Academic and Professional Speaking Skills

TASK

Fill in the blanks with a signposting expression. Then, listen to the lecture about computers and compare your suggestions with the original version.

Uses of Computers

We have been discussing how a computer works. *Now, let us turn to another topic*: What are the uses of the computer? Many laymen have an exaggerated picture of what computers are capable of. Sometimes computers are called 'electronic brains' and this is confusing, because no computer so far built can compete with the human brain in all respects.

Let us take a look at the applications of computers in commerce and industry. Today, I shall discuss three of the main areas, and I shall give some examples of each. I think you should note the examples, but don't bother too much about the details of each example.

Firstly, clerical work. Computers are very good for handling repetitive clerical work efficiently. We can take two examples of this. The first is the widespread use of computers in handling PAYROLLS, that is paying employees. Details about each employee (his salary, his tax-code, etc.) are fed into the computer. The computer makes the necessary calculations and prints out a pay slip. Another example of the same sort of process has been the use of computers by banks to provide up-to-date records of clients' accounts.

Secondly, we have the use of computers in information systems. The most successful use of these is perhaps the use of computers by airlines to control seat reservation and provide information about flights. British Airways BOADICEA system has 200 terminals in 70 different countries. The main computer store for BOADICEA has a constant record of the details of every flight, including the number of seats available and the names of passengers who have already booked.

Thirdly, the computer as an aid to design planning. My first example has to do with predicting the cost of a design if one were planning to build a road. One could take a series of photographs of the area; from these, the amount of rise and fall of the landscape can be analyzed to within a few inches. This information can be fed into the computer, along with details about what different areas would cost to buy etc. From all this, the computer can be programmed to work out the cheapest route between two points.

My second example has to do with predicting faults in a design. It is possible to produce by computer methods pictures of what the road will look like at one-meter intervals. It is possible to film each of these as a separate frame, and film them in sequence. In this way, one can spot design faults before the actual construction of the road ever begins.