SOME ADVICE FOR TACKLING DATA RESPONSE QUESTIONS

Dr Kevin Bucknall

INTRODUCTION

This advice was written for my students doing economics but the general approach should work in most subjects.

Some advice is deliberatively repeated here where it applies in different areas.

Remember! We are all individuals and each specific item of advice may not apply well in your case. It is often best to try it out and see – practise on your own if your school does not set much in the way of mock exams. Then keep on practicing. By the time you are in the exam room, you should have developed your technique, which will help you do a better answer and help reduce your tension which will allow you to think more clearly.

Keep in mind that you have enough time! Do not hurry the initial stage of examining the question then thinking and carefully planning out an answer. This initial stage is where marks are easily gained and lost. If you should miss just one point out of a possible four because you skip the planning stage you are only being marked out of 75%, which means it is going to be that much harder for you to do well and an "A" result will be unlikely.

A. CHOOSING THE QUESTION WHEN THERE IS MORE THAN ONE

- When you have a choice of questions, glance over them to see which topic you feel you know something about in general, or in which you already have some interest. It often helps if you can find one like this. It is often best not to read the supplied text or graphic details yet - that is usually better done later.

- If you decide that one question allows you to use more theory, diagrams or formulae than another, it will probably be easier for you to gain marks by doing that question.

- If you are generally better, say, at interpreting tables than graphs then the question that is presented in tables might be easier for you. You need to use your strengths and not parade any weaknesses.

- Read through the actual question part of each question quickly (not the attached material yet) to get a feel for what you are being asked. You might realise that you really know most of the answer already (good) or perhaps see that you cannot refer to any well-known authority in that area, do any diagrams or use any formulae (tends to be bad).

- Now you can look quickly at the material such as figures, tables or diagrams that are supplied. You can often gain insight and awareness here before you return to consider carefully what questions they actually ask.

It is often an advantage to read the supplied test material upon which the question is based last. Doing it this way can help, because the time you spent reading the and considering the question helps to put your brain in the right mode for spotting and understanding the important parts of the supplied text material. If there is a choice of questions to choose from, reading up the minute details of all the questions that you do not intend to answer is clearly not in your best interest as it wastes your valuable time.

A part of your answer can sometimes be done without reference to the supplied newspaper clipping etc., as examiners like asking pure theoretical and analytical sub-questions as well expecting you to know something about the real world we live in and to mention it. Some of the sub-questions will certainly require you to read the clipping carefully.

Once you have decided which question to tackle and thought a bit about it, never bother to look at the questions you have discarded . Why waste time? Now you turn to reading carefully the detailed data or other information supplied.

B. WHAT YOU ARE DOING

With figures, graphs or tables you are looking for things like:

- What particular items are big and what are small – you might try to identify the largest and smallest ones first.

- What items are increasing and what are decreasing. Are any doing so faster than the others? Any idea that pops into your head now you can jot down in the margin of the exam paper or on the back page to be later crossed out (follow any rules that are set about this) so that you do not forget them under exam room stress.

- Patterns – These are often what you need to focus on. Patterns may be two rows, or columns, or items that go up and down together. Possibly one goes up when the other goes down. Sometimes two might go up and one go down, or something similar. The lesson is: do not stop when you have identified two elements that move in some related pattern. There may be more elements that move or more than one pattern involved. Spotting half the answer means only half the marks.

- The unexpected – something unusual or outstanding that looks remarkable in any way. Again, jot down any ideas that you have on why this might be happening.

- Extremes – what stands out as really big relative to the others, or particularly small?

- Any item that does not change as the others do – the exception to the pattern.

- Seasonal or annual fluctuations – are there any?

How to identify a pattern:

- Examine the headings of columns and charts etc. and look to see if they are in percentages, or absolute numbers, or "change" of something, or perhaps even "rate of change" of something. You need to be clear what the figures refer to before you can analyse sensibly.

- Use your eyes first – glance over all the data in the columns quickly to see if anything jumps out immediately for you. It is usually best to jot it down in the margin so you do not forget it.

- Then go over the data more slowly, looking for a pattern between the columns etc. to see if something emerges after you have given it a bit more thought and concentration.

- You might draw a rough freehand graph quickly if this helps you to see a pattern – do not spend a lot

of time on this however. You can do this in the back of your answer book or on the back of the question paper. It is to help you: it is not part of your answer unless you were asked to draw one. Cross it out later before you hand it in.

- Think back to see what you know about a relationship between any of the items listed, e.g., growth and the current account balance, and see if this shows in the data you have been given.

What to do when you have identified one or more patterns that fits the question asked

- Answer the question the examiner asked – this is <u>always</u> the first thing you must do. This is usually the main part, the "I found this, and this is why or how it works…" bit.

- After that you add a brief expansion or comment of your own. You might:

    - Explain why we see the pattern.

    - Point to any possible causes and effects that explains this pattern.

    - Indicate any linkages between the items (or the rows, columns etc) that might explain your findings.

    - Maybe extrapolate into the future to see if any particular problems might arise.

    - In economics and some other subjects, if a diagram would fit (e.g., if given data about the price level and national income then the standard aggregate supply and aggregate demand diagram is appropriate) draw it to illustrate your answer. Make sure you draw it correctly, label all the curves and axese, and put in the equilibrium position.

Be wary about proffering a lot of advice on what to do about a problem unless you were asked to do this. You need to demonstrate you can understand and analyse what you have been given. Some policy advice from you might be reasonable but never be dogmatic in what you say. If the marker disagrees on what to do about the problems it might sway his or her judgement of you.

C. PLANNING YOUR ANSWER

Some pieces of advice:

- *Keep to your time schedule* – if you have half an hour to do the question try to stick to this. Maybe 5-10 minutes on the reading and preparation will work for you, 15 minutes or so to write, then 5 minutes at the end to check over what you have said.

- *Always* think and plan out your answer, do not just start writing. Otherwise you might miss something relevant , and hence lower your mark.

- *Never* copy out a diagram or set of figures that they have supplied for that particular question as this is a waste of your time. You can put figures (numbers) in your answer of course. You can refer to any diagrams or tables that they have supplied if you wish; in fact this is often a good tactic.

- *Never* quote the text supplied word-for-word; always put it into your own words. (The examiner has

already read the text and will be unimpressed by a lengthy word-for-word quote. He or she is likely to think you do not understand the question properly or else simply do not know what to say if you simply quote the text. That could lose you marks). You are trying to understand, explain and extract from the data and not to simply reproduce it.

- *Do not* write out the question as it wastes your time; just put the question number and part in the margin, e.g. "10 c ii" (note that if they use the notation "ii" do not put "2" because this leaves the bad impression that you cannot even read and number properly!)

- *Do what is asked* – if you are asked to "describe" this is different from "analyse": see the author's "Improve Your Marks in Exams: the Meaning of Commonly Used Words" (free from www.keweipress.com) for more details.

- *Look for bias* – see who wrote or published the report or data. If it is a trade union then it is unlikely to be same as a report from an employers organisation. Might there be an axe to grind?

You usually need to get four things in your answer:

- A *definition* of the important terms being considered – they might actually ask for this but it is usually a good idea to supply one anyway.

- Some *theory*, to explain what you see in the data. *Data never explains itself; you have to tell the examiner what it means*.

- Some *diagrams*, if your subject uses these, to point up the theory to which you have referred – again with a clear explanation of what the diagram means. Diagrams do not explain themselves either. "As can be seen from the diagram….." might be a start.

- Some relevant *jargon*, e.g., "income elasticity", "economies of scale", or "externalities" - whatever is appropriate to the question set with the data supplied.

D. WRITING YOUR ANSWER

- Jot down your ideas for a draft answer on paper – you can use the book provided but always cross out this planning part before handing in the finished paper. A good place for this is in the back of the book where it is out of sight – but still cross it out once you have finished with it. Examiners are always busy and almost never read what is crossed out unless they are struggling to understand your meaning. However, if you leave it uncrossed out they might look at it and might wonder what the heck it is all about!

- Make sure you answer the particular question that is actually asked. Too many students get side-tracked into putting down everything that they know, rather than answering the question asked. You lose marks like this for two reasons. First, you persuade the examiner you are a bit dim and not worth a good mark. Second, you have wasted your valuable time dealing with irrelevancies.

- You can now renumber these ideas and points in a logical fashion (they do not normally occur to you in the best order for you to present). You then follow this logical order when you come to write up.

- In economics, put all economic points first, ahead of any social or political ones – this is an economics

exam! You can and should mention social and political points but do not dwell on them or explain in detail. You are merely demonstrating your breadth of knowledge and your intelligence, and you are not sitting a political/social exam. Do not be dogmatic here – the examiner is human and if he or she disagrees with a political statement it will not help you. (An indirect approach such as "It has been suggested that…." or "Some observers feel….." can help prevent you from irritating the examiner; he or she must accept it, even if they do not believe it!) Similarly, in subjects other than economics, you should always deal with that subject discipline first before mentioning (but not explaining) points from other disciplines.

- If you can do so, get the diagram or diagrams in early. This means that you might put the points you want to make and for which you can draw a diagram in first, before turning to the points for which you cannot draw a diagram. Examiners like to see relevant diagrams and your use of them can impress. Impressing early is better for you than leaving this important matter to the end.

- In economics, if you have several points and some are supply and demand, it is often desirable to put these first (if it is relevant to the answer) ahead of all the others. The most important analytical devices should always go upfront.

E. SOME GENERAL POINTS

- When you start writing you should follow your outline jottings, as you have already put these in a sensible and logical order.

- Put the question number and part number in the margin as you start your answer.

- Make your writing legible – you never want to annoy the marker.

- Put in as many relevant diagrams or formulae as you can.

- Do all diagrams in ink, not pencil. Use one colour for simple diagrams, two colours for complex ones, three colours only if you really must – and never use red! Markers use that themselves often and some can get annoyed when you get in their way if they decide to look back at their red markings (they might underline points, put in a question mark and the like for their own use).

- Make sure you label all the curves and axese.

- Explain the diagram immediately you have drawn it, referring to it as you write. An unexplained diagram is worth very little or nothing. Remember - diagrams never explain themselves! You have to do it, i.e. tell us what the diagram means and use this information as part of your analysis.

- With data response you frequently do not need a long Introduction and Conclusion, as they have already divided up the question into parts for you. Often a single sentence will do as an introduction:

  e.g., "10(b) The main reasons for the rise in food prices in recent years lie on the side of supply and demand."

  "Starting with the supply side, there has been a noticeable increase in the production of biofuels, such as vegetable oils, and land has been transferred from producing food crops. Secondly on the supply side ……"

  "On the demand side, ……"

(In this particular example, don't forget to draw a supply and demand diagram, with an increase in the demand curve and a decrease in the supply curve.)

- Finally, at the end you must read over what you have said and correct any obvious errors, put in missing labels for diagrams, correct spelling errors, and add in any missing words. A general tidy up and improvement should occupy your last few minutes.

- If you suddenly realise you have missed something out of an answer, and have to add a segment you can make an insertion. If there is room and the insertion is small you might be able to squeeze it in where it is needed – as long as it can be read! If the insertion is long, you can place a large obvious asterisk where you want the insert to go, put a clear upside down "V" to show exactly where it will go, and then write "please insert from page XX" in the margin. It does no harm to put a circle around the note in the margin to make sure it leaps out to the eye. Then go to page XX and write what you wish to insert, put a large asterisk by it, and again put your note in the margin "Please insert on page YY, earlier". Once more, you can put a circle round the margin note, especially if you did that earlier. The consistency in style does you no harm! If you wish to use, say, a green asterisk in both places it helps the examiner find the insert more easily. A happy examiner is always a good idea!