Appendix-III

Some Characteristics of Scientific English

1) Passive Voice: Scientific texts generally place the emphasis on what happens to things instead of on the person who performs the action. Therefore they frequently use the passive voice. For example:

The cell units were found to be filled with living substances.

Many interesting experiments have been done along this line.

2) Functional Shifts. An important factor in the control of scientific English is to know which words can serve as both nouns and verbs (example: burn, cause, form, line, move, result): to know which can be used only as nouns (example: discovery) And which only as verbs (eg discover) And to know the nouns that correspond to verbs like move and rotate and the verbs that correspond to nouns like movement and rotation.

3) Words ending in- ing. The English ending -ing cannot be overlooked when dealing with scientific English, as words with this ending have different grammatical functions that sometimes mislead the students.

For practical teaching purposes, we can divide the functions of ing words into the following groups:
(a) Words ending in -ing may play the role of nouns. Example:

The moving of the matter; The trembling of the leaf; Such burning destroyers organic matter; the growing of the same crop year after year.

(b) Words ending in -ing may function as adjectives. Example:

Creeping plants; a growing danger; decaying matter; the burning rays of the sun; an opposing force.

(c) Words ending in -ing may function with the force of verbs.

Example: A river flowing ( = That flows) Into the gulf; until a soil is produced containing (that contains) good materials; the rays coming (that come from the sun); new experiments are being done; they have been trying to solve.

4) Different Meanings. Some everyday (not scientific) words that appear frequently in scientific writing and that have more than one meaning should be explained with illustrative examples. Unless the students understand most of the meanings of these words, they will always get confused when they come across them. Here is an illustration giving examples of uses of the everyday word as:

As I was late, I hurried up (because)

As a child I lived on a farm. (when I was)
As we grow older we gain more experience (while)

Do as I do. He does not speak as other people do (in the same day as)

As I was saying just now ... (In accordance with what)

It is as you told me (the way (in which)]

He was famous as a physicist [considered as]

5) Special Compounds. Scientific English makes frequent use of expressions in which a combination of ideas is condensed into compound noun [eg. stunning-instruments = the instruments used in slaughter house’s for stunning animals before killing them] or a group of nouns that has not yet been adapted as a compound [eg. conception rate = frequency with which conception occurs).

6) Abbreviations. The students need to be familiar with many abbreviations. Because there’s so many, the teacher should give them only need those abbreviations that appear with the highest to frequency. Here are some of these:

C Centigrade; Celsius

dca. about; approximately

deg. for example

ft feet

gr. gram; grain
i.e. that is (from Latin *id est*)

i.q. The same as (from Latin *idem quod*)

m. meter

math. Mathematics

nt. wt. net weight

viz. namely (from Latin *Videlicet*)

7) Special Plurals. Some words likely to occur in a scientific context are derived from Latin or Greek. Their characteristic is that they have irregular plurals. A list of them for the students to memorize would be helpful:

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<th>Singular</th>
<th>Plural</th>
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<tbody>
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<td>Basis</td>
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<td>Serum</td>
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8) Prefixes and Suffixes. Morphology plays an important part in scientific English. A lot of words are formed by adding a syllable or word in front (prefix) or at the end (suffix) of the root word. The meaning of the derived word is related to that of the root word.

Prefixes
non – meaning not  
nonluminous, nonessential,  

mis – meaning wrong  
misspell, misunderstand  

dis – meaning away, apart, opposite to, not  
disable, disarm, disobedient  

Suffixes  

ness – meaning state, condition or quality of being  
greatness, redness  

less – meaning without or unable to  
endless, aimless  

-en – used to for verbs from adjective or nouns  
hard – harden, thick – thicken, tight – tighten, wide – widen  