
Theoretical basics of the development of the professional competence of higher military education institution faculty and staff

Kostyantyn Mamchur * A

*Corresponding author: Ph.D. in Education, Associate Professor, e-mail: tim68@ukr.net, ORCID: 0000-0003-1792-3349

^A Yevheniy Bereznyak Military Academy, Kyiv, Ukraine

Received: March 10, 2023 | Revised: March 20, 2023 | Accepted: March 31, 2023

DOI: 10.5281/zenodo.8001068

Abstract

Modern views, ideas, and approaches to the development of the professional competence of scientific and pedagogical workers in the context of the application of the competence approach are offered. The theoretical aspect of the application of the Dreyfus model in determining the stages of development of teachers' professional competence is revealed. The potential of models for evaluating the effectiveness of the development of professional competence of teachers, which are most often used in the leading countries of the world, in particular, Kirkpatrick's model, is analyzed.

Key words: development, quality of education, evaluation model.

Introduction

According to the results of the study of world trends and the experience of the leading NATO member states regarding the transformation of the military education industry in the conditions of high dynamics of changes in the forms, methods, and means of conducting armed struggle, as well as the analysis of the current state of the military education system of Ukraine, the existence of certain problems that inhibit effective functioning is noted system of military education. Among the main reasons for the emergence of these problems, the Concept of the Transformation of the Military Education System indicates the insufficient level of training of scientific and pedagogical workers (NPS) of higher military educational institutions for teaching in educational programs by the needs of integration into NATO, as well as the use of outdated approaches and principles during the formation of the structure and the content of military education, the imperfect process of forecasting its development (On the transformation of the military education system).

The search for ways to solve the problem of developing the professional competence of the faculty members of the institution of higher military education determines the relevance of the article.

Theoretical background

The analysis of the latest research and publications. The problems of the development of professional competence of scientific and pedagogical workers were investigated by domestic and foreign scientists: V. Andrushchenko and L. Babenko – the formation of professional competence of teachers and the development of their creative abilities, V. Savchenko – the issue of professional self-improvement of higher school teachers, I. Korduba is the author of several works on the assessment of the competence of teachers; V. Vergun, S. Gladun, and I. Palahniuk studied the problems of professionalism of teachers and the quality of education in the military sphere in their

research. The works of D. Kolb, D. Kirkpatrick, D. Hoffmann, H. Dreyfus, and others should be noted among the most relevant foreign studies in the field of adult education, educational cycle models, and teacher training.

Based on the analysis of the scientific literature, we can state that Ukraine and the world have accumulated considerable experience in organizing the professional training of scientific and pedagogical workers. At the same time, it was established that in the domestic scientific space, the issue of the conceptual development of the professional competence of scientific and pedagogical workers of higher military education institutions has not been sufficiently researched, singled out, and systematized.

The purpose. The article aims to systematize the main modern views, ideas, and approaches, which are fundamental for the development of professional competence of scientific and pedagogical workers of higher military education institutions, for their perception by domestic practice.

Results and Discussion

Modern requirements for the level of professional competence of military specialists are determined by challenges and threats, which became especially relevant after the beginning of the large-scale Russian aggression against Ukraine. These requirements determine fundamental changes in the organization and content of the education of future military specialists of the Armed Forces of Ukraine.

At the current stage of the functioning of the military education system in the context of training future specialists for the Armed Forces of Ukraine, the need for a deep comprehensive analysis of the accumulated experience and theoretical approaches to find ways to improve and improve the quality of professional education in institutions of higher military education has become ripe.

The solution to this problem, in particular, is determined by the success of the development of theoretical and methodological foundations for the development of the professional competence of the scientific and pedagogical staff of institutions of higher military education, since among the criteria applied by the National Agency for Quality Assurance of Higher Education, one of the most important is the professional qualification of teachers involved in the implementation of the educational program, and their professional development.

The professional competence of the faculty members of the institution of higher education is a complex multi-level stable structure of its mental traits, which is formed as a result of the integration of experience, theoretical knowledge, practical skills, and personal qualities that are significant for the faculty members and includes the readiness to act (interact) effectively when solving professional tasks of various levels of complexity (Kremen V. G., 2003, 37).

The main goal of developing the professional competence of faculty members in higher education institutions is to achieve a better match between the required and actual level of its development among teachers. Taking into account the fact that this is a long process, some researchers outline the levels and stages of development of teachers' professional competence and offer a list of criteria characterizing them. An attempt at a systematic description of a separate approach to determining the levels and stages of development of professional competence of the faculty members is shown in Fig. 1, which includes the ideas of B. Bloom.

After analyzing the ideas and views of the most famous scientists in the field of professional competence development, we concluded that there is no single model of professional competence development of faculty members that can be applied to any higher military educational institution and context. The professional competence of the faculty members of the institution of higher military education requires special psychological and pedagogical approaches.

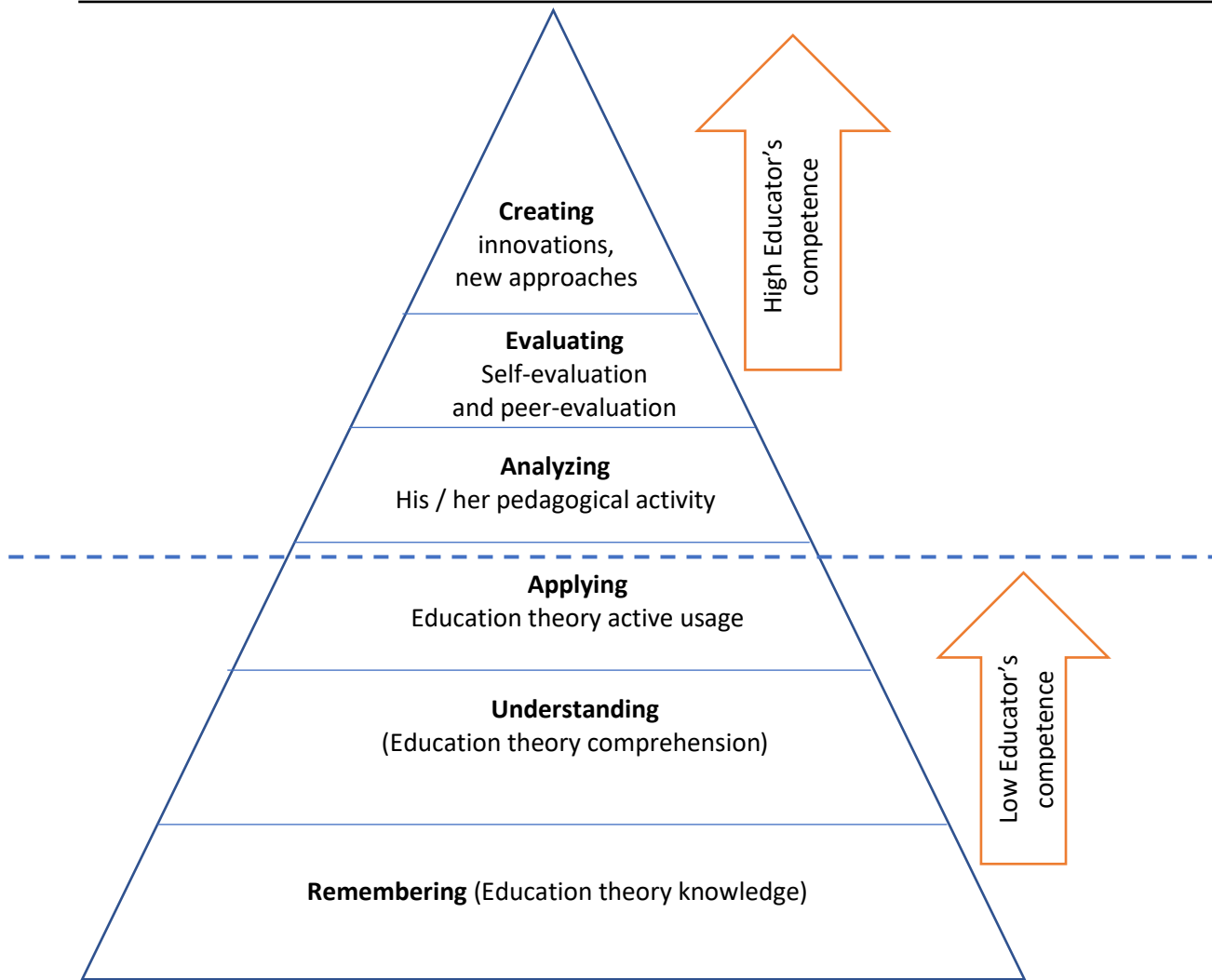


Figure 1 – Levels and stages of development of professional competence (according to B. Bloom)

This is because service activities of military personnel, as a specific type of activity, have complex determinants, which must be taken into account during the training of personnel in higher education institutions.

After analyzing the ideas and views of the most famous scientists in the field of professional competence development, we concluded that there is no single model of professional competence development of faculty members that can be applied to any higher military educational institution and context. The professional competence of the faculty members of the institution of higher military education requires special psychological and pedagogical approaches. This is because service activities of military personnel, as a specific type of activity, have complex determinants, which must be taken into account during the training of personnel in higher education institutions.

In the development of the professional competence of the faculty members, one should also take into account the model of the acquisition of competencies by H. Dreyfus and S. Dreyfus (Elaine M., Mangiante S., Peno K., 2021, 154), shown in Fig. 2.

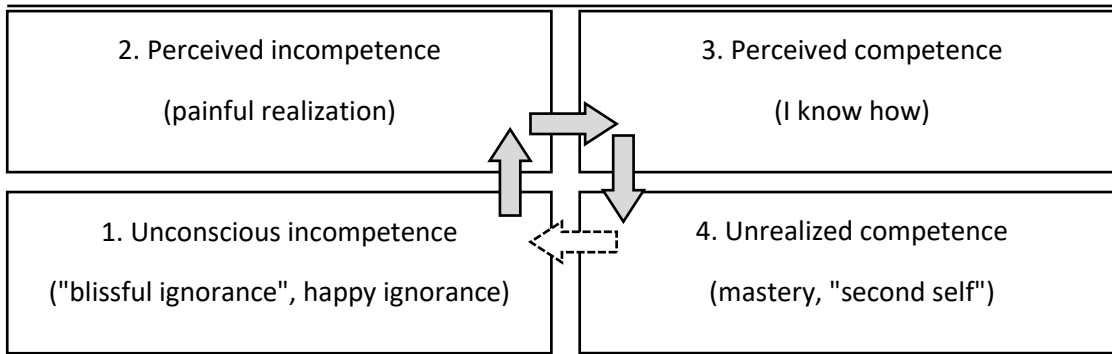


Figure 2 – Model of competence acquisition by H. Dreyfus and S. Dreyfus

Before a new faculty staff member without work experience acquires the necessary level of professional competence, he is characterized by the so-called unconscious incompetence. This means that he is not aware of the need to acquire specific knowledge, abilities, and skills, as well as the development of professionally important qualities necessary for the proper performance of his functions as a teacher. Such a teacher conducts pedagogical activities on a routine and reflexive level – the methods, methods, and approaches used are the same or very similar regardless of the context and tasks. Often, novice teachers, at the level of unconscious incompetence, attribute problems in student learning outcomes to the fact that they are simply unlucky with students. At the stage of unconscious competence, it is possible to effectively carry out educational activities only if they correspond to the situational context.

A critically important moment in the development of a teacher's professional competence is the transition from this level to the next when the fact of incompetence is realized. At the same time, there is a stage of understanding the need to acquire new knowledge, to replenish the existing set of skills. The training stage begins. In our opinion, the most effective way to develop the professional competence of teachers at a higher military education institution is learning through experience or experiential learning (Kolb D.A., 2015). The process of development leads consistently to perceived competence. This is the stage at which theoretical knowledge and practical aspects of their use have already been acquired, while educational activity implies that the teacher must constantly improve. In addition to learning through experience, professional competence can be developed in another way. Among the most common is teacher training in the form of training in project groups, mentoring, coaching, consultations with experts, various trainings, etc.

The variety of approaches to the development of the professional competence of teachers of a higher military education institution is explained by the fact that there is no universal model of this process. In addition, the used approaches in their diversity are much easier to adapt to the constant change of today's requirements for the professional competence of teachers of the institution of higher military education.

Improving the qualifications of teachers can be considered effective if, as a result of training, teachers acquire a new level of development of professional competence, demonstrate specific skills, and also use the acquired knowledge in their practical activities, and change their attitude toward it. The main tool for checking the effectiveness of professional development is a reliable evaluation system. In the practice of foreign institutions of higher education, target assessment is most often used, according to which learning outcomes are determined from the point of view of predetermined goals. Training is considered effective if the set goals have been achieved – teachers have developed specific competencies or even acquired new ones. One of the most common assessment models is based on this approach – D. Kirkpatrick's model (Cahapay M., 2021, 136–141). This training evaluation model is recognized as the standard in the field of retraining and staff development in the United States.

According to this model, the analysis of the effectiveness of the training course is carried out at four levels:

1. The response level, at which subjective data are collected on how satisfied the persons who underwent professional development were with the course, its organization, and the teachers who conducted it. This is usually determined immediately after training, most often in the form of a questionnaire.

2. Level of training – at this stage, what teachers have learned during professional development is evaluated. This is usually done to determine the degree of understanding and assimilation of the educational material. This stage may include testing, reports, essays, and other forms of assessment of knowledge and understanding of the learning material.

3. The level of behavior – at this stage, it is determined how effectively the teacher after completing the training course can apply the acquired knowledge in practice, and how the learned training course influenced the change of behavior at the workplace. The evaluation of which may include observing how teachers use new skills in real situations of their pedagogical activities, or measuring the impact of learning on their educational activities.

4. The level of results – at this stage, the positive consequences for teachers and institutions of higher military education after the completion of the advanced training course are measured. Outcome evaluation may include measures of post-training performance, such as increased work productivity, improved educational quality, etc.

Although D. Kirkpatrick's model is fairly thoroughly presented in the scientific literature, in practice, all four levels of assessment are not always implemented. Only in some cases is the attention paid to behavioral outcomes. For example, after analyzing the studies in which the efficiency of professional development training was evaluated, we can state that in them, scientists mainly determined the attitude (reaction) to specific training and the level of acquired knowledge, less often – the impact of training on changing professional behavior (Furnham A., Robinson C. & Haakonsen J. M. F., 2023).

The highest level of professional competence according to the model of S. Dreyfus and H. Dreyfus is the level of unconscious competence. At this level, professional competence is embedded in professional behavior. It is no longer necessary to focus on the choice of a teacher's solution suitable for a specific situation because intuition works. In our understanding, at this level, the teacher achieves professional mastery. However, it is important to remember that awareness and analysis of activities can help the teacher to develop himself and improve teaching methods. In this regard, it is important to involve faculty members in reflection, analysis of their activities, and learning new methods and techniques, which will make it possible to improve the quality of education and the effectiveness of education seekers.

Conclusion

Despite the wide interest of domestic and foreign scientists in the problem of developing the professional competence of teachers, and the existence of various approaches to it, there is no universal model of this process.

The analysis and generalization of the world and domestic experience in the development of the professional competence of teachers shows that the modernization of the education system of Ukraine requires the search for new, progressive approaches to improving its quality. Since one of the key elements of improving the quality of higher education is the professionalism of the teacher, it is necessary to optimize and develop a system of relevant training courses and training for teachers of the institution of higher military education.

Modern views, ideas, and approaches to the development of the professional competence of scientific and pedagogical workers in the context of the application of the competence approach

can be adapted to the teachers of the institution of higher military education if we take into account the specifics of the activities of military personnel.

Prospects for further research We see this problem in the definition of features and the development of a model for the development of professional competence of teachers of a higher military education institution.

References

1. On the transformation of the military education system: Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2022 No. 1490. Available from : <https://zakon.rada.gov.ua/laws/show/1490-2022-%D0%BF#Text> (accessed: 15.03.2023).
2. Kremen V. G. Education and Science of Ukraine: ways of modernization (Facts, reflections, perspectives). Kyiv: Gramota, 2003. 216 p.
3. Sobral S. R. Bloom's Taxonomy to Improve Teaching-Learning in Introduction to Programming. *International Journal of Information and Education Technology*, V. 11(3), P. 148–153.
4. Elaine M., Mangiante S., Peno K. Teaching and Learning for Adult Skill Acquisition: Applying the Dreyfus and Dreyfus Model in Different Fields. Information Age Publishing. Charlotte, NC. The USA. 2021. 351 p.
5. Reynolds R. Reflections on 40 years of participation in social and citizenship education. *Social Educator*. 2023. V. 41(1), P. 12–23. Available from : <https://search.informit.org/doi/10.3316/informit.899109727063839> (accessed: 16.03.2023).
6. Karaolis, Andreas, and George N. Philippou. Teachers' professional identity. *Affect and Mathematics Education: fresh perspectives on Motivation, engagement, and Identity*. 2019. P. 397–417.
7. Kolb D.A. *Experiential learning: Experience as the source of learning and development*. 2nd Ed. Upper Saddle River, NJ: Pearson Education, Inc. 2015. 410 p.
8. Cahapay M. (2021). Kirkpatrick Model: Its Limitations as Used in Higher Education Evaluation. *International Journal of Assessment Tools in Education*. 2021, V. 8, Issue 1. P. 135–144.
9. Furnham A., Robinson C. & Haakonsen J. M. F. (2023). Hire ambitious people: Bright- and dark-side personality and work engagement. *Journal of Individual Differences*. V. 44(1). P. 47–56.