Developing pedagogical acmeology skills within teacher training frameworks

The article is devoted to the analysis of pedagogical acmeology and the relevance of its application in the system of training future teachers in modern conditions. The authors consider the use of such effective areas of psychological and pedagogical science as pedagogical acmeology, based on appropriate criteria and indicators, and the effectiveness of its application in the formation of the professional competence of the future teacher. This study is considered within the framework of training a new generation of teachers who meet modern requirements for the formation of professional competencies. The role of applied psychology is highlighted, in particular, certain approaches and principles of psychological science, which are aimed at the development of acmeological competencies necessary for the training of "modern" teachers, the development of a culture of self-development and professional self-awareness, based on the principles and concept of pedagogical "acme". A teacher needs to assess his level of professionalism, know the level of his motivation for his professional activity, be able to reveal and develop these abilities. And in this situation, there is a need to pay special attention to pedagogical acmeology as one of the effective ways to achieve professionalism in the activities of a teacher.

Keywords: pedagogical acmeology, new learning conditions, motivation, professional competencies, acme, success, leadership, reflection.

Introduction

At present, there is a need to take a critical look at the issues of training future teachers from the point of view of their preparation for new conditions, in particular, their culture of self-development and professional self-awareness, perfection based on the principles and concept of pedagogical acmeology.

The mechanism for achieving this goal is the application of a system for assessing the formation of indicators of pedagogical acmeology in the activities of teachers for critical analysis and achievement of effective teaching and ensuring the quality of education. With a huge amount of new knowledge and information, teachers and their students need to learn how to apply pedagogical acmeology in the assessment of their activities to achieve higher results in their professional activities. Pedagogical acmeology is aimed at ensuring the mastering by teachers of the knowledge and technologies necessary for their successful self-realization in pedagogical activities, the development of professionally oriented motivation, as one of the principles of pedagogical acmeology, and the determination of mechanisms and conditions for assessing the development of the teacher's personality in practical professional activities, including in the knowledge management system.

The new learning environment presupposes the application of the principle of "lifelong learning", and therefore, having the qualification of a teacher or starting teaching again, the specialist must understand that he can not only rely on his basic qualifications, but must also, despite his experience or age, systematically seek additional knowledge and the development of new skills throughout his professional activity. This is required by new learning conditions and the modern generation of students with a new way of thinking. New learning conditions are modern requirements, programs, including a learning environment based on the use of modern pedagogical technologies and teaching methods. Therefore, a young or established teacher needs to rebuild, learn, change and constantly develop in his professional activities, and be able to manage the accumulated knowledge in order to be effective in teaching his wards and not to lose the characteristic of a "modern" teacher and to ensure the modern quality of education. This is the whole relevance of pedagogical "acme", which is formed as a result of the search for everything new and modern. And, of course, this issue should be one of the key issues in the training of modern teachers and in the systematic development of teachers' professional qualifications.
The research questions of the given study are as follows:

1) What is the application of the acmeological approach in teachers’ professional development?
2) What is the structure of the pedagogical acme and how can it be used to assess teachers’ acmeological skills?
3) What are the levels of acmeological competence of organization teachers’ and their characteristics?
4) How can be experimental assessment of organization teachers’ acmeological competence be conducted and what are its potential results?

In terms of the given study we consider the acmeological competence of a teacher “as an integral personal quality that reflects the readiness and ability to design and implement progressively productive personal and professional development aimed at achieving the heights of pedagogical professionalism” [1].

The success of a teacher’s professional activity is determined, first of all, by his readiness and psychological degree of awareness of all the requirements for the main activity. The purpose of this study is to obtain results that indicate the need and effectiveness of the acmeological approach in the professional and pedagogical activities of teachers. The results of the assessment can be used in the training program for future teachers or in the system of self-development and advanced training of existing professionals on the principle of lifelong learning [2].

Some of the authors apply an acmeological approach to form teacher’s personal qualities concerning development of his leadership abilities: “Acmeological competence and leadership qualities are formed in the teacher on the basis of the same personal qualities, such as responsibility, independence, ability to creatively solve problems, initiative, ability to set goals, activity, motivation for success is self-development, self-knowledge, self-improvement, self-education” [3].

According to Perekrestova T.S. [4], Poletaeva N.M. [5], usage of an acmeological approach can be an effective method to develop teachers’ professional self-development. The strategy revolves around the concept of striving for excellence, which involves carefully choosing methods and tools to enhance the progress of aspiring teachers, aiming for continuous improvement in their professional performance. This progression spans from achieving significant milestones at one stage to reaching even greater accomplishments at the next level [4], [6].

Currently, there exist diverse interpretations of the concept of “professionalism”, as discussed by Bakireva E.V., Robotova A.S. [7] and Poletaeva N.M. [8]. Within the context of acmeology, professionalism is seen as a state of self-organization in individuals, enabling them to evolve from one pinnacle in their professional endeavors to another. This evolution signifies a blend of personal and occupational growth, involving a progression from a basic to a moderate and advanced level of proficiency. However, even upon attaining peak excellence, this state may prove to be transient. As societal expectations concerning the outcomes of teachers’ work evolve, there emerge prerequisites to reassess the standards for measuring teachers’ professional achievements.

Establishing a nurturing psychological atmosphere in the academic setting, where students receive their education, is vital. As highlighted by Jafari S., the academic success of students hinges on the interactions among various educational stakeholders (such as student-to-student, student-to-teacher, and teacher-to-teacher connections). By showcasing successful experiences to aspiring educators, university instructors can inspire them not only to seek out new knowledge but also to develop the essential skills for independent professional growth through self-directed learning [9].

The key focus in preparing prospective educators is nurturing their desire for ongoing professional augmentation and lifelong learning. This approach enables them to effectively strategize and adapt their professional advancement in alignment with evolving demands in the teaching field. Those individuals who prioritize professional growth as their main objective assume greater responsibility for the outcomes of their endeavors, demonstrating higher levels of initiative and a propensity toward innovation [10, 11].

As it is known, acmeology (“acme” — peak, “logos” — science) is a branch of social sciences that integrates knowledge about a person at the stage of his maturity, studies the patterns of achieving “acme” (peaks) by an adult in various types of life, including education, self-education, and professional activity [12]. In order to reach the top in one’s pedagogical activity, it is very important to have such a psychological ability, for example, motivation, without which no professional can develop or move consciously towards overcoming all difficulties and problems or plans and tasks in their activities. The use of pedagogical acmeology provides and strengthens professional motivation, stimulates creative potential, identifies individual, personal resources to achieve successful results in the professional activity of a teacher.
A teacher needs to use a mechanism for assessing his or her performance, where motivation, creativity, innovation, leadership and other psychological and pedagogical qualities play a major role. A teacher needs to assess these qualities and know the level of their formation in his professional activity, to be able to reveal and develop these psychological abilities. In the presence of such professionally important qualities, each teacher will show interest, which will correspondingly affect the quality of teaching [13]. Pedagogical activity, as it is known, ensures the implementation of many functions, such as: teaching, developing, educational, diagnostic, correctional, consultative, managerial, organizational, reflective. And within the framework of the implementation of these functions, the use of pedagogical acmeology and the assessment of its formation in each of these functions plays an important role for the further development of the professional competence of the teacher as a whole.

According to the researchers, the concept of “acme” is one of the main ones in the new scientific discipline and attention is paid to the objective and subjective factors that, interacting with each other, allow an adult to reach the level of acme.

N.A. Rybnikov, and then B.G. Anan’ev and his students and followers A.A. Bodalev, A.A. Derkach and N.V. Kuzmina include the term “acme” in the title of the branch of the science of human development in ontogenesis [14]. These researchers, a science that comprehensively studies the development of an adult, called acmeology, where a professional manifest himself as an active worker. In the scientific school of B.G. Ananyev, an integrated approach is used, and, accordingly, when tracing changes for a deeper explanation of the causes of these changes, data from scientific disciplines adjacent to psychology are involved. The movement of an adult to his acme or optimum, which proceeds through his attainment of microacme at the previous age stages, and this great acme itself with all its characteristics is considered in a multidirectional and multi-level way, as a result of the interaction of many objective and subjective conditions and circumstances, including the person’s own life-creation, the essence of which is revealed by acmeology in close cooperation with other sciences — natural sciences, social, humanitarian, and technical.

As the results of the study on the quality of education show, there is an opinion that, in general, the level of effectiveness of acmeological mechanisms in teachers is above average. But this is only quantitative data, not qualitative. We define qualitative outcomes, for example, as the degree of pedagogical proficiency, when the teacher is able to actively manage new knowledge, uses a teaching methodology for cognitive development, or psychological development, aimed at the development of conscious, non-mechanical learning [15]. It is also welcome to use work on the development of thinking functions through the use of logical tasks, situations aimed at developing the ability to analyze, express and prove one’s opinion. To do this, it would be correct for teachers to use techniques based on Piaget’s theory of cognitive learning, since the focus of the teacher’s activity should be aimed not only at the transfer of knowledge, but primarily at the development, the step-by-step systematic development of the student’s thinking, and not the linear progression of mastering the subject. Or Vygotsky’s theory of learning, where the main emphasis is on the integral approach of language and thought, for example, the theory of elementary mental thinking, which includes attention, sensation, perception and memory. By using these basic tools in interaction with their socio-cultural environment, children seem to improve them, using everything that their culture provides. In the case of memory, for example, Western cultures tend to write notes, use a mind map, or use mnemonics, whereas other cultures may use other memory tools, such as storytelling. In this way, it is possible to make good use of cultural variations in learning. In this theory of learning, the principle of the structure of thinking, based on the ability of learners to work individually and in a team with others, is crucial.

Very relevant is the theory of Taxonomy by Benjamin Bloom [15], an American educational psychologist whose theory focuses on the idea that goals related to cognition can be divided into subdivisions and arranged in order of cognitive complexity. The initial subdivisions consist of the following: (knowledge is the lowest, and the assessment is the most cognitively difficult): Knowledge — Understanding — Application — Analysis — Synthesis — Evaluation — Creation. Memorizing information at the level Knowledge is when memory is used to produce definitions, to cite facts or lists, or to read and retrieve information. Comprehension is the ability to construct a certain thought, reflected in written form or expressed graphically. Application refers to a situation where the material learned is used in products such as diagrams, models, interviews, simulations, and presentations. Analysis and Synthesis are the skills of separating material into parts and then determining how the parts relate to each other or to the overall structure and purpose. Assessment refers to the ability to formulate judgments based on criteria and standards, with justification and critical analysis. The creation stage puts the elements together and the functionality is formed, using the reorgan-
ization of the elements, the construction of a new structure, accompanying with the planning and production of the new [15].

The educational process in organizations, regardless of the form of ownership and departmental subordination, is carried out according to:

- State compulsory standard of education and training [16];
- Model curriculum for education and training [17].

Also, organizations are guided by the Standard Rules for the Operation of Organizations [18]. The standard defines the requirements for:

1) the content of education and training with a focus on the results of education and training;
2) the maximum volume of students’ academic workload;
3) the period of upbringing and training.

According to the above-mentioned documents, the professional activity of teachers focuses on the holistic development and realization of each child’s potential. This is based on universal and national values, considering their interests, characteristics and needs. Students’ skills and abilities are developed through:

- physical development;
- development of communication skills;
- development of cognitive and intellectual skills;
- development of creative skills, research activities;
- formation of social-emotional skills.

Moreover, the changes that occur in education put forward demands on the professionalism of the teacher. The teacher must not only master the methods of education and upbringing and have knowledge of the developmental characteristics of children, but also be familiar with modern methods for working with parents. This is necessary in order to unite the efforts of families and organizations, establish effective communication with them on matters related to child development, take into account the interests of children, and apply an individual approach to each child.

In 2021, Kazakhstan adopted the Model for the Development of Education and Training [19], which:

- is a strategic document;
- determines comprehensive measures with the participation of higher and secondary specialized educational institutions in matters of training teaching staff for the field of education;
- involves changing approaches to the development, upbringing and education of children;
- involves methodological support of the processes of organizations;
- regulates issues of assessing the quality of education;
- determines the role of the teacher;
- provides conditions for working with children with special educational needs;
- stimulates interaction with the parent community.

Thus, modern transformation processes determine the requirements for the individual as proactive, organized, with high creative potential, capable of actively shaping his worldview, developing potential opportunities for professional self-improvement, influencing the achievement of the pinnacle of professionalism and mastery.

It should be noted that the acmeological orientation of the personality of an education teacher characterizes his general focus on progressive development in various fields of activity (professional, public, social, etc.), determining purposeful creative activity in any direction and encouraging the search for effective ways of professional development. Recognition of a teacher as a master of his profession increases the professional demand of an individual, ensuring, on the one hand, his need for self-actualization, and on the other, increasing confidence in his abilities and the desire for self-knowledge and self-improvement.

Methods and materials

To assess level of formation of the acmeological competence of the organizations educators 29 teachers of education in Almaty took part in the survey. To determine the level of development of acmeological skills of teachers, a self-assessment procedure was carried out using a questionnaire using a ten-point rating system. Each section included 10 questions. The structure of pedagogical acme proposed by A. Derkach [20] was used as the basis for developing the author’s questionnaire. The questionnaire composed of the five sections correspondingly devoted to such aspects of acme as:

- Age aspect;
The group of questions for assessment of the age aspect reveals potential and personal abilities that should and can develop in any period, regardless of age, by influencing motivation.

The group of questions for assessment of educational aspect relate to the level of knowledge management and the use of innovation, development of planning, level of knowledge, thinking (fluency, originality, efficiency), arbitrariness of cognitive processes, adaptive personality traits, mastery of modern content and means of teaching.

The group of questions for assessment of the professional-motivational aspect reflects the professionalism of the individual (motives, values, personal qualities) and determines the teacher’s personality-oriented focus on the active construction of positive professional strategies, creative self-realization in the profession, considering universal human values as well as the level of development of emotional intelligence, development of empathy, communication abilities, positive thinking.

The development of emotional intelligence, empathy, and communication skills, as well as positive thinking, must be realized through:

- Awareness by teachers of the value and significance of their profession for personal and professional growth.
- A confident stance on the dynamics of professional improvement.
- The desire to achieve new positive results in increasing professional skill levels and self-actualization.
- Perceptions of pedagogical innovations and an eagerness for continuous creative professional pursuit.
- An expressed need for self-esteem, recognition, and a friendly attitude from colleagues, parents, and administrators towards one's own successes.

Questions for assessment of the creative aspect relate to the special psychological content of this activity, the creative nature of developmental education, the creative content of interaction between the teacher and parents. The questions are designed for self-assessment of teachers’ self-development, their level of ability disclosure, developing programs, analyzing results, and self-analysis. This includes teamwork when professional associations or groups of subject teachers don’t work in isolation, identifying new aspects of self-determination, self-actualization, self-improvement, and self-efficacy. It also includes the emergence of new attitudes towards the world around us and ourselves. It can include inclusivity and psychological interaction between teachers and students.

Questions for assessment of the reflective aspect relate to the abilities of self-analysis, self-assessment, assessment of the scope of skills, the completeness of their professional properties and integrativeness, the dynamics of the development of competencies; updating knowledge when solving cognitive and practical problems; applying knowledge to new situations.

The levels of acmeological competence were also determined. The characteristics of these levels are presented in Table.

The characteristics of the levels of teachers’ acmeological competence

<table>
<thead>
<tr>
<th>Levels</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High</td>
<td>The teacher actively improves his level of professional training, shows independence and initiative in the study of psychological and pedagogical innovative technologies (including inclusive ones), and is interested in using new forms and methods of educational activity in his practical activities. The teacher plans and organizes educational activities based on an activity-based and competency-based approach, knows how to analyze, apply the most effective methods, forms of organizing the pedagogical process, and uses innovative psychological and pedagogical technologies in his practical activities. The teacher understands the role and importance of self-education in his professional activities.</td>
</tr>
</tbody>
</table>
Continuation of Table

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher is able to critically assess the level of his professional competence, monitors the dynamics of his professional development (updating knowledge when solving cognitive and practical problems), and improves his professional level.</td>
</tr>
</tbody>
</table>
| Average | The teacher does not regularly improve his professional level, is interested in studying innovative pedagogical technologies (including inclusive ones) but does not always strive to use them in practical activities.  
The teacher tries to plan his educational activities on the basis of an activity-based and competence-based approach but does not always know how to rationally use effective methods and forms of organizing the pedagogical process.  
The teacher understands the role and importance of self-education in his professional activities but does not always strive for self-improvement of his professional level.  
The teacher monitors the dynamics of his professional growth but does not have a sufficient level of critical assessment of the level of his professional competence. |
| Low | The teacher does not strive to improve his professional level, does not independently strive to study pedagogical innovative technologies (including inclusive ones), and does not know the technology for applying them in practical activities.  
The teacher plans his educational activities on the basis of traditional approaches (accumulation of learning skills) and does not know how to use effective forms and methods of organizing the pedagogical process.  
The teacher poorly understands the role and importance of self-education in professional activities.  
The teacher does not know how to critically assess the level of professional competence and does not know how to monitor the dynamics of his professional development. |

Results and Discussion

Due to the fact that pedagogical acmeology is aimed at the development of psychological and pedagogical competence, the study was based on the structure of pedagogical acme proposed by A. Derkach [21]. According to this structure, the reflexive-acmeological approach to the development of professional skills takes into account such aspects as:

The age aspect of the acmeological approach shows that the degree of activity in teachers can change from active to passive both in the young and in the adult period of pedagogical activity. But the study helps to identify the potential and personal abilities that should and can develop in any period, regardless of age, by influencing motivation. When studying this aspect, it is necessary to consider the main indicators from various sciences, such as Pedology, Androgogy and Gerontology, and then the results of the performance assessment will be very accurate. The identification of such results will provide great motivation for teachers on how to develop in the future.

Conclusions: In this aspect, as our research results show, after many years of work, some professionals of organizations who work and have a stable interest in work, are dissatisfied with their professional achievements. Many teachers are characterized by psychological imbalance (23%), neurosis (29%) and a decrease in professional activity (19%). More than 85% show dissatisfaction with their achievements and only 44% are satisfied with the process of labor. But it is not enough to express satisfaction, since the agenda of modern education includes issues on the use of more relevant priorities, not only the traditional fulfillment of one's professional duties within the framework of teaching and education on paper, but also the use of innovations, the introduction of modern teaching strategies, the digitalization of learning, etc.

The educational aspect is aimed at diagnosing and developing knowledge and skills in the system of academic activity of the teacher. How is high the methodological potential, how can the teacher manage knowledge, what innovations and initiatives does he use in teaching? Here, we have adopted as the main indicators: knowledge management skills and the use of innovations.

Conclusions: Majority of teachers show an average level, the reasons for this are the lack of systematic study of new knowledge with their subsequent implementation in education. 58% showed an average level, 20% — a high one and 22% demonstrated a low one and used elementary techniques to use those techniques that are not widely used, but are only used in open, demonstration lessons.
The professional-motivational aspect is associated with the determination of the possibilities and results of labor activity through the clarification of professional suitability, psychological readiness for this type of work and the degree of social responsibility for its process and results. In this structure, we have chosen such indicators as: organization and the ability to manage time, the ability to manage the audience, the creation of a pleasant psychological climate with students, the correct organization and consistency stages of lessons with access to the result.

Conclusions: The results of the study showed that many teachers are doing very well, the indicators are above average. Almost 89% of teachers cope with these indicators very well.

But the results also showed that the professional aspect, expressed through such indicators as the motivation and activity of teachers, increases only within the framework of teaching program requirements in the traditional form. The use of new approaches, techniques, and experiments are practically not used. The results of the activity show a high level, but the motivation is very low. This is due to the fact that educators do not take the risk of introducing innovations.

The creative aspect determines the efforts expended and the success of their implementation by clarifying the level of professionalism, reflexive and innovative potential for its improvement to the degree of mastery and assessing the social significance of innovations obtained in the process of creativity. Key indicators such as: creativity and pedagogical excellence, inclusivity and psychological interaction showed an interesting result, namely pedagogical mastery has a high result, above the average. But according to the qualitative analysis, it can be noted that mastery is only limited by professional indicators, which are limited to the ability to conduct a lesson according to the appropriate plan, including various types of activities, but the essence of mastery does not have an explicit expression. And it should be noted that educators need to be more specific about the definition of mastery in its practical implementation.

Conclusions: in general, the creative aspect formation showed an average level — 66%, low level composed 24%, high level made up 10%. In terms of inclusivity and psychological interaction, the indicators are high — 78%, but if we talk about the quality of the content, then in the daily activities of teachers, this indicator will be very low, because with the results where many teachers are characterized by psychological imbalance (23%), neurosis (29%) and a decrease in professional activity (19%), then there is something to work on.

The reflexive aspect associated with the self-awareness of personality development allows to develop creative abilities in solving professional and creative problems, the use of intensive-game methods for the formation of a reflexive culture, taking into account the acmeological approach to the training of professionals based on the reflexive-psychological concept of the development of creativity in teaching acmeological educational technologies.

Conclusions: The main indicators that were highlighted are the following: self-education and self-improvement, self-esteem and critical analysis. The results of the study show a very low level. In the overall indicators, low level composed 66%, an average level made up 28% and a high one — 6%. These indicators reflect a low level, as there is no formal self-assessment system in place and it is not used. Instead, there is an indirect system in place for evaluating teachers' performance through questionnaires. In general, the results of the study showed that 25.7% of teachers had a low level of acmeological competence, 39.7% — an average one, and 34.6% — a high level.

The results showed that the majority of respondents had an average level of educational skills. Educators may have been more active in motivating their students, as there is still directive-instructive learning, resulting more in a mechanical type of learning than a cognitive one. More than half of the learning time is based on the method of repetition and memorization, which is not a reason for motivation and conscious perception of the material by students. The teacher himself can be very active, but the level of motivation to use the innovation is not high, classes are conducted according to the traditionally familiar method of rote memorization. The conclusions that we have made on this indicator are the need to familiarize ourselves with learning theories aimed at the cognitive and psychological development of students and their application in practice, following the example of the theory of Piaget, Howard Gardner, Erikson, Maslow [22], L. Vygotsky [23], A.A. Derkkach [24], etc. When it comes to knowledge management and the use of innovation, educators are not always clear about what constitutes knowledge management and the definition of innovation. According to this indicator, it seems necessary to plan additional education to improve the qualifications of teachers. The degree of intensity and intensity of the teacher's work could be observed in the organization of the lesson and the planning of the appropriate types of work. The assessment of this indicator shows the presence of lesson plans, use of visual aids, and technical teaching aids. This indicates
that there is a methodologically necessary set in place for teaching. However, the problem lies in the quality of how this set is used. This indicator smoothly flows into the ability to organize and the ability of the teacher to manage the content of the subject and the ability to vary the use of various methodological foundations aimed at cognitive and psychological development.

As for the professional-motivational aspect of formation of acmeological competence the majority of respondents got a high level of educational skills. The average level was educational. According to the indicator of mastery of modern content and means of teaching, its qualitative aspect, then teachers need not only to use the basic materials familiar to teaching, but also logical exercises, electronic training programs, audio and video materials with subsequent discussion or analysis. Teachers are more dependent on external factors in the organization of work, and if there are no appropriate technical and electronic means, then the creative approach of the teacher is not high. This is confirmed by the assessment of the indicator of solving professional problems and learning outcomes. The most difficult indicator that a teacher should strive for, when planning, turns out to be low in the end. And then everything goes back to normal, and the teacher must ensure the quality of planning, which should turn into a high-quality result. This, of course, is from the field of quality management, how to ensure and develop the quality of training. According to this indicator, it is necessary to train teachers more thoroughly and clearly show how the system of pedagogical activity is managed with access to quality [25].

The creative aspect is mostly developed at the average level — 66 %. In this regard, it can also be concluded that educators need to develop a critical mass system and learn how to discuss and establish appropriate communication on professional topics [26]. The nature of the productivity of the professional environment is also influenced by the quality of relationships between the subjects of educational activity, i.e. how correctly and effectively the communication and psychological relations between the teacher and students are built.

One of the modern indicators is the inclusivity and psychological interaction of the teacher and students. Activities on this indicator are not new, but require the use of modern approaches. The results of the study showed that according to this indicator, special courses for additional education are needed, with the invitation of professionals from specialized schools who have extensive practical experience in applied psychology. The integration and interaction of the educational environment in terms of psychological integration with pedagogical approaches used in teaching is very important.

The reflexive aspect which is associated with the self-awareness of personality development allows to develop creative abilities in solving professional and creative problems is formed mostly at the low level — 66 %, which showed that the ability for self-education and self-improvement, self-esteem and critical analysis needs further and profound development.

As a result of the study, we came to the conclusion that in order to professionally develop teachers on the basis of modern knowledge of the new science — pedagogical acmeology, it is possible to solve the following tasks in an educational institution:

1. Increasing professional competence in the field of modern achievements of applied psychology, pedagogy and pedagogical acmeology;
2. Identification of teachers’ personal resources;
3. Formation of skills for building effective strategies for professional growth, career, and image of a teacher;
4. Mastering of modern technologies and techniques in teaching by teachers;
5. The use of methods of cognitive and psychological development of students instead of the directive and instructive method of teaching;
6. Formation and development of competitiveness of the individual [27].

The importance of these tasks was assessed by teachers according to the proposed above-average assessment scale. Based on the data obtained, it can be concluded that the successful implementation of pedagogical acmeology is ensured through the observance of the following sequence of changes in the predominant direction of pedagogical influences on the following types of teacher development:

1. **Cognitive development** is focused on providing a conscious approach to self-development, professional and creative realization, and the growth of professional motivation. At the initial stage, for example, many people react to innovations with internal protest. But the teacher needs to overcome the internal state of resistance and constantly improve and update his knowledge. Low level of cognitive abilities, a consequence of superficial acquaintance with innovations, and, accordingly, low the level of quality of teaching is
the result of the lack of systematic work on the improvement of the teacher's qualifications and the lack of a knowledge management system in the pedagogical process [28].

2. *Emotional and psychological development* aimed at determining psychological acme in working with students and colleagues. It is probably important to introduce systematic training courses in applied psychology, pedagogy and professional communication for teachers [29].

3. *Critical analytical development* is based on the cognitive development of teachers, the use of appropriate teaching methods for the cognitive development of students. These are appropriate tasks, methodological techniques aimed at the development of cognitive perception and the development of speech-thinking functions.

4. *Self-assessment* is associated with the organization of awareness and value comprehension of information, the value of professional self-development and creative self-realization, which in fact is a kind of attitude towards success. The results of the self-assessment showed that these skills are the basis for effective professional development. The training seminars are aimed at building a system of professional self-improvement from the study of one's potential to the activation of skills and skills to structure their activities through the introduction of an acmeological approach into the process of professional development of the teacher’s personality.

5. *Motivational and behavioral activity* is aimed at the formation of stable motivation for professional activity, the need for creative self-realization, achieving professional success, which is aimed at results [30].

Practical acmeological learning strategies include the following, such as: games, psycho counseling technologies, training technologies, student-centered learning strategies, and the project-based learning method.

Thus, the task of the educational institution administration is to find the most effective and efficient ways to motivate teachers to improve their level of professional training. To do this, it is necessary to plan a system of work in accordance with the personal interests of the teachers themselves, which would make it possible to activate the creative potential of the teacher, his personal resources for self-education, the desire to learn new things and share his practical experience with other participants in educational relations.

To implement a system of professional development work, the following requirements must be taken into account: ensuring an individual — differentiated approach, taking into account the capabilities of teachers and their professional interests; assistance in assessing your performance in advanced training and timely making adjustments to this process; provision of systematic, integrated and activity-based approaches.

One of the important aspects of the system of advanced training for teachers is the involvement of educators in participation in professional competitions. Participation in competitions allows teachers to demonstrate their professional qualities, analyze their professional level, share their practical experience and get acquainted with the use of innovative technologies in the work of other educators. In addition, creating a teacher’s portfolio will allow the teacher to track the dynamics of the growth of his professional development, which will help the teacher to be critical of his level of self-training and will interest him in taking advanced training courses. To increase teachers’ level of acmeological competence, it is necessary to help them to draw up a long-term plan in accordance with the topic of self-education, and to send educators to advanced training courses.

**Conclusion**

In the result of the presented study we can conclude that all research questions were solved and the results were gained.

The acmeological approach in teachers’ professional development in the technology of additional training and retraining are applied as the relevant approaches to improving the teacher's activities, which today are one of the most effective approaches to ensuring the quality of education. In order to improve the quality of education, the main focus of quality assurance work must begin with the teacher himself. It must be admitted that educational institutions for the training of teachers, in particular education, do not train future teachers well enough, and at the same time, huge changes in the paradigms of our time also leave an imprint on the low level of personnel training. The modern philosophy of lifelong learning is the concept on which it is possible to build a model of the systematic formation and development of the professional competence of teachers by using pedagogical acmeology as a new approach to improve the quality of the teacher himself and, consequently, the quality of teaching. The use of the assessment system is the tool that should be relied on to determine the degree of formation of pedagogical acme, as the highest point of the teacher's professional achievement.
The structure of pedagogical acme of “acme” consists of such aspects as age, educational aspect; professional-motivational aspect; creative aspect; reflective aspect. Within the framework of the research, these aspects were reflected in the sections of the author’s questionnaire.

Within the framework of the study, the levels of acmeological competence were determined, including:

- high level, at which the teacher actively improves his level of professional training, shows independence and initiative in the study of psychological and pedagogical innovative technologies (including inclusive ones), and is interested in using new forms and methods of educational activity in his practical activities;
- average level, when the teacher does not regularly improve his professional level, is interested in studying innovative pedagogical technologies (including inclusive ones) but does not always strive to use them in practical activities;
- low level characterized by the teacher’s position when he does not strive to improve his professional level, does not independently strive to study pedagogical innovative technologies (including inclusive ones), and does not know the technology for applying them in practical activities.

The experimental assessment of organization teachers’ acmeological competence was carried out among organizations educators. 29 teachers of education of Almaty on the basis of self-assessment procedure was carried out using a questionnaire using a ten-point rating system.

Based on the results of the self-assessment procedure of the level of development of acmeological competence of a teacher, a quantitative analysis was formed. Based on the analysis, we saw that the majority of teachers assessing themselves (39.7%) were at the average level, a little bit less 34.6% had a high level of acmeological competence and 25.7% of respondents had a low one. These facts show that there exists the need to increase the level of acmeological competence of teachers which will enable them to realize, plan and analyze the peaks reached, the achievement of which indicates the implementation by the individual of certain stages of development and the acquisition of personal and professional experience. That would create new opportunities for professional improvement and involve modeling a new professional strategy for the development of a teacher’s personality. Therefore, it is important for teachers to form an objective self-assessment, since the teacher’s inability to realistically evaluate himself and his achievements indicates the professional immaturity of the individual, leading to a distortion of professional results, increases the motivational dissatisfaction of the teacher himself and can lead to professional isolation of the teacher from the educational community and parents as customers of educational services.

All of the above allows us to draw the following conclusion: the application of the acmeological approach acquires particular significance when designing the individual trajectory of professional development of teachers of an educational organization, predetermining a system of pedagogical conditions aimed at changing personal attitudes associated with self-management of professional development.

In general, the results of the study showed that some studies are carried out to study the psychological and pedagogical state of teachers in various educational institutions. Often, the indicators for teachers in methodological and educational work — how much they know their subject, what methods they use, and what educational activities they plan and implement — are subject to monitoring and control. However, little attention is paid to studying psychological and pedagogical indicators that, together with teaching skills and methods, form a holistic picture of the teacher we need.

As statistics show, at present there are many problems in the system of educational institutions that arise precisely because of the low pedagogical and psychological preparedness of teachers in working with children of early, junior, and adolescent age.

This suggests that not enough work is being done to manage the activities of professionals aimed at developing motivation to study, innovate in training, improve qualifications, and conduct scientific research in various new areas related to pedagogical activity. For example, it would be relevant to study applied psychology and its modern directions, such as pedagogical and psychological acmeology, neurolinguistics, cognitive science, behavioral psychology, anthropological philosophy and other social sciences and humanities, which are directly related to the formation of personality, the development of thinking, and the provision of cognitive and psychological development. The study of modern learning theory should arouse not only interest, but also the active application of best practices from various systems, the use of our foundations of cultural development through an in-depth study of ethnopedagogy and cultural anthropology. Basic education should be constantly replenished with the latest areas of science, which must be introduced into the practical work of the teacher, since the generation of students requires the use of new approaches to teaching on the part of the teacher.
Analyzing the works of many researchers, we have found that in the works of many researchers, attention is very often paid to the basic sciences such as general pedagogy and psychology, but the issues of the development of the teacher's personality, the issues of the teacher's self-development, the development of his creative activity in the acmeological sense are not sufficiently studied [31]. Educators often do not practice measuring or assessing the degree of motivation, the level of professionalism of the teacher, do not assess the satisfaction of teachers with their activities. From time to time, a survey is conducted to study the opinions of students, but the results are analyzed not with an emphasis on improving the quality of teaching of the teacher, but on his rating.

All studies in pedagogical and psychological sciences, with all their theoretical and methodological development, do not give practical recommendations for determining the degree of formation of pedagogical “acme” based on the results of teachers’ activities and recommendations for the subsequent improvement of these indicators to improve the pedagogical and psychological competence of the teacher. This traces the relevance of our study, where the authors try to show a system for determining the results of the teacher's activity in the form of assessing the formation of certain indicators of the pedagogical acme and recommend their further development.

The theoretical principles and conclusions presented in the article complement the theory and methodology of education in solving the problem of professional development of teaching staff in an educational organization.

The considered provisions update further research related to the development of methodological support for the individual trajectory of professional development of a teacher in an educational organization in accordance with the methodology of the acmeological approach.

The article was written within the framework of the scientific project No. AP14870390 “Scientific — methodical foundations for the formation and assessment of digital competencies of a modern teacher in the context of educational transformation” under grant funding by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan.

References

Г.Б. Саржанова, Э.А. Утеубаева, Г.М. Сарсанбаева

Мугалымдерді даярлау жүйесінде педагогікалық акмеология дәгдыларының ықпалының түсіндіру

Макала педагогікалық акмеологияның талдауы және оны қазіргі жағдайлда болашақ мугалымдерді даярлау жүйесінде қолданудың өзектілігін анықтайды. Авторлар психологікалық-педагогікалық ғылыминың ғылыми әдістемесінің үнемі құрылысқа келіпшілік сүйінеді, білініп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Материалдардың қолданылуын қосып, олардың қолданылуын қолдау өзектілігін суреттіріп, мугалымдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Макала педагогікалық акмеологияның талдауы және оны қазіргі жағдайлда болашақ мугалымдерді даярлау жүйесінде қолданудың өзектілігін анықтайды. Авторлар психологікалық-педагогікалық ғылыминың ғылыми әдістемесінің үнемі құрылысқа келіпшілік сүйінеді, білініп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Материалдардың қолданылуын қосып, олардың қолданылуын қолдау өзектілігін суреттіріп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Г.Б. Саржанова, Э.А. Утеубаева, Г.М. Сарсанбаева

Мугалымдерді даярлау жүйесінде педагогікалық акмеология дәгдыларының ықпалының түсіндіру

Макала педагогікалық акмеологияның талдауы және оны қазіргі жағдайлда болашақ мугалымдерді даярлау жүйесінде қолданудың өзектілігін анықтайды. Авторлар психологікалық-педагогікалық ғылыминың ғылыми әдістемесінің үнемі құрылысқа келіпшілік сүйінеді, білініп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Материалдардың қолданылуын қосып, олардың қолданылуын қолдау өзектілігін суреттіріп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Г.Б. Саржанова, Э.А. Утеубаева, Г.М. Сарсанбаева

Мугалымдерді даярлау жүйесінде педагогікалық акмеология дәгдыларының ықпалының түсіндіру

Макала педагогікалық акмеологияның талдауы және оны қазіргі жағдайлда болашақ мугалымдерді даярлау жүйесінде қолданудың өзектілігін анықтайды. Авторлар психологікалық-педагогікалық ғылыминың ғылыми әдістемесінің үнемі құрылысқа келіпшілік сүйінеді, білініп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Материалдардың қолданылуын қосып, олардың қолданылуын қолдау өзектілігін суреттіріп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Г.Б. Саржанова, Э.А. Утеубаева, Г.М. Сарсанбаева

Мугалымдерді даярлау жүйесінде педагогікалық акмеология дәгдыларының ықпалының түсіндіру

Макала педагогікалық акмеологияның талдауы және оны қазіргі жағдайлда болашақ мугалымдерді даярлау жүйесінде қолданудың өзектілігін анықтайды. Авторлар психологікалық-педагогікалық ғылыминың ғылыми әдістемесінің үнемі құрылысқа келіпшілік сүйінеді, білініп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.

Материалдардың қолданылуын қосып, олардың қолданылуын қолдау өзектілігін суреттіріп, мұғалімдерді даярдау қоғамдық қасиетінің ғылымның дамуын қалыптастыру үшін қажет етеді.
Г.Б. Саржанова, Э.А. Утеубаева, Г.М. Сарсенбаева

Формирование навыков педагогической акмеологии в системе подготовки учителей

Статья посвящена анализу педагогической акмеологии и актуальности его применения в системе подготовки будущих педагогов в современных условиях. Авторы рассмотрели использование таких эффективных направлений психолого-педагогической науки, как педагогическая акмеология, основанную на соответствующих критериях и показателях и эффективности ее применения при формировании профессиональной компетенции будущего педагога. Данное исследование изучено в рамках обучения нового поколения педагогов, соответствующих современным требованиям по формированию профессиональных компетенций. Выделена роль прикладной психологии, в частности отдельных подходов и принципов психологической науки, которые направлены на развитие акмеологических компетенций, необходимых для подготовки «современных» педагогов, развития культуры саморазвития и профессионального самосознания, основанных на принципах и понятиях педагогического «акме».

Педагогу необходимо оценивать свой уровень профессионализма, знать уровень своей мотивированности к своей профессиональной деятельности, уметь раскрывать и развивать эти способности. И в данной ситуации есть необходимость уделить особое внимание педагогической акмеологии как одной из эффективных путей достижения профессионализма в деятельности педагога.

Ключевые слова: педагогическая акмеология, новые условия обучения, мотивированность, профессиональные компетенции, «акме», успешность, лидерство, рефлексия.

References


Developing pedagogical acmeology skills...


Information about the authors

Sarzhanova, G.B. — PhD, associate professor, Head of the Department of Theory and Methodology of Foreign Language Training, Karaganda Buketov University, Karaganda, Kazakhstan;

Uteubayeva, E.A. — Candidate of pedagogical sciences, senior lecturer, Head of the Foreign Languages Department, S. Seifullin Kazakh Agrotechnical Research University, Astana, Kazakhstan; E-mail: elmira5555@mail.ru;

Sarsenbayeva, G.M. — PhD, associate professor, Quality Assurance Manager, American University of Malta, Bormla, Malta; E-mail: gulnara.sarsenbayeva@aum.edu.mt.