Standardising Foreign Language Knowledge in Electrical Engineering Education

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ABSTRACT: The demands of europeanization of foreign language teaching in university contexts requiring meeting standards or standardised descriptors shared within Europe and being available for a variety of purposes depending on specific institutional contexts and requirements are dealt with in this paper.

To satisfy the demands of europeanization, a foreign language standard for technically orientated universities is being constructed at Brno University of Technology. Students', postgraduates', other language teachers', subject specialists', and some future employers' needs are being collected and analysed. The format of the standard is based on the "Common European Framework of Reference for Languages: Learning, teaching, assessment" (Council of Europe, 2001), which provides a sound basis for the mutual recognition of language qualifications thus supporting the language department accountability at a technical university. The system of standardised evaluation descriptors reflecting students' professional orientation and European scales and levels will accompany language skills of listening, reading, writing, spoken interaction and spoken production at the level B1 (a lower level of an independent user) and the level B2 (a higher level of an independent user).

The author also believes that word descriptors will help students in the planning of self-directed learning including raising their awareness of their present state of knowledge, self-setting of objectives, selection of materials and self-assessment.

1   INTRODUCTION

Globalisation of economy, communication, and culture, as well as rapidly changing technologies have changed today's objectives of university education which are to guarantee international compatibility and mobility as expressed in Bologna Declaration. At present, teams in various countries are discussing how to develop descriptors for Bachelor and Master degrees that might be shared within Europe and be available for a variety of purposes depending on specific national, regional or institutional contexts and requirements.

University foreign language teaching and learning has to meet the demands of europeanization of university education as well. Foreign language standards based on European scales and levels or standardised descriptors represent one possibility of achieving this goal.

2   STANDARD SPECIFICITY

At present, such a standard respecting specific needs of students at a technical university and enabling comparability between university language programs is being constructed at Brno University of Technology.

Respecting specific needs of a particular science is a fact about which the literature agrees, over which there is no dispute (T. Dudley-Evans & M. J. St John, 1998, T. Hutchinson & A. Waters, 1993, R. R. Jordan, 1997, G. Mayo, 2000, T. Shortis, 2001, J. M. Swales, 1999, to mention just a few). The importance of language within specific professional fields can also be seen in the number of papers published in journals whose focus is exclusively on English for Specific Purposes such as *English for Specific Purposes, The ESP SIG Newsletter, Journal of English for Academic Purposes* and others. Specificity has become central to the teaching of foreign languages in university contexts. According to Ken Hyland, the success of such an approach to language use "is largely due to ESP's[1] distinctive approach to language teaching based on identification of the specific language features, discourse

practices and communicative skills of target groups and on teaching practices that recognize the particular subject-matter needs and expertise of learners" (2002:385).

However, putting specificity into practice is not an easy task for language teachers because majority of them have not been trained as such. In comparison with General English teachers, language teachers of Science and Technology have to acquire the main characteristic features of scientific prose (e.g. the use of the passive voice in scientific/technical writing, grammatical and lexical metaphor, nominalizations, vocabulary in EST[2], verb tenses, visual aids in scientific discourse etc.). The issues of scientific-technical translation and genre analysis, making particular emphasis on the structure of the research article and abstract are also necessary (see García Mayo:2000). Next to that, LSP[3] teachers are required to obtain some knowledge of the fundamental principles of the subject matter they have to teach because they can effectively use only those specialized materials where there is a common fund of knowledge between them and their learners, otherwise the lessons would be dull, boring and even confusing. On the other hand, it has to be underlined that language teachers are not substitute teachers regarding technical subjects. Even if the texts are subject specific and activities authentic, it must be clear to both teachers and students that the objective is learning language, not a technical subject.

The existence of a modern, professionally-orientated foreign language standard with learning objectives, core subject-matter and evaluation standards ensuring higher objectivity when testing and evaluating students would be of real help for LSP teachers within a specific professional field.

3   NEEDS ANALYSIS

The above mentioned standard being constructed for university students of electrical engineering and information technology is in the process of identifying specific language needs which will be addressed in developing objectives and content of a language standard. Not only students' and postgraduates' needs are being collected. The other sources are language teachers, subject specialists, and some future employers whose needs are also being collected and materials relevant to the LSP field studied. The aim of needs analysis is to identify the key language skills for students' present and future target situations - university education itself and their later professional lives.

The process of determining needs is very important. Dudley-Evans and St John claim that "needs analysis is the corner stone of ESP and leads to a very focused course" (1998:122). The idea of necessity of needs awareness is central for LSP. By stressing students' target goals and the need to prioritise specific language competencies, needs analysis clearly distinguishes LSP and general English and has helped decouple university language teaching from the "grammar" or "writing" approaches of earlier days (see Jordan 1997:20-42; Tomlinson 1996:240-250; Hutchinson & Waters 1993:53-64; Nunan 1988:75-85, and others).

The combination of quantitative and qualitative methods of work is used in this research. Data collection methods include semi-structured questionnaires for students and some future employers, semi-structured interviews for subject specialists, non-structured interviews for other language teachers and focus groups (D. Morgan, 2001) for postgraduates. The results will be processed in a primary analysis and some of them also in a secondary analysis and then converted into information for later creation of the foreign language standard. The standard should be open and flexible, so that it can be applied, with such adaptations as prove necessary, to particular situations. Establishing what are the specific language activities of students in a particular professional context will outline learning priorities and help teachers make their teaching effective and their practices professional.

4   EUROPEANIZATION OF LANGUAGE TEACHING

When creating the language standard, necessity of europeanization of university foreign language teaching has to be taken into account. Therefore the format of the standard is based on language proficiency levels and scales of the *Common European Framework of Reference for Languages: Learning, teaching, assessment* (Council of Europe 2001), which provides a sound basis for the mutual recognition of language qualifications. The system of word descriptors corresponding to standardised descriptors of the *European Framework of Reference* will accompany language skills of listening, reading, writing, spoken interaction and spoken production at the level B1 (a lower level of an

independent user) and the level B2 (a higher level of an independent user). These descriptors may help students in the planning of self-directed learning including raising their awareness of their present state of knowledge, self-setting of objectives, selection of materials and self-assessment as well.

5   COMPARABILITY BETWEEN UNIVERSITY LANGUAGE PROGRAMS

Teachers' and students' assessment according to European scales and levels will enable an internationally understandable students' output thus promoting a need for standardising the grades awarded by universities for language knowledge. The standard implemented into curricular documents of the language department will contribute to comparability between university language programs and may help introduce a certificate which would be valid and acceptable also beyond the university context.

At present, there is a university-specific language certification system UNIcert® developed and accepted by some German universities and based on *European Framework of Reference* (for details see http://rcswww.urz.tu-dresden.de/~unicert). In comparison with existing models like Cambridge examination systems, TOEFL and others which are not university-specific in their target groups, do not reflect necessity of professionally-orientated language competences and are not applicable to other languages than English, the UNIcert® system is both specific (university staff and university students are a target group) and comprehensive (all languages at all levels, not only English, are included in the system). As this system enables the mutual recognition of university language qualifications, our faculty is interested in attaining accreditation for UNIcert® thus contributing to the students' and professionals' mobilities and making our graduates, postgraduates, and academic staff more competitive in the open labour market.

The existence of the professionally-orientated language standard can also be of help when implementing the European Language Portfolio in university-wide courses. "The Portfolio would make it possible for learners to document their progress towards plurilingual competence by recording learning experiences of all kinds over a wide range of languages." (*Common European Framework of Reference for Languages,* 2001:20). The model for university-wide courses was approved by the ELP[3] Validation Committee of the Council of Europe in 2002 and is at present being tested in language centres of national associations of the CercleS confederation (for details see http://www.cercles.org) representing another possibility of European co-operation in the field of university foreign language teaching and learning.

6   SUMMARY

The primary goal of the foreign language standard is to identify specific language needs of students at technically-orientated universities which will be addressed in developing the aims and objectives of a language program and establishing what the students' specific language activities in a particular professional context are. In order to satisfy the demands of European harmonisation of university language programs requiring meeting standards or standardised descriptors shared within Europe, the language standard is freely based on standardised levels and descriptors of the *Common European Framework of Reference for Languages: Learning, teaching, assessment* (Council of Europe, 2001). Teachers' and students' assessment according to European scales and levels enables an internationally understandable students' output thus supporting language department accountability at a technical university. The author also believes that used word descriptors will help students carry out their self-assessment and plan their self-directed learning.

7   ACRONYMS USED

[1] ESP   English for Specific Purposes
[2] EST   English for Science and Technology
[3] LSP   Language(s) for Specific Purposes(s)
[4] ELP   European Language Portfolio

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