DEFINING TRAINING STAGE OBJECTIVES FOR FOREIGN LANGUAGE TEACHING IN HIGHER TECHNICAL EDUCATION: A COMPETENCE-BASED APPROACH

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Abstract: The paper aims to apply one of the methodological principles of the "competence based-approach", namely, defining training stage objectives, to foreign language teaching in higher technical education. After a short description of the approach, the paper focuses on the objectives specific to the linguistic training stages identified for foreign language teaching in technical universities. These objectives clearly highlight the specificity of this training program compared to other non-philological higher education fields.

Key words: methodology, objectives, competences, foreign languages, technical universities

1. INTRODUCTION

The introduction of the "competence-based approach" (Boutin, 2004: 29) in European higher education has resulted in the reassessment of higher technical education teaching methodology, including foreign language teaching. The present paper focuses on one of the methodological principles of the competence-based approach, namely, defining training stage objectives for foreign language teaching in higher technical education, and aims to refine those set forth by the *Common European Framework of Reference for Languages: Learning, Teaching, Assessment* (CEFR, 2001).

The principles described in various methodological guides (e.g. OIF, 2009, CNCIS, 2010) have a general character and are applicable to academic training programs (e.g. bachelor's degree). However, we note that the CEFR observations with respect to professional domains (in our case, the technical domain) are insufficient and thus unsatisfactory. This can be accounted for by the fact that the purpose of CEFR is to provide a general common framework for foreign language teaching.

Amongst the above-mentioned principles, our paper places special emphasis on defining those specific objectives of the foreign language training stages in higher technical education. The use of another principle of the competence-based approach namely, the description of the competences necessary for future engineers at completion of bachelor's degree programs according to the training stages identified for foreign language teaching in technical universities (Pop, Tănase, 2009, 2010), will be the aim of further research. The paper extends our previous research centred on the establishment of specific criteria for foreign language curricular design customized for the engineering field (Pop & Tănase-Robescu, 2009) and on the identification of training stages for foreign language teaching in technical universities. As further research, we intend to describe the competence-based curricular design for foreign language teaching in the technical field and to define the minimal performance standard for engineering students.

2. THE COMPETENCE-BASED APPROACH TO FOREIGN LANGUAGE TEACHING IN HIGHER TECHNICAL EDUCATION

2.1 The competence–based approach: a new paradigm in higher education

The competence-based approach has induced major changes in the educational and training system. In our opinion, this approach has led to important changes at pedagogical and methodological levels as well as in pedagogical reform.

At the pedagogical level, this approach has generated a paradigm change in that teaching is no longer centred on relaying of knowledge and on teachers / trainers, but on action and on learners (cf. OIF Methodology, 2009: 4).

At the methodological level, the specific objectives of a training program are now defined in terms of competences to be acquired by future graduates. Identification and description of competences result from of a detailed analysis of both national (i.e. the country where the training takes place) and European labour markets to insure coherence in training programs at a European level. These competences are described by authorized institutions in methodological guides, which serve as reference tools in the elaboration of competence referential. Three types of competences are targeted (cf. OIF Methodology, 2009: 5): general, specific and transversal competences.

Concerning reform, this newly formulated approach has a guiding role for training programs in all European countries in their joint effort towards the creation of a European Qualifications Framework. The pedagogical reform movement generated by the competence-based approach started in the U.S.A. at the end of the 60's and expanded later on to Australia and Europe. The U.K., Switzerland and Belgium are among the first countries that adopted the pedagogical principles of the approach (cf. Boutin, 2009: 29).

2.2 The action-oriented approach in foreign language teaching

As stated in the introduction, some of the principles underlying the competence-based approach are also found in CEFR (2001). CEFR describes the approach (named "the action-oriented approach"), the common reference levels, the user's competences, the tasks and their role in language teaching, the curriculum and the assessment method. In specialised literature, this approach is studied in close relation with the communicational approach (cf. Puren, 2009). Language users are viewed in their interaction both with others and with the environment as social actors capable of permorming specific tasks according to the communicational setting (e.g. educational, familial and professional). The term "competence" is defined with reference to the basic principles of the approach (CEFR, idem): "competences are the sum of knowledge, skills and characteristics that allow a person to perform actions" and are grouped into two large categories: general competences and communicative language competences. The former comprise declarative knowledge ("savoir"), skills and know-how ("savoir-faire"), and existential

competence ("savoir-être"), while the latter, linguistic, sociolinguistic and pragmatic competences.

As mentioned above, the CEFR guidelines regarding the professional domain in general, and the technical domain in particular, are rather succinct, as this methodological tool was designed to cover a much wider range of uses. Therefore, the next section is an attempt to put forth a new paradigm of foreign language teaching. This paradigm is grounded in the competence-based approach principles and is tailored for the technical domain.

3. SPECIFIC OBJECTIVES OF THE FOREIGN LANGUAGE TRAINING STAGES IN HIGHER TECHNICAL EDUCATION

One of the principles of the competence-based approach is the formulation of the specific training objectives in terms of *results*: knowledge, abilities, attitudes, values and/or competences that have to be acquired by students and put into practice after the academic training period (CNCIS Methodology, 2008: 11). In our view, the foreign language teaching process for non-philological fields of study (including technical) should be structured according to a training program with variable length. The study of foreign languages in technical universities usually lasts for two years (i.e. four semesters) within bachelor's degree programs. The close observation of the current foreign language teaching practice in Romanian technical universities (cf. Pop & Tănase-Robescu 2009: 327-328) has led to the identification of three stages in the linguistic training of engineering students: general training, specialized training and socio-professional training.

Consequently, each stage has a set of specific objectives and certain types of competences (tab. 1). The table below shows the specificity of the linguistic training program for future engineers at the stage of specialized training in the technical domain. Functional competence is pragmatic competence specific to foreign language learning in the technical domain and is manifested through the acquisition of different skills (e.g. expressing numbers and percentages, assessing equipment reliability) and of generic competences (e.g. problem-solving skills, team-work skills): "this component is concerned with the use of spoken discourse and written texts in communication for particular functional purposes" (CEFR, 2001: 125).

Training stages	Objectives	Competences
1. Stage of general linguistic training	Developing general communication skills for general purposes of language used in various social interactions	General competences Linguistic competences (writing and speaking skills)
2. Stage of specialized training a) Initiation stage of specialized communication b) Stage of specialized communication	A) Initiation into specialized communication; assimilation of the vocabulary and structures of general technical discourse B) Development of technical vocabulary and specialized domain-related communication in close relation to domain specificity	Pragmatic competences - Functional competences (reading – comprehension and writing skills, including mediating competence)
3. Stage of socio-professional training	Development of techniques of written and oral communication required by the professional settings	Sociolinguistic competences (writing and speaking skills)

Tab. 1. Specific objectives of the foreign language training stages in higher technical education

4. CONCLUSION

In light of the above, we can conclude that both the training stages involved in teaching foreign languages at technical universities and the training programs for other non-philological higher education fields (e.g. economics, law, social and political sciences, agricultural sciences, etc.) obviously share common objectives. However, it is essential to note that the former also display certain specific objectives to be found in the specialized training stage, at initiation level and at specialized level.

The use of the methodological principles specific to the competence-based approach, in general, and defining language acquisition objectives in terms of competences, in particular, allows the identification of future engineers' linguistic profile.

The use of another principle of the competence-based approach would permit the formulation and description of the types of competences corresponding to each stage of training according to minimal performance standards.

We consider that the paper is a valuable contribution to both national and European efforts of foreign language curricular harmonization in technical education. A more efficacious structuring of the language training content implicitly leads to enhanced quality of foreign language training in technical universities.

5. REFERENCES

Boutin, G. (2004). L'approche par compétences en éducation : un amalgame paradigmatique [The competence-based approach in education: a paradigmatic blend]. Available from: http://www.cairn.info/revue-connexions-2004-1-page-25.htm. Accessed: 2010-03-10

Pop, M., & Tănase-Robescu, D. (2009). Towards a New Curricular Design for Foreign Language Teaching in Romanian Technical Universities. *Proceedings of Balkan Region Conference on Engineering and Business Education & International Conference on Engineering and Business Education*, *Sibiu, Romania*, Oprean, C., Grünwald, N., Kifor, V. (Eds.), pp. 326-329, ISBN 978-973-739-848-2, ISBN 1843-6730, Sibiu, România, October 2009, Lucian Blaga University Press, Sibiu

Puren, C. (2009). Entre l'approche communicationnelle et la perspective actionelle, quoi de neuf? [From the communicative approach to the action-oriented approach: What's new?]. Available from: http://www.cahiers-pedagogiques.co,/spip.php?article6339 Accessed: 2010-09-16

Tănase-Robescu, D., Pop, M. (2010). Developing a common framework for foreign language teaching in Romanian technical universities. *Procedia-Social and Behavioral Sciences*, *Vol. 2, Issue 2*, May 2010, pp. 5630-5634, ISSN 1877-0428

*** (2008) *Cadrul Național al Calificărilor din Învățământul Superior [The National Qualifications Framework for Romanian Higher Education - CNCIS Methodology]*. Available from: http://www.apart.ro/metodologiecncsis.pdf. Accessed: 2009-06-21

*** (2001) *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Available from:http://www.coe.int/T/DG4/Linguistic/Source/Framework_EN.pdf. Accessed: 2009-09-03

*** (2009) *Les Guides méthodologiques d'appui à la mise en œuvre de l'approche par compétences en formation professionnelle [Methodological guidelines for the competence-based approach in vocational training – OIF Methodology]*. Available from: http://www.francophonie.org/IMG/pdf/guide_presentation.pdf. Accessed: 2010-03-10