Style Matters

Teaching English for specific purposes

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Few would dispute the need for students of scientific disciplines to learn English. The teaching of English to scientists whose first language is not English is essentially utilitarian. The learners need English as a means of doing their work efficiently and of furthering their specialist education, and the language is not taught with a general educational aim in mind, as a cultural or social experience. As suggested by its name, English for specific purposes (ESP) covers both the common nucleus—the basic categories and patterns of communication and structure of the English language—and variations relevant to the specific use. Furthermore, the variety of uses to which English is put in different countries and the different degrees of proficiency required make it essential to consider each group of users in each country separately.

Professional requirements

The field of activity—in this case medicine—defines the basic shape of the professional requirements of the learners. Nevertheless, these will vary greatly, mainly according to the professional status and specialty of the user, and they are also limited by the geographical and sociolinguistic setting.

For Czechoslovak doctors English is primarily a library language—that is, the student must understand enough to gain access to knowledge contained in textbooks and particularly in periodicals and journals, in order to extract information, interpret data and theories, and keep abreast with latest advances. All this is one-way communication through the printed page.

Fifteen years ago I investigated the relative importance of sources of printed information in endocrinology by analysing 1370 citations in 20 major journals. The geographical distribution of relevant information was merely a by-product of the investigation, but it provided important information on the leading role of English as a language of science: 54% of the papers came from the USA, 15% from the UK, 7% from Germany, 6% from France, 4% from the USSR, 3.5% from Scandinavia, and 2.4% from Japan. No other country contributed more than 2%. But this analysis shows only the country of origin of the paper: actual papers in English made up a far higher percentage than just the sum of papers from the USA and UK, since an ever-increasing number of scientific papers are being published in English all over the world. Over the 15 years that have passed since the investigation, the pattern must have changed even further in favour of English as the language of scientific writing.

The second most important part English plays for Czechoslovak doctors is its position as an international language of conferences,

symposia, and seminars, which means that they need to be able to understand specialised spoken language. Active participation in these meetings, however, also demands an ability to communicate with colleagues. As well as skill in the specialised language of medicine this also demands knowledge of everyday language.

The professional requirement to comprehend the written word concerns virtually all Czechoslovak doctors, but only about 15% participate in international meetings. The proportion of doctors who go to study or practice medicine in English-speaking countries is even smaller, so at university level we concentrate on teaching medical students how to understand written English. The skills needed to speak everyday English and more specialised “medical” English (at different levels, such as doctor-doctor, doctor-nurse, doctor-patient communication) as well as the skills needed for writing reports, diagnoses, prescriptions, etc have to be disregarded completely.

Basic competence

Our geographical and sociolinguistic circumstances not only affect the professional requirements but also have an impact on the students' command of English when they enter university. The main efforts to teach English take place in the secondary schools. One foreign language (English, German, or French) is compulsory, the extent of teaching being mainly two classes a week for four years. The general instruction in English that is provided in secondary schools has in most cases proved inadequate as a basis for use of the language at higher education levels. Moreover, the students' command of what they were taught at secondary school varies greatly but is generally low.

Despite these shortcomings, we start with the assumption that our students have acquired a basic competence in the language. Their actual level with regard to their future professional requirements will, however, have to be established by specially designed tests.

Learner's needs

The next crucial aspect in ESP is the learners' needs. So far we have deduced them from the estimated characteristics of the students and of their prospective occupation, but our informal approach has proved inadequate. Objectively accumulated and evaluated information is essential as a background to the more directly linguistic considerations affecting the content of the course and its objectives. Such information enables the course designer to narrow down the area of language use and to prepare materials relevant to the learner. Ideally, the objectives of our course should fully reflect the identified needs, but in our case they are strongly limited by the existing level of competence at the beginning of the course, by the curriculum, and, above all, by the restricted time available.

Not only does the generally low level of competence in English affect our objectives, but we also have students who possess alarmingly uneven linguistic skills: students who have learnt about grammar but cannot apply it; students who know how to pair the two languages on using word-by-word translation but fail to grasp the whole meaning because they cannot assign the individual words their appropriate meanings according to context. These difficulties become even more severe when we move from sentence to paragraph and passage. Students are unable to find the main idea and identify the supporting

ones, to distinguish between logical categories, to recognise important and unrelated details, to realise the author's purpose, or to determine the significance of the context.

The time allotted to teaching English has been reduced at our school from four terms to a single term—that is, there are 14 90-minute language sessions—a 21-hour course. A common complaint of ESP teachers—even those with six to ten times the teaching time that we have—is the limited amount of time that students have to master the skills of reading and understanding scientific texts. Our task is made harder by the fact that we now teach students in the third term, when their knowledge of medicine is practically non-existent, so that the English and the medical syllabuses cannot be linked.

Teaching reading skills

Clearly, these new circumstances demand a reconsideration of objectives, materials, methods, and testing procedures. The emphasis has to shift from teaching productive skills to teaching receptive skills, and reading comprehension has to be given priority.

Since the students' contact with English cannot be increased quantitatively, we are primarily concerned with the question of what qualitative variables influence their acquisition of receptive skills. In this area research is sparse. Applied linguistics has little to tell us about an effective way of conducting a reading course. There is not even a consensus on the concept of reading in a foreign language. Much research is extrapolated from first-language investigation, whereas there are many crucial differences between learning a first and a second language. Nevertheless, reading for understanding is not just a mechanical skill, a decoding process. Properly used it can be an exciting avenue to learning and communication, since even a scientific text has to be viewed as communication.

Basically, reading entails three purely mental processes. Firstly, we read selectively: we choose the key words which then become the supporters of the other elements. Secondly, reading is a process of classification: we organise information that tells us about the agent of the action, the object of the process. Thirdly, reading is a process of specification: we look for the restrictions and characterisations that the selected and classified elements include—that is, the semantic information obtained produces new information on the real world.

These three processes are almost simultaneous activities of the mind. The first two have a semantic basis. A piece of written material is made up of chains of linguistic elements, structures that are related to each other according to certain rules. To understand a chain of this kind means being able to analyse these elements and the relationships between them that make them conform to a semantic structure. For a reader in a second language the usefulness of these processes, which are carried out almost unconsciously by a native reader, depends precisely on their being made conscious.

With no effective method available to teach reading to ill-equipped students, we have tried a combination of approaches. Faced with the first-order task of straightening out the linguistic complexities, our classes have often become a mere extension of supplementary exercises for vocabulary improvement, control of language structures, technical explanation of sentence connectors, etc, with the reading material as a source of model sentences. The goal of cultivating the technique of critical reading, the thought-getting process, has been jeopardised and we must take positive steps to build a method tailored to the actual needs of our undergraduates and postgraduates.

Vocabulary and structure

A rough evaluation of the comprehensive reading process presents three major problem areas: (a) lexical factors—vocabulary, (b) grammatical factors—structure, (c) logical factors—content. Without wanting to belittle the importance of vocabulary—though I object to a word-centered approach—I consider the primary task is to teach word recognition in context, including contextual guessing, instead of lists of unrelated words, since we do not read words but constituents. This is well illustrated by the fact that the first 500 words of Thorndike's frequency list have 14 070 meanings recorded in the *Oxford English Dictionary*. We also have to get the students used to understanding meanings through paraphrases, definitions, and synonyms rather than equivalent terms in their native language. The problem of pronouncing technical terms also has to be tackled because the English spoken version of Greek and Latin words varies greatly from that used in Slovak.

The second area, structural problems, is a product of the complex

syntax that so often characterises unsimplified English writing. For adults this is particularly difficult, because although they are still accustomed to learn new words and concepts in their own language, they have long since lost the habit of learning new syntactic structures; in our native language we absorb phrase and sentence patterns unconsciously but increase our vocabulary consciously. Although English syntax in the spoken language has been described in detail, not much has been said about the critical differences between the structures of the spoken and written languages. We have to develop the student's awareness of the syntax of written English, since sooner or later the student will find himself reading a kind of English that no one speaks. For example, complex verb phrases are very prevalent in certain kinds of writing. We also cannot assume that our students understand the differences between restrictive and non-restrictive types of relative clauses, which are often used in writing to indicate important attitudes. Certain kinds of writing in which many ideas or events must be presented and interrelated tend to make frequent use of free modifiers that are not embedded in noun or verb phrases but more loosely in the sentence as a whole. The order of words within constituents is relatively rigid in English, but constituents themselves may be moved around with considerable, and sometimes confusing, freedom. The resulting inversions provide a useful stylistic device, but such sentences may prove extremely difficult for the foreign reader to understand. We must identify the problem structures since our students will not have acquired a conscious knowledge of the way the structures really work within the complex sentences of advanced written English.

Besides these problems of structure and vocabulary there are other items that deserve increased attention—for example, the use of the passive voice, which differs greatly in English and Slovak; functional shifts occurring without formal change—noun to verb and vice versa; sequence of tenses; the contrast between perfect and imperfect in the Slovak verb system that is absent in English, where it is supplied by lexical items, and, conversely, the contrast between progressive and non-progressive in English, which is expressed mostly by lexical items in Slovak; special plurals derived from Latin or Greek; prefixes, suffixes; phrasal verbs; prepositional phrases; and false cognates.

Logical relations

Although both vocabulary and structure have to be mastered if we are to understand what is written, in treating the problem of content we face a far broader range of factors, including connections between sentences, paragraph structure, the organisation of longer sections, and many other elements. There seems to be a trend toward an approach that might be called discourse-centered, and the experience of it will take the student beyond vocabulary lists and verb forms to more lasting insights into language use. The necessary skills, particularly in the reading of expository discourse, involve recognising logical relationships as well as lexical and structural ones. The number of devices by which logical relationships are created is limited but they can be combined or manipulated to achieve an unlimited number of variations. Nevertheless, it is reassuring to the student to know that the logical relationships he encounters in his reading are limited in number and recur constantly, and that if he learns to recognise a definite list of logical functions that create relationships, he is likely to be able to cope with the relationships he will find in all his reading. A set of workable categories of functions, by no means complete, would include: addition, alternative, answer, cause, classification, comparison, contrast, conclusion, definition, effect, emphasis, evaluation, evidence, example, expansion, explanation, generalisation, hypothesis, illustration, inference, opinion, parallel idea, purpose, question, related action, restatement, result, sequence, statement, time.

There are formal criteria or markers, words and phrases that serve as logical connectors to express these relationships, though very often these categories are presented without any formal markers. When they do occur, however, understanding them (and so the rhetorical functions) helps in contextual guessing, which is so important for extensive reading. But the primary purpose of teaching connectives is to draw the reader's attention to the process by which a piece of language is interpreted as discourse. This can be done by various approaches, such as comprehension check questions, completing opening statements with some clues, and supplying synonymous items performing the same function. The point is to relate surface language forms to logical operations and so to show their communicative function in the passage, and to attune the student to specific clues in a context, sharpening his awareness of recurring linguistic features that carry a highly context-determined semantic load. The student will probably

know one or even more meanings of such words; but he is less likely to recognise the value that such words take on in different contexts. For example, "as" has six different meanings signifying at least four different logical categories: because, when, while, in the same way, in accordance with what, considered as; and "once" may mean: for one time, only, at some indefinite time, if, as soon as, at all, not even for one time. The students' mistakes often show a strong bias towards one particular meaning of a word to the exclusion of the other meanings.

Content and aims of a reading course

It might be relevant to list the skills of a reading programme. Many parallels can be drawn between the writing and reading processes if we consider the former as the selection and coherent organisation of experience so as to report, explain, and evaluate, and the latter as recognising and judging the organisation and purpose of this selected body of facts, ideas, and opinions. The ultimate skill—comprehending and handling of intellectual material—may be broken down into various components, which become pedagogically useful if we can devise valid exercises through which to reach these component skills. These exercises then have to be ordered into a teaching sequence—stepping stones towards the ultimate skill.

The following is a somewhat random list of study skills which should help the student learn to read—to read to learn: recognising important details; identifying unrelated details; locating key words and informational clues; outlining single paragraphs; determining conceptual paragraphs; grasping the rhetorical function of a paragraph; finding the main idea of a paragraph; determining relationships between paragraphs; finding the main idea of larger selections; locating topic sentences and sentences or phrases containing supporting information and ideas; deter-

mining the relevance and accuracy of information; identifying the author's viewpoint; realising the author's purposes in individual sections and the whole article; seeing the relation between the purposes; classifying the author's statements by degrees of certainty (use of different tenses); finding possible implications; detecting fallacies in logic; finding overgeneralisations, distortions, omissions; summarising single paragraphs and larger units of material; and recognising the significance of the content as a whole.

If we manage to teach our students to recognise these types of information and perform these skills, they will gain a more thorough and more rapid comprehension of a piece of scientific writing and come closer to understanding the language used as the writer intended it to be understood.

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Reading for Pleasure

Celtic and non-Celtic nostalgia

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Environment has a considerable effect on reading habits. Crime writers evidently profit from the tendency of others to pack a few thrillers in their holiday baggage. Two events have influenced my reading in the past year. The first was that the farmhouse in Wales where my mother had lived for 95 years was sold and I had to move out books dating from my schooldays. The other was that, after living in England for nearly 40 years, I bought a house in Wales. I hope to use this periodically and I wanted to furnish it with a modest collection of books, both for my benefit and that of friends who may use it. The school books went in, together with a selection from my home in England.

Return to Wales

Just as books have a flavour of their own, so do houses. The farm where I was brought up was on a high plateau with the moors rising gently behind. Though I loved the song of the curlew, I disliked the driving rain and the drizzle. So in choosing a new home I went for softness and I now have a house in the valley below, on the banks of the Teifi, where the sun shines more often. To me the Teifi is the finest river in Wales and no other shows so many changes of character. One of its habits is to carve out enormous wide, still, and deep pools when it changes direction. These look like small lakes and they are given individual names. In other places, where it flows slowly, it has gouged out deep canyons with sheer sides in the rocks. In summer, the stream is confined to this narrow channel and the water is so still and black and deep that as a child I readily believed that its depth under the bridge at Henllan was immeasurable.

I have reread two books on life in this part of Wales at the turn of the century—and it had not changed much in my childhood. Both were identified as gems by that perspicacious writer on country matters, Maurice Wiggin in the *Sunday Times*. The first was *Welsh Country Upbringing* by D Parry-Jones

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