

СЕКЦІЯ ІV
«ПСИХОЛОГІЯ. ПЕДАГОГІКА. СОЦІОЛОГІЯ»

DOI: <https://doi.org/10.5281/zenodo.6969446>

Implementing the English Medium Instruction for training future aviation engineering personnel at universities in the conditions of the wartime

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The current situation in Ukraine connected with wartime requires implementing the English Medium Instruction for training future aviation engineering personnel to overcome the Russian aggression. It is possible to realize thanks to students' mastering the professional English vocabulary concerning the knowledge of military weapons and ammunition based on programs of the allies' military supports from the NATO countries in the most efficient way.

The English Medium Instruction is of great importance for future aviation engineering personnel as they promote flight safety for Ukrainian military pilots since aviation engineering is a branch of engineering that deals with airspace development, aircraft maintenance, the Air Force bases design, as well as aircraft navigation technologies and the aerodrome planning. They are the military aviation engineering personnel that should also perform the high organizational level of maintenance of the modern aviation electronic systems including communications, radars, navigation, electronic warfare, data link, fire control and tactical displays with associated equipment. It should be realized in the English-speaking environment. Ukrainian universities should implement the English Medium Instruction in training such specialists to be sure of their professional competence in tackling different problems, especially in the wartime based on the modern requirements concerning the necessity of implementing the standards of the North Atlantic Treaty Organization and the International Civil Aviation Organization at the educational process at universities.

There is such an experience of implementing the English Medium Instruction by the pedagogical staff of the department of physics and radioelectronics at Ivan Kozhedub Kharkiv National Air Force University. The department has implemented new systematic methods of the remote education of such important disciplines as fundamentals of physics, aviation's radiotechnic, aerospace engineering and electronics in English including blended learning, student-centred learning, case study, etc. Comprehensive educational modules in the above-mentioned disciplines in the English

language were created on the learning platform Moodle by the department's staff, which are easily adaptive to the challenge of mastering up-to-date weapons and ammunition's essence in English. It is a motivation for deepening students' knowledge of modern military weapons and ammunition according to the NATO and the ICAO interoperability standards to become high-qualified professionals.

The department of physics and radioelectronics has the high educational and scientific potential for creating high-quality educational modules in professional disciplines for aviation engineering personnel. The staff also improves the knowledge of the engineering English language continuously. The department of physics and radioelectronics has a mutual relationship with the department of foreign languages and the aviation English language department for creating a standardized and modular approach for improving the distance educational processes for aviation engineering personnel at the university. There are three main stages of developing the standardized and contemporary aviation engineering courses in the English language such as:

- the preparation stage that includes developing not only methodical materials for aviation engineering in the professional English within the modules but also visual materials (presentations, layouts, samples of studied equipment and devices, etc.), as well as consulting cadets about the specifics of applying professional terminology in English taking into account the aviation engineering ICAO standard;

- the main stage that is geared toward conducting the distance modular classes by Moodle in the English language and establishing feedback between teachers and cadets through the problem-based learning of the aviation engineering disciplines;

- the final stage that is based on controlling students' knowledge and developing their creativity in making decisions at the high aviation engineering professional level in the English-speaking environment.

The stages are geared toward supporting the professional sustainable development of aviation-engineering personnel's professional and organizational cultures in the English-speaking environment.

Thus, taking into consideration the wartime in Ukraine it is possible to state the necessity of taking the department of physics and radioelectronics' experience concerning the implementation of the English Medium Instruction at Ukrainian universities as an example of the highly-qualified engineering and cultural level based on the aviation English standardized requirements.