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Ciencias de la Educación  
Artículo de Investigación

*El trabajo independiente como condición para la superación personal del docente  
en el proceso educativo de instituciones adicionales de educación vocacional*

*Independent work as a condition for teacher's self-improvement in the educational  
process of additional vocational education institutions*

*O trabalho independente como condição para o autoaperfeiçoamento do professor  
no processo educativo de instituições de ensino profissionalizante complementar*

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## Resumen

En este artículo se revelará el papel establecido para la importancia de la autogestión y la superación continua de los docentes dentro del sistema de formación docente. Define conceptualmente el trabajo independiente como las actividades de estudio, investigación y análisis crítico de la práctica que los docentes realizan de forma autónoma. Se describirán los principios clave de la andragogía que deben guiar el trabajo autónomo, tales como: partir de las necesidades de aprendizaje del participante, permitiendo la autogestión de contenidos y métodos, considerando la motivación y la experiencia previa. También se basa en criterios como la sistematicidad, la utilidad práctica, la autorregulación y la autoevaluación. Posteriormente, se explica un algoritmo organizado de 7 pasos para estructurar eficazmente el trabajo independiente de los docentes. Asimismo, propone herramientas para desarrollar la capacidad de autorreflexión y metacognición de los docentes, como las tarjetas de autocontrol. También plantea la importancia de vincular los contenidos a la solución de problemas pedagógicos reales que enfrentan los docentes.

**Palabras Claves:** Autogestión; superación personal; andragogía; motivación; sistematicidad.

## Abstract

In this article, the established role for the importance of self-management and ongoing self-improvement of teachers within the teacher training system will be revealed. It conceptually defines independent work as the study, research and critical analysis activities of practice that teachers carry out autonomously. The key principles of andragogy that should guide autonomous work will be described, such as: starting from the learning needs of the participant, allowing self-management of content and methods, considering motivation and previous experience. It is also based on criteria such as systematicness, practical utility, self-regulation and self-assessment. Subsequently, an organized 7-step algorithm is explained to effectively structure teachers' independent work. Likewise, it proposes tools to develop teachers' ability for self-reflection and metacognition, such as self-control cards. It also raises the importance of linking content to the solution of real pedagogical problems that teachers face.

**Keywords:** self-management; self-improvement; andragogy; motivation; systematicness.

## Resumo

Neste artigo será revelado o papel estabelecido para a importância da autogestão e do autoaperfeiçoamento contínuo dos professores dentro do sistema de formação de professores. Define conceitualmente trabalho independente como as atividades de estudo, pesquisa e análise crítica da prática que os professores realizam de forma autônoma. Serão descritos os princípios-chave da andragogia que devem orientar o trabalho autônomo, tais como: partir das necessidades de aprendizagem do participante, permitindo a autogestão de conteúdos e métodos, considerando a motivação e a experiência anterior. Baseia-se também em critérios como sistematicidade, utilidade prática, autorregulação e autoavaliação. Posteriormente, é explicado um algoritmo organizado de 7 passos para estruturar eficazmente o trabalho independente dos professores. Da mesma forma, propõe ferramentas para desenvolver a capacidade de autorreflexão e metacognição dos professores, como cartões de autocontrole. Levanta também a importância de vincular o conteúdo à solução de problemas pedagógicos reais que os professores enfrentam.

**Palavras-chave:** auto Gerenciamento; auto-aperfeiçoamento; andragogia; motivação; sistematicidade.

## Introduction

The qualitative essence of modern postgraduate education depends on various factors. Of particular importance is the capacity and willingness for independent learning. Specialists reinforce their knowledge independently in the training process and activities within the educational institutions for additional vocational education.

The teacher's activities are mainly independent. This includes classroom work that involves active participation in all kinds of professional development, improving their professional level, attending in-person lessons under guidance in order to master and implement new technologies, enhancing professional skills.

According to the theoretical principles of andragogy, "organizing the cognitive activity of adults who take nothing for granted, and when management mechanisms are built, it is impossible to count on success unless conditions are created for the self-organization and self-regulation of their activities, so that the newly acquired knowledge is an independently found value, and was discovered by them"

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(Machynska & Boiko, 2020). These provisions indicate the need to take into account a number of the most important principles, according to V. Ya Sinenko, regarding the organization of teacher training. Among them is the direct participation of teachers, both in and out of the classroom: autonomous activities as a mandatory part of the learning process outside of class hours, but within the total time allotted for a specialist's professional development.

Independent work is usually understood as all kinds of active cognitive and research activities carried out independently by a teacher, which require an independent search for answers to questions that arise during professional activities, advanced training, as well as analysis of one's own teaching practice. Based on the results of a study of independent work.

For teachers in the professional development system, the following are found: the conscious connection of the course content with the concept is considered self-education cognitive activity; differentiated approach in the teacher training courses process; taking into account motivation in adult education; focusing training on the teacher's creative development. The individual systematic, organizationally and methodologically directed, carried out independently during extracurricular time without direct assistance from the teacher in order to achieve implementation of the listed principles is carried out, specific result, expanding the self-education functions, selection of content and planning by the teacher their knowledge, as well as the use of teachers' teaching experience (Rakhmonkulov et al., 2019.).

## Methodology

During the period of advanced training, the teacher has optimal subjective conditions for independent education and professional self-improvement: maximum physical and mental strength development; volitional self-regulation that has reached a certain positive level of development, which ensures perseverance in achieving goals, preparedness for independence.

Long-term search, self-expression in activity by creating an original pedagogical project to define this thesis, we start from the provisions of A. S. Dneprov, S. I. Zmeev and other scientists that: 1) “autonomy determines the independence of educational and work activities, manifests itself in the conscious choice of various options for solving tasks and educational tasks, in a critical assessment

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of what is perceived"; 2) "autonomy as the most important, essential trait of a self-taught person" can be considered as "greater development of problem-based research learning method under the influence of increasing independence in learning and independence of pedagogical thinking" (Nation, 2022); 3) "Independent learning is characterized first of all by a greater degree of autonomy and independence of the student from external influences; favorable and unfavorable, as well as flexibility in training regarding time, place, content, forms and methods of teaching." (Jalil et al., 2021).

Organization of the teacher's independent work in institutions of additional vocational education provides for solving several problems. Among them, the two most prominent ones are - identifying educational needs and setting learning objectives (self-directed learning). (Van, 2020). If self-education is carried out more often for the sake of general development, then the goal of self-education is professional growth. Therefore, it is advisable to organize a teacher's independent work in the advanced training process considered within one category: self-directed learning. In this case, the conventional differentiation of the concepts of "independent work" and "self-education" must be taken into account (Cheng et al., 2024), As well as the relationship between education and self-education. This is indicated by M. G. Garunov, P. I. Pidkasisty, L. M. Fridman. Training "creates the basis for self-education, self-education creates the need for knowledge as a goal to teach. Learning includes self-education; independent work in the learning process constitutes a transitional stage between learning and self-education". (Ionuț Mihai, 2021). The teacher's independent cognitive activity includes: 1) setting goals based on awareness of one's own educational needs, identifying objectives and expected work outcomes; 2) planning independent work, determining content, work stages, overall amount of time needed to complete it and deadlines for its completion; 3) identification and selection of effective forms and means to carry out independent work; 4) timely self-organization and self-control of assigned task progress, as a result of which it is revealed whether the task is being performed correctly by these methods and means, whether adjustments are required in progress and work methods; 5) self-assessment of the success of educational and cognitive activity in achieving a specific goal in completing exercises and tasks from the perspective of improving certain actions.

A teacher's independent work in advanced training courses generally corresponds to the listed positions: when carrying out independent work, a specific, pre-programmed result is necessarily obtained, a product of the activity, a methodological development, a lesson plan project, etc. (Burgan

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& Burgan, 2020) The process of assimilation and transformation of a specific body of knowledge and skills through the prism of one's professional experience, the teacher masters the methodological foundations of studying the theoretical material and education.

Personal practice, forms and means of professional development. In parallel with this, it leads to the development of independent design thinking as the most important characteristic of a modern specialist, willingness for autonomous work and training, which is reflected in the didactic content of professional development. The final personally significant result of a teacher's independent work during the advanced training period is to acquire experience as an autonomous independent activity and, on its basis, preparation for worthwhile professional self-activity and personal improvement in it. The success of a teacher's independent work depends on many internal and external factors: volitional abilities and qualities, motives and attitudes of the teacher, their general educational and professional background, the content and complexity of autonomous work tasks and, to a large extent, their organization and management. (Filgona et al., 2020).

Based on the Novosibirsk Institute for Advanced Studies in the qualifications and retraining of education workers, a study was conducted on the problem of professional development of technology and entrepreneurship teachers, in particular in the organization of independent work within the framework of the course training. Analysis of the autonomous work carried out by teachers of this profile during the period of advanced training for 2005-2009 showed that professional self-improvement, training and development of teacher preparation for this activity occur unevenly and separately. Special difficulties arise in reflecting professional training, which is practically not formed either at the university or in the process of teaching. The development of motivation for self-education and the didactic preparation of teachers is also carried out in a contradictory way. With a generally positive attitude towards professional development, more than 50% of teachers show an insufficient level of mastery of technological teaching methods, more than 65% do not have a clear understanding of ways to design the educational process in real conditions of practice and school implementation. (Unesco, 2023).

Technological education models where most teachers are convinced that research in the field of teaching methods cannot give practically significant results for their professional growth based on

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this, the organization of independent work of a technology and entrepreneurship teacher during the course preparation period assumes a holistic, systematic character, is carried out in a differentiated, step-by-step manner and provides for solving several more specific didactic problems that are consistent with the components of the teacher's professional development and their willingness for this activity (Urbinati et al., 2020).

Therefore, the development of motivational and substantive components, modern electronic technology motivation as the most important principle for organizing teachers' independent work in the advanced training system is the first and fundamental evaluative preparation of a teacher for professionalization in building an algorithm for this self-improvement aims at the formation of self-motivation, a subjective professional position; cognitive-productive component for the formation of an experience of professional self-improvement, important for advanced training and greater self-improvement; reflexive-evaluative - for the development of teachers' professional self-awareness when organizing a teacher's independent work, the basic principles of offline activity are taken into account (Žydzūnaitė & Daugėla, 2020).

Developing self-learning motivation encourages active activity, therefore, from the first lesson of the course work in training, a leading role is given to the motivational and evaluative aspect of teaching activity, from training and development of motivation to learn and self-educate for self-motivation, motivation training for self-improvement, subjective professional position. This process is carried out on the basis of reflective interaction between teacher and teacher, didactics, but its meaning changes in an interdependent form where with each lesson the functions of the structure of the system of principles, which presupposes, are expanded:

- Sustainable motivation for self-education, encouraging active and independent activity;
- Focus and continuity of work in accordance with the educational program of teacher training courses;
- Consistency, coherence and systematicity in organizing teachers' independent work, which presupposes the presence of a set of tasks for independent work, constructed logically and in accordance with the stages of a teacher's professional development;
- Productivity (convenience) of independent work, ensuring the improvement of certain professional knowledge, skills and abilities of teachers;



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- Differentiated and individual approaches to organizing the independent work of teachers, that is, taking into account individual and age characteristics, work experience, level of professionalism and stage of professional development;
- Integrative unit and comprehensive development of all components of teacher preparation for independent work in the learning process;
- Controllability, leadership and self-government capacity of teachers to work independently;
- Availability of educational documentation and awareness of teachers when organizing self-organization and self-government of the teacher. The didactic structure of the lesson includes stages identical to the stages of the teacher's personal development activities: organization-goal, cognitive-productive, reflexive-evaluative. This interaction between participants in the educational process allows the teacher to successfully organize their offline independent work and receive productive output.

The second position is the development of the teacher's reflective skills, which is facilitated by working with "self-control sheets," which are an integral part of the educational and methodological support of the classes. At the initial stage of training, working with "self-control sheets" is considered an educational task, an exercise performed under the direction of a teacher as skills for independent work are developed. As skills for independent work develop, the "self-control sheets" become an educational task that allows the teacher to successfully design, adjust and carry out the process of self-improvement. At later stages of training, these sheets perform diagnostic functions to track ongoing professional changes in teachers in dynamics.

The third position – the methodology for organizing teachers' independent work – is associated with the selection a certain set of educational tasks and assignments that is performed independently, autonomously and has independent work as part of course preparation as an goal developing the experience of improvement (curricula, syllabi, class schedules, consultations with teachers, independent work assignments), timeliness of information on all changes in the educational process; – provision of the educational process with educational and methodological support, reference and scientific-methodological literature, professional diagnostics, while a teacher's willingness for professional development is a necessary condition for the successful professional growth of a teacher. Mastering methods of teacher independence activities are considered didactic a means to develop self-improvement skills, educational tasks or assignments, as a unity of the educational process.



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According to studies the assignments and educational tasks of A. S. Dneprov contain potential opportunities to provide autonomy of teacher self-education. In didactics All types and kinds of assignments and educational tasks reflect real problems and situations objectively in development of teachers, using real problem situations, transform an objective problem into educational. The educational problem, in acquiring a form accessible to the teacher, becomes an educational assignment, that is, in its original form it is an educational assignment with unformulated conditions, transformed - a task, question or exercise. (Urbinati et al., 2020).

Fourth, we take into account that learning tasks and assignments lead to various didactic results, therefore, in the system-didactic complex for technology and entrepreneurship teacher training courses, both types are included - educational problems, respectively independent work tasks and practical work: exercises, self-control questions, self-preparation questions and assignments. Study assignments: assignments for independent work make it possible to create problem situations, manage learning, activate the cognitive activity of teachers. Tasks involving practical work, self-control questions, self-preparation questions and assignments, serve as a didactic tool, a condition for more effective assimilation and improvement of knowledge, develop thinking skills.

Topics of assignments for independent work. elaborated in accordance with the curriculum for advanced training of technology and entrepreneurship teachers, updated annually and adjusted taking into account changes in educational programs and current issues of our time. All works are united by a single content - technological training of schoolchildren, which is reflected in the pedagogical research carried out by the teacher in the process of course preparation. Each of the works has the character of a problem search and is a kind of component of the final test work (course), which allows it to be completed step by step, mastering the content of the educational program.

Advanced training taking into account the logic of a teacher's professional development there are various forms of carrying out works: written papers, oral presentations at seminars, round tables, practical classes, presentations, etc. Thus, during the course preparation, the written paper is provided as part of independent extracurricular work (exams, projects, essays, course boot works) and oral presentations of teachers, which, among other things, are also considered as a kind educational reports on individual topics, sections of the educational program and as final work based on the results of completing the entire course of study the fifth position involves the construction a set of independent

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works provided for in the technology and entrepreneurship teacher training course, in accordance with the stages of teachers' professional development and based on the principles of raising the level complexity of tasks during the course preparation, multi-level nature of tasks, problematic nature in determining tasks, investigative nature of tasks, etc. The most important requirement for all such tasks and assignments is to ensure the growth of the teacher's independence, the development of his willingness for self-education so that he, moving from performing one task to another, gradually increasing the degree of independence and autonomy of learning.

Ensuring a gradual increase in complexity of problems and a certain degree of teacher independence is provided by work at several levels, from reproduction to research within the framework of a pedagogical project. Different types and kinds of independent work have different effects impact on the development of teacher independence and willingness for independent activities. Thus, independent work of a reproductive nature at the initial stage of advanced training provides greater depth in mastering professional knowledge, increases the level of competence in the most common methods of cognitive activity, contribute to the improvement of analysis skills, planning and managing their own activities, basic projective skills as tools of a teacher's professional activity. The peculiarity of such work is that the process of performing the task is presented in the form of an algorithm. These works create the necessary base of professional knowledge and skills that ensure the teacher's transition to the performance of tasks with a higher level of independence. Tasks for independent work are structured as follows: for the teacher to independently complete only one part, and then, together with the teacher, analyze the results of his work and its productivity.

The sixth position aims to form the experience of independent autonomous activity of teachers, which begins with the implementation of independent work related to the analysis and generalization of their own teaching experience. This work involves making transformations, generalizations, drawing on the knowledge and skills acquired during the course training, as well as the methods of activity previously known, the existing professional experience to solve problems. Completing transformation level tasks contributes to the development of activity methods that form the basis for the experience of independent autonomous work of others.

The last, seventh position of the subject algorithm: the formation of the highest level of independent autonomous activity, which is achieved by carrying out research-based independent work. At the

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same time, the teacher must transform and transfer existing knowledge and methods of activity to new situations, determining the purpose, topic of his activity, develop a plan, choose methods for solving assigned problems, carry out self-analysis, self-control and self-correction. Independent research work allows the teacher to directly take the position of the subject of activity. Through his own action, activity, according to the research of G. N. Prozumentova, G. V. Zalevsky, the teacher enters "into the position of a researching person by giving shape to personal meaning and authorship of professional activity." (Alam, 2022).

Thus, in this way, a positive experience of independent autonomous work of the teacher is formed and his level of preparation for independent autonomous activity increases.

### **Discussion**

You make excellent points. Independent work is essential for teachers' professional growth, enabling personalized progress while invigorating internal motivation. However, this hinges on proper scoping and organizing of tasks alongside supporting self-management and self-assessment capabilities.

The proposed "self-control sheets" seem intriguing to cultivate reflective, metacognitive competencies in educators. And the ever-advancing intricacy tactic with incrementally improving self-direction over assignments shows promise.

Thoughtful dialogue around blending autonomous efforts with in-person or hybrid learning sessions can ensure appropriately unified theory and practice. Care must be taken to consider independent work's integration, preventing knowledge silos, instead building bridges between modes of instructor development.

### **Results**

The article provides a detailed model to structure independent work in continual teacher training, defining key elements such as motivation, reflection and progressiveness of the activities. It makes it possible to improve the quality and effectiveness of the independent work, enhancing self-regulation skills and promoting an active and customized learning experience. The proposed 7 steps constitute

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a useful guide for teacher trainers to design independent work spaces that truly empower professional development, which will occur in the following manner:

1. Improving motivation and attitude towards professional development: The proposed model places special emphasis on enhancing teachers' intrinsic motivation towards their ongoing learning. This is key to ensuring their active commitment..
2. Self-regulation and reflection on own practice: Tools such as "self-control sheets" for monitoring and metacognition are very useful. They encourage teachers to reflect, detect gaps in their competencies, and adapt their strategies.
3. Greater autonomy and accountability: By focusing on promoting self-management and self-correction, teachers are empowered as responsible for their professional development. This is essential for lifelong learning.
4. Linking theory-practice: The approach of addressing real context problems and needs helps learning to become more meaningful and useful in application.
5. Attention to individual differences: Considering each teacher's particularities regarding their experience, motivations, learning style allows for situated and personalized training.
6. Continuous evaluation and feedback: The self-evaluation and formative assessment processes on the various independent assignments enhances the improvement and deepening of competencies.
7. Independent research work for teachers: Allowing them to reach an advanced level of autonomy in their activity, assuming an active role to shape their professional practice in a customized way.

## Conclusions

In conclusion, we observe that organizing a teacher's independent work in accordance with the stages of professional development provided by a prolonged regime of accounting for the results of the teacher's independent work at the training stages allows tracking of their professional advancement dynamics. Achieving greater productivity of a teacher's independent work during the period of advanced training is possible if the following didactic conditions are met:

Sustainable motivation for self-education is ensured by the possibility to choose advanced training content and formats that are adequate to the teacher's level of readiness for professional advancement.

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Clear definition of the purpose of independent work and its effectiveness: the result of actions and achievement of private goals, that is, what performance indicators should be achieved in the process of completing exercises, practices, tests and others.

Provision of a specific set of tasks and educational assignments that are performed by the teacher independently, autonomously due to their differentiation by levels based on the stage and level of readiness for professional development, which presupposes a clear definition of this readiness and allows the teacher to determine their level.

Understanding the algorithms for carrying out independent work aimed at achieving the goal by mastering didactic actions, including the next steps:

- A clear understanding of action methods and their end result, which should be achieving independence in work.
- Constant step-by-step self-monitoring of the quality of performed actions through comparisons between the real result and the planned result (or that exists in the sample view)
- Timely detection of errors in actions and their correction at the level of preparation for independent autonomous activity. during subsequent repetitions of these actions.

5. Self-analysis and self-assessment of the successes (failures) of independent autonomous work in achieving a specific goal of exercises, tasks from the point of view of improving dominated actions, adequate self-assessment of productive activity.

The key condition is the teacher's awareness of the level of their professional competence, of himself as the subject of activity, which they themselves direct, organize, carry out and control their professional development, establish and analyze positive and negative aspects moments of independent work, based on the modern demands of the specialist and the will for Vovaniya professional growth and self-improvement.

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