Peculiarities of Teaching English as a Foreign Language to Technical Students

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Abstract

Research stresses out that teaching English in technical universities has specific features in terms of vocabulary, grammar and developed skills. The purpose of this paper is to outline the three-stage model of teaching English to technical students. As the curriculum presupposes studying English for both general and special purposes, as well as mastering skills essential for corresponding professional communication sphere, it influences the content of the studied material and the structure of the academic process. The description of the highlighted stages enables specialists to apply the results for experimental purposes.

Keywords: linguistic competence; language skills; language for general purposes; language for special purposes; professional communication

1. Introduction

Nowadays the communicative competence is a dominating target of teaching a foreign language. The English language performs the function of communication, education and self-education, being an instrument of collaboration and interaction in modern society. The vast majority of students are interested in the practical use of language not only as a means of introduction to the world culture, but also as an efficient and necessary tool for becoming competent in the labour market. In modern business environment, ambitious employees are expected to possess professional skills to be able to compete internationally. Consequently, the university education should train the students capable of working in the real circumstances of professional environment. This is exposed on their

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language skills even if their future profession is not directly connected with linguistics, translation, or teaching foreign languages.

1.1. Literature review

Authors have different approaches to the solution of the problem of teaching English in technical universities. One of the methods is creation of the interdisciplinary curricula conception which is based on the profession-oriented model of sociocultural formation of personality (Slesarenko, 2007). Communicative competence, intercultural competence, professional competence, professional communication, communication at a workplace, and professional language are highlighted as the components of the English teaching process (Frolova & Aleshchanova, 2013). Modular training is worked out for teaching students to analyse information, make creative decisions and form a high level of cultural competence (Dulepova, 2013). There exist efforts in creation and use of universal multimedia textbooks for studying language for special purposes (Osadchaya, 2012). The question how to improve the quality of foreign language teaching by means of mass communication, namely the Internet, is also regarded in papers on education (Molchanova, 2011). Nevertheless, communicative competence is regarded as the main aim of learning a foreign language.

The structure of the communicative competence has been described in a wide range of publications. For example, L.V. Sukhova distinguishes the following components:

1) language competence including the knowledge of vocabulary, pronunciation and grammar rules;
2) sociolinguistic competence, which is the ability to react appropriately in different cultural and social situations choosing and applying adequate language forms and means depending on the aim of communication, type of communicative situations, and the social roles of participants;
3) discourse competence, which is the ability to understand the utterances of different communicative types, make up linked and logical sentences in different functional styles;
4) strategic competence including being aware of verbal and nonverbal means or strategies which can be applied if the communicative task is not achieved;
5) sociocultural competence includes the knowledge of the cultural peculiarities of native speakers, their customs, traditions, norms of behavior and etiquette and the ability to understand and adequately use them in the process of communication being the representative of a different culture;
6) social competence is an ability and desire to interact with people and self-confidence in communication (Sukhova, 2007).

2. Assumptions

The foreign language is an obligatory subject in all the universities. The curriculum is based on knowledge and skills obtained by students at schools. By the end of their study technical students must possess the skills of everyday communication, understand monological and dialogical speech on general and cultural topics; know the rules of grammar and be able to use basic grammatical phenomena, typical of everyday oral and written communication, know essential vocabulary used in everyday and professional communication; read and understand literature on general and special topics using a dictionary; master the skills of oral speech; make prepared reports; take part in discussions on general, cultural and scientific topics; master basic writing skills for everyday and professional correspondence; master basic skills of abstracting and translating literature on general and special topics.

The first challenge which faces a teacher of English at university is the fact that an academic group includes students demonstrating different levels of language skills. Groups may comprise beginners, intermediate and advanced learners. Formation of groups in accordance with the students’ language skills is not always possible. This requires using the individual approach and graded language, especially in the beginning. Nevertheless, textbooks and final assessment materials are equal for everyone. Besides, teaching English to technical students presupposes teaching not only the language for general purposes (LGP), but also the language for special purposes (LSP). Learning terms requires background knowledge from both students and English teachers. However, as the foreign language is always studied during the first or the first two years at universities, most students are not familiar with
the system of special concepts of their future profession. Thus, the subject has interdisciplinary links with other subjects of the curriculum.

3. Structural Model of Teaching English in Technical Universities

We suggest that the subject learning should be divided into 3 stages. The first one includes studying language for general purposes. The second stage includes studying English for professional purposes and, in our opinion, should occur during the third year of studies. The final stage is supposed to be optional: the graduates can choose between academic and business English for the final year of training. Apparently, it presupposes reducing the amount of academic hours at the first stage. In our opinion, it may be compensated by independent work of students or online learning. We also suggest making a strict border between all the three stages and we consider that it is reasonable for the teaching staff of the foreign languages departments to divide their responsibilities and be specialised in one stage only.

The first stage is meant for improving pronunciation, word-building and grammar skills, studying collocations and norms of words combinability. This stage should include studying the following topics: “Family and Friends”, “Free Time Activities and Hobbies”, “Holidays and Travelling”, “Health and Sports”, “Shopping, Clothes and Accessories”, “Meals”, “Nature and Environment”.

Mastering grammar skills as part of the communicative competence is an important factor in the formation of skills of oral and written communication in English. Knowledge of situational grammar is of particular importance for the use of language in correspondence with the extralinguistic factors in the process of communication. The grammar material at the first stage is as follows: countable and uncountable nouns, verb forms for expressing the past, present and future actions, modal verbs, comparatives and superlatives, adverbs of frequency, quantifiers, articles, relative clauses, question forms, short answers, questions without auxiliaries, first and second conditionals, reported speech and reported questions.

The skills formed and developed are: making conversations, asking questions and finding out personal information; expressing preferences and opinions, giving advice, asking for / giving directions, making guesses, finding out information; making a phone call, seeing the doctor, buying things, etc. By the end of the second year it is reasonable to provide the students with information about the exact level of their English skills in accordance with the Common European Framework of Reference (CEFR) – the internationally recognised system for describing language ability.

Latypov, Sabirova (2013) consider that a foreign language for specific purposes should be studied at all levels of language acquisition. If all the students of the group have proper language knowledge and skills, it is reasonable enough to acquaint the students with some professional lexis at this stage, but, in our opinion, technical terms should not dominate in the studied vocabulary. It is the aim of the second stage alongside studying the rules and ways of translating and abstracting technical texts. It includes developing all four language skills (reading, writing, speaking and listening) in a technical context, as well as formation and development of the skills of translating professional texts. The situations presented in the tasks should be connected with the sphere of professional communication. By their third year at the university students usually have enough background knowledge to understand the subject matter, which is necessary to translate the special discourse properly.

Studying terminological units plays a great role in studying technical English and translating special texts. Studying professional vocabulary mainly occurs in the process of reading special texts. These include descriptions of machines, equipment, instruments or processes of production. The ability to choose corresponding equivalents in the target language and general translation skills are trained at this stage. The lexical material includes multi-word terms consisting of groups of attributes denoting properties and characteristics of objects and phenomena and verbs denoting processes: apply, assure, effect, imply, involve, lead to, obtain, perform, result in, etc. The grammatical aspect of teaching should be focused on translating predicative constructions and the passive voice.

A very important aspect of learning languages for special purposes includes learning and translating words and word-groups belonging to the terminological system of a corresponding sphere. As their main function is to convey a concept peculiar to this particular field, these language items are not used or even understood by people who are not specialists in the corresponding field of study or activity. Technical students are to learn specialized vocabulary
of a definite branch of science, serving the needs of such highly developed fields as power engineering, building construction, aviation, etc. They have to master the system of terms in the corresponding sphere and be able to properly use terminological dictionaries and other books of reference, as well as the resources available in the Internet. It is necessary to explain the fact that a term is usually translated by a corresponding term of the target language, as technical terms have their permanent equivalents in the respective terminological systems of the source and target languages. If a term causes difficulties and has no evident equivalents in the target language, it is necessary to analyse this term logically and linguistically, taking into consideration its connection with the context in order to choose a precise monosemantic equivalent. Correct understanding and translation of terms depend not only on good knowledge of the language, but also on being aware of realia of the native country and these of the country of the studied language.

In translating special texts students must be able to cope with the problem of polysemy of terms. Though terms tend to be monosemantic, terminological systems possess polysemantic units and their translation depends on the context. For instance, in the sphere of construction, the term moulding may denote a small decorated area of stone or wood at the edge of a wall or around a door, picture, frame, etc. and, at the same time, something that was produced in a mould (Macmillan English Dictionary for Advanced Learners, 2006). Students should also know the structural peculiarities of terms: they may consist of one word and be a word-group of one key-word and one or several adjuncts specifying or modifying the meaning of the main element. Multi-word terms are typical of special literature and may cause difficulties while translating. For example, in teaching to translate word groups consisting of several components from English into Russian, a teacher of English should explain to the students that it is necessary to stick to the following succession of actions: translate the dependent noun (the last word of the word-group); analyse the semantic relations between the members of the word-group and divide them into sense-groups (from left to right); translate the word-group starting with the dependent element and then translate every sense group from right to left. For instance in the word-group thermal expansion coefficient the main word is coefficient — коэффициент, and the adjective thermal modifies the noun expansion, so the translation is коэффициент теплового расширения.

Students are also inclined to make mistakes in translating units regarded as translator’s false friends, i.e. words of different languages which are more or less similar in form but different in meaning. They tend to take this similarity in form for the proximity in semantics and to consider the units that look alike as interchangeable terms. Therefore, a list of examples of translator’s false friends should be presented. For example, the English word apparatus has Russian equivalents аппарат and аппарatuра, but it also may be rendered as прибор, инструмент; машина; механическое устройство; установка; приспособление. The term resin is not translated as резина, but has the following semantic equivalents: смола; канфоль; камедь.

As the skills of making summaries of texts are tested at the examination, the following phrases should be included into the lexical minimum: The title of the text is ..., The text concerns the problem (information, data) ..., The main idea of the text is ..., I’d like to underline (stress) that ..., It should be said that ..., I would like to draw your attention to ..., I’d like to pay your attention to the fact that ..., In conclusion..., Summing up all that has been said .... This brings us to the conclusion that .... Thus, we may conclude that ..., etc.

The third stage presupposes the choice between business and academic English. Students planning to continue their education at masters or post-graduate courses are expected to study academic English. Firstly, it is necessary for their entrance exams, as their language skills of reading, speaking and translation are tested at the examination. Secondly, writing thesis presupposes getting familiar with the works of scientists of other countries and, reading their papers in international journals and magazines published in English and finding out about novelties in the sphere. Thirdly, participating with confidence in international conferences, symposia and seminars with reports or presentations and writing papers in a foreign language contributes to the development of a person’s career in science. It requires being aware of and following the stylistic requirements for scientific texts and accurate choice of words and language patterns. Informing about scientific ideas, inventions, investigations, proving hypotheses, explaining sophisticated concepts and phenomena require special language skills. These include using proper language means for framing arguments, informing about the results of investigation and making conclusions. The groups of lexical items studied at this stage include:

- abstract nouns: aspect, bias, empiricism, facet, hypothesis, objective, phenomenon, procedure, scrutiny, verification, etc.;
verbs: assume, conclude, infer, point out, presume, suppose, replicate, duplicate etc. and impersonal passive constructions which are often used with them: It should be pointed out that..., It must be assumed that..., It must be emphasized that..., It can be inferred that..., etc;
- emphasizing adverbs: clearly, completely, considerably, essentially, fairly, greatly, scientifically, markedly, materially, perfectly, reasonably, etc;
- causative-consecutive conjunctions and logical connectives: since, therefore, it follows that, so, thus, to imply, to involve, to lead to, to result in, etc.

Furthermore, some students with a high level of English who plan to continue their studies abroad must be able to follow a corresponding academic course at university level, which also requires proper language proficiency. Teachers should encourage such students to read special literature and watch specialised TV programmes in the studied language. The Internet gives access to authentic texts, possibility to communicate with native speakers of the studied language, and creates a natural language environment thus providing opportunities for developing mediacompetence of students (Molchanova, 2011).

Students planning to finish their studies and enter the job market are expected to choose a course of business English at the third stage. Knowledge of business English allows communicating effectively in business environment, and opening better career opportunities making graduates’ ambitions for promotion or career development a reality. They are expected to develop their abilities to use English to demonstrate, at least, basic office skills such as reading and writing short messages, memos and emails, writing CVs and application letters, interpreting charts, following short telephone conversations and discussions, talking about business-related matters. Teaching at this stage should include everyday work and business tasks. The examples of lexical units studied at this stage are: application, aptitude, assignment, counterpart, deadline, employment, fee, freelancer, interview, perk, portfolio, promotion, recruitment, salary, shift, staff, wage, etc.

4. Conclusion

The introduced model of English teaching process includes 3 stages. During the first one, English for general purposes is studied. English for professional purposes is supposed to be studied during the last two years. The second stage is devoted to studying the relevant technical vocabulary, working with technical texts, and developing all four language skills in a technical context. The main task is to teach to cope with the problem of translating simple and compound terms in professional discourse and that of choosing language means to make abstracts of special texts. The third stage is optional: the students make a choice of studying either academic or business English depending on their professional plans. Students studying academic English are expected to get knowledge of the scientific language style and corresponding language skills. The other group of students are supposed to learn business English sufficient for practical everyday use in a business environment. Making a strict border between all the three stages is suggested. All the stages have their own peculiarities of content, including vocabulary and grammar, as well as in the formation and development of practical skills.

References