## Specific Linguistic and Methodological Qualifications of English Language Teachers and Postgraduates

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**Abstract** — The recent ESF project is focused on increasing the qualifications of language teachers who have received high-level linguistic and pedagogical training, however not specialized in teaching a language of profession, which is the subject of language education at tertiary level. The major fields of science at our faculty being electrical engineering and information technology, the project is centred on English for Electrical Engineering which has received very little attention in the past, mainly on its linguistic characteristic and the pragmatic aspects of this variant of professional language, its style, logical structure, grammatical and lexical cohesion and coherence of texts. These linguistic parameters of English for Electrical Engineering as well as the methodology and didactic aspects of teaching a language of profession are the subjects of the proposed teacher training. In contrast with 'General English', teaching a Language for Specific Purposes [LSP] is focused on the specific needs of the learners, it is goal-directed. Teaching LSP should always reflect the underlying concepts and activities of the disciplines or professions it serves. Language teachers are required to obtain some subject knowledge of their learners and the ability to balance content level and language level and produce their own materials fitting the specific needs of the learners. Last but not least, teachers also have to master the methodological principles related to teaching a language of profession, e.g. learning by doing, tolerance of error, focus on communicative activities, authenticity of materials and tasks. The second target group involved in the project are students of electrical engineering and information technology, who in their professional careers, academic or in the industrial sector, will have specific communication needs and therefore it is essential that they should concentrate on this particular variant of professional language.

**Index terms** — Language for Specific Purposes, methodology, pragmatic aspects, science and technology style

#### Introduction

There has been a lot of discussion about teaching languages at the tertiary level as it is often believed that by reaching this stage of education learners have gained sufficient knowledge of languages they would need for their future careers, and that the tertiary education institutions should offer education in the major and affiliated subjects of study, and language knowledge should be cultivated elsewhere. However, the reason for teaching languages, especially English, at universities is well defined. It is the importance of language specificity within professional fields that clearly distinguishes teaching of General English at secondary schools from teaching a Language for Specific Purposes in university contexts.

At our department we deal with students of electrical engineering and information technology who learn English as the language of their future profession. For them English is a necessary tool of international communication, access to sources of information, study and career opportunities. At our disposal we had practical textbooks and e-learning materials, for example those produced within the framework of various development projects and Leonardo da Vinci projects conducted at our university. But rare, though highly necessary is the study and knowledge of the theoretical basis that would facilitate the teaching and learning the professional variety of English for Electrical Engineering.

Research at our department is focused on the language of electrical engineering as a special province [5] and on the parameters of professional discourse/English for Electrical Engineering [6].

## **English for Electrical Engineering**

English for Electrical Engineering can be classified as a functional variety used for professional and academic purposes. The style is restricted by the purpose of this variety to transfer specific information concerning a specific field of science. It is a functional style and the preferred genres are scientific article, research paper, scientific books, research report, or article in popular scientific journals. The style of English for Electrical Engineering complies with the characteristics given by Galperin [3] who characterized the style of technical sciences as logical in sequencing, following the chronological scheme, using condensed sentences and specific vocabulary, with high degree of nominalization. The message must be true, relevant, brief, orderly and informative.

Another quality of the style of science and technology and therefore of English for Electrical Engineering is the density of specific terms used. These terms create a lexical cohesive chain - a net of terms that help comprehend the

delivered information. Other qualities of the text, semantic and grammar, cannot guarantee the appropriate interpretation of the discourse [5].

English influences the terminology in all disciplines of electrical engineering. It is significant for language communities using English as a foreign language that in their own languages the gist of information is delivered by English words that serve as orientation points in processing of specific information. English terms are taken over as loanwords, because the language of science and technology has to react quickly and accurately to the latest achievements in the particular areas of interest and English can express the transferred information appropriately and accurately.

When defining the functional style used in English for Electrical Engineering it is necessary to take into account some extra-linguistic features of this specific functional variety, namely the pragmatic aspects, i.e. the interpretation of pragmatic meaning. While the pragmatic meaning of a general language discourse is often based on cultural habits and historical experience and may be restricted locally, a crucial role in comprehending specific professional information is that of the shared professional knowledge and experience. It is the professional knowledge and education, not a high proficiency in the language knowledge, that create the schemata of professional knowledge in the receiver's mind, shared with professionals in a particular field of science that enable the users to decode the specific information.

## Methodology

In 1987 Hutchinson and Waters introduced a new approach to teaching English for specific purposes [4]. They point out the importance of methodology, which is more important than the linguistic approach. Among the recent approaches to research of language for specific purposes is genre analysis useful in work with both written and spoken discourse [11]. Although teaching of a professional language cannot be regarded as an independent discipline, this type of tuition requires special didactic and linguistic training. The teachers should know specifically how the students will use English, they should be aware that they have their special professional knowledge which especially in our fields of science facilitates their comprehension of information in English, and should be able to offer courses tailored to the specific needs of these specific groups of learners. Teaching of a professional language requires specific skills. The teacher should be, to a certain degree, familiar with their students' area of interest, and must be aware of the specific working environment and target situations their students will face in their professional careers [7].

Strevens [10] gives two absolute and two variable characteristics of a professional language. The absolute characteristics state that teaching of English for specific purposes

- should meet the specific needs of learners
- is connected (contents, topics) with a specific profession
- is focused on language skills suitable for them (syntax, lexis, discourse)
- requires discourse analysis

The variable characteristics state that English for specific purposes

- can be restricted to individual skills
- does not require previously given methodology

The tuition is goal-directed, based on needs analysis [9]. Furthermore, the training is time-restricted, offered in courses for adults and in homogeneous groups (in sense of profession). For example, Dudley Evans and St.John [2] point out the difference in the methodology of teaching general and a professional language. In the latter the language teacher becomes a language consultant for students who have the knowledge of their specific field of science. Tuition is centred on the students and their needs, their own creative work, communication approach, authentic tasks and a certain degree of error tolerance.

## **Needs analysis**

In designing a course of a language of profession the first step is the needs analysis. It should include the students, teachers of the subjects relating to the major area of study and potential employers.

In the centre of attention should be the specific needs of all these groups. Emphasis is laid on the goals of the students and specific language competencies are preferred. In this, teaching of a language for specific purposes is distinguished from teaching general English. Needs analysis is closely connected with evaluation. Although they are on the opposite ends of the teaching process, they are similar in that they have to progress through the process to acquire feedback information and be able to transform the programme. The results of the summative final evaluation are then considered in

the needs analysis for a new course. A successful course of a professional language is based on continuous progress evaluation and verification and transformation of the initial ideas and materials.

The specific needs of a particular study area in language teaching are widely accepted in literature However, a widely discussed issue is the degree of specificity. Neuwirthová [7] points out that the degree of specificity should reflect the results of the needs analysis and level of language knowledge.

Research referring to the needs of the group of students attending courses focused on English for Specific Purposes was carried out with the view of acquiring reliable information on the needs of our students. The chosen sources of data acquisition were the students whose major study areas are the various disciplines of electrical engineering and information technology. Also included in the research were language teachers and teachers involved in research and tuition in the major study areas. The last, important source of information was the potential employers of our graduates who, on the national scale, often refer to language skills as lagging behind professional knowledge. The methods employed were discussions, interviews and questionnaires [8]. Evaluated results were confronted with criteria of the Common European Framework of Reference for Languages [1]. All four groups of respondents laid emphasis on communication skills.

# The ESF project Specific Linguistic and Methodological Qualifications of English Language Teachers and Postgraduates

Based on our research on English for Electrical Engineering and research on the methodology of teaching a language for specific purposes is the recent ESF project **Specific Linguistic and Methodological Qualifications of English Language Teachers and Postgraduates** focused on the specific needs of teachers and advanced students of English at a technical university.

The first target group includes teachers of English at the Department of Languages, Faculty of Electrical Engineering and Communication, Brno University of Technology. Although they have had high-level linguistic education they need to be acquainted with the specific variety of English used by the specific community of professionals in the field of electrical engineering and information technology, the characteristics of its style and pragmatic functions and with the didactic aspects related to teaching a language of profession which is different from teaching general English. Within the framework of the project they receive training, not offered anywhere else, in their workplace.

The second target group, postgraduate doctoral students are offered an innovated course of English language to improve their competencies in the language of their major area of study and future profession which they need to make use of globally available sources of information, participate effectively in international research and communicate research results.

The course is targeted at the characteristic features of English for Electrical Engineering. The individual aspects of this style, the lexical system of this variety of English and word formation principles are studied.

The innovated materials include electronic support for use in class. The students work with reference modules and task-based exercises accessible online. Another output of the project will be a CD including all produced materials.

## English for postgraduate doctoral students

The course is based on the results of needs analysis performed within the methodological research, with respect to the criteria set by the *Common European Framework of Reference for Languages: Learning, teaching, assessment* [1].

#### Spoken discourse

The student is able to

- deliver without difficulty a simply formulated lecture, make presentation on a topic concerned with electrical engineering or information technology
- take part in discussion, argumentation
- take part in an interview
- · make a professional presentation of his/her personality, department, university
- · describe the research he/she is involved in and the latest developments in the relevant field of science
- master mathematical terminology, description of graphs, charts and trends

#### Written discourse

#### The student is able to write

- a short discourse referring to a topic concerned with the major study area
- a structured CV, letter of application and motivation letter
- a short summary of a text
- a short report on a completed research task
- a simple abstract
- to communicate information
- to describe a process, a product

When designing the syllabus, we were guided by the characteristic features of the style of science and technology. In writing we focused on research paper, one of the major genres of scientific and technical writing. The subject of this part of the syllabus is the structure of a research paper, the appropriate grammar and language functions. Another focus of attention is the lexical competence. While the students are usually able to supply the specific terms of their area of interest, they are not well acquainted with academic vocabulary in general. Moreover, there are many difficult and confusing words and expressions that must be highlighted and practised.

Although the written medium is preferred in science and technology, spoken discourse is of utmost importance. Therefore the students are given guidance and encouraged to make presentations, take part in discussions and interviews.

#### **Syllabus**

First semester

Appropriate English, everyday and academic English
Types of writing
Research articles - composition, style, language functions, grammar
Composition - abstract, introduction, the main body, conclusion, summary
Academic vocabulary
Presentations - parts of a presentation
Describing trends, reading graphs, charts and tables
Universities
CV, letter of application, job interview

Second semester

Research articles
Style - objectivity, formality, hedging
Language functions - comparing and contrasting, emphasizing, defining, describing a process
Grammar - articles, passive voice, relative clauses, word order
Academic vocabulary
Presentations
Product description
Difficult words

## **Conclusion**

The ESF project **Specific Linguistic and Methodological Qualifications of English Language Teachers and Postgraduates** has focused on a specific variety of English - English for Electrical Engineering which until recently had not been the subject of research despite its wide spread and increasing global importance of the professional community using this variety for communication. Little attention has been paid to training of teachers of this specific language variety and to the didactic aspects of a language of profession rather different from those employed in teaching a general language. The innovated courses for doctoral students now offered at our department are proving beneficial for increasing the students' language competencies targeted at their immediate needs at university and anticipated needs in their future careers.

The present project and the innovated course for postgraduate students will be followed by courses of English for Electrical Engineering provided to academics to cultivate their knowledge of English with focus on academic vocabulary

and style of science and technology. A new study programme English for Electrical Engineering has been submitted for accreditation. In the intended programme English and electrical engineering will be two equivalent major areas of study.

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## References

- [1] 'Common European Framework of Reference for Languages: Learning, teaching, assessment', Cambridge: CUP, 2001
- [2] Dudley-Evans, T., St John, M.J. 'Developments in English for Specific Purposes. A multi-disciplinary approach', Cambridge University Press, 1998
- [3] Galperin, I., R., 'Stylistics', Moscow: Higher School Publishing House, 1971
- [4] Hutchinson, T., Waters, A. 'English for Specific Purposes. A learning-centred approach', Cambridge: Cambridge University Press, 1993
- [5] Krhutová, M., 'The Language of Electrical Engineering as a Special Province', Brno: Akademické nakladatelství CERM®, 2007
- [6] Krhutová, M., 'Parameters of Professional Discourse/English for Electrical Engineering', Brno: Tribun EU s.r.o, 2009
- [7] Neuwirthová, L., 'Profesní jazyk v pregraduálním učitelském studiu'. In Janík, T., Mužík, V., Šimoník, O. (Ed.), Sborník příspěvků: Oborové didaktiky v pregraduálním studiu: mezinárodní conference 13.-14. září 2004 (CD-ROM). Brno: Masarykova univerzita v Brně, 2004, 7 p.
- [8] Neuwirthová, L., 'Constructing a Foreign Language Standard for Technically-Oriented Universities'. In INNOVATIONS 2008: World Innovations in Engineering Education and Research. iNEER Innovations Series. Arlington, VA22205, USA: BEGELL HOUSE PUBLISHING, 2008, pp. 57-61
- [9] Robinson, P., 'ESP Today. A Practitioner' s Guide', Hemel Hempstead: Prentice Hall International, 1991
- [10] Strevens, P., ESP after twenty years: a re-appraisal. In TICKOO, M. (Ed.) 'State of the Art'. Singapore: SEAMEO Regional Language Centre, 1988. In MAYO, G. 'English for specific purposes: discourse analysis and course design'. Bilbao: Servicio Editorial de la Universidad del Pais Vasco/Euskal Herriko Unibertsitatea, 2000, pp. 23-24
- [11] Swales, John M., 'Genre Analysis', Cambridge: Cambridge University Press, 2008
- [12] Widdowson, H.G., 'Discourse Analysis', Oxford: Oxford University Press, 2007