

ABSTRACT

UDC: 378.147:629.07.8
 DOI: 10.26697/ijes.2020.4.6

Forming of Future Pilots' Professional Competence during the General Technical Studying

Senior Teacher ChornoglaZova H. V.¹

¹ Flight Academy of the National Aviation University, Ukraine

Background:

Today, the ability of quick adaptation to permanent innovation throughout the professional activity is a priority for future pilots' training. The role of general technical disciplines in the professional education of modern aviators is increasing along with the growing level of complexity and automation of production functions, rapid modification of parameters of modern aviation equipment and opportunities for adequate human adaptation to the machine as artificial intelligence. For these reasons, the training of aviation professionals requires deeper integration and coherence in the study of general technical and specialized disciplines, and the formation of professional competencies as an operationalized goal of training future pilots should not interfere with building their holistic scientific worldview based on natural constants. General technical training is a structural element in the complex education. It is a system of polytechnic training, which has a goal to form readiness for work in the field of modern material production, including objects of labor, machinery, technology, organization of labor and production, economics of production.

Methods:

To achieve the goals and objectives the research the following methods were used: theoretical analysis and generalization of literary sources; ascent from the abstract to the concrete.

Results:

Based on the analysis of professional qualification requirements for a pilot of civil aviation and the development of psychological and pedagogical literature, the following components of professional competencies of cadets of flight educational establishments are identified: cognitive, praxeological, personal. The cognitive component of professional competencies is basic. Future pilots of civil aviation must get the basic knowledge of fundamental, general technical and special disciplines. Particular attention is paid to the study of general technical disciplines. It is impossible to study special disciplines at a level corresponding to higher technical education, successful professional and research activities of civil aviation in an intensified flow of scientific and technical information, new air traffic control and aircraft

management, new information technologies without technical knowledge.

The praxeological component presupposes the practical ability to implement professional competence successfully in the process of professional activity at the enterprise; reflects the presence of professional experience, professional culture, and ability to execute as a specialist, which is also achieved during training in flight educational establishments. The application of knowledge increases the motivation to learn, makes knowledge stronger, really meaningful.

Forming the necessary skills and abilities of future aviation specialists, it is necessary to set a goal, formulate a motive and properly organize activities within each discipline, including general technical disciplines. The effectiveness of knowledge, readiness of cadets for self-education, personal development and acquirement of the specialty depend on the successful formation of skills.

The personal component demonstrates the awareness of the cadet of the flight educational establishments itself as a specialist; professional self-assessment, self-analysis of one's own professional, personal physical and psychophysiological qualities; ability to personal development and self-education, etc. This component is represented by such personal and professionally important future pilot's qualities as attentiveness, tolerance, moral purity, sociability, congruence, activity, independence, initiative, creativity, flexibility of thinking. At the same time, within the specifics of the profession of civil aviation pilot, there is a need to consider and develop the psychophysiological properties of the cadet's personality.

Conclusions:

During the study of general technical disciplines, the cognitive component is actualized through the use of test tasks of different levels of complexity, which reflect the key points of the program – theoretical material. The content is consistent with the relevant didactic and methodological principles of test content. The test tasks meet methodological requirements. The praxeological component is realized through the methods of problem-searching and project training, conducting debates, didactic games, solving cognitive and interdisciplinary problems, discussing aviation accidents. The personal component is realized through the presentation of the project, the ability to present material, correct, logical and clear statements, the ability to listen to criticism, developing adequate self-esteem, analysis and correction of errors.

Information about the author:

ChornohlaZova Hanna Vitaliivna – Doctor of Philosophy in Pedagogy, Senior Lecturer of the Department of Aviation Engineering, Flight Academy of the National Aviation University, Kropyvnytskyi, Ukraine.

Research interests: professional training of aviation specialists; <https://orcid.org/0000-0002-3207-3525>