

Role of Terminological Usage Orientated Professional Dictionaries in Conditions of Informatization and Computerization of the Education Process of Students

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Abstract¹

The creation of terminological, usage orientated professional dictionaries of an applied character to be used locally for aimed to solve specified tasks of the speciality can be viewed as one of the ways that improve the information base of a technician assuming formation of professional components. The paper examines advantages of application published an English-Russian dictionary (glossary) of the electromechanical terms.

The main tasks dealing with informatization of technical education are: application of new technical means within the existing education system, creation of an education system in new processing and information medium and compatibility (ideally advance) between the education informatization and the level and complexity of industry informatization.

One of the ways for solving the tasks mentioned above is creation of information base of a technician assuming, formation of professional components, namely: knowledge and skill to work with information sources; application of computer information technologies (including computer graphic and geometric modeling). One should take into account that universal software environment is only a base for developing special softwares in-situ connected with a speciality. The

appropriate specialized softwares within the framework of the speciality «Electromechanics» allows solving the following tasks: performance of investigations; planning of experiments and processing of its results; examination, estimation and diagnosis of electromechanic energy converters, etc.

One should note the efficiency and urgency of the task dealing with development, publication and application of terminological, usage orientated professional dictionaries of an applied character to be used locally for creation of an information base and aimed to solve specified tasks of the speciality.

These dictionaries play an important role in creation of science valid technical and humanitarian terminology. The creation of such dictionaries will provide increasing informational, basic and communicative training of technicians by gaining skills to use information technologies of the latest generation, communicative and ethical competences and information medium for solving scientific and production tasks. It also will provide conducting administration activity, developing standard-technical documentation and transferring information base to exchange experience and increase training.

The authors of the manuscript have developed and published an English-Russian dictionary (glossary) of the electromechanical terms [1]. This glossary provides: avoiding the polysemy of definitions used by specialists studying speciality «Electromechanics» owing to the creation of a regulated (specified) system of terms; improving, communicative and linguistic training of technicians via comprehension of psychological essence of technical terms used in the process of communication

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of scientific and technical specialists; forming a system of associative bonds with economic, natural and scientific spheres of knowledge; enhancing the quality of educational process by coordinating the foreign language course and technical subjects that will result in more profound comprehension of foreign periodicals and instructions used at practical and laboratory lessons; optimizing education within the given study hours by eliminating some redundant information and providing continuous connection between separate education stages; broadening the possibilities of remote education of technicians by developing electronic versions of textbooks .

Application of terminological, usage orientated professional dictionaries of an applied character is promoting raising the level and quality of scientific and research work. This occurs due to the following:

- master of all types of easy reading of a foreign special texts (that is to be able to look through, study or just view a text) and gain of a skill of systematization of the acquired knowledge by selecting key terms and definitions in the dictionary;
- gain of a skill to represent the information derived from foreign sources in the form of translation or resume (an essay, annotation);
- ability of easy reading of foreign original literature in the corresponding direction of training of qualified specialists and publications in leading reviewed scientific magazines and editions using the information base open to general use;
- participation in international conferences, etc.;
- development of special software and extension of opportunities of modern computer technologies usage (including internal possibilities for researching literature, reference characteristics of program means on the given speciality);
- performance of investigations using modern facilities;
- development of new innovation projects and their technical and economic background on the basis of the knowledge obtained; preparation and submission of grant and contract applications assuming participation of foreign specialists and making business plans for getting project financial support;
- performance of scientific and research and pilot and design works for developing and producing production models and technologies competitive abroad;
- expansion of student's motivation by developing their creative skills and knowledge of foreign language (particularly some special technical terms) and their ability to use them in practice.

Consequently in the future application of terminological, usage orientated professional dictionaries of an applied character will improve the information base of the education process: formation of a uniform terminological system of a speciality with a concentrated conception of a term which belongs to the conditions where they function; formation of information base of a reference character on electromechanical energy converters; perfection and further development of obtained knowledge and skills in the field of computer technologies as well as formation of communicative and linguistic competences of a technician; usage of a text not only for writing an annotation but also for getting full understanding of the text and the author's argumentation as well as making text review.

The use of terminological, usage orientated professional dictionaries allows to work not only with foreign text but with more complicated level of text comprehension which assumes an efficient mastering (on-line) of grammar, lexics and technical material in the process of dealing with some technical units (diagnostic complexes and systems of monitoring and forecasting of states of technical, power and telecommunication units).

Conclusions

The authors of the manuscript have developed and published an English-Russian dictionary (glossary) of the electromechanical terms. This glossary allows:

- to improve the level of knowledge and scientific researches with use of informatization of the education process of technical specialists;
- to use technical material (foreign text) while working with technical
- to create of correlated humane and technical computer educational programs and courses of improvement of professional skill for technicians , as well as development of computer textbooks (glossaries) which may undergo some supplements and alternations according to the normative and technical documents that is especially important for the specialists studying on speciality «Electromechanics» and in this way getting the aim of individualization of educational process of specialists of different levels.

References

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