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PREDGOVOR

Udžbenik *English in Dentistry* (*Engleski jezik u stomatologiji*) sastavljen je na osnovu savremenih postavki u lingvistici i metodologiji nastave stranih stručnih jezika imajući u vidu potrebe savremenog profesionalnog obrazovanja stomatologa. Namenjen je studentima Stomatološkog fakulteta i predstavlja nastavni materijal za kurs engleskog jezika budući da je usaglašen sa planom i programom predmeta Engleski jezik.

English in Dentistry sasatavljen je polazeći od pretpostavke da njegovi potencijalni korisnici već poseduju srednjoškolsko znaje opšteg engleskog jezika, a da se ovde prvi put susreću sa stručnim jezikom, te da će im ovaj udžbenik predstavljati određenu nadgradnju, odnosno jedan viši i više specijalizovani nivo učenja engleskog jezika.

Udžbenik se sastoji od 14 jedinica (units), od kojih se svaka sastoji od četiri celine.

Svaka jedinica sadrži autentični tekst uzet iz stručnih knjiga, časopisa, kao i članaka sa interneta. Tekstovi su odabrani tako da prate različite oblasti stomatologije.

Uz svaki tekst dat je i određeni broj stručnih reči i izraza. Reči iz opšteg korpusa engleskog jezika date su samo onda kada imaju i posebno značenje u stručnom jeziku.

Zatim su data pitanja (*Comprehension questions*) koja se odnose na tekst, a koja imaju za cilj proveru razumevanja teksta.

Takođe veoma važan deo svake jedinice je onaj u kome se obnavlja gramatika (*Revision*). Obnavljanje gramatike pre svega obuhvata strukture engleskog jezika koje su specifične za stručni jezik, a koje se u opštem korpusu engleskog jezika koriste na drugi način. Prateći deo predstavljaju odgovarajuća vežbanja.

Poseban deo predstavlja Tabela prefiksa za složenice (*Table of prefixes for compound words*) kao pomoć onim studentima koji nisu ili su malo učili latinski jezik.

Na kraju je dat zbirni rečnik (*Vocabulary*) sa izgovorom i značenjem svih reči za koje autor smatra da su studentima nepoznate.

Udžbenik je poprimio ovaj oblik nakon desetogodišnjeg iskustva u radu na ovom fakultetu. Ima za cilj da osposobi studente, buduće stomatologe da se samostalno služe stručnom literaturom na engleskom jeziku, da bez teškoća prate pismenu i usmenu komunikaciju kao i da sami u njoj učestvuju, a pod tim podrazumevamo sposobnost pismenog i usmenog saopštavanja rezultata i dostignuća kao što su pisanje radova i rezimea, aktivno učestvovanje na različitim naučnim skupovima i dr.

Treba međutim posebno istaći da ovaj udžbenik nema pretenzija da studente uči stomatologiji već da ih uputi u tajne stručnog engleskog jezika za potrebe stomatologije.

septembar 2013.

Autor

INTRODUCTION

This textbook *English in Dentistry* is intended for the students of Dentistry having in mind the needs of the present day professional education of dentists.

It is based on the current knowledge and experience both of linguistics and methodology of the teaching and thus represents teaching material for the course of English, since it has been done in agreement with the plan and program of the subject English language of this Faculty.

English in Dentistry has become a textbook in this form starting form the presumption that its potential users already have a substantial knowledge of English acquired in previous schooling and that here, in this textbook for the first time they will get in contact with ESP (English for Special/Specific Purposes.), i.e. a higher and more specialized level of the knowledge of English.

The textbook has 14 units each containing four parts.

Each unit has an authentic text taken from a special book, journal and articles from Internet. Texts have been chosen so as to deal with different areas of Dentistry.

Each text is followed by words and phrases that the author supposes are unknown to the students. Words from the general core of English are given only when they have a special meaning in ESP or help in the understanding of the text.

Comprehension Questions refer to the text and are intended to show the teacher how well the students understand the text.

Revision of grammar mostly highlights structures specific for ESP (used differently in general English)

A special part of the textbook is *Table of prefixes for compound words* that should be of help for students who have learnt little Latin or not at all.

Vocabulary holds a list of words from the texts now given in alphabetical order, with pronunciation and meaning.

As already mentioned the textbook got this form and content after a ten year experience of teaching at this Faculty and with aim in mind to enable students, future dentists to be able to read and get benefit from the ESP literature, with little or no help, to participate in written and oral communication, meaning to have ability to

communicate results and achievements by way of written papers and otherwise, and taking active part in various scientific gatherings, both in writing or orally.

However, the author wishes to point out that this textbook has no pretensions to teach students dentistry, but to help them to understand and acquire knowledge of 'secrets and mysteries' of the ESP in Dentistry.

September 2013

M.Gluščević

WHAT IS ESP?

Today we can speak about the two main kinds of motivation in foreign language learning: instrumental and integrative. When anyone learns a foreign language instrumentally he/she needs it for operational purposes: to be able to read, to write or to communicate with the native or non-native speakers of that language. However, there has also been recognized the need of many students to use the language for specific or special instrumental purposes. Thus, today we talk about and teach ESP – English for Special/Specific Purposes.

The objectives of the teaching and learning of English in Dentistry besides the general objectives and methodology of the foreign language teaching is concerned with the examining the linguistic characteristics of the specific language variety that is necessary for the students of Dentistry.

There are numerous varieties of the English language and what is ordinarily meant by the term is a common core or nucleus which is realized only in different forms of the language that are actually heard or read. Six kinds of varieties can be distinguished and they are interrelated.

Thus, we may say, that the common core of English consists of these variety classes: region, education, and social standing, subject matter, medium, attitudes and interference. Common core, however, dominates all the varieties and there is a set of grammatical and other characteristics that are running through it and are common to all.

Variety classes

region – realized predominantly in phonology (later we notice vocabulary or lexicon)

education/social standing – means educated or uneducated speech

subject matter – dentistry

medium – speaking (stress, rhythm, intonation, tempo) or writing (the use of orthographic system)

attitude – often called stylistic choice of the linguistic form that proceeds from our attitude to the hearer (or reader) to the subject matter or the purpose of communication. It is a non-linguistic component (attitudinal gradient between stiff, formal, cold, impersonal on the one hand and relaxed, informal, warm, friendly on the other)

interference – refers to the traces left by someone's native language upon the foreign language he has acquired.

For the purposes of our studies we are concerned with two varieties: the one, called education, and social standing and the other called subject matter.

When speaking about the former we mean that a variety called Standard English is being taught, that it is a language which can not be identified as regional, that it is taught in schools and is the language of educated people, learned professions and institutions which address themselves to the general public. It is often referred to as the BBC English or 'network' English.

As regards the latter, this variety involves besides what has been termed as Standard English a particular set of lexical items habitually used when handling certain specific subjects, such as law, dentistry, etc.

Within the scope of that term we speak of ENGLISH IN DENTISTRY as one of the special areas of the English language.

Some features of English for Dentistry

Scientific communication (writing and speaking) has a concentration of many types of concepts which have specific functions in English. These functions express the concepts such as: cause and result, defining, possibility, certainty, likelihood, comparing, using passive, expressing obligation, etc.

The aim of the English course in the curriculum

The students have to become acquainted with the functions of the language that express the concepts necessary for English in Dentistry. At the same time by revising the grammar, reminding them of language structures that they already know in order to be able to make the necessary 'shift', which is: how to use language forms and structures and apply them in actual, practical situations, how to speak and write as professionals.

UNIT1

THE STRUCTURE OF THE HUMAN BODY

There are three chief parts of the human body: the head, the trunk and limbs or extremities.

The tiniest structures of living material in the body are cells. Each cell consists of the cell membrane which encloses the cell and the cytoplasm which makes up the bulk of the cell. The spherical body inside the cytoplasm is called the nucleus. It regulates the activities of the cell.

The cells have but short life and then they are renewed in the division process. Sometimes this process is faster as in young bodies and sometimes it goes on slowly. In some cases the cells die, due to an illness or age. Each cell has some special function and a group of similar cells form a tissue. There are different kinds of tissues:

- epithelial and endothelial tissues which form coverings and protect the organs,
- connective tissue which supports and connects other tissues and organs. There are varieties of connective tissue such as bone and cartilage. Every part of the body has connective tissue in it,
- muscle tissue produces movements under voluntary or involuntary control. They are: skeletal, visceral and cardiac muscles,
- nerve tissue conducts impulses, regulates and coordinates the functions of the body organs. It forms the brain, the spinal cord and nerves,
- liquid tissue is composed of blood and lymph. Both fluids circulate continuously throughout the body. The blood is made of plasma in which float small cells: red and white blood cells and blood platelets. The main function of this tissue is to carry nourishment to different parts of the body and to take away products that the cells have made. Different tissues work together and form organs. All organs have varying amounts of epithelial, connective, muscle, nerve and liquid tissues.

Organs performing related functions are grouped into systems. There are nine systems in the body and all are dependent on the others to function normally. They are:

- the skeletal system composed of bones and their articulations,
- the muscular system consisting of skeletal and visceral muscles,
- the nervous system which comprises the brain, the spinal cord and nerves,
- the circulatory system including heart, blood vessels and lymph vessels with the lymph and the blood which circulates in them,
- the endocrine system consists of a special group of glands that secrete their products directly into the blood,
- the respiratory system includes the lungs and all the passages that lead air into and out of them.

- the digestive system consisting of the mouth, the pharynx, the esophagus, the stomach, the large and small intestines, the liver and the pancreas,
- the excretory system includes the kidneys, right and left, the urinary bladder and the lower end of the large intestine,
- the reproductive system is involved in the production of the young. It consists of male and female genitals.

The Anatomic(al) Position

In the anatomical position the body is upright. The arms are by the sides and the legs are parallel to each other. The palms of the hands, the feet, the face and the eyes are all directed forwards. The anatomical position is the basis of all descriptions of the position of structures in the body. For example, the head is always said to be **above** the feet, even when the patient is lying down.

Special terms are used to describe sections made through the body. A **median** section is made vertically through the midline and cuts the body into two halves, right and left. A **sagittal** section is any section which is parallel to the median section. A **coronal** section is also a vertical section, but it is made from side to side. A horizontal section is often known as a **transverse** section or a **cross-section**. A section may be **oblique** or at any other angle, e.g. the section of a tooth is shown as longitudinal, or we can say that the section of the skin is made at right angles to the surface.

structure (n)	('str∧kč∂) sastav
human (adj)	('hju:m∂n) ljudski
chief (adj)	(či:f) glavni

make up (v) (meik Λp) sastojati se

 $\begin{array}{lll} trunk \; (n) & & (tr \Lambda nk) \; trup \\ limb \; (n) & & (lim) \; ud \\ tiny \; (adj) & & ('taini) \; si\acute{c}u\check{s}an \\ cell \; (n) & & (sel) \; \acute{c}elija \end{array}$

membrane (n) ('membrein) membrana

enclose (v) (in 'klouz) obavijati

cytoplasm (n) ('saitou 'plæzm) citoplazma

bulk (n) (bAlk) zapremina
spherical (adj) ('sferikl) okrugao
nucleus (n) ('nju:kli∂s) jedro
renew (v) (ri 'nju:) obnoviti
division (n) (diviž∂n) deoba
process (n) ('prouses) postupak
involve (v) (in 'volv) uključivati

case (n) (keis) slučaj due to (prep) (dju: tu) zbog similar (adj) ('similô) slično tissue (n) ('tisju:) tkivo

epithelial (adj) (epi 'θi:li∂l) epitelno, površinsko endothelial (adj) (endo 'θi:li∂l) endotelno, unutrašnje

covering (n) (' $k\Lambda v\partial ri\eta$) prekrivač line (v) (lain) obložiti connective (adj) ($k\partial$ 'nektiv) vezivni support (v) ($s\partial$ 'po:t) podržati variety (n) ($v\partial$ 'rai ∂ti) raznolikost

bone (n) (boun) kost

cartilage (n) ('ka:tilidž) hrskavica

muscle (n) ('masl) mišić voluntary (adj) ('vol∂nt∂ri) voljan

skeletal (adj) ('skel∂t∂l) skeletni, što pripada kosturu

visceral (adj) ('vis∂r∂l) uz unutrašnje organe

cardiac (adj) ('ka:di ∂ k) srčani nerve (n) (n ∂ :v) živac conduct (v) (k ∂ n 'd Λ kt) voditi impuls (n) ('imp Λ ls) nadražaj brain (n) (brein) mozak

spinal cord (n) ('spain∂l co:d) kičmena moždina

liquid (n)(adj) ('likid) tečnost, tečno fluid (n) (flu:id) tečnost circulate (v) ('s∂:kjuleit) kružiti

continuously (adv) (k∂n 'tinju∂sli) neprestano

(θru: 'aut) kroz throughout (prep) (plæzm) plazma plasma (n) (flout) ploviti, lebdeti float (v) platelet (n) ('pleit∂l∂t) pločica nourishment (n) ('narišm∂nt) hrana take away (v) (teik ∂wei) odnositi vary (v) ('ve∂ri) razlikovati se amount (n) (∂ 'maunt) količina perform (v) (p∂: 'fo:m) vršiti, obaviti

to be related (v) (ri 'leit) biti u vezi

heart (n) (ha:t) srce

depend (on) (v) (di 'pend) zavisiti (od)

(glænd) žlezda gland (n) (si 'kri:t) lučiti secrete (v) ('respireit∂ri) disajni respiratory (adj) lung, lungs (n) (lan, langz) pluća passage (n) ('pæsidž) prolaz digestive (adj) (di 'džestiv) probavni ('fe∂rinks) ždrelo pharynx (n) esophagus (n) (i 'sof∂g∂s) jednjak

stomach (n) ('stam∂k) želudac

small intestine (n) (smo:l in 'testin) tanko crevo large intestine (n) (la:dž in 'testin) debelo crevo

liver (n) ('liv∂) jetra

pankreas (n) ('pænkri∂s) gušternjača, pankreas

excretory (adj) (eks 'kri:t∂ri) izlučni kidney (n) ('kidni) bubreg

urinary bladder (n) ('ju∂rin∂ri 'blæd∂) mokraćni mehur

involve (v) (in 'volv) uključiti

Comprehension questions

Answer the following questions:

- 1. What are the chief parts of the human body?
- 2. What are the structures of the living material made of?
- 3. Describe the cell.
- 4. Describe the division process.
- 5. What is the tissue and how many kinds are there?
- 6. What are tissues that form coverings and protect the organs?
- 7. What is the function of the connective tissue?
- 8. List the types of muscle tissue and describe their function.
- 9. Tell all you know about the nerve tissue.
- 10. Tell all you know about liquid tissue.
- 11. What are the organs made (formed) of and how are they grouped?
- 12. What is the skeletal system composed of?
- 13. What does the muscular system consist of?
- 14. What system comprises brain, the spinal cord and nerves?
- 15. What does circulatory system include?
- 16. What about the endocrine system?
- 17. What does the respiratory system include besides lungs?
- 18. Describe the digestive system/
- 19. Describe the excretory system.
- 20. What system is involved in the reproduction?

Revising Articles

The Indefinite Article

a. The indefinite article (a or an) is used before singular countable nouns. To decide whether or not a noun is countable, ask yourself if it is the name of something you can count: a tooth, a mouth, a bone, an operation, an airway, an alveola.

- b. Sometimes the indefinite article helps to change an uncountable noun into a countable one. In such cases, the noun usually changes its meaning: a glass (a vessel from which we drink), an ice (an ice-cream).
- c. The indefinite article can be used with its original meaning of one:

Mary has a sister and two brothers.

We have not heard a word from him.

d. It can also mean any:

A tooth can be affected by caries.

An illness is to be cured.

e. It can also be used before the name of a profession, occupation, class, religion: *John is a student.*

Mr Smith is a dentist.

f. If the indefinite article is used before a name, it implies that the person is known only by name:

A doctor Kelly wishes to see you.

A Miss Hill seems to be your new patient.

g. Frequently the indefinite article is used in certain phrases before singular nouns: such a day, quite an occasion, many a person, to have an opportunity, what a shame, on an average

The Definite Article

a. The definite article is used before a common noun to denote a particular person or thing/persons or things known to us:

He saw the nurse standing beside the table. (the nurse that he knows)

But the indefinite article is used to introduce a new thing or person; later if we refer to it again the noun denoting the thing /person is preceded by the definite article:

Dr Kelly saw a man standing in front of his surgery. The man knocked at the door and opened it.

b. The definite article is used before a common noun when a defining relative clause makes the noun into a particular one:

The nurse whom I met in the corridor is Miss Lee.

c. It is used before a common noun when followed by a defining prepositional phrase:

the week after next, the patient with a swollen cheek

d. It is used before a singular noun standing for a whole class or species:

The cell is the basic structural unit of the body.

(**But** : Cells are ...)

e. It is used before nouns denoting the parts and organs of the body:

the mouth, the pharynx, the gland, the spinal cord.

The teeth are situated in the mouth.

 $(\boldsymbol{But}: \text{not with the names of diseases})$

Cancer is usually a lethal disease.