Lesson Element

Practice in responding to unseen data

Instructions and answers for teachers

These instructions should accompany the OCR resource ‘Practice in responding to unseen data’ activity which supports OCR A Level Economics.

The Activity:

This resource comprises of 4 tasks.

The objective of the task is to teach students how to respond to unseen data in some stimulus material which will be presented in a variety of formats.

This activity offers an opportunity for English skills development.

This activity offers an opportunity for maths skills development.

Associated materials:

‘Practice in responding to unseen data’ Lesson Element learner activity sheet.
Overview

The new exam papers will have some text as well as some numerical/quantitative content which candidates will only have a limited amount of time to absorb. To that end this task teaches them how to engage with data with the expectation that the more they use these techniques the easier they’ll find it to elicit the key economic concepts and terms needed to answer exam questions.

The topic of the lesson is *income inequality* which is drawn from the macroeconomic section of the A Level specification. The resource has been designed with the expectation that students already have a working knowledge of this element of the specification and that they’ll be able to apply this knowledge to the context of the unseen stimulus material.

Students can sometimes miss the main theme running through a series of materials (i.e. identifying which topic the material is concerned with or which part of the specification the material is mapped against). The first activity in this task focuses on this particular skill.

This resource provides an example of a way to prepare students to respond to unseen data that can be replicated using different source materials throughout the teaching of the course. The idea is to take these activities relatively slowly at first as students become accustomed to engaging with unseen stimulus material, but gradually give less time and fewer, directed, activities so that eventually they can read through a number of extracts and quantitative elements as a whole document, rather than breaking it down into separate components, and still elicit key terms and concepts in order to fully answer the exam questions.

Task instructions

Task 1

Working independently at first, ask students to read through the stimulus material in its entirety and write down the key economic concept(s)/theme(s) covered in the stimulus material.

Depending on the strength of the group they may find it useful to have the specification alongside as a reference to remind themselves of the economic concepts they’ve already covered. Give approximately 10 minutes for this activity at first and reduce the time as students become more familiar with the approach.
Task 2

Ask students to write what they consider to be the main theme onto a piece of paper or a post-it without showing anyone else and to stick it on to the classroom white board.

The idea is that they all write down what they think the main theme of the stimulus material is without being influenced by anyone around them.

Hopefully they’ll all come up with (roughly) the same theme but it is fine if they don’t – that should prompt discussion on which element of the specification directed them to that economic concept.

This should be followed by a teacher-facilitated discussion about which part of the stimulus material suggested that this was the main theme to help them recognise how the stimulus material is mapped against the specification.

Remind them that the exam paper will only assess what is on the specification; it won’t go beyond the confines of the specification.

Task 3

Ask students to read through the data again and this time, in the left hand margin, write down key economic terms as they come across them. For example: in this resource material in the first paragraph they could write down: economic growth, GDP, greater consumer and business confidence, higher AD, etc. - all the concepts associated with an economic recovery. As they become more confident they’ll be able to write more terms, for example against the extract from Joseph Stiglitz article they could briefly jot down words associated with the causes and consequences of income and wealth inequality and possible government solutions.

When they come to a chart/table or other numerical information encourage them to look for: the units of measurement (is it in percentages or raw data?), what are the significant changes over time (if this is relevant to the data), who has the greatest and least/peaks and troughs, what is the trend over time, what is the information telling us - they should write this in one sentence to the left hand side of the data.

Task 4

A paired activity

To continue to help students become more familiar (a) with the topics in their specification and (b) with the way in which they could be assessed, ask them, on a sheet of A3/flip chart paper, write an exam
question that you think could be asked concerning the stimulus material. Encourage them to make it a 'discuss/evaluate' question.

They should then move to take up the place of the pair to their right and start to write an answer plan for the question written by the pair whose places they have just taken. Give them about 5 minutes to do this. Repeat two more times so that each exam question has been planned by three pairs, each one building on the previous pairs' work. Then ask students to return to their original seats. Give out blu-tack and ask students to stick their A3 sheet on the board.

**Time for feedback**

For each pair ask them (a) why they designed that question - what element of the stimulus material and the specification prompted them to write that question and (b) what they think of the answer plan written by their peers.

Depending on the student they may not offer a confident answer to this so prompt them further by asking for specific parts of the answer plan that are strong and where they might develop it further. The hope is that there will be some similarity across the questions, but that does depend upon the breadth of that particular part of the specification. In the case of this resource material the topic students will hopefully home in on is whether a slower rate of economic growth is a consequence of income inequality.

**Plenary exercise**

If you have time, or as a homework activity, ask students to answer the following question:

‘Evaluate the extent to which limited economic growth is the most significant consequence of income inequality’.

When writing their answer (which can be as a plan or in full depending on the time available), ask them to highlight their work every time they use information directly or implicitly from the stimulus material. At the end ask the students to count how many times they referred to the stimulus material and consider the link between their answer and the material. Hopefully this will become more frequent the more they practise.

The point here is that they should recognise more and more the economic concepts covered in the material and become comfortable utilising it in answers.

Remind them that this is a data response question and there are 'hooks' for them to hang their answer on in the stimulus material. Some will help them analyse and others help them to evaluate. For example,
in this resource material there is specific mention of whether economic growth is affected by income inequality. In his article Joseph Stiglitz argues that income inequality will reduce the rate of economic recovery because lower consumption and lower government tax receipts will reduce government expenditure thus reducing AD growth.

Once they've completed their answer plan, ask students to give feedback to the rest of the group and record the salient points on the whiteboard. Ask students to amend their own answers as necessary. Keep reinforcing the idea that their comments have come about because they took time to read the material and better understand their specification.

**Teacher Preparation**

*Materials needed:*

- A3 paper for each pair within the group
- Marker/felt-tip pens
- Blu-tack
- Printed copies of the student sheets and the Joseph Stiglitz article for each student (unless working online)

*To repeat the activity with other sources:* Collate a variety of sources (some text some quantitative data) into an 'exam paper style'. This should comprise of 2 or 3 pieces of quantitative data (table/chart etc.) and some text.

It is particularly useful to practise quantitative data that covers the following: changes in percentages to reinforce the idea of percentage points, strengthening/weakening of exchange rates, elasticities, balance of payments accounts, the difference between budget deficit (or surplus) and national debt, terms of trade improvements/deterioration, comparative advantage in either numerical form or as production possibility curves, the difference between the rate of inflation and the price level. This particular resource doesn’t tackle these topics but if you are designing your own version it is worth giving students the chance to interact with data on these topics because they frequently find them more challenging.

Some useful sources include:

- [www.bbc.co.uk](http://www.bbc.co.uk)
- [www.guardian.co.uk](http://www.guardian.co.uk)
- [www.tutor2u.net](http://www.tutor2u.net)
Some of the things to look out for are already covered in the lesson plan above but in addition there are some questions that you might expect from students:

**Can the examiner ask me questions about topics that aren’t on the specification?**

**Answer**

No, the examiner is limited by the boundaries of the specification. However, many topics contain the command word ‘evaluate’ which means that students can be asked to evaluate that topic or anything below, i.e. analyse, explain, define etc...

**Will a topic like this cover more than one area of the specification?**

**Answer**

It might do and to demonstrate that economics is a synoptic subject, students may be required to answer questions synoptically.

**Am I expected to make reference to the stimulus material in all my answers?**

**Answer**

The stimulus material is there to help you understand the questions you’ll be asked and when you’re asked to evaluate or analyse it is advisable to refer to data from the stimulus material if it is possible to do so.

**Can’t I just underline the parts of the stimulus material that might be useful?**

**Answer**

The point of writing key terms in the left hand margin is that it is a more effective way of remembering the economic concepts covered in the stimulus material.

**How long will I have to read through the stimulus material in the exam?**

**Answer**

Approximately 5-10 minutes should be spent reading through the stimulus material.
Stimulus material

Developments in the global economy

The global economy is gradually recovering from the worst financial crisis since the Great Depression, business and consumer confidence is rising and politicians are beginning to talk about a sustained period of growth for most economies rather than nervously referring to green shoots. Fig.1 shows forecasted world economic growth for 2014 and 2015.

Fig.1 – World GDP growth, 2008 – 2015 (forecast)

However, many economists warn that economic recovery could be hindered by the rising tide of income inequality. In this year's survey members of the World Economic Forum identified the growing gap between the rich and poor as the biggest threat to global prosperity. The Gini Coefficient is one way of measuring income inequality. The Gini coefficient for a range of countries is shown in fig. 2. A coefficient above 0.4 is regarded as a signal of dangerous levels of inequality.

Fig. 2 – Gini Coefficients for selected countries between 1985 and 2008

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>USA</td>
<td>0.34</td>
<td>0.38</td>
</tr>
<tr>
<td>China</td>
<td>0.28*</td>
<td>0.42</td>
</tr>
<tr>
<td>UK</td>
<td>0.32</td>
<td>0.34</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.21*</td>
<td>0.26</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.46*</td>
<td>0.47</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.56</td>
<td>0.55</td>
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*Estimated from 1984 data
The changes in income distribution that have led to many countries experiencing rising income inequality is illustrated in fig. 3, however, not all countries have had the same experience.

Fig. 3 – The average annual income change for selected economies, 1985-2008

Economists have long been engaged in discussions regarding the consequences of income inequalities, one notable economist – Joseph Stiglitz believes that there is a strong link between rising income inequality and the rate of economic recovery.

Extract 1 - Joseph Stiglitz discusses the problem of inequality in America. http://opinionator.blogs.nytimes.com/2013/01/19/inequality-is-holding-back-the-recovery/?_php=true&_type=blogs&_r=0

A slower economic recovery isn’t the only consequence of rising inequality. Some economists believe that there are negative consequences for living standards, intergenerational social mobility, health and well-being and labour productivity. Rising levels of inequality can be linked to falling social mobility as those at the lower end of the income spectrum aren’t as likely to afford higher education and will have fewer employment opportunities than those at the higher end. This can reduce labour mobility and so add supply-side constraints into the economy.

The worry is that this may have long term implications for the macroeconomic performance of the economy as a whole, not just economic growth.
OCR Resources: the small print

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