UDK 378.096:347.823.4-047.22 DOI: 10.37026/2520-6427-2025-121-1-15-20

Mykola PIVEN,

Candidate of Pedagogical Sciences, Associate Professor, Department of Physical Training, Rehabilitation and Drone Racing, Ukrainian State Flight Academy, Kropyvnytskyi, Ukraine ORCID: 0000-0002-8777-0475 e-mail: costaluka011@gmail.com

Victoriia PIVEN,

Candidate of Pedagogical Sciences, Associate Professor, Department of Professional and Aviation Language Training, Ukrainian State Flight Academy, Kropyvnytskyi, Ukraine ORCID: 0000-0002-6315-2197

e-mail: vita68psh@ukr.net

DETERMINANTS OF SELF-ACTIVITY IN THE EDUCATIONAL PROCESS OF PILOT CADETS AT AVIATION HIGHER EDUCATION INSTITUTIONS

Abstract. The article examines the conditions for organizing and conducting a workshop as a form of educational activity in which an individual independently creates the conditions for transforming self-learning skills from a knowledge-based space into a tool for selfcreation. It enables the development of an individualized approach to personal self-improvement, where the content of the workshop becomes an activity of self-work. Considering this, in the educational process of future aviation professionals, particular importance is given to such issues as methods for developing the ability for self-learning; forming adequate evaluative attitudes; a stable interest and a positive mindset towards mastering autodidactic skills; the ability to engage in prolonged activities aimed at achieving subjectively significant goals; the demonstration of willpower to develop personal qualities aligned with the corresponding determinants of self-activity.

A workshop, as a metaform of organizing the educational process (self-learning) for cadet pilots, is characterized by dynamism, flexibility, independence,

and a creative atmosphere. It serves as a pedagogical condition that allows cadets to transfer their competence into a functional control panel for both professional and personal self-improvement. The content of the workshop, designed according to the «do it yourself» principle and directed by the cadet toward self-development, represents an expansion and enhancement of their initial self-learning capacity. This expansion requires a specific methodology and a decomposition of the traditional workshop structure. The self-activity of pilot cadets in workshops not only actualizes but also facilitates the realization of their potential capabilities. It allows them to understand and visually observe how the personal learning paradigm evolves in professional education, enabling cadets to explore themselves through self-movement in educational activities.

Key word: workshop, self-activity, professional and personal self-improvement, self-learning, self-creation, psychological and pedagogical conditions, integration of interdisciplinary knowledge, self-movement in educational activities.

Микола ПІВЕНЬ,

кандидат педагогічних наук, доцент кафедри фізичної підготовки, реабілітації та дрон-рейсінгу Української державної льотної академії, м. Кропивницький, Україна ORCID: 0000-0002-8777-0475

e-mail: costaluka011@gmail.com

Вікторія ПІВЕНЬ,

кандидат педагогічних наук, доцент кафедри професійної та авіаційної мовної підготовки Української державної льотної академії, м. Кропивницький, Україна ORCID: 0000-0002-6315-2197

e-mail: vita68psh@ukr.net

ДЕТЕРМІНАНТИ САМОАКТИВНОСТІ У НАВЧАЛЬНІЙ ДІЯЛЬНОСТІ КУРСАНТІВ-ПІЛОТІВ У ЛЬОТНОМУ ЗАКЛАДІ ВИЩОЇ ОСВІТИ

Анотація. У статті досліджуються умови організації та проведення воркшопу як різновиду навчальної діяльності, коли особистість самостійно створює умови для перетворення навичок самонавчання із простору знань на інструмент самотворення, здійснює авторський спосіб особистісного самовдосконалення, де зміст воркшопу перетворюється на діяльність над собою. Зважаючи на це, у навчальній діяльності майбутніх авіаційних фахівців особливого значення набувають питання щодо способів розвитку здатності до самонавчання; формування адекватних оцінних ставлень, стійкого інтересу та позитивного налаштування на оволодіння автодидактичними навичками; здатності до тривалої діяльності, в якій реалізується та чи інша суб'єктивно важлива мета; прояву вольових зусиль із метою розвитку в собі тих якостей, завдяки яким реалізуються відповідні детермінанти самоактивності.

Наголошується, що саме воркшоп як метаформа організації навчальної діяльності (самонавчання) курсантів-пілотів, для якої характерні динамічність, гнучкість, самостійність і творча атмосфера, є тією педагогічною умовою, що дозволяє транслювати власну компетентність як реально діючу панель управління професійним та особистісним самовдосконаленням. Зміст воркшопу, сконструйований за принципом «зроби сам» і спрямований курсантом на самого себе, являє собою розширення й доповнення його вихідного стану здатності до самонавчання. Означена добудова потребує відповідної методики й декомпозиції традиційного змісту воркшопу. Самоактивність курсантів-пілотів у воркшопі не тільки актуалізує а й сприяє втіленню власних потенційних можливостей здобувачів, дозволяє їм зрозуміти й наочно продемонструвати, як у професійній освіті зростає особистісна парадигма навчання, за допомогою якої курсанти мають змогу пізнати себе через саморух у навчальній

Ключові слова: воркшоп, самоактивність, професійне й особистісне самовдосконалення, самонавчання, самотворення, психолого-педагогічні умови, інтеграція міжпредметних знань, саморух у навчальній діяльності.

Formulation of the problem. At the current stage of national development, a new system of professional

education is emerging. It is oriented toward a unified global information space, significantly influencing the training process of future specialists. Today, the main requirements for preparing competitive international-level specialists include professional, practical, and creative orientations in educational content, with a focus on the individual as both a subject and a result of the educational process (Vozniuk, Dubaseniuk, 2011; Sliusarenko, Kulbatska, 2015). In the context of modern educational trends, the idea that new opportunities are being created for the professional and personal self-improvement of future aviation specialists is particularly relevant. This educational space is considered a subsystem of the sociocultural space, encompassing all its functional mechanisms (Vatkovska, 2010; Tsymbalaru, 2016). Professional and personal self-improvement of pilot cadets serves as the starting «point» in the structural composition of the educational space. This point gradually unfolds within educational activities, possessing a pronounced communicative nature and incorporating various determinants of self-activity (Denysiuk, 2012; Piven, 2018). Under these conditions, the educational activity of pilot cadets can achieve its goal to the extent that it creates a situation where personal and creative efforts are in demand. Such an interpretation presents educational activity as a creative means of developing personal competencies in future aviation specialists. It is, therefore, reasonable to consider it as a technology that translates educational activities into a mode of personal development, where the cadet becomes a subject of learning and integrates psychological and pedagogical knowledge to solve assigned tasks. A cadet, as a subject of educational activity, not only follows the traditional scheme (developing general and specialized professional competencies) but also creates a new form of self-activity. In this way, the cadet implements an individual approach to personal self-improvement, where learning transforms into working on oneself (Piven, 2018).

Review of scientific research and publications. Justifying the potential of educational activity in personality formation, researchers (Kremen, Ilin, 2012; Kushchov, 2007; Tatenko, 2015) emphasize the decisive role of subjective activity in this process. This activity is driven by internal factors such as personal needs, attitudes, individually significant values, personal meaning, and motivation for independent, initiative-based engagement in the educational process (Maksymenko, 2013; Mid,

2000). Accordingly, higher demands are placed on educational activity, which begins to play a leading role in professional and personal self-improvement. It affirms the necessity of developing the ability for self-learning and genuine participation in the self-creation of one's own personality (Boryshevskyi, 2010; Serdiuk, 2015). Such activity should be of an innovative type, serving as a mechanism for generating new ways of self-creation, as well as new techniques and methods of creative interaction (Dubaseniuk, 2013). Thus, the ability to perceive educational activity as a space for self-creation which is built independently by the individual and aligned with personal competence allows for the release of a natural desire for self-improvement. At the same time, it creates conditions for transforming self-learning skills from a mere knowledge acquisition process into an instrument of selfcreation. Self-creation, in its complete form, is interpreted as a holistic, self-determined phenomenon mediated by a complex set of personality parameters, including the value of self-development, a holistic perception of one's life path, self-acceptance, confidence in one's abilities, and readiness for self-learning (Boryshevskyi, 2010; Serdiuk, 2015). Self-learning skills provide access to an individual's internal psychological resources, facilitating the utilization of such inexhaustible wealth as the source of creative abilities and inner integrity which is embedded in the cadet's inner world. At the same time, these skills serve as a tool for integrating interdisciplinary knowledge (Kolomiiets, 1999), which is necessary to eliminate «fragmentation» in the ability not only to test independent learning methodologies but also to create them autonomously. Such methodologies should define the requirements necessary for personal and professional self-improvement (Sliusarenko, Kulbatska, 2015). It is essential to emphasize that self-learning skills, due to their integrative nature and structured approach, often represent a reliable pathway to achieving internal integrity and experiencing a sense of meaningfulness in one's educational activities (Kurinskyi, 2006). Considering these aspects, certain key issues become particularly significant in the educational activities of future aviation specialists. These include:

- Developing the ability for self-learning;
- Forming adequate evaluative attitudes;
- Establishing a stable interest and a positive mindset toward mastering autodidactic skills;
- Cultivating the ability to engage in long-term activities aimed at achieving personally significant goals;
- Demonstrating willpower in developing qualities essential for self-activity determinants.

A workshop serves as a foundational element ensuring the identified determinants of self-activity in pilot cadets' educational activities. According to K. Fopel, a workshop is an intensive educational event in which participants, through their own activity, discover that they know and can do more than they previously thought and learn from people they did not expect to learn from (Fopel, 2003, p. 13).

The workshop, as a meta-form of organizing educational activities (self learning) for pilot cadets, is characterized by dynamism, flexibility, independence, and a creative atmosphere. It serves as a pedagogical condition

that enables cadets to transform their competence into a real operating control panel for professional and personal self-improvement. The content of the workshop, designed according to the «do it yourself» principle and directed by the cadets toward themselves, represents an expansion and enhancement of their initial capacity for self-learning. This extension requires a corresponding methodology and the decomposition of the traditional content of the workshop.

The purpose of this article is to examine the features of organizing and decomposing the content of a workshop as an educational space that fosters pilot cadets' self-movement in learning activities, develops their self-learning skills, and enhances their ability for constructive professional and personal self-creation.

Presentation of basic material. The workshop as a meta-form for organizing the integrative process of forming pilot cadets' self-learning skills within the interdisciplinary interaction of the subjects «Psychology», «Professional Pedagogy», and «Competency-Oriented Physical and Psychophysiological Training» allows for the creation of psychological and pedagogical conditions that emphasize cadets' internal states in learning. These conditions facilitate the engagement of personal experiences, accumulating various abilities (verbal, tactile, visual, emotional) to consolidate and assimilate interdisciplinary knowledge in a way that is both personally meaningful and conceptually linked to the collective experience of solving problem-based learning situations. In essence, this organizational meta-form provides cadets with the opportunity to find self-reliance in solving educational tasks while simultaneously forming the internal conditions necessary for perceiving «collective experience» and «collective methods» of solving educational problems, their reinterpretation, and transformation based on the «do it yourself» principle. This adaptation allows cadets to go beyond their initial level of personal competence, overcome internal barriers and obstacles to subject activity in learning, and represents a moment of unfolding their professional and personal self-improvement within educational activities (Piven, 2023). The workshop helps pilot cadets become more self-reliant in understanding that their memory, thinking, willpower, abilities, and even physical excellence largely depend on their own efforts. The «collective experience» and a creative instructor act as facilitators for their professional and personal selfcreation. Given the nature of cadets' self-activity in a workshop, which not only activates but also facilitates the realization of their potential abilities, they gain insight and a clear understanding of how the personalized paradigm of learning in professional education is evolving. Through this paradigm, cadets can understand themselves by engaging in self-movement in educational activities.

So, the main goal of the workshop is to actualize cadets' self-movement in educational activities, enhance their self-learning skills, and develop their ability for constructive professional and personal self-creation. To achieve this goal, the special tasks are outlined.

The Tasks of the Workshop:

- Develop skills for activating internal resources and creative potential, recognize barriers to creativity, and create conditions for overcoming or reducing them.
 - Enhance self-acceptance and self-reliance.

- Create conditions for the formation of personal competence in the context of interdisciplinary interaction.
 - Teach effective self-reliance skills.
- Foster internal motivation for constructing an individual algorithm for professional and personal self-creation within educational activities.
- Encourage awareness of individual abilities that contribute to the constructive development of autodidactic skills.
- Provide cadets with opportunities for intersubjective interaction in educational and creative activities.
- Ensure necessary conditions for active cadet engagement, including a trustful atmosphere and honest communication.
- Establish an environment of unconditional respect for each cadet's values.
- Provide maximum support for cadets in verbalizing their ideas, thoughts, and experiences.
- Create conditions where cadets have to demonstrate independence in problem-solving, explore new dimensions of problem situations, and discover new constructive solutions for supporting inter-subjective interaction.
- Ensure feedback mechanisms, where cadets receive information from peers and instructors regarding their activity within the workshop.
- Optimize self-knowledge and self-improvement processes through inter-subjective interaction and reflection techniques, self-analysis, and establishing a positive dynamic of self-creation within educational activities.
- Ensure a gradual development of meaningful activity, where the instructor only supports the cadets' initiative and activity.

Basic Rules of the Workshop:

- Self-creation is never fully complete, because the end of the workshop is merely the completion of a specific stage of personal self-improvement.
- Communication follows the principle of "here and now," meaning that discussions focus on the present moment, addressing what is currently relevant to the cadets and what is happening within the group. Kindness and tolerance are encouraged during exercises and discussions, fostering the recognition of positive qualities and actions in the process of interaction.
- The workshop encourages honesty, openness, and trust in communication.
- It is unacceptable to evaluate a person directly, because only their actions should be assessed.
- Everything that happens within the group remains confidential.

Workshop Content:

Topic 1: «Generalization of Needs, Attitudes, Personally Significant Values, Personal Meaning, and Initiative-Based Engagement in Personal Self-Knowledge and Self-Improvement» (4 hours).

Topic 2: «Self-Portrait» (6 hours).

Topic 3: «Algorithm for Developing Self-Learning Skills» (14 hours).

Topic 4: «Emotional Stability and Psychophysiological Reliability» (8 hours).

If necessary, the workshop can be conducted as separate thematic modules, focusing on developing

autodidactic skills, emotional stability, and psychophysiological reliability, which are essential factors in cadet self-realization within educational activities.

Indicators of Pilot Cadets' Self-Activity in the Workshop are:

- 1. Activation of internal resources and creative potential in developing self-learning skills as a tool for professional and personal self-improvement.
- 2. Development of effective self-reliance in educational activities, fostering self-motivation and self-creation.
- 3. Formation of readiness for personal self-creation within educational activities.
- 4. Development of skills for constructing an individual self-learning algorithm.
- 5. Improvement of inter-subjective interaction skills in educational and creative activities.

Evaluation of Workshop Effectiveness. The main diagnostic measure of the workshop's effectiveness is the formation of an individual self-improvement algorithm by pilot cadets, as well as specific cognitive changes that reflect their autodidactic orientation toward self-creation in educational activities.

Conclusions. The workshop contributes to the development of pilot cadets' ability to comprehensively integrate educational activities, structure their selfknowledge and self-improvement, and overcome the chaos of self-development. The process of cadets' selfmovement through the content of the workshop, which incorporates various aspects of interaction among participants and reflection techniques, allows them to continuously search for foundational skills that support self-creation in educational activities. These include skills in goal-setting and achieving professional and personal self-improvement as well as becoming an active subject in educational activities. Currently, the issue of determinants of pilot cadets' self-activity in educational activities, given its complexity and multidimensionality, can be viewed as a process influenced by the educational environment on the individual. It is the cadet, through their inherent selfactivity, who is capable of transforming these influences, gradually developing their own conceptual understanding of the phenomenon of self-learning. Based on this, they define their own algorithm for professional and personal self-improvement.

Prospects for further research. The urgent pedagogical issue of forming pilot cadets' autodidactic competence requires additional empirical research, the development of a step-by-step strategy for its formation during initial flight training, and the creation of a holistic structural-functional model of self-educational competence for future aviation professionals in a higher flight education institution, where the workshop will take its place among the universal means of «self-creation».

REFERENCES

Vozniuk, O. V., Dubaseniuk, O. A. (2011). Innovatsiinyi pidkhid do analizu profesiinoi kompetentnosti suchasnoho fakhivtsia [Innovative Approach to the Analysis of Professional Competence of a Modern Specialist]. Innovatsii u vyshchii osviti: problemy, dosvid, perspektyvy]: monohrafiia. Zhytomyr: Vyd-vo

ZhDU im. Ivana Franka. S. 328-346. [in Ukrainian].

Sliusarenko, N., Kulbatska, M. (2015). Subiekt-subiektnyi pidkhid do orhanizatsii pedahohichnoho protsesu [Subject-Subject Approach to the Organization of the Pedagogical Process]. *Liudynoznavchi Studii*. *Pedahohika*. № 1 (33). S. 194–201 [in Ukrainian].

Vatkovska, M. H. (2010). Samorealizatsiia osobystosti v osvitnomu prostori [Self-Realization of Personality in the Educational Space]. Odesa. 20 s. [in Ukrainian].

Tsymbalaru, A. D. (2016). Osvitnii prostir: sutnist, struktura i mekhanizmy stvorennia [Educational Space: Essence, Structure, and Mechanisms of Creation]. *Ukrainskyi Pedahohichnyi Zhurnal*. № 1. S. 41–50. [in Ukrainian].

Denysiuk, L. B. (2012). Psykholohichni osoblyvosti formuvannia systemy profesiinykh tsinnostei maibutnikh fakhivtsiv aviatsiinoi haluzi [Psychological Features of the Formation of the System of Professional Values of Future Specialists in the Aviation Industry]. Kyiv. 20 s. [in Ukrainian].

Piven, M. I., Piven, V. V. (2018). Osobystist kursanta yak yadro intehratsii psykholoho – pedahohichnykh kompetentsii v osvitnomu prostori lotnoho VNZ [The Personality of a Cadet as the Core of the Integration of Psychological and Pedagogical Competencies in the Educational Space of a Flight University]. *Visnyk Hlukhivskoho Natsionalnoho pedahohichnoho universytetu imeni Oleksandra Dovzhenka Ser: «Pedahohichni Nauky»*. № 1. S. 96 –102 [in English].

Kremen, V. H., Ilin, V. V. (2012). Synerhetyka v osviti: kontekst liudynotsentryzmu [Synergetics in Education: The Context of Human-Centeredness]. Kyiv: Pedahohichna Dumka. 366 s. [in Ukrainian].

Kushchov, V. H. (2007). Subiektna paradyhma vyshchoi osvity [The Subject Paradigm of Higher Education]. Teoretychni ta metodychni zasady rozvytku pedahohichnoi osvity: pedahohichna maisternist, tvorchist, tekhnolohii: zb. nauk. prats. Kharkiv. S. 133–136 [in Ukrainian].

Tatenko, V. O. (2015). Subiektno-vchynkovyi pidkhid na sluzhbi u sotsialnii psykholohii [Subject-Action Approach in Service of Social Psychology]. *Psykholohiia Osobystosti*. № 1 (6). S. 20–31 [in Ukrainian].

Maksymenko, S. D. (2013). Psykholohiia uchinnia liudyny: henetyko-modeliuiuchyi pidkhid [Psychology of Human Learning: Genetic-Modeling Approach]. Kyiv: Vydavnychyi Dim «Slovo». 592 s. [in Ukrainian].

Mid, D. H. (2000). Dukh, samist i suspilstvo: z tochky zoru sotsialnoho bikheviorysta [Spirit, Self, and Society: From the Perspective of a Social Behaviorist] / per. z anhl. T. Korpalo. Kyiv: Ukr. Tsentr Dukhovnoi Kultury. 374 s. [in Ukrainian].

Boryshevskyi, M. (2010). Doroha do sebe: vid osnov subiektnosti do vershyn dukhovnosti [The Road to Oneself: From the Foundations of Subjectivity to the Heights of Spirituality]. Kyiv: Akademvydav. 416 s. [in Ukrainian].

Serdiuk, L. Z. (2015). Samotvorennia u rozvytku osobystosti [Self-Creation in Personality Development: A Scientific Perspective]. Kyiv: Pedahohichna Dumka. 93 s. [in Ukrainian].

Dubaseniuk, O. (2013). Modernizatsiia systemy

osvity v Ukraini v umovakh suchasnykh hlobalizatsiinykh protsesiv [Modernization of the Education System in Ukraine Amid Contemporary Globalization Processes]. *Osvitni reformy: misiia, diisnist, refleksiia:* monohrafiia. Kyiv: TOV «Edelveis». S. 253–262 [in Ukrainian].

Kolomiiets, A. M., Kolomiiets, D. I. (1999). Mizhpredmetni zviazky u konteksti problemy intehratsii [Interdisciplinary Connections in the Context of the Integration Problem]. Pedahohika i psykholohiia profesiinoi osvity. Lviv. № 2. S. 61–66. [in Ukrainian].

Kurinskyi, O. V. (2006). Ukrainska postpsykholohichna dydaktyka [Ukrainian Post-Psychological Didactics]. Kyiv: ZAT «Vipol». 484 s. [in Ukrainian].

Fopel, K. (2003). Efektyvnyi vorkshop. Dynamichne navchannia [Effective Workshop. Dynamic Learning]. Vyd. Henezys. 368 s. [in Ukrainian].

Piven, M. (2023). Pedagogization of physical and health-improving activities for pilot cadets. Modern conceptual models and trends in the development of pedagogical education and philology: collective monograph. International Science Group. Boston: Primediae Launch. P. 145–167. doi: 10.46299/ISG.2023. MONO.PED.2.2.1 [in English].

СПИСОК ВИКОРИСТАНОЇ ЛІТЕРАТУРИ

Вознюк, О. В., Дубасенюк, О. А. (2011). Інноваційний підхід до аналізу професійної компетентності сучасного фахівця. *Інновації у вищій освіті: проблеми, досвід, перспективи:* монографія / за ред. П. Ю. Сауха. Житомир: Вид-во ЖДУ ім. Івана Франка. С. 328–346.

Слюсаренко, Н., Кульбацька, М. (2015). Суб'єктсуб'єктний підхід до організації педагогічного процесу. Людинознавчі студії. Педагогіка. № 1 (33). С. 194–201.

Ватковська, М. Г. (2010). Самореалізація особистості в освітньому просторі: автореф. дис. ... канд. філос. наук: 09.00.10. Одеса. 20 с.

Цимбалару, А. Д. (2016). Освітній простір: сутність, структура і механізми створення. Український педагогічний журнал. № 1. С. 41–50.

Денисюк, Л. Б. Психологічні особливості формування системи професійних цінностей майбутніх фахівців авіаційної галузі: автореф. дис. ... канд. псих. наук: 19.00.07. Київ. 20 с.

Півень, М. І., Півень, В. В. (2018). Особистість курсанта як ядро інтеграції психолого — педагогічних компетенцій в освітньому просторі льотного ВНЗ. Вісник Глухівського Національного педагогічного університету імені Олександра Довженка. Серія «Педагогічні науки». Вип. 1. С. 96—102

Кремень, В. Г., Ільїн, В. В. (2012). Синергетика в освіті: контекст людиноцентризму. Київ: Педагогічна думка. 366 с.

Кущов, В. Г. (2007). Суб'єктна парадигма вищої освіти. Теоретичні та методичні засади розвитку педагогічної освіти: педагогічна майстерність, творчість, технології: зб. наук. праць. Харків: НТУ «ХІІІ». С. 133–136.

Татенко, В. О. (2015). Суб'єктно-вчинковий підхід на службі у соціальній психології. *Психологія особистості*. № 1 (6). С. 20–31.

Максименко, С. Д. (2013). Психологія учіння

людини: генетико-моделюючий підхід: монографія. Київ: Видавничий дім «Слово». 592 с.

Мід, Д. Г. (2000). Дух, самість і суспільство: з точки зору соціального біхевіориста / пер. з англ. Т. Корпало. Київ: Укр. центр духовної культури. 374 с.

Боришевський, М. (2010). Дорога до себе: від основ суб'єктності до вершин духовності: монографія. Київ: Академвидав. 416 с.

Сердюк, Л. З. (2015). Самотворення у розвитку особистості: наук.-метод. посіб. / за ред. Л. З. Сердюк. Київ: Педагогічна думка. 93 с.

Дубасенюк, О. (2013). Модернізація системи освіти в Україні в умовах сучасних глобалізаційних процесів. *Освітні реформи: місія, дійсність, рефлексія:* монографія / за ред. В. Кременя та ін. Київ: ТОВ «Едельвейс». С. 253–262.

Коломієць, А. М., Коломієць, Д. І. (1999). Міжпредметні зв'язки у контексті проблеми інтеграції. Π едагогіка і психологія професійної освіти. Львів. № 2. С. 61–66.

Курінський, О. В. (2006). Українська постпсихологічна дидактика: лекції. Київ: ЗАТ «Віпол». 484 с.

Фопель, К. (2003). Ефективний воркшоп. Динамічне навчання; пер. з нім. Генезис. 368 с.

Piven, M. (2023). Pedagogization of physical and health-improving activities for pilot cadets. Modern conceptual models and trends in the development of pedagogical education and philology: collective monograph. International Science Group. Boston: Primediae Launch. Pp. 145–167. DOI: 10.46299/ISG.2023. MONO.PED.2.2.1

Дата надходження до редакції: 10.02.2025