DO EXAMINERS AND TEACHERS MAKE THEIR QUESTIONS UNNECESSARILY DIFFICULT?

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Some pupils work for carrots and some have to be driven by sticks. So some teachers believe in giving their pupils the hard-earned carrots for the time they spent in preparation for a test, while other teachers have made up their mind to be stern taskmasters. And so some teachers like to set questions that are reasonably easy, but others will only be satisfied with questions that are unnecessarily difficult. Do you fall in the latter category of teachers? Consider these questions.

Do you use complex words or phrases or clauses longer than necessary?

This is a likely way to make a question more difficult than is necessary. Do you first write the question as a simple sentence with simple, common words and when you are satisfied with it, replace the simple words with more difficult, uncommon words (technical terms) and longer phrases wherever you can? For example, consider this instruction:

Q1. Name three common substances containing carbon dioxide.

Is this question made more difficult than is necessary, if we replace "common substances" with "chemical compounds"? We may also substitute the simple word "containing" with a more complex clause "which have as one of their components". The instruction then becomes:

Q2. Name three chemical compounds which have as one of their components carbon dioxide.

Do you write your questions in the negative form?

Another way which may make a question more difficult than
is necessary, is to write the question in the negative form. Thus, instead of this:

Q3. Which of the following contains carbon dioxide?
   (a) Distilled water
   (b) Baking powder
   (d) Table salts
   (d) Aerated drinks

we write this:

Q4. All of the following have as one of their components carbon dioxide with the exception of . . .
   (a) Washing soda
   (b) Baking powder
   (c) Health salts
   (d) Distilled water

**Do you use complex sentence structures and, sometimes, one long sentence that runs into several lines?**

Long questions with complex sentence structures are challenging for the teacher to write and the pupils to answer. The idea of making a question more precise than is necessary may confuse the pupils.

Take this simple question:

Q5. There are three stages in water purification at the reservoirs. What are these three stages? Write them in the correct sequence.

Do we make it unnecessarily difficult when we say:

Q6. What are the three stages of water purification, in the correct sequence, which water at the reservoirs has to go through before it is supplied to homes and factories?

Here is another example:

Q7. A substance gives off a gas when treated with diluted acid. The gas turns limewater chalky. What substance is it?
An unnecessarily difficult version of this question may be this:
Q8. What is the substance that gives off a gas which turns limewater chalky when it is treated with diluted acid?

Do we use the passive voice?

Yet another likely way of making a question more difficult than is necessary is to write it in the passive voice.
For example:
Q9. A and B share $17 between them. A gets $1 more than B does. How much does A get? And, B?

An unnecessarily more difficult version of the same question may be this:
Q10. How much does each child get if $17 are divided between two children such that one gets $1 more than the other?

We have here another example:
Q11. I use a piece of wire to make a rectangle 24cm by 20cm. I then use the same piece of wire to make a circle. What is the radius of this circle?

Does the version below make it more difficult?
Q12. Find the radius of a circle if a piece of wire which was used to make a rectangle 24cm by 20cm is now used to make the circle.

Yet another example:
Q13. In a lever system where the fulcrum is very far away from the load, . . .
   (a) a small effort is needed to move the load.
   (b) a great effort is needed to move the load.
   (c) no effort is needed to move the load.
   (d) an effort equal to the load is needed to move the load.

This question probably has an easier version:
Q14. A lever system has a fulcrum very far from the load. How much effort do you need to move the load?
   (a) A smaller effort than the load.
   (b) A greater effort than the load.
   (c) An effort equal to the load.
   (d) No effort at all.
What about the use of the impersonal form?

The impersonal form sounds more objective and scientific and hence, perhaps, more respectable. This is another way which may make a question somewhat more difficult than is necessary, especially for young pupils.

Consider these statements:
Q15. When the rope in the pulley system is pulled downwards, the load . . .
(a) is lifted.
(b) is lowered.
(c) does not move.
(d) moves up and down.

Is this more personally-involved version easier to understand?

Q16. If you pull the rope in the pulley system downwards, what will the load do?
(a) It will move up.
(b) It will move down.
(c) It will not move.
(d) It will move up and down.

Is it all really unnecessary?

If you disagree that the formulation of questions using bigger words and longer phrases or clauses, the negative form, complex sentence structures, the passive voice, and the impersonal form is a problem for content subjects, you may be right. In fact, there are occasions and places for using these forms: the pupils will sooner or later come across them. It depends, anyway, on the occasion and situation. There is a place for finding out how much the pupils know about certain technical terms: every content subject has its share of these. The concept and the term by which it is coded in language (or other symbols), however, are two cognitive structures, though it is sometimes difficult to separate the two. Wherever possible, use different questions: one for finding out whether the pupils have mastered the concept and the other for finding out whether they can remember the technical term. This is especially important when dealing with young or inexperienced pupils or a new topic. Of course, with older or experienced pupils and topics which have been taught and perhaps revised for some time, it may not be necessary to separate the two aspects since they would have been integrated into one cognitive structure.
Questions written in the negative, like statements of similar form, require more time for the information to be processed. A pupil answering a question in the positive form asks himself a simple decision question of Yes-or-No and drops the No’s until he comes to the Yes. To answer a question in the negative form, he needs a memory storage for all the options and then tries to identify the one that is the odd man out — the one that answers a negative question positively (what a roundabout way of doing things!). A more intelligent or experienced pupil will put a mark against the No’s to reduce the information load on his memory; a pupil who is not intelligent or experienced enough to do this is doubly taxed.

In complex sentences, concepts are nested one in another. The more nesting there is, the more difficult it is to read and understand the sentence. It takes much more time for the mind to process the information contained in a complex sentence than the information in a sequence of simple sentences. Thus, questions written in the form of complex sentences slow down the reading and comprehension speed even when the pupils are familiar with the sentence structures being used. And, if the pupils were not familiar with those sentence structures, the questions are just incomprehensible and hence cannot be answered even though the pupils may have mastered the relevant concepts.

It is a convention of scientific language in English to use the "third person singular, passive voice" such as "it has been observed that . . .". This special feature is commonly found in learned journals and conference papers (perhaps, as a way to show humility and impartiality). Like the negative and complex sentence structures, the passive voice also takes up more processing time, implying that it is more difficult to comprehend.

As for the impersonal form of questioning, the effect is probably more psychological than anything else. Younger pupils may find the impersonal form in questions less interesting and this may affect their motivation. They may also find the impersonal form more abstract, and because they have difficulty in imagining objective situations they may find the questions more taxing. Hence, for every question set in a test we have to ask ourselves the preliminary question, "Are the questions unnecessarily difficult?"