

THE ROLE OF THE STUDENTS' INDEPENDENT WORK IN THE INDIVIDUAL STYLE FORMATION OF THE SELF-REGULATION EDUCATIONAL ACTIVITY

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Abstract. *The article reveals the urgency of developing a new approach to managing the students' independent work on the basis of strengthening their subjective position. The model of managing students' independent work as a pedagogical system, represented by the interaction of participants in the educational process, is described. A complex of psychological and pedagogical conditions for managing independent work is described, including motivation, differentiation and activation of students' independent work. The individual style self-regulation selection in educational activity as one of the criteria for the effectiveness of students' independent work management is justified. The experimental and experimental testing results of the conditions set are presented, which testify to the transition of students from an ineffective style to an effective style of educational activity self-regulation.*

Keywords. *Students' independent work. Students' independent work Management. Individual style of educational activity self-regulation. Regulatory actions.*

I. Introduction

Global trends in the development of professional education determine the need for transition in higher education from the paradigm of teaching to the paradigm of learning. This clearly entails the need to develop a new approach to the students' independent work organization on the basis of strengthening their subjective position.

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Pedagogical aspects of the problem of students' independent work are examined in Russian and foreign science. We are united with researchers in understanding the goal of independent work, which is the graduate's autonomy development. At the same time, by independence we mean autonomy in the organization of their own activity, manifested in the skills to plan, monitor and regulate their activities. We share the opinion of N. Dorofeeva, S. Vytvitskaya [4] from the Ukraine, who believed that independent work is the main type of academic work in higher education, since it forms the ability for students to learn. M.K. Asanaliev, B.E. Atymtaeva, N.M. Ilyassova from Kazakhstan presented the results of the students' creative activity development through the use of independent work technology [1]. O.V. Prokopenko and Kolomiets O. M. describe the innovative experience of organizing students' independent work in collaboration with students from partner universities [12; 7].

The research for solving the problem of improving the students' independent work is important if the subject of research in which is self-regulatory training. Since the publication of the monograph of American researchers B.J. Zimmerman, D.H. Shunck "Self-Regulated Learning and Academic Achievements: Theory, Research and Practice" (1989) abroad, a significant amount of work has been done in the field of self-regulated learning. B.J. Zimmerman [14] and his colleagues define self-regulating learning as a process by which students activate and support their cognitive activities aimed at achieving educational purpose. The article S. Davoodi, K. Khaefi, F. Sadighi from Iran empirically substantiates the relationship between the commitment and academic achievements of students with an emphasis on the mediating role self-regulation [3].

Self-regulating training is devoted to a number of domestic authors' publications. Under self-regulated training TN. Lomtev, N.S. Kirgintsev understand the process and result of educational and pedagogical interaction, during which, on the basis of the self-regulation mechanism development, the student moves to a higher level of subject development [9]. At the base of self-regulated learning, as pointed out by J.V. Koryakin, lays the educational activity autonomy. F.K. Usmanova specifies that the distinctive feature of self-regulated learning is matched the process to the student's individuality [8]. E.A. Klushina emphasizes that self-regulating learning provides for the creation of motivations for achievements in the studying process [5]. To describe the individual identity of the self-regulation system of a person V.I. Morosanova and her students use the concept of self-regulation individual style, which characterizes typical for the subject ways of managing their own arbitrary activity [11].

At the same time, as the theoretical analysis of the literature has shown, in the theory and methodology of professional education, the existence of a **problem** connected with the definition of psychological and pedagogical conditions for managing students' independent work that contribute to the formation of an individual style of educational activity self-regulation is evident.

In accordance with this **object** of research, an individual style of students' learning activity self-regulation was made; the **subject** of research was a set of psychological and pedagogical conditions for managing students' independent work as a means of creating an individual style in educational activity self-regulation. The **aim** of the research was to theoretically substantiate and test experimentally the effectiveness of the complex of psychological and pedagogical conditions influence governing the students' independent work on the formation of an individual style of self-regulation of educational activities. The **hypothesis** of the research consisted in the assumption that the implementation of the psychological and pedagogical conditions complex management in the educational process of the student's independent work, including motivation, differentiation and activation of independent work, will provide students with an effective individual style of educational activity self-regulation, manifested in a high level of development of regulatory actions of goal-setting, modeling conditions, programming actions, evaluating the

activity's results. In accordance with the goal aim, the **research objectives** were defined: 1) conduct a theoretical analysis of the state of the problem of managing students' independent work in Russian and foreign pedagogical and psychological literature; 2) determine the complex of psychological and pedagogical conditions for managing the students independent work, ensuring the formation of an effective individual style in educational activities self-regulation; 3) to test experimentally the influence of a psychological and pedagogical conditions complex governing the students independent work on the formation of an effective individual style of educational activities self-regulation.

II. Methods

Theoretical methods (analysis, synthesis, comparison, abstraction, specification, modeling); empirical methods (pedagogical experiment, psychological testing according to the method "Style of self-regulation behavior" V.I. Morosanova [11], which allows to assess the level of regulatory actions development); method of mathematical statistics (calculation of the Wilcoxon T-test for comparing the values measured under two different conditions on the same sample of subjects).

III. Research results discussion

In accordance with the second objective of the research, we conducted an analysis of psychological and educational literature, which showed that the problem of students independent work is studied in science consistently and deeply enough. Despite the fact that the interaction of participants in the educational process in managing students' independent work is one of the weak points in the theory and practice of professional education, scientists have created scientific prerequisites for solving this problem by joint efforts of scientists. E.V. Korotaeva, M.G. Golubchikova, S.V. Kharchenko [7, 2] and others' works reveal the theoretical foundations for building a humanistically oriented pedagogical interaction. Close to our views is the point of view by N.O. Khlupina [5] and others, according to which the management of students' independent work should be a unity of teaching and learning as socially determined interrelated activities. Reliance on this provision made it possible to develop a model for managing students' independent work in the form of a pedagogical system, the components of which are the education aim, educational and pedagogical interaction, the education content and pedagogical means.

The technology of managing students' independent work is presented as a consistent realization of the interrelated actions of the teacher and students in the goal-setting, planning, organization and control of students' independent work (spreadsheet 1).

Spreadsheet 1

<i>Teacher's actions</i>	<i>Students' actions</i>	<i>Teacher and students' collaboration</i>
Presentation of independent work objectives	Analysis of the aims proposed by the teacher	Discussing the possible diversity of aims

Encouragement to identify their own aims	Identification of own aims, their argumentation	Students' individual aims analysis
Proposal to identify criteria and indicators for the implementation of aims	Possible criteria and indicators for the implementation of aims identification	Criteria, indicators for the implementation of aims choice
The proposal to determine the significant conditions for achieving the aims	Determination of significant conditions for achieving aims	Choice of conditions for achieving aims
Proposal of tasks for independent work	Choice of task	Discussion of tasks for independent work
Issuance of information-methodological materials on the independent work organization	Studying of information-methodological materials	Discussion of the content, order of tasks
Encouraging the execution of assignments on time	Studying the schedules independent work's control	Discussion of time limits, forms of independent work's control
Study places organization	Choosing the conditions for effective performance of independent work	Searching for effective conditions for independent work
Motivation to perform tasks of independent work in accordance with the established schedule	The attitude towards the future work	Fixing students attitudes towards the future activity
Maintaining an interest in independent work, if necessary to change students' actions	Self-organization of their own activities, if necessary, elimination of mistakes in their actions	Discussion of the students' actions effectiveness
Presentation of information on control	Acceptance of information on control	Discussion of information on the control conduct
Giving verification means	Selection of self-test means	Choosing the means of cooperative verification
Offer to verify. Verification	Doing self-test	Making cooperative verification

Informing about the level of aims achievement. Offer to evaluate the work. Evaluation of work	Self-evaluation of work	Cooperative evaluation of work
Development of a decision on the need to correct the teaching process	Development of a decision on the need to amend individual actions	Development of a decision on the need to amend cooperative actions

In accordance with the second task of the research, we defined a set of psychological and pedagogical conditions for managing the students' independent work, ensuring the formation of an effective style of educational activities self-regulation. The first psychological and pedagogical condition for managing students' independent work was the motivation for independent work of students - such an organization of the educational process, in which the teacher encourages students to active learning activities to meet personal needs and achieve educational aims. We have identified 3 groups of pedagogical methods for the formation of motivation as a system to motivate learning activity that determine the direction (spreadsheet 2).

Spreadsheet 2

Pedagogical methods of motivating students' independent work

<i>Ggroup of methods</i>	<i>Motivation</i>	<i>Increased motivation</i>
Intellectual	Strengthening of cognitive interests. Orientation for the upcoming work. Ability to select assignments.	Creation dispute and discussion situations. Alternation of various activities
Social	Activation of self-esteem. Organization of the competition. Creation of success situations. Strengthening of the social status.	Motivation to identify the personal position. Example. Public opinion.

Willed	Conviction. Regulation. Instruction	Attraction to the setting of close and distant aims. Evaluation of realistic goal-setting. Assignments without feedback. Tasks of increased complexity.
Emotional	Encouragement. Praise. The motivation for relative dissatisfaction with the results of their work	Fixation of the motives of previous achievements. Formation of positive perspective motivation. Creation of intrigue, provocation.

As the second psychological and pedagogical condition for managing students' independent work, we chose the differentiation of the students' independent work-such an organization of the educational process, in which the teacher works with a group of students, taking into account the availability of common psychological traits that are significant for learning. These students' features we associate with the type of temperament and the leading channel of perception (spreadsheet 3).

Spreadsheet 3

Pedagogical methods of differentiating students' independent work

<i>Type of temperament</i>	
Choleric person	The mood for work. The requirement of discipline. Various tasks on the content and method of solution. Orally control.
Phlegmatic person	Clear instruction. Consecutive presentation of educational material. Individual work. Control in writing.
Sanguine person	The use of activity forms for studying (discussions, games, projects). Performing tasks that require attention distribution. Work in a group. Orally control.
Melancholic person	The mood for work. Work in a quiet, calm environment. Individual pace of work. Performing tasks that do not require attention distribution. Control in writing. Encouraging, stimulation.

<i>The leading channel of perception</i>	
Visual	Application of words describing the colour, size, shape, location. Highlight colours of various aspects of content. Emphasis on visual methods of teaching.
Audial	The application of words describing sounds, their strength, height, timbre, and tempo. Use of voice variations. Reflection of the rhythm of the metronome by gestures. Focus on verbal teaching methods.
Kinesthetic	The use of words that describe taste, smell, movement, temperature. Use of gestures, touches. Emphasis on practical teaching methods.

The third psychological and pedagogical condition for managing students' independent work was the activation of students' independent work which is understood as the organization of the educational process, in which the teacher uses pedagogical means that increase the activity of students' learning activities and lead to its effective implementation. To pedagogical methods of activating students' independent work we included: relevance - approximation of the content of teaching to new, important discoveries in science, achievements of modern culture; contextuality - subordination of the content in training to the interests of future professional activity; vitagennost - the inclusion in the content of learning life, subjective students experience; emotionality - giving the content of learning an emotionally significant context.

The solution of the third task of the research involved carrying out a pilot experimental verification of the effectiveness of the psychological and pedagogical conditions complex for managing students' independent work. Experimental work was conducted on the basis of the Department of Pedagogy and Psychology of the Omsk State Medical Academy in the period from September 2014 till January 2015. The pedagogical experiment involved 3 teachers and 60 students, who were divided into experimental and control groups. As the diagnostics results showed, 68% of participants in the experimental group had an effective style of educational activity self-regulation (which is characterized by high rates of regulatory actions development) after conducting the pedagogical experiment. At the same time, only 28% of participants in the experimental group had an effective style of educational activity self-regulation. The reliability of the shifts in the indicators of the regulatory actions development was verified by calculating the Wilcoxon T-test. Differences in the experimental group are statistically significant at $p \leq 0.05$, since the empirical (84) is less than the T spreadsheet (286). The differences in the control group are not statistically reliable: the empirical (96) is greater than the T spreadsheet (60).

IV. The conclusion

Thus, the hypothesis of the research was confirmed: the use of a set of psychological and pedagogical conditions for managing students' independent work (including motivation, differentiation, activation of students' independent work), ensured the formation of an effective style of students self-regulation in the learning, manifested in a high level of development of regulatory actions of goal-setting, programming actions, evaluating the studying results.

The scientific novelty of the research consists of: developing a model for managing students' independent work as a pedagogical system, represented by the interaction of participants in the educational process; determination of the criterion (individual style of educational activities self-regulation) and performance indicators for managing students' independent work (regulatory actions of goal-setting, modeling conditions, programming actions, evaluating learning outcomes); experimental verification of the psychological and pedagogical conditions complex governing the students' independent work, which are the motivation, differentiation, activation of students' independent work.

The practical significance of the research results is the creation of a pedagogical means system that implements the idea of managing students' independent work on the basis of interaction between participants in the educational process. The specified system of means is presented in the educational-methodical manual "Management of students' independent work at medical high school", published in 2015 by the authors of this article.

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