

**SECTION 2. GENERAL PEDAGOGY**

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**2.1 Pedagogization of physical and health-improving activities for pilot cadets**

The issue of development the ability of Pilot Cadets to show independence in physical education has a huge role among the problems of improving the quality of professional education for future aviation specialists in flight institutions. Nowadays, the organization of physical training needs to be changed. In particular, it is necessary to create favorable pedagogical conditions for the Pilot Cadets self-realization in the process of forming psychophysiological readiness for future professional activity. In this situation, the best way to solve this problem can be an organic combination of the efforts of the instructor and the cadet in educational activities. This can help to activate the mechanisms of individual self-improvement and independence in the formation of physical culture and health-improving competence for future aviation specialists.

One of these ways is the possibility and expediency of organizing physical education and health-improving activities according to such scheme: -educational classes - independent training according to program material - physical education amateur activities - autodidactic skills. This scheme ensures the integrity of the pedagogical process, in the center of which is the personality of the Pilot Cadet. Only in the personal context an effort to be the person who constantly encourages the development of physical culture and health-improving activities acquires realistic outlines in professional and personal self-improvement.

At the end of the 20th century, a new systemic vision of the problems in physical training led to the need for broader ideas about the nature, methods and approaches of the formation of physical and psychophysiological readiness for future professional aviation activity. The complexity of aviation equipment operation and the problems of assimilation to information influences of various means in aviation professional training sharply raised the problem of the psychophysiological reliability formation for future pilots. The subject of Physical Training began to be considered in conjunction

with other subjects as an integral means of forming the psychophysiological reliability for flight personnel within the framework of psychophysiological training system (R. Makarov, 1980-2001). Such way, for the first time, physical training facilities were considered as the basic substructure of the professional education system for future aviation specialists. In addition to physical training, this system included real professional activity (its psychophysiological aspect), simulator training (flights modelling) and theoretical training. It was a systematic approach to the organization of physical and psychophysiological training that made it possible to scientifically approach the design of various models in general, special and corrective physical training of Pilots Cadets. Exactly in these models, the alternately accented use of means of general and special orientation in physical exercises was realized in order to ensure effective interaction in the system: on the one hand - with other substructures of the system, on the other - with the human body as the carrier of all didactic influences [82].

Special physical training had high indicators for the formation of psychophysiological reliability among all means of ground training of flight personnel. This was expressed in the indicators of rapid formation of psychophysiological, psychological and physical qualities; in reducing the "psychophysiological cost" of professional activity; in the qualitative and reliable performance of professional functions in abnormal conditions of flight; in strengthening health and in improving the functional performance of future aviation specialists.

A wide range of scientific studies and the long-term practice of systematic organization of physical training were held in the higher educational institution the last decade. They indicate that one of the possible solutions to the problem of extremely relevant for flight practice of forming the psychophysiological reliability of cadets in the flight institutions is competently oriented physical and psychophysiological training. It is based on personal and professional motives to consolidate the importance of means of physical training for the formation of physical and health - improving competencies in general and special direction. Under such conditions, the physical training of the cadets can achieve its goal to set up a situation of demand for the creative forces of individual [83].

The personally oriented situation in the system of physical and psychophysiological training for future aviation specialists acts as a kind of unity of the content, procedural and personal aspects of educational activity. On the one hand, it acts as a problem or a task that carries the aspect of identifying and disclosing physical capabilities and influences of general and special physical exercises. On the other hand, it becomes a system of a cadet action, resulting in the realization and determination of the essential forces of the individual, his physical culture and health-improving competence. It is this way that can motivate cadet youth to regular physical exercises, to change the cadets' attitude to specially organized classes in physical and psychophysiological training in flight institutions.

Thus, competently oriented physical and psychophysiological training is an effective factor in the formation of the cadet's personality. At the same time, this is the implementation of psychophysiological mechanisms of adequate adaptation of the cadet's body to tests in a dangerous profession. So, his body will be able to withstand the effects of the environment and actively operate with internal conditions far as he is ready to perform professional tasks effectively. Actually, the psychophysiological mechanisms formed in the process of competently oriented physical and psychophysiological training activity is a tool for forming the basic foundations of the psychological readiness of future aviation specialists for profession activity.

In the system of professional education of future aviation specialists, the formation of physical education and health-improving competence implies the complementarity and interdependence of all elements in the educational process. But its core is not just a motivated cadet, but a cadet as a creator who, in his creation, relies on the conceptual foundations of an open personality and basic needs - to feel competent, capable of self-determination and meaningful relationships (E. Disi, R. Ryan). As a result, their own constructive and transformative forces are enriched with "living personal knowledge" (V. Zinchenko) and individual spiritual experience of self-creation [84-86]. And this is the essence of the leading value from regular physical exercises in flight institutions. A set of personally significant and valuable aspirations, ideals, beliefs, views, attitudes to educational activities and to professional education in flight higher institutions in

general; understanding of fitness competencies as one of the leading professional and social values, allows us to talk about the Pilots Cadets readiness for self-movement in educational activities. These allow us to speak about the ability to show their independence, adequately correlate their intentions and potencies with the nature and complexity of the problem situation, choose the arsenal of its solution, be ready to bear responsibility for their actions [87]. The ability of cadets to self-movement in educational activities implies that they have the ability to construct own personality and to content the authorship of self-creation.

Actually, we are talking about mastering the entire spectrum of physical culture and health-improving competencies. But achieving this goal is possible if the person has a need for constant self-improvement, self-creation and constructive-transformation. With the help of this a cadet is able to transform physical and health influences for the most complete actualization and realization of individual potential opportunities in educational activities. On this basis he is able to determine the algorithm of professional and personal self-development, realize the most important personal meanings, values and motives in physical and psychophysiological training.

According to this interpretation, competently oriented physical and psychophysiological training is a form of creative way for professional and personal self-development. It is legitimate to consider it as a technology for transferring educational activities to the mode of personal development when the cadet becomes the subject of educational activities and the subject of integration of psychological and pedagogical knowledge. The fact of subjectification allows you to achieve a holistic reflection in the mind of the cadet the real educational situation at the classes of physical training. This act specifies interdisciplinary connections, interdisciplinary psychological-pedagogical and physical education knowledge and skills, ways of solving educational problems, specific problem situations based on the unity of the physical and mental states of the individual; on the unity of his thoughts and actions. So, the cadet is a harmonious person who has a balance in contradictions (the term of A. Voznyuk), has enormous power (the term of P. Weinzwieg) to self-transcendence and self-creation (the term of V. Tatenko) in educational activities. Self-transcendence

and self-creation is a personal meaning created through combinations of different aspects of interaction in educational activities [85]. Personal meaning is such an inner act, that primordial and contributes to the ordering of chaos in the formation of physical and health-improving competencies and its transformation into a tool for transforming the cadet's personality into the subject of self-creation. It also contributes to the development of the individual's ability to holistically integral comprehension of competently oriented physical and psychophysiological training.

To find a key that can create opportunities for scientific filling of the process of personal growth is on the ways of understanding the developmental potential of the educational environment [88, 89]. The cadet's focus on his own professional and personal growth in physical education is the ideal moment of his motivation to implement the transcendent essence of individual creative thinking to organize independent educational activities.

Consequently, the independence and constructive position of future aviation specialists should become a priority in physical education and health - improving activity. This will instrumentally equip the personality of the cadet in the manifestation of self-movement in educational activities, and meaningfully fill the authorship of his own personal and professional self-improvement in the process of physical exercises.

One of the sources for studying such a position are the ideas of authorship of a living human subject in the creation of social structures in the works of T. Lukman, P. Berger, A. Furman, O. Marchenko, M. Borishevsky, V. Tatenko and others. So, A. Furman notes that educational activity is a metadata of a special (social-cultural - psychological) content, structure, design, canonized in such a complex phenomenon of the highest cultural affirmation of a man as creation

Naturally, its authentic theoretical knowledge is possible only from the meta-scientific standpoints, first of all as a deep scientific reflection and the highest methodological synthesis of all the ideas, theories, and concepts previously obtained in the history of psychological and pedagogical thought. To master the art of parity complicity in the educational process for cadets is to go through the school of independent production, cultivation and creation [90]. Actually, a meta-objective space

is formed, in which the main focus (center) is not the cadet who forms the information baggage about the profession and is able to apply this knowledge in practice, but the cadet who is the subject of the creation of his profession and himself in it [91].

The "goal" from the Greek word "meta" means "over, after" and symbolizes the movement to the own "I" and the acceptance of others as subjects of activity. It emphasizes the influence of the educational environment on the individual, on the one hand. On the other hand, it is the constructive power of the individual in health-improving the educational environment in his own inner experience. Thus, a synergistic meta-form of organizing one's own educational environment is born, where the subjective abilities of the individual are the driving force of a stable self-organizing whole: the constructing individual and the educational space constructed by him constitute a procedural unity. In this unity, the meta-individuality of a person (V. Merlin) is fully manifested as a leading personality property that contributes to its inactivation (the term of F. Varela) into the educational space.

In our opinion, the interaction of the outlined areas of meta-individuality forms the basis for synergistic meta-forms of organization and self-organization of physical education and health-improving activities in flight institutions. Exactly in the institutions the authorship of the cadet as a subject of educational activities can be fully represented. Therefore, the educational activity itself under certain conditions can become a space for the development of self-learning skills and thereby serve the professional and personal self-improvement of a young specialist. Besides the cadet's creative adaptation to various organizational forms can be provided: from training in physical aerobic training, independent training, independent physical education and health-improving activities to self-training (auto-didactics).

The idea of the possibility and expediency of organizing physical training in flight institutions according to the scheme "training sessions - independent work according to program material - physical education amateur activity - autodidactic skills" ensures the integrity of the pedagogical process, in the center of which is the personality of the Pilot Cadet. Only in the personal context is one who constantly encourages the development of competently oriented physical and psychophysiological training

acquires realistic outlines in professional and personal self-improvement. In the cadet's mind this is the main way of emergence of the goal in physical improvement as a tool for transforming his own personality into the subject of self-creation.

However, the authorship of self-organization, self-improvement, self-creation of self-regulation and other didactic phenomena for which the internally determined activity of a person is common, which is aimed at developing its potential, is possible only under the condition of mature awareness of the desire and orientation of the individual to the manifestation of independence and autonomy in activity. It is known that the power of authorship in personal and professional growth ultimately depends on the autodidactic skills of the cadet's personality. There is no and cannot be authorship outside of his creative constructive abilities, outside of interaction with the professional and educational space

It is known that autodidactic skills are as the state as the quality of the personality, which are aimed at effectively constructing cadet's professional and educational space. To some extent they are also self-realization of his creative abilities both in learning and in creating his own authorship. The cadet's autodidactic skills are action - acceptance, action - dependence, action - possession and action - authorship.

In this space, the cadet creates a new mediated idea about himself and his inner space by force of his thought, on the one hand. On the other hand, he creates a new idea about the objective external professional and educational environment, about interaction with other subjects of educational activity, etc.

This representation exists at a qualitatively new level. It creates conditions for self-movement in educational activities and for personal and professional self-improvement. The movement of the cadet beyond his own space and his own "I" and the acceptance of others as subjects, capable of creative self-development, contributes to the formation of new meta-individual position of the individual, such as creative interaction. This way subjects continuously share with each other the experience of "self-improvement," "amateur performance" and, thus, contribute to the awareness of almost the only way to specify their own limitations, probable ways of overcoming it and creating only the individual (original) self-transcription algorithm.

The meta-individual position of a cadet in educational activities is a dynamic process of interaction and design of external capabilities and internal conditions which are resources for professional and personal growth. Its essence is revealed through the ability of the cadet as a subject of educational activity to provide a "golden proportion" (according to V. Petrovsky) between the internal aspirations of the individual and the external conditions for their implementation. It is provided the cadet to be at high level of independence (subjectivity) and competence development.

The analysis of Ukrainian and foreign scientists works as for confronting the problems of self-creation, in particular the self-creation of the personality in educational activities, show that the personality is permanently facing not only problematic tasks, but also the need for self-transcendence and self-transformation.

Outlined processes have a common source which is the motivation for growth. Many studies confirm that the personality in the activity strives for perfection. Of particular importance for the understanding of independence and autonomy in activity are the studies of K. Rogers and A. Maslow. The authors emphasize that personality is represented not only as something that is in the process of development, but also as a subject consciously striving for autonomy and self-development.

L. Serdyuk believes that personal autonomy is one of the main structural components of self-creation. The process of self-creation itself is an integral self-deterministic, difficult to organize phenomenon, mediated by a complex of personality parameters, in particular the value of self-development; the integrity of the perception and the life path; self-acceptance; faith in oneself; readiness for self-change, etc. The ability to self-determination, self-development, self-improvement and self-creation is realized when a person becomes a real subject. At the same time, self-improvement acts as a mechanism for the process of self-creation. The driving forces of personal development are localized in the personality itself, and external factors can lose their programming role [92].

The formation of a person as a real subject is expressed in a gradual change in the relationship between "external" and "internal": from the predominant orientation "external through internal" to the increasing dominance of the tendency "internal

through external" (V. Chudnovsky). And " self-development, self-education, self-formation occupies an increasing place as a person grows older and, accordingly, a greater proportion belongs to internal conditions, through which all external causes, influences, etc., always act" (G. Kostyuk). I. Zyazyun notes that the process of the creative potential development of the individual in educational activities will become effective in implementing such mutually agreed psychological and pedagogical conditions as: stimulating activity, independence, inner freedom; the use of reflection in the process of personal and professional formation and development; designing and organizing the educational process based on personal and professional values; defining a humanistic and creative paradigm; widespread use of a creative approach in educational practice; saturation with creativity of subjects educational space for educational activity [93].

Recently, there has been a certain "breakthrough" in the development of self-training (autonomy) of the individual in the professional education of future aviation specialists. Ukrainian post-psychological autodidactic shows that personal self-improvement as a complex education can be determined by numerous factors, the full coverage and transformation of which ensures the acquisition of a creative personality capable of independent and responsible choice [94].

To clarify the process of emergence in the personality structure of the goal for self-creation by means of physical training, certain psychological and pedagogical factors should be distinguished. First of all, this concerns the motivational and value orientations of the individual. The cadet's focus on his own professional and personal growth in educational activities is the ideal moment of motivating the cadet to self-creation.

It motivates the cadet to implement the transcendent essence of creative thinking of the individual, to simulate the meta-form of synergistic organization with regular physical exercises. Actually, the motivational component in the system of competently oriented physical and psychophysiological training reflects the cadet's attitude to regular physical exercises, which is expressed in aim settings. The motivational component includes the need for the formation of psychophysiological reliability and

psychological readiness for future activities; dynamic health and professional longevity; the desire for physical and sports improvement; interest in technologies and methods of professional and personal self-development, health-improving techniques; innovations in the formation of a healthy lifestyle; increasing the level of physical fitness; functional performance and motor activity. A set of personally significant and valuable aspirations, ideals, beliefs, views, attitudes to the results of physical improvement, to the physical and psychophysiological training system in the flight institutions as a whole; realizing of physical and health competencies as one of the leading professional and social values allows us to talk about the readiness of the cadet to self-movement in educational activities, about the ability to show his independence, adequately correlate his intentions and potencies with the nature and complexity of the problem situation; choose the arsenal of its solution and to be ready to bear responsibility for his actions.

An important significance in the implementation of the transition from the formalized requirements of the training session on physical training to the self-organization of physical education is a strong-willed factor. In the process of physical education during the overcoming of difficulties, volitional efforts are necessary, which, depending on its specifics, characterize the manifestations of the corresponding volitional qualities. We can confidently say that the problem of the formation of volitional qualities of Pilots Cadets must be solved precisely through the study of the nature of volitional effort, the possibility of their external stimulation and self-stimulation in the process of performing tasks of a different nature. Volitional qualities are not only manifested, but also formed through volitional efforts. The manifestation of volitional efforts in accordance with the features of the difficulties overcome in extreme activity contributes to the formation of appropriate skills of volitional actions, as well as the formation of volitional qualities. Volitional qualities characterize the potential side of volitional efforts and become a kind of guarantee of readiness for their stable and effective manifestation [86]. Volitional qualities of a person are manifested in its activities, while the same qualities can be manifested in different ways depending on the types of activities. In this regard, we can assume that the manifestation of

volitional efforts depends on the characteristics of the activities carried out, and this should be taken into account in the process of physical and psychophysiological training of Pilot Cadets.

In psychology, volitional efforts are understood as a manifestation of the active and conscious nature of overcoming obstacles in different levels of complexity. The basis of volitional efforts is the conscious motives of the activity carried out, which perform a meaningful, directing, stimulating function.

The volitional forces themselves perform an organizing, controlling, realizing function. Conscious motives do not always determine the manifestation of will. It depends on the level of development in a person of appropriate volitional qualities and awareness of the need to carry out certain activities related to overcoming difficulties. At the same time, the availability of appropriate practical skills, the development of the ability to self-stimulation with the use of various techniques, such as: self-hypnosis, self-conversion and self-punishment. Motivational determination of volitional efforts is facilitated by certain emotional states: confidence, readiness, mobilization, excitement, etc., which arise on the basis of actualization of the corresponding motives of achievement and claims of the individual [82, 86]. For the manifestation of will during exercise, conscious prediction of the reality to achieve the intended results is important. Volitional efforts only achieve high efficiency when they are subordinated to goals of different levels and values. At the same time, promising aims determine the stability of the manifestation of volitional efforts, and the nearest goals stimulate their intensity. The presence of a volitional installation plays a significant role in this. Volitional attitude is formed on the basis of an objective assessment by the subject of its capabilities adequately to the requirements of future competitions. The formation of volitional attitude is preceded by cognitive and prognostic activity with the analysis of emotional and value attitudes towards physical improvement [87].

Volitional efforts provide the creative side of physical education, contribute to the formation of such motives that are associated with self-improvement. Depending on the orientation and peculiarities of readiness for volitional efforts, one can judge the formation of various volitional qualities of a person. The installation on the

manifestation of volitional efforts that contribute to the formation, maintenance and implementation of promising goals characterizes such a volitional quality as purposefulness, the leading feature of which is a volitional orientation.

One of the psychological and pedagogical conditions under which the physical activity of Pilots Cadets achieves high performance in the formation of physical education and health-improving components is the mandatory self-analysis (reflection). Reflection comes from lat. *return back* and means self-analysis, self-observation, the return of the process of knowledge by a person to himself, to his own activity and the spiritual world, to the study of his own process of knowledge and transformation of the world. Today, most specialists in the process of professional training of Pilot Cadets claim the mandatory reflection as a stage of training. In the system of competently oriented physical and psychophysiological training, self-analysis is the driving force of the Pilot Cadet's self-movement in educational activities, in particular:

- 1) self-analysis at the classes acts as a way to assimilate the knowledge and skills of organizing physical education, the development of professionally important physical, psychological and psychophysiological qualities, health, professional longevity;
- 2) self-analysis creates conditions for the Pilot Cadets to realize the methods and results of their own physical education activities both in the process of planned physical training and in the process of self-organization;
- 3) introspection provides an internal career of the cadet's personality.

The ability to think about educational activities in the subject of Competently Oriented Physical Training, which is organized by the cadet independently and which is correlated with his competence, makes it possible to release the natural desire of a person to improve, on the one hand. On the other hand, it creates conditions for the transformation of fitness competence from a treasury of knowledge into an instrument of self-creation. Such way, the cadet's physical activity in its manifestations unfolds on the border of the inner and outer space of the individual, acting as a way of integrating the outlined tools in the general professional educational space.

Consequently, reflection allows us to open access to the internal psychological resources of the individual, to facilitate the use of the inexhaustible wealth which is the source of creativity and inner integrity and is inherent in the inner world of the cadet. It is reflection, based on the integrative nature of its arsenal and the developed algorithm without excessive intellectualization, that represents a reliable path to master the cadet's inner integrity, to experience a feeling of incompleteness with the meaning of one's own physical education amateur activity.

It is quite reasonable from these positions to believe that in the course of physical education amateur professional and personal self-development of the individual is already moving from disparate processes and systems to holistic education, so called self-creation. This requires certain internal conditions, in particular the formed skill of autodidact. In this regard V. Kurinsky notes: "each development of approaches to a new exercise in material should become a school for improving autodidactic skill. A master is a master of skills. We can say more broadly: the personality itself is a skill, because non-specific, unearned manifestations of personality do not exist. Personality is determined by the working capacity of the soul, which is demonstrated in actions, authenticity in relation to assessments (axiological apparatus), etc. - and all this indicates those basic skills that characterize it as a figure, a living subject. The main thing in self-development is to observe how a skill is formed in you " [94, p. 191].

The autonomy of the cadet is an important condition that provides a transformative impact on the individual and that makes the process of professional and personal self-development constructive, holistic and meaningful. Under the autonomy of the cadet we understand not only the actions which can lead to independent work in physical and psychophysiological training in the content of training programs, but also the self-organization of his training; the ability of the cadet to carry the phenomenon of development; to be the subject of self-creation in his own physical education.

At the same time, the act of development is carried out only under the conditions when the cadet will record, reflect and turn self-change into an arsenal of a new experience in the development of physical and health-improving competencies and enrich his own potential for professional and personal self-development. At the

moment of reflexive fixation of self-change, the cadet experiences his future as a new state that enriches his experience of self-creation. In this regard, the autonomy of the cadet is an important condition that provides a transformative effect on the individual and which makes the process of professional and personal self-development in regular physical exercises meaningful, constructive and holistic.

Actually, the experience of self-study of a cadet is a long-term, dynamic, flexible and multi-vector process of creating a personal didactic arsenal of self-creation in educational activities. The experience of self-creation gained by the cadet forms a certain "channel" of the most effective autodidactic techniques, which stabilizes the content of the cadet's self-movement in physical exercises, provides psychological unity of the internal state of the individual, correlates the individual capabilities and states of the cadet with the tasks facing him. Autodidactic skills are aimed at qualitative self-changes in health and professional longevity, at self-management in the form of an "internal leader" (according to V. Kurinsky), the development of confidence in their own internal forces, which significantly affects the integrity of the inner world of the individual, his spiritual component, concentrates his responsibility in the process of personal and professional growth, the creative evolution of his personality by means of physical training and the formation of the specific algorithm. It is the algorithm of autonomous educational activity of the cadet that provides self-regulation of the development of outlined competencies and internal processes.

Thanks to the algorithm, the cadet feels power over his abilities and features of the psyche, his own competence in the self-organization of educational activity and self-creation, forms the so-called algorithmic thinking. The creation of an algorithm and its application as a tool for the formation of physical and health competencies contributes to the technological feasibility of self-learning.

An essential feature of creating a self-learning experience in physical exercises is the inactivated combination of algorithmic thinking with the creativity of the cadet. Recall the famous words of P. Torrens: "Creativity means to dig deeper, look better, correct mistakes, talk with a cat, dive deep, go through walls, light the sun, build a castle on the sand, welcome the future." It is no coincidence that V. Kurinsky believed

that “the individual pedagogical creativity of each of us should become a source for any other creativity. Moreover, the first is integral to the second. Unimaginable for us remains a serious mental activity without the skill of an internal teacher. Tracing one's own spiritual and physical-skill development in the reverse order becomes a great assistant in acquiring teacher skills necessary in relations with oneself ”(14, p.214). In general, creativity is the interaction of purpose, state, intuition and possibilities. One does not exist without the other, since abilities, states, intuition and chances are organically interrelated and complementary phenomena in achieving the goal. At the same time, creativity is understood as the search for extraordinary, non-standard solutions, the emancipation of intellectual imagination, the attempt to predict the future result, the desire and possibility of realizing independence in the chosen business, etc [96]. Therefore, creativity is multifaceted and, most importantly, a phenomenon that determines the essence of self-creation by an individual.

The more understandable and convincing is the exceptional role of creativity when it comes to the psychophysiological reliability of Pilot Cadets and their psychological readiness for flight activities. In addition, these phenomena serve as the basis for structuring the personality, capable of independent choice, making decisions focused on the implementation of the relevant tasks of physical education amateur activities, i.e. the creativity of the future pilot in physical education and health-improving activities is considered as the ability of the individual, which manifests himself in the flexibility and co-structuring of responding to organizational problems in amateur performance and management of the process of self-creation, ability to make non-standard decisions in situations of uncertainty and incomplete information faced by a person. Any effective implementation of the creative activity of Pilot Cadets in the system of competently oriented physical training is impossible without certain thought operations to provide psychological and pedagogical conditions for the formation of autodidactic skills. Flexibility, originality, accuracy, predictability and speed is not the whole list of features for cadets’ creative thinking to solve the problems. As shown by experimental studies, an important condition that provides a positive result in self-creation is the presence in the personality structure of the cadet for key features and

abilities, such as psychological and pedagogical competence, emotional stability, initiative, communicatively, intuition, non-standard thinking, need in physical improvement and personal self-creation, self-confidence, criticality, subjectivity. They are the mandatory factor that requires the presence in an explicit or implicit form of creativity and provides a clear understanding of what needs to be created, why and when for their own self-improvement.

According to the definitions, content and effectiveness, the creativity of the individual is integrated into a wider integrity, such as the psychological readiness of future aviation specialists for professional activity. According to the most common understanding of the concept of psychological readiness, it is an integrated education of the individual, characterized by the chosen predicted activity during the preparation and introduction to activity. This concept is appropriate to consider not only in the context of obtaining an aviation profession, but as a general orientation of the individual to self-creation of his own personality and self-realization for subject abilities in educational activities. Since the psychological readiness of Pilot Cadets for flight activity is not formed automatically or spontaneously as a result of professional training, it requires purposeful psychological support for the professionalization of future aviation specialists and the creation in flight.

In general, it can be said that the main task of the classes is to create such conditions under which the opening of an autodidact begins for each cadet, who contemplates his inner life, feels the internal logic of the formation of personal development skills through the awareness of associative flows, structures, states that flow spontaneously, as well as the use of comparisons, introspection, the creation of his own image of physical education. This image is filled with skills, action, health-improving potential for their own personal and professional self-creation. The moment of self-creation for the future aviation specialists is carried out on a triadic basis as a transition from the individual form of the initial level of physical culture development and health-improving competencies through a common meta-form of competence training to the individual form of the highest level in professional and personal self-development.

In the act of self-creation, the cadet uses his own competence as a tool to overcome, surpassing external and internal boundaries in himself, as a way to transform spontaneous physical activity into an algorithm of creative physical education amateur activity.

Now there is a small number of research works, the authors of which reveal the essence of the holistic process of self-creation of the individual in physical education and health-improving activities. Nevertheless, most experts insist on the opinion that it is physical training classes that are the leading motivator of personal meaning in physical education [97]. To do this, it is extremely important to organize a pedagogical process with a focus on personality, which requires the teacher to constantly search for new modern means and methods of competency training in the subject, taking into account their interests and preferences. Given the important role of the competence of the individual in the process of self-creation, one of the requirements for its organization is the creation of conditions under which the pilots in the air would be able to carry out a conscious and motivated self-movement in educational dialogue. Methodological tools occupy a central place among such conditions.

Today, three groups of methods are used in the system of competently oriented physical and psychophysiological training of future aviation specialists:

- *the first* is aimed at mastering knowledge on the theory of physical and psychophysiological training, on the basics of a healthy lifestyle and motor activity;
- *the second* is aimed at the development of general and special professionally important physical and psychophysiological qualities;
- *the third* is aimed at the formation of automatic skills.

The selection of the leading method in the practice of conducting physical training classes depends on a number of pedagogical conditions. In particular, their choice is determined by:

- 1) the stage of formation of health-improving competencies;
- 2) the nature of the content of educational material, the means used;
- 3) the state of health and the level of cadet's preparedness;
- 4) the time possessed by subjects of educational activities;

- 5) the structure of individual occupations and their parts;
- 6) the peculiarities of the climatic conditions in which the lesson is held (air temperature, wind force, etc.);
- 7) the presence and condition of special and auxiliary equipment, the number of inventory, etc.).

To form of physical education and health-improving competencies of the general direction, all three groups of methods are used for Pilot Cadets. With the help of the first group of methods, the tasks of acquiring and mastering the knowledge of cadets are solved, creating a complete and more accurate image of physical education activity. The success in the development of physical education and health-improving competencies among cadets largely depends on it.

The second group of methods consists of methods for the development of general physical qualities: endurance, quickness, strength, agility and flexibility. Methods of mastering motor skills and skills as well as methods of mastering methodological techniques that would comprehensively contribute to strengthening the state of health, the formation of a stable motivation to engage in physical exercises.

The third group of methods includes autodidactic techniques that provide the process of self-organization of physical education activity, the development of skills in designing and achieving the goal of professional and personal self-development and skills to be a subject of educational activity.

The teacher's compliance with the structure of the classes and the correct use of methods and methodological techniques have the great importance for the qualitative organization of classes in order to develop physical and health-improving competencies of the general direction since the foundations of a motivational and value attitude to physical training is at the initial stages of training the cadets. The same teacher who conducts classes with cadets-pilots must be competent and prepared. The main task of the teacher is:

- to prove to cadets the value of regular physical exercises for professional and personal development using specific examples and simple arguments;

- to focus the attention of cadets on the importance of rethinking the informal approach to physical activity in the classroom and the role of independent physical exercises and certain types of motor activity;
- reveal the initial ideas and elementary excerpts from autodidactic and autodidactic direction of physical education activities;
- open internal and external sides of physical activity;
- to familiarize with the method of development of general physical qualities and visually;
- to show the cadets changes in their functional state during the exercise;
- to consolidate the ability to navigate in the methodological arsenal of selection of physical activity and functional recovery, based on the individual characteristics of the organism and the level of physical health improving;
- to focus the attention of cadets on the peculiarities of the organization and content of the preparatory, main and final parts of the lesson;
- provide conditions for mastering the security methodology for organizing independent classes.

The ability of a cadet to autonomous learning activities implies that the individual has autodidact skills (self-learning skills). V. Kurinsky notes in this regard: *"each development of approaches to a new exercise in material should become a school for improving autodidactic skill"* [95, p.191]. With particular expressiveness, the close connection of the cadet's autonomous educational activity with all manifestations of his activity as an autodidact arises through the specific algorithm. It is the algorithm of autonomous educational activity of the cadet that provides self-regulation of amateur activity and internal processes. Thanks to the algorithm, the cadet feels power over his abilities and features of the psyche, his own competence in self-organization of educational activity and self-creation. The creation of algorithms and their application as a tool for the formation of fitness competence contributes to the technological feasibility of self-learning. Algorithm structure is:

- morphologization of attempts in activity and self-creation;

- actualization of interests to self-movement in activity and self-creation, self-motivation;
- concentration of autodidactic potential, construction of the image (model) for self-movement in activity and self-creation;
- objectification of self-movement in activity and self-creation, implementation and improvement of the self-movement model;
- self-management of activity and self-creation.

We understand self-management of physical education as a system-organized plan for the internal activities of the cadet's personality to initiate, build, maintain and manage self-movement in educational activities. Based on the idea of Ukrainian scientists about the integrity of the process in self-regulation and the model of self-movement in educational activities, it is possible to determine the functional links that implement a structurally complete process of self-management in the cadet's physical education activities. These include:

- goal setting: this link performs a common system-forming function. The process of self-management is created to achieve a specific educational goal of physical activity in the form in which it is realized by the cadet;
- a subjective model of significant psychological and pedagogical conditions reflects: the complex of those external and internal conditions of physical education; the account of which the cadet considers necessary for a successful solution of the outlined goal of physical activity. Such a model of a complex of conditions and its dynamics carries the function of a source of information, on the basis of which the cadet performs programming of his own physical education activities;
- the program of his activities: the cadet carries out the regulatory function of building, creating a specific program of performing actions regarding the planned physical activity. Such a program is an information that determines the nature, sequence, methods and other (in particular dynamic) characteristics of actions aimed at achieving the outlined goal of physical activity in those conditions that are highlighted by the subject himself as significant, as the basis for the program of physical system of subjective criteria for achieving the goal (success criteria): it is a functional link

specific exactly for the regulation of physical education. It has the function of specifying and clarifying the purpose of physical activity. The cadet overcomes the initial information uncertainty of the outlined goal, creates his own criteria for evaluating the result, in accordance with his subjective understanding of the accepted goal;

- control and evaluation of real results: this is a regulatory link that carries the function of evaluating current and final results in relation to the system of success criteria adopted by the subject. It provides information on the degree of compliance (or discrepancies) between the background indicators of physical education, its staged and final results;

- adjustment: the specificity of the implementation of this function is to correct their own performing actions in the process of physical education.

All links of the regulatory process, which are psychological entities of the cadet's personality, are systemically interconnected and receive their meaningful and functional certainty only in the structure of the holistic process of self-management in physical education.

Consequently, the ability of Pilots Cadets to self-creation depends on the established skills of self-learning. The core of physical education and health-improving activities to form these skills for cadets should be the idea that can radically change their own lives. It means change themselves through competence. The educational activity itself under certain conditions can become a space for the development of self-learning skills and thereby serve the professional and personal self-improvement of a young aviation specialist and provide his creative adaptation to various organizational forms: from training, independent work, independent educational activity to self-learning (autodidactics). The idea of the possibility and expediency of organizing physical training in a flight institutions according to the scheme "training sessions - independent work on program material - physical education amateur activity – "autodidactic skills ensures the integrity of the pedagogical process, in the center of which is the personality of the Pilot Cadet. Only in the personal context, he is one who constantly encourages the development of competently oriented physical and

psychophysiological training acquires realistic outlines in professional and personal self-improvement. In the mind of the cadet this is the main way of emergence the goal of physical improvement as a tool for transforming his own personality into the subject of self-creation.

The purposeful realization of physical culture improving activity as a tool of self-development and self-creation is filled. It is hard to work in the context of development of the internal possibilities which provide reliable performance of professional skills in any conditions of activity. Actually, the cadet can be competent in self-creation if he carries the phenomenon of development and becomes the subject of self-creation in educational activities; if he develops the skill of fixing, reflecting and turning self-change into an arsenal of new experience of professional and personal self-development into the potential of self-leadership in the form of an "internal leader" (according to V. Kurinsky). At the same time, the autonomy of the cadet in physical education and health-improving activity is an important condition that provides a transformative effect on the individual. It makes the process of professional and personal self-improvement meaningful, constructive and holistic.