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An Outline of EMP Course Design

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SUMMARY

Society is now at a stage at which it is possible to obtain information about almost anything within a very short period of time. Such a situation requires the usage of one language for mutual understanding and communication of scientific, technological and academic information among different linguistic groups within a multi-linguistic community.

English has become the common language of international experts in a wide range of subjects, including medicine. Courses in ESP focus on the specific vocabulary and the unique language skills those in a given field are likely to require.

The overall goal of the English in Medicine course at the Faculty of Medicine in Niš is to improve the proficiency of the learners and inevitably comprises the discorsal, grammatical and sociolinguistic competence and performance depending on the four linguistic skills.

Key words: course design, terminology, written and oral communication, language skills, medicine

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INTRODUCTION

Language teaching is always characterized by a search for more effective ways of teaching foreign languages. Curriculum and course design of English for Medical Purposes is a never - ending, open process of constant change and improvement (1). There are various types of syllabuses available but as teachers gain experience and knowledge they most often begin to develop an individual approach or personal method of teaching, one that draws on an established approach or method but that also uniquely reflects their beliefs, values, principles and experiences. The syllabus inevitably modifies and adjusts to the realities of the classroom.

English for specific purposes is closely connected to language for professional purposes, where speakers of English as a foreign or second language have to learn how to use language in areas where they are going to work. A major interest in this approach is to create knowledge about the specific needs to be covered in specialized language classrooms, in order to make this kind of language teaching as efficient as possible.

The study of languages for specific purposes (LSP) is highly student - centered, focused on learners' professional linguistic needs, as well as teaching materials production.

In learner - centered approaches, course design and teaching often become negotiated, dynamic processes, since needs, expectations and student resources vary with each group. This suggests that LSP teachers must take into account student learning styles, strategies and language processing approaches. LSP teachers should assist students in becoming more flexible and more aware of their own learning styles and approaches.

English for Specific Purposes focuses on the learner and one of the greatest contributions of teaching English for Specific Purposes is the emphasis it puts on the thorough analysis of the students' needs when designing the course. The analysis includes an assessment of the current level of knowledge students possess and determining the target situation, what the student wants to achieve. Knowledge of both General English and English for medical purposes is necessary for progress and development in science and workplace. For this reason, knowledge of General English at an intermediate level is mandatory for a successful participation in the course. An overall needs analysis shows that students need training in specialized language which includes not only vocabulary but also specific grammatical structures, phrases, styles and principles of oral and written communication which are characteristic for medical profession. The information obtained from needs analysis can be used to define program goals. These goals can then be stated as specific teaching objectives, which in turn will function as the foundation on which to develop lesson plans, materials, tests, assignments and activities. Basically, a need

analysis will help to clarify the purposes of the teaching program.

In ESP, the authentic world must be brought to the students, and they must learn to interact with the language as it is spoken and written in target situation. The workplace context also helps keep the focus more on the specific purposes and less on the language. Thus ESP teachers must be willing to negotiate with both experts in the target situation and with the students. Also, the teacher must rely on his/her own knowledge when assessing the appropriateness of the material to be used for developing students' skills.

The course designed in accordance with the modern ESP methodology will enhance peer work and team work and it will enable shared learning.

The starting point in course implementation

In English for medicine, the implementation of the course design starts from the level of morphology. With intermediate knowledge of General English, students are already familiar with, for instance, affixation and word building, families of words and derivations. In EMP this frame is then transferred to the field of medicine and further enriched with examples associated with medicine. Students are presented with the basic medical vocabulary and terminology which include learning the structural word analysis. This level is very important as it will provide a basis for understanding more complex medical terminology and connecting the basic word elements with the systems of the human body.

Medical terminology usually refers to a word or a group of words with a particular meaning used among medical professionals in particular situations. Since English is the accepted international language of various fields, including medicine, future doctors need to master the use of English so as to be able to keep up with the developments in their field (2). Therefore, medical terminology should be a prerequisite for medical students who intend to work internationally whether in the form of further education abroad, publishing medical papers in English, taking part in conferences or presentations.

When starting a medical English course, terminology, i.e. vocabulary, represents the center of teaching and all other skills (reading, writing, listening and speaking) will be improved as terminology is accumulated. These terms are derived primarily from Latin and Greek which has several advantages. The terms have precise meanings, can be formed into compound words easily and have been in constant usage for many centuries. Instead of memorizing a long list of terms, it is better for a student to try to dissect a word and understand its meaning.

The part of the course that deals with morphology consists of three levels. The starting level is the *analysis of the component parts*. The teacher helps

students analyze words by dividing them into component parts. The goal is to learn the tools of word analysis which will make the understanding of complex terminology easier. Medical terms are constructed of small pieces that can be used in different combinations in other words, making each word unique. As the students become familiar with the word parts and learn the meaning, they will be able to recognize those parts in new combinations. Medical language is logical in that most terms can be broken into basic parts (3).

At the beginning, students work with more familiar words in order to understand the effects of word building. For example:

roentgenogram

roentgen - root
o - combining vowel
gram - suffix

The root is the foundation of the word. Medical terms can have one or more roots. The suffix is the word ending. The combining vowel (usually o) links the root to the suffix or the root to another root. A combining vowel has no meaning of its own; it only joins one word part to another. It is useful to read the meaning of medical terms starting from the suffix. In our case, the term roentgenogram means a photograph made with x-rays.

oncogenic

onc - root
o - combining vowel
gen - root
ic - suffix

The root *-onc-* means tumor, the root *gen* means to produce, the suffix *-ic* means to refer to. The whole word means to refer to the production of tumor.

The combining vowel is dropped before a suffix that begins with a vowel:

gastric not **gastroic**

There are also two other important word parts: combining form and prefix. Combining form is a combination of root and combining vowel, such as:

cardi/o (in cardiogram)

It is useful to know the meaning of a combining form because it can be used with many different suffixes.

The prefix is a small part that is attached to the beginning of a term. Not all medical terms contain prefixes, but the prefix can have an important influence on meaning. For example:

gastr/ic means pertaining to the stomach, whereas

sub/gastr/ic means pertaining to the area under the stomach.

In this part of the course it is very important to practice and insist on the correct spelling and pronunciation. Spelling of medical terms is usually very complex but it is of crucial importance because there are many words with similar pronunciation but different spelling and completely different meaning. For example, *urethra* /juə'ri:θrə/ is the urinary tract tube leading from the uri-

nary bladder to the external surface; *ureter* /juə'ri:tə/ or /'ju:ritə/ is one of two tubes leading from the kidney to the urinary bladder.

Vocabulary in systems

When they have mastered basic word formation, the students are expected to apply their knowledge of word elements and relate the medical terms to structure and function of the human body on the basis of body systems. For every particular system, the students will learn the basic vocabulary and specific combining forms and suffixes (for example, in digestive system - celio/o, colon/o, enter/o; -ase), describe the location and functions of the organs and the most common diseases.

Each body system initially comes with the relevant vocabulary, predominantly terms for organs that make up the system. Correct spelling and pronunciation are insisted on throughout the course and this phase is no exception. In addition to the basic vocabulary consisting of words (mostly nouns and common collocations) used for organs, the students are also presented with useful verb forms that enable them to describe a system from anatomical, locational and physiological point of view. This is usually achieved with specific definitions.

For example, with the cardiovascular system the relevant vocabulary will include the terms such as: *valve, erythrocytes, leukocytes, lymphocytes, hemoglobin, pulse rate, blood pressure (diastolic, systolic), heart chambers (ventricle, atrium), circulation, oxygenated blood, heartbeat rate, blood clot, etc.*

This system also provides an opportunity to include words that describe specific properties of organs, tissues, membranes, etc.: *muscular, elastic, permeable, fibrous.*

At this point, the specific medical knowledge is integrated with what is learned in English classes and the results are presented in the forms of definitions, such as:

A capillary is the smallest blood vessel in the cardiovascular system. It is located between an arteriole and a venule. Capillary walls are permeable to leukocytes.

However, medical language is not necessarily restricted to that of experts talking to experts. Non-specialists also enter the medical community, most often as patients. Therefore, medical language can also be found in communities in which the speaker is a professional and the addressee is a layperson. The whole situation is also reflected in the process of teaching English for medicine. Besides dealing with symmetrical communication between equals, the course also has to include the aspects of asymmetrical communication between experts and laypeople (doctor-patient).

For this reason, each system is followed by examples of formal and informal expressions, including: *tra-*

chea-windpipe, uterus-womb, coccyx-tailbone, clavicle-collar bone, etc.

Towards the end of the course, asymmetric communication is emphasized again, this time as part of medical interview. As a basic diagnostic procedure, medical interview determines the quality of doctor-patient relationship which is the key element of cooperation and patient satisfaction (4, 5). Therefore, it is obvious that practicing the models of asymmetric communication is of utter importance.

From body systems, we move on to the pathological standpoint, namely the diseases associated with each system. In addition to basic vocabulary this part also includes comprehension questions which allow students to show their ability to define, classify and provide logical conclusions. If the text concerns atherosclerosis, the questions would be like the following:

1. *Define atherosclerosis.*
2. *What is the cause of atherosclerosis?*
3. *What are the major risk factors for CAD (coronary artery disease)?*
4. *If you were to advise a patient who is high risk for a heart attack, which type of diet or lifestyle would you suggest?*

It is obvious that the students are expected to provide their conclusions based on their own specialized knowledge. What is applied here is the so-called *problem - based learning* which represents the basic approach in medicine. This type of learning encourages the students to discuss the problems they deal with in their medical studies. The course of English may help the students to further improve this approach and at the same time develop both the knowledge of medicine and the knowledge of English. An important approach could also be applied here called *guided writing* which implies forming definitions based on provided words or putting sentences into correct order to obtain a coherent paragraph. The results obtained by guided writing could be further expanded so that definitions are used as a basis for writing paragraphs.

Final stages

Using all the mentioned principles and models of teaching, the students are preparing for the later stage of the course which is in part based on the writing skill, where medical research papers are emphasized. Each part of the course represents a kind of building block which is used to create a unified whole, written and oral communication in English.

Discussions and dialogues, done in groups or pairs, are important in teaching. These parts, present throughout the course, are generally used to sum up everything that has been learned. The students are expected to use the specialized vocabulary in complete and accurate sentences.

Writing research papers is a very important part in medical practice and medical students, future doctors, are very well aware that this is one of the ways of becoming equal members of medical community worldwide and expanding the field of work and professional development across the borders of their own country. Therefore, the course needs to include the conventions of writing in English, along with specific rules and propositions concerning scientific papers. Since the basis is formed through previous parts of the course, at this point attention is paid to the specific genre, including style and form; in a word, everything that characterizes longer stretches of language. Here, the course inevitably deals with punctuation, sentence markers, expressing agreement, disagreement, contrast, paraphrasing, etc.

A significant emphasis is placed on case studies since they are one of the most important elements of medicine, concerning specialized topic and content, as well as the opportunity to employ problem-based learning. Case studies are a source of great motivation in students since they are able to use their medical knowledge in English classes in order to solve real problems.

Case study is intertwined with medical interview which is practically at its core and represents the basis of the diagnostic procedure. In the context of teaching, medical interview is capable of combining various aspects of the course. For example, students may take the role of the doctor in pair work and their job would be to conduct the interview with the patient (played by another student) taking care to include all the relevant elements of this mode of communication. Among other things, these include asking specific questions in order to obtain relevant information, using appropriate forms of address, initiating and closing the conversation and using appropriate vocabulary. The problems that the student-patient represents are real-life problems, usually obtained from specialized medical subjects. Next, groups are formed and the presented problem is further explored and may be used as a topic for writing a case study or even a whole research paper or a presentation.

The presentations, which are the final stage of the course are conducted in groups, as well. The presenting group outlines the problem and presents the possible solutions. Other students are the audience; they listen, take notes and ask questions during discussions which follow the presentation.

It should be outlined here that the students and the teacher have specific roles. The students are experts in the field of medicine and they participate in the course by introducing their specialized knowledge. The teacher's role is to ensure that the communicative aspects are fulfilled, to facilitate language learning and to act as guides during the course which is centered around the learners and their perceived needs.

CONCLUSION

Finding appropriate approach to course design in English for medical purposes is one of the most important things for a teacher. However, if we consider the various syllabuses, we will arrive at the conclusion that a number of different ones are needed and are best combined in an eclectic manner in order to bring about positive results. The most important feature of any modern language syllabus is its inherent potential for adjustment based on careful decision - making at each level of the course. Teachers need to be able to use approaches and methods flexibly and creatively based on their own judgment and experience (6).

When learning medical English, the starting point is the medical terminology. It is believed that by understanding the rules of basic word formation, students will overcome the difficulties in learning medical English and make their study easier and more effective. Mastering the basic medical vocabulary in English will also enable students to more easily progress to the level of syntax and semantics.

Each part of the course is a step forward in a process of creating a unified whole. The process develops in layers and each layer is important - the linguistic elements and language skills build upon one another and are held together by the medical context. The final goal of the process is expert communication in English.

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PREGLED NASTAVNOG PLANA ENGLESKOG ZA POTREBE MEDICINE

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Sažetak

Savremeno društvo se nalazi u fazi u kojoj je moguće da se za kratko vreme sazna o svemu. Takva situacija nameće upotrebu jednog jezika u cilju međusobnog razumevanja i komunikacije, razmene informacija naučne, tehnološke i akademske prirode u okviru različitih lingvističkih grupa jednog multijezičkog društva.

Engleski je postao zajednički jezik stručnjaka iz različitih oblasti na međunarodnom nivou. Jedna od oblasti je i medicina. U skladu sa tim, kurs engleskog jezika za specijalne namene zasniva se na specifičnom vokabularu i jedinstvenim jezičkim veštinama koje će biti potrebne u odgovarajućoj oblasti.

Krajnji cilj nastave engleskog jezika za medicinu na Medicinskom fakultetu u Nišu jeste unapređenje znanja medicinskog engleskog jezika, što neizostavno obuhvata nivo diskursa, gramatike i sociolingvistike, a sve u skladu sa četiri jezičke veštine.

Ključne reči: osmišljavanje kursa, terminologija, pisana i usmena komunikacija, jezičke veštine, medicina