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INTERDISCIPLINARY TRAINING OF THE INTERPRETERS AND TRANSLATORS AT A LINGUISTIC DEPARTMENT OF HIGHER TECHNICAL EDUCATIONAL INSTITUTION: EXPERIENCE, CHALLENGES AND PERSPECTIVES

This article deals with the discussion of the interdisciplinary approach to training interpreters and translators at a linguistic department of a higher technical educational institution. Three-I approach (Interdisciplinarity, Integration, Innovation) is proposed and considered in details with a view of curricula and syllabi development for bachelors, specialists and masters in translation.

Key words: interdisciplinarity, integration, innovation, synergetic approach, foreign language teaching methodology, translators.

kraine enters the global community strengthening professional and cultural relations with the other countries. The process of intercultural professional communication in its turn needs high-level professional mediation. Therefore training interpreters and translators able to effectively facilitate the process of professional intercultural communication is especially important for modern higher educational institutions.

The problems of the 21st century education may be solved only on the basis of conceptual philosophic approach envisaging the need in development of general human values. Obviously, higher technical schools face the challenges of educational process reformation. Therefore, it is necessary to specify the conceptual approach to educational process organization at linguistic departments of higher technical educational institutions.

In our opinion, it is the synergetic approach that serves the goal mentioned above in the best possible way. It is based on the systemic, interdisciplinarity and integration principles.

The aim of this paper is to provide theoretical and methodological reasons for development of the interdisciplinary relations system in teaching future interpreters and translators as well as to give some examples of successful interdisciplinarity implementation experience at the Department of Linguistics of the National Technical University of Ukraine «Kyiv Polytechnic Institute» (NTUU «KPI»).

Interdisciplinarity presently attracts much attention of modern scholars in the field of teaching methods because of the constant and sustainable interrelation of different sciences and the need in their interaction. Nowadays scholars (namely, Y. Kniazeva and S. Kurdiumov, R.V. Milenkova) differentiate such terms as interdisciplinarity, polydisciplinarity and transdisciplinarity. They state that *polydisciplinarity* deals mostly with a possible dialogue between sciences where the object is the same for several sciences but the subject is different for each field of knowledge. *Transdisciplinarity* envisages crossing disciplinary borders and scholarly research jointly held by the scholars from different fields of knowledge.

Interdisciplinary interaction supposes communication, in the process of which every discipline is autonomous and open [1, p.347-348]. Studying interdisciplinarity in foreign language teaching, C. Lee [6] goes along the opinion of L.R. Bronstein [3] according to which interdisciplinary collaboration is defined as an effective interpersonal process in which cooperation, coordination and partnership are involved. Whatever form it takes interdisciplinary collaboration can benefit teachers in the following ways: continued learning in content knowledge, modern technology and recent methodology; sustained enthusiasm for teaching and professional development [4; 10], generation of new outcomes such as course design and teaching [7], curriculum development [8], multiplied input from experts from other subjects, increasing awareness of incompatible personalities, working style, beliefs about learning [9] and perception of learner's needs [5]. All this in return maximizes productivity, improves student learning and facilitates personal professional development.

Interdisciplinarity is the integral part of the educational process organization at linguistic departments of higher polytechnic educational institutions. Therefore, it is extremely important to provide continuous cooperation with non-linguistic departments of the university and their representatives.

For non-linguistic departments such cooperation will facilitate the implementation of the humanization tendency in the highly technological society changing education orientation from technocratic towards humanitarian. For linguistic departments interdisciplinarity implemented via cooperation with the non-language departments is the ground for diversification of the content of education. Thus, the focus is shifted towards philological and translation studies of science-technical discourse, the study modern information search systems, training specialists integrated into the information society.

Integration is first of all achieved through the general methodological principle of integrated learning of speech activities which makes the basis for developing integrative communication skills. Besides, it is necessary to consider the importance of training a student's personality integrated into the modern information society.

Systemic development of the model of foreign languages studying at higher technical educational institutions is shown in its simultaneous regulation at three different but hierarchically related levels, namely, the micro-level of interpersonal communication within professional discourse, the macro-level of social institutions and the meta-level of methodological system, aimed at facilitation of the cooperation improvement on the micro and macro-levels.

The activities of the Department of Linguistics at the NTUU «KPI» are aimed at attaining the goal of interdisciplinary training. The successful implementation of the main principles of Bologna process, as well as thorough development of curricula and syllabi, orientation towards training high-level professionals make the Department of Linguistics extremely popular among the alumni. Graduates of the Department are considered by employers to be the best in the area of technical translation, they successfully teach foreign language for specific purposes at different higher educational institutions.

To implement the synergetic personality-oriented cognitive-communicative bi-level (Bachelor, Master) system of professional training of future interpreters and translators the following priorities in academic, educational and methodological activity were determined at the Department of Linguistics at NTUU «KPI».

They include philological and translation studies of scientific-technical discourse, studies of modern information search systems for training professionals integrated into the information society, the development of informational educational environment where the training situation is considered as a dynamical indirect IT facilitated process of developing language and translation competence, the methodological provision of bi-level education system; training ESP teachers, constant renewal of authentic text materials obtained from different fields of scientific-technical discourse and their methodological adaptation according to the aims and tasks of a specific learning unit; the development and implementation of innovative teaching methods.

To be competitive at national and global labour market, translators and interpreters shall not only have high level of translation competence but also be aware of the subject area, know terminology and subject matters of a specific specialty etc. This aspect of professional activities of a interpreter and translator is usually outside the focus of attention at different depart-

ments training philologists and translators, although translation of professional scientific-technical discourse needs to be specifically taught. From this point of view the Department of Linguistics is unique because in the process of planning and organization of the educational process for future interpreters and translators the essence of the NTUU «KPI» as a really polytechnic higher educational institution is considered – thus facilitating the development of knowledge and skills of multi-aspect technical translation. This shows the essence and the goal of continuous interdisciplinary training of bachelors, specialists and masters of translation at the Department of Linguistics.

To implement this goal, the curricula for bachelors, specialists and masters at the Department of Linguistics envisage continuous theoretical and practical training of future interpreters and translators specifically in the area of scientific-technical translation thus providing for crossing the interdisciplinary borders. For example, the course in the ««Practice of Translation» contains such modules as General Engineering, Electronics, Computing and Ecology studying every one of which the students develop their professional competence in specific technical translation. Such courses as «Translation of Scientific-Technical Literature» and «Translation of Business and Commercial Documents», «Translation of Business and Technical Documents» provide for the development of students' translation competence. Special attention is paid to the course «Information Technologies in Translation» aimed at developing the knowledge and skills of PC usage according to the qualification requirements of ECDL (European Computer Driving License) standard as well as special CAT (Computer Assisted Translation) class software. It is also worth mentioning that only the Department of Linguistics of the NTUU «KPI», unlike other higher educational institutions of Ukraine, trains ESP teachers. Students study the course of «Methodology of Teaching Foreign Languages and Translation» in their graduation 5th year. Practical training of the specialists and masters is held at non-language departments of the NTUU «KPI» where for 2 or 3 weeks they study practical experience of other ESP teachers, practice in teaching under their supervision. This make them more experienced in ESP teaching than graduates of other higher educational institutions thus making them more competitive. The workshops with partner organizations of the Department are also organized for students to get them informed about the current situation on the labour market, as well as to make them provided with deeper insight into the specificity of practical work of interpreters and translators.

The Information Technology Centre for Foreign Language Learning aims its activity at ensuring the implementation of the innovative methods of teaching foreign languages to students and modern IT technologies implementation in the process of education – thus facilitating the increased efficiency of the educational activities of the faculty. Besides, the Centre provides technical support for online conferences held at the Department of Linguistics. These conferences are aimed at development of the foreign language communicative competence of students of nonlinguistic specialties. The most famous of them is internationally popular students' conference «Innovations in Science and Technology» held twice a year.

The activities of the Department are closely related to the international activities of the University, including, for example, translators' support for scientific-technical projects held at the NTUU «KPI». An example may be a joint project of the World Data Centre for Geoinformatics and Sustainable Development and the Department of Linguistics resulting in series of English versions of the analysis results of the sustainable development in the world and in Ukraine.

Let us also consider the specificity of master's dissertations development and the experience of the Department of Linguistic in implementing the general concept of students training. The synergetic approach to future professional interpreters and translators' training at such a polytechnic higher educational institution as NTUU «KPI» envisages establishing new complex criteria for development and assessment of masters' dissertations according to the *systemic, interdisciplinarity and integration* principles. Besides, in the modern tendencies of education development the need in top-level professionals able to solve complex tasks at the intersection of different sciences and, what is more important, to successfully implement the solutions is extremely growing. That is why master's dissertations of future interpreters or translators shall reflect the general level of graduates' professional competence. This, in its turn, requires a corresponding approach to the criteria development.

The assessment criteria for master's dissertations include the research development level, its practical orientation, the level of independence and heuristics, as well as the presentation lev-

el. The interrelation of criteria and their components with the coefficients may be shown as depicted in Table 1 below.

Diploma research quality is assessed in the following way. The type of certain diploma research is determined by the criteria «Performance». The student obtains the lowest point according to the «Performance» criteria in case the research is individual (envisaging independent work of the student under the supervision of the teacher) and the highest point in case the research is complex, i.e. performed in cooperation with some other departments, higher educational institutions or external organizations. This facilitates students' motivation to search for ways of practical implementation of the results of the research under interdisciplinarity approach to the professionals training system.

The student obtains the highest point according to the criteria «Independence and heuristics» in case the research is performed at creative search level envisaging independent search for the solution of a specific problem and choice of the optimal solution on the basis of independently determined criteria or conceptual enriching level envisaging enrichment of a specific scientific concept with new ideas on the basis of independent research. Lower points are obtained if the research is performed at facts-generalizing level (when the data received are generalized and independent conclusions are made) or accompanying-heuristic level (when the idea is enriched with new conclusions and arguments and the new concept is formulated together with the teacher). The student obtains the lowest point according to the indicated criteria in case the research is performed at reproductive-explanatory level when existing theoretical facts are supported with the results of the research.

Table 1
Master's dissertation and specialist's diploma work assessment criteria

| Criteria and points | | | | | | | |
|---|-------------|--|-------------|------------------------------|-------------|-----------------------|-------------|
| Performance | | Practicability | | Independence and heuristics | | Material presentation | |
| Туре | Coefficient | Туре | Coefficient | Level | Coefficient | Туре | Coefficient |
| Individual | 5 | Academic | 5 | Reproductive- explanatory | 10 | Illustrative material | |
| Complex | | Real | | Facts generalizing | 20 | During the defense | 2,5 |
| Department | 10 | Related to the science research activity of the department | 2,5 | Accompanying heuristic | 30 | During development | 2,5 |
| Interdepartmental | 15 | Done for the benefit of external organizations | 2,5 | Conceptual enrichment | 40 | IT usage | |
| Interdepartmental involving several departments | 20 | Presence of the order for practical implementation of research results | 2,5 | | | During the defense | 2,5 |
| Interuniversity | 25 | Presence of articles and other publications related to the topic of the research | 2,5 | Creative search | 50 | | |
| Done in cooperation with external organizations | 30 | | | | | During development | 2,5 |
| Total maximum | 30 | | 10 | | 50 | | 10 |

According to the «Practicability» criteria a student obtains the lowest mark if the research is purely academic (i.e. the student solves tasks using specific knowledge and professional skills

according to the current requirements to a professional of given education qualification level). If the research is real, the points scored for every optional implementation of the research results (shown in Table 1) are summed up. As a result, the student may obtain maximum 10 points.

According to the criteria «Presentation level» the points obtained by the student are also summed up. This level includes using illustrative material and IT both in the process of research development and during the defense.

Thus, the research is complexly assessed making it possible to evaluate the level of the student's theoretical training as the personality able to make decisions on the basis of the deep multi-aspect analysis of the problem. Besides, such approach provides for the implementation of the tasks of 21st century education on improvement of students' independent work skills, motivated independent search for information and performing independent research using new technologies, development of information analysis and synthesis skills to solve the most complex tasks.

The scientific schools of the Department aim their scientific searches at modern linguistic, translation and methodological pedagogical research in the area of philology and methodology of teaching. Scientific schools' activities also cover the research of bachelors, specialists and masters studying at the Department as the thematic fields of their diploma research are directly related to the development of terminology of different specialized areas of professional activities, translation research in the sphere of scientific-technical translation.

To conclude, let us emphasize that implementation of the Bologna process principles requires a complex approach to solving the task of training professionals which can be described as THREE-I approach where the 1st I stands for Interdisciplinarity, the 2nd I stands for Integration, 3rd I stands for Innovation. Our experience of professional training of future interpreters and translators at the Department of Linguistics of the NTUU «KPI» briefly described in this article is one of the efforts to search for effectively meeting the challenge of training top-level professional interpreters and translators..

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Статтю присвячено розгляду міждисциплінарного підходу до навчання майбутніх перекладачів на мовному факультеті вищого технічного закладу освіти. Авторами запропоновано синергетичний трьохкомпонентний підхід до організації навчання (міждисциплінарність, інтегративність та інноваційність), втілений у навчальних планах бакалаврів, спеціалістів та магістрів.

Ключові слова: міждисциплінарність, інтегративність, інноваційність, синергетичний підхід, методика навчання іноземних мов, перекладачі.

Статья посвящена рассмотрению междисциплинарного подхода к обучению будущих переводчиков на языковом факультете высшего технического образовательного учреждения. Авторами предложен синергетический трехкомпонентный подход к организации обучения (междисциплинарность, интегративность, инновационность), который воплощен в учебных планах бакалавров, специалистов и магистров.

Ключевые слова: междисциплинарность, инновационность, интегративность, синергетический подход, методика обучения иностранным языкам, переводчики.

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