

## SCTMG 2020

### International Scientific Conference «Social and Cultural Transformations in the Context of Modern Globalism»

## SELF-REGULATORY TRAINING IN THE PROCESS OF SUMMARIZING A PROFESSIONALLY-ORIENTED TEXT

Koryakina Yana Vladimirovna (a)\*, Simonova Nadezhda Aleksandrovna (b)

\*Corresponding author

(a) North Caucasian Federal University, 1, Pushkin str., Stavropol, 355009, Russia, koryakina.ya@yandex.ru

(b) North Caucasus Federal University, 1, Pushkin str., Stavropol, 355009, Russia, simonova\_na@rambler.ru

### *Abstract*

This article analyzes the process of summarizing a professionally-oriented text in the context of self-regulatory learning in the context of the formation of the student's autonomous personality. The main goal of the article is to substantiate the concept of self-regulated learning, to identify its structurally-meaningful components, to disclose this concept in the light of the concepts of domestic and foreign scientific schools, to analyze the features of abstracting text to form critical thinking and foreign-language communicative competence. The article describes the technology of summarizing a professionally-oriented text in the conditions of self-regulatory training for students. In order to identify the levels of organization of mental activity, the analysis involved an algorithm of actions for summarizing a professionally-oriented text in the conditions of self-regulated training. For solving the tasks in the article, the methods of comparative, theoretical, and methodological analysis, as well as the empirical method of training, were used. A review of the theoretical and methodological aspects and the implementation of the experimental part of the work allows concluding that the technology of summarizing professionally-oriented text in the conditions of self-regulatory training can serve as the basis for the development of professional competence of students-economists, increase the level of independence and self-management of educational and cognitive activities, to ensure self-expression and self-efficacy. The question of the relevance of the self-regulatory learning process in the context of modern education can lead to the extrapolation of theoretical ideas of self-regulation to other academic subjects, taking into account their specificity.

2357-1330 © 2020 Published by European Publisher.

**Keywords:** Self-regulatory training, self-determination of activity, thumanistic psychology, cognitive self-regulation.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## **1. Introduction**

In the framework of this study, we verify the effectiveness of the developed model of self-regulatory learning using the example of summarizing a professionally-oriented text. Based on the development of higher education, personality-oriented education is becoming the main pedagogical direction. The concept of student-centered learning focuses on the personality of the learner, whose goal is to develop a secondary language nomination (Schunk & Zimmerman, 2008). The development of autonomy, the creative beginning of the student, is a component of the task of education. The development of autonomy, the student's creative beginning, is a guarantee of constant self-education, forming professional competence, and intercultural interaction in various fields of activity. In this regard, the task arises of teaching the student to obtain theoretical knowledge, skills independently, and to practically interpret them. Today, the domestic and foreign practice represents pedagogical technologies in which individual abilities, the personal meaning of training, value orientations play a predominant role and occupy a leading place. Such technologies include self-regulatory training.

## **2. Problem Statement**

The term self-regulatory education came into pedagogical practice at the beginning of the 20th century and was developed in several concepts. In our study, the term self-regulating learning is understood as the process of educational and cognitive activity of the interaction of two parties – the learner and the learner, as a result of which, based on self-regulation mechanisms and intellectual reflection, the formation of a new, harmonious personality with a high level of subjective beginning is ensured.

One of the goals of the educational process is the formation of an autonomous, independent personality, capable of not only gaining knowledge, data, facts in itself but also independently comprehend and explain them. In this regard, the process of self-regulated learning plays an important role when a student autonomously, without the support of a teacher, carries out his educational and cognitive activities, sets a goal, plans, performs correction, evaluates the results of his achievements, and performs intellectual reflection. Achieving this goal is possible due to the introduction of the appropriate pedagogical technology at the university, namely, self-regulatory training on the example of summarizing a professionally-oriented text.

## **3. Research Questions**

Self-regulatory training is "any form of training in which students independently plan their own educational and cognitive activity, implement it and evaluate the result of their academic work" (Kirgintseva, 2002, p. 156).

At the beginning of the 20th century, the first steps were taken to scientifically substantiate the concept of self-regulatory learning. Research began with Houle (1961), who, depending on the motives for participating in educational and cognitive activities, identifies three types of students: goal-oriented; activity-oriented – oriented to learning (learning-oriented) – for them, learning is an end in itself.

According to Hiemstra (2000), self-regulated learning is understood as a process "through which students take the initiative in diagnosing learning needs, developing learning goals, identifying learning resources, selecting and implementing appropriate learning strategies, and evaluating learning outcomes" (p. 93).

The principles of self-regulated education in foreign schools are based on the following concepts:

- humanistic psychology by Maslow, Rogers, where the personality, as a unique, holistic system, is the dominant subject, which leads to self-actualization: "study of a person in integrity;
- each person is unique;
- man is striving for self-realization and continuous development" (Maslow, 1954);
- theory of "self-determination of activity" Deci and Ryan (2000), distinguishing three types of internal needs that are involved in the process of self-determination of personality: the need for competence, the need for autonomy and attitude;

Boekaerts (1996) developed a heuristic model of self-regulatory learning, consisting of two regulatory systems: cognitive and motivational self-regulation. Both systems are focused on a common goal: the student independently sets the stages of educational and cognitive activity, "learns to set goals, plan, self-control, self-correction, self-esteem, controls behavior" (p. 105). McCombs considers "self-regulatory learning" as a unity of motivation, academic excellence, and strong-willed personality traits (as cited in Heckhausen & Dweck, 1998). Little, under self-regulated learning, suggests understanding "the student's ability to independent and independent actions, critical reflection, decision making" (Little, 1991). The ability to independent activity is noted in the method of learning and in the way students transfer the results of learning to a broader context. Zimmermann (1990) defines this learning process as "the activation and maintenance of cognitive behavior by students focused on achieving their goals" (p. 176). The primary attention is paid to the activities of students who are not passive recipients of information, but actual figures who develop their skills and strategies. Shank formulates this concept as "the process by which students activate and support cognitive behavior oriented towards achieving goals" (Schunk & Zimmerman, 2008, p. 47).

Knowles in the work "Self-regulatory learning: a guide for students and teachers" defines self-regulatory learning as "a process in which a student, independently or with the help of others, takes the initiative in identifying their cognitive needs, setting learning goals, determining human and material resources for learning, and in assessing the results of their own educational and cognitive activities" (Knowles, 1975, p. 38). Designed by Knowles scale of competencies, shows the successful implementation of the model of self-regulatory learning, combining the following abilities: the ability to think outside the box; ability to formulate heuristic questions; ability to objective perception of oneself and adequate response to criticism; ability to diagnose own, educational needs within the framework of a model of professional competence; the ability to identify the necessary resources following the goals set in training (Knowles, 1975).

An analysis of the work of international research theorists allows concluding that the Western pedagogical school considers self-regulatory learning as a rational concept, which is a self-learning process without a teacher.

In the national education system, ideas for the development of self-regulatory learning became the subject of consideration in the 90s of the 20th century. According to the private pedagogical school, this type of training allows an individual acquiring skills for studying throughout his life and developing the skills necessary for self-realization in the professional sphere, "the emphasis is shifting towards personal self-development" (Goverdovskaya & Mkrtycheva, 2015, p. 231). Professional, organizational, moral, and spiritual qualities of a personality are highlighted (Kolossova, 2009). Ruvinsky (1986) considers it essential to focus on self-regulated learning since those who are not involved in the process of "self-directed learning are behind the modern reality" (p. 73).

Domestic pedagogy regards the process of self-regulated learning as bilateral, as the unity of the teacher's professional activity and the student's self-educational activity.

Koryakovtseva (2010) defines self-regulated learning as "the student's ability to effectively and independently manage learning activities, where the student takes responsibility to set a goal (learning task), to monitor and evaluate the results of his work, capable of critical thinking, to evaluate and to correct" (p. 93). Kirgintseva (2002) describes self-regulatory learning as "a process in which, based on self-regulation mechanisms, learners, with the participation and assistance of the teacher, solve the goals of goal-setting in educational-cognitive activity, planning, implementing and evaluating the results of this activity, aimed at enriching the learner's experience and endowing education with personal meaning" (p. 157). In this context, self-regulatory training is considered as the implementation of continuous monitoring for all aspects of educational and cognitive activities and as the ability to access the most significant number of sources of educational information and the ability to choose from them the means that are relevant to the learning objectives (Lomteva & Kirgintseva, 2003).

Tikhonova describes the studied concept as "a process of interaction between the teacher and the student, aimed at enriching the experience of the individual, awareness of the personal meaning and goals of instruction, self-organization of educational activities and the development of reflection" (Tikhonova, 2000). Osadchuk (2008) differentiates self-regulated learning as "the process and result of educational and pedagogical interaction, during which, based on the development of self-regulation mechanisms, the student is transferred to a higher level of subjective development" (p. 3).

In our work, self-regulated learning is understood as "a process of educational and cognitive activity of the interaction of two parties, as a result of which, based on self-regulation and intellectual reflection mechanisms, the formation of a new, harmonious personality with a high level of subjective beginning is ensured" (Koryakina, 2017, p. 267).

Systematizing the above ideas of self-regulatory learning, we will adhere to the domestic approach of substantiating this concept as the most culture-like to the requirements of the educational process of the traditional school of education, where the student's independent work is conducted with the participation and assistance of the teacher. Historically, the Russian educational system has emerged as authoritarian. Therefore, the transition to a liberal-democratic educational system would be extremely unproductive without the introduction of elements in which the teacher is the leader of this educational process. From national consciousness, the process of self-regulated learning is allowed at the training stage. Teaching and pedagogical interaction provide a positive result "of the learner's transition to a higher level of

subjective development, internal motivation increases, professional preferences are formed, awareness of the learner's goals, his subjectivity develops" (Osadchuk, 2008, p. 8).

#### **4. Purpose of the Study**

The purpose of the analysis is to consider ways of mastering professional competencies for the formation of an autonomous, integral personality with a high level of subjective beginning. One of the ways to master professional foreign language competencies is the practice of summarizing a professionally-oriented text. This approach is because the condition of their professional competence is not just knowledge of the language as a means of communication. A condition of their professional competence is the ability to perform analytical and synthetic processing of the content and language of the primary source in order to form a secondary text and its critical analysis on this basis (Provotorov, 2006).

We consider abstracting as a type of speech activity, consisting in extracting from the read text the main content and given information for their written presentation. Abstracting is an independent study, which can be carried out with one or more sources. The purpose of any review is to analyze and critically evaluate the content. Abstracting of the text involves a detailed written retelling with an assessment of critical ideas, as well as a general summary conclusion at the end of the work, which contains the pros and cons of the reviewed material (Ostrovaya, 2016).

In order to prepare the student for a discussion of the problems that comprise the content of his professional training, each lesson relies on the material of economic texts that verbally represents a specific communication situation. Therefore, the future specialist should clearly understand the functional and stylistic characteristics of the speech product in the corresponding communicative situation. In the implementation of this process, the text is a source of information and the basis for interconnected learning.

Professionally-oriented texts contain specialized professional knowledge that is represented using the functional-stylistic variety of language, a language for particular purposes Language for special purposes (Gorina, 2012). The leading feature of these texts is content and linguistic form used for expressing this content. The primary purpose of reading professionally-oriented literature is to search for and extract specific information and generate personal interpretations of a professional nature. This type of work teaches students to interpret the content of the proposed material logically, to define the idea briefly and, as a whole, contributes to the formation of students' foreign language communicative competence (Ostrovaya, 2016).

Work with professionally-oriented texts corresponds to the ultimate goal of student learning, namely, the formation of the ability to communicate in foreign languages in specific professional, scientific, and business situations.

Summarizing a professionally-oriented text is defined as a sub-competence of general professional and foreign language communicative competence and implemented in the process of self-regulatory training. Consequently, the process of summarizing a professionally-oriented text makes it possible to form an independent, integral personality, able to adapt to conditions determined by socio-economic changes, and realizing the student's creative abilities. As a component of the learning content of students

of economics at a non-linguistic university, the process of summarizing a professionally-oriented text will contribute to the formation of necessary, communicative competencies. Thus, it is advisable to conduct training in this aspect of educational-cognitive activity in the format and context of self-regulatory training.

## 5. Research Methods

This paper discusses the possibility of a new approach to the analysis of self-regulatory learning, which is the technological basis of learning in line with the modern educational paradigm. This methodological orientation allows providing and supporting the processes of self-knowledge, self-construction, and self-realization of the student’s personality.

The methodological approach under consideration is a continuum of three components:

- 1) concepts, which is the primary tool of mental activity;
- 2) the original provisions and rules for constructing the learning process (principles of the methodological approach);
- 3) the technological component, which includes the most appropriate methods of the pedagogical activity, which ensures the freedom of individual creative realization of the student, based on its features as a subject of knowledge.

## 6. Findings

Analysis of the theoretical and methodological literature of foreign and domestic scientists allows proceeding to the development of the practical part of the study. The purpose of the study is to prove the effectiveness of the implementation of the technology of self-regulatory learning using the example of summarizing a professionally-oriented text. The study was conducted based on the North Caucasus Federal University, Institute of Economics and Management, Department of Foreign Languages, Natural Sciences, and Humanities. The experimental work was carried out in the framework of 3 stages (diagnostic, training, control), where 50 students of 3-4 courses of the specialty "World Economy" took part.

The goal of the diagnosing phase was to determine the students' ability to self-regulation when summarizing a professionally-oriented test. Four levels of skill formation were used: high, medium-high, medium, medium-low. It has been established that not a single person can summarize a professionally-oriented test at a high level, 17 – at medium-high, 25 – at medium, 8 – at medium-low. The results of the diagnostic phase are presented in Table 1.

**Table 01.** The level of knowledge of the ways of organizing mental activity when performing a summarization of a professionally-oriented test in the framework of self-regulatory training before an experiment

Level	Level characteristic	Number of students, %
High level	The algorithmic apparatus is fully applied in practice. The student follows the plan of the given structure of pedagogical practice; self-regulatory training can independently conduct a control and	– (0 %)

	evaluation analysis of the text review. The degree of occupancy of each stage is complete.	
Medium-high	The algorithmic apparatus of a given structure, self-regulatory learning, is not fully applied. The fuzziness and inaccuracy of the structurally-substantive component of each stage of abstracting the text are indicated. The degree of occupancy of each stage is moderate.	17 (34 %)
Middle level	The chaotic is the use of educational components and cognitive activity in the mode of self-regulatory training. A review of a professionally-oriented test is carried out in violation of the exposition norms of each stage completeness. The degree of occupancy of each stage is poorly expressed.	25 (50 %)
Medium-low	There is fragmented implementation of the educational components and cognitive activity in the mode of self-regulatory training. Lack of independent skills in conducting control and evaluation activities, self-assessment is the process of summarizing a professionally-oriented test (not all stages are involved). The degree of occupancy of each stage is low.	8 (16 %)

Analysis of the data of the diagnosing stage of the experimental work allowed proceeding to the training stage. During the training phase, the technology of a phased algorithm of actions for performing the abstracting of a professionally-oriented test was used. The basis of summarizing a professionally-oriented test was the components of educational and cognitive activity, which form the basis of self-regulatory training. Such components are the formation of motivation, goal setting, planning, control and evaluation component, correction of actions, self-esteem, intellectual reflection (Koryakina, 2016). As a stage of experimental training, the task was taken to use abstracting elements to form and control the skills of working with authentic foreign text in a non-linguistic university. The results of experimental training are presented in Table 2:

**Table 02.** Step-by-step instruction (algorithm of actions) for performing the abstracting of a professionally-oriented test in the conditions of self-regulatory training at the stage of experimental training

Stages of a given structure of teaching practice self-regulatory training	Algorithm of actions and contents
Formation of motivation – awareness of the personal meaning of learning, addressing the learner, and his "I"	1. Become involved in an independent process of acquaintance with the text. 2. To master the skills of abstracting a foreign language text and analyze the material studied.
Goal-setting is the process of setting a potential goal, a way to deploy it	What should I do? 1. Read the text; 2. To set a goal – to systematize the main and exciting information, objectively provide the nature of the text and state the most significant points of its content.
Planning is the optimal allocation of resources to achieve the goal	For information systematization, it is necessary to indicate the subject and purpose of the referenced source, give a heading, identify the main thoughts of the source, give a conclusion on this issue, a chain of evidence in their logical sequence. The student will need primary, additional literature in a

	referenced language; linguistic dictionary; analyzed passage.
Beginning of determining the main idea of the article and give a general description of the text	<ol style="list-style-type: none"> <li>1. General characteristics of the text: author, text genre, event, main topics, author's goal of the article, analysis of events;</li> <li>2. Analytical analysis – an understanding of the internal organization of the text and the details of the content:                         <ol style="list-style-type: none"> <li>2.1. definition of the primary, secondary ideas, their argumentation;</li> <li>2.2. lexical and grammatical analysis;</li> <li>2.3. causal relationships;</li> </ol> </li> <li>3. Editing – a statement of the content of the text based on the plan:                         <ol style="list-style-type: none"> <li>3.1. To take the point of view of the author;</li> <li>3.2. Follow the logic of the author's text;</li> <li>3.3. Reformulate the author's text.</li> </ol> </li> </ol>

Performing a step-by-step algorithm of actions in a specific sequence will ensure the formation of a holistic personality, capable of developing the skills of self-regulation and self-management of their educational activities with the subsequent growth of the subjective beginning.

The aim of the control phase of the training experiment is to test the formation of skills for summarizing a professionally-oriented test in the conditions of self-regulatory training with our own analytical and synthetic study of the text content. The stage of consideration of the analyzed passage, offered to students in the conditions of self-regulated learning, is a scheme similar to the scheme of a training experiment: to determine the main idea of the article and give a general description of the text. The results of the experiment showed that six people performed the analysis at a high level, 25 people at a medium-high level, 15 people at an average level, four people at a medium-low level. The results of learning how to summarize a professionally-oriented test through a self-regulation system are presented in Table 3.

**Table 03.** The level of knowledge of the ways of organizing mental activity when performing a summarization of a professionally-oriented test after an experiment is self-regulatory training

Level	Level characteristic	Number of students, %
High level	The algorithmic apparatus is fully applied in practice. The student follows the plan of the given structure of pedagogical practice, self-regulatory training, can independently conduct a control and evaluation analysis of the text abstract. The degree of occupancy of each stage is complete.	6 (12 %)
Medium-high	The algorithmic apparatus of a given structure, self-regulatory learning, is not fully applied. The fuzziness and inaccuracy of the structurally-substantive component of each stage of abstracting the text are indicated. The degree of occupancy of each stage is moderate.	25 (50 %)
Middle-level	The chaotic use of the components of educational and cognitive activity in the mode of self-regulatory training. A review of a professionally-oriented test is carried out in violation of the	15 (30 %)

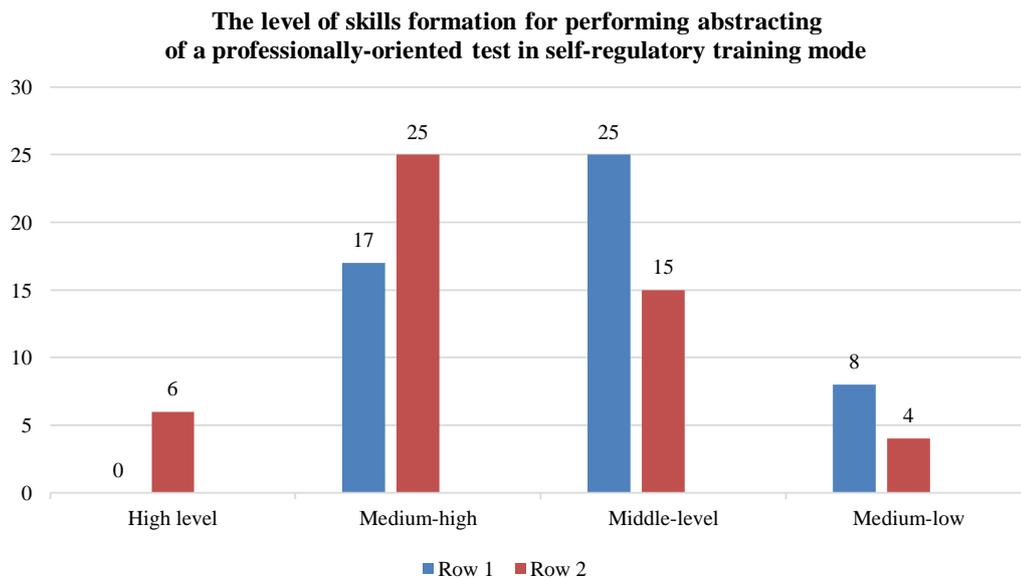
	completeness exposition norms of each stage. The degree of occupancy of each stage is poorly expressed.	
Medium-low	Fragmented implementation of the components of educational and cognitive activity in the mode of self-regulatory training. Lack of independent skills in conducting control and evaluation activities, self-assessment is the process of summarizing a professionally-oriented test (not all stages are involved). The degree of occupancy of each stage is low.	4 (8 %)

An analysis of the levels of formation of skills for performing refereeing of a professionally-oriented test in the conditions of self-regulated training before and after the experiment is presented in Table 4.

**Table 04.** A summary table of indicators of the level of formation of the skills to perform abstracting of a professionally-oriented test in the conditions of self-regulatory training

Group of students, number of people (%)		
Before the experiment	After the experiment	Levels of formation of skills for performing abstracting of a professionally-oriented test in the conditions of self-regulatory training
– (0 %)	6 (12 %)	High level
17 (34 %)	25 (50 %)	Medium-high
25 (50 %)	15 (30 %)	Middle-level
8 (16 %)	4 (8 %)	Medium-low

The results of diagnosing the level of formation of skills for summarizing the professionally-oriented test in the conditions of self-regulatory training are presented in Figure 1.



**Figure 01.** Diagram of changes in the percentage of students with a high level of formation of performance indicators for summing up a professionally-oriented test in the conditions of self-regulatory training

The results of the study show that the level of formation of the ability to perform abstracting of a professionally-oriented test in the conditions of self-regulatory training after a training experiment has grown significantly. At a high level, it is 12 % (6 people), at a medium-high level – 16 % (8 people), at an average level it fell to 20 % (10 people), at a medium-low level to 8 % (4 people).

## 7. Conclusion

Thus, a comparative analysis of the students' work results before and after the experiment showed the technology advantage in the practice of summarizing a professionally-oriented test in the conditions of self-regulatory training. The results allow concluding that the technology developed by the curriculum for self-regulating training of a phased algorithm of actions for performing the summarization of a professionally-oriented test is sufficiently useful and gives high results if it is carried out systematically and relies on interpersonal communication. The use of technology of self-regulatory learning in the learning process will serve as the basis for the development of autonomy, competence, independence, and ensure self-expression. Under Russian conditions, work should be carried out aimed at developing the student's ability to self-esteem, the ability to independently, without outside help, determine the goal, objectives, planning, monitoring, and evaluation of the material studied. The need for this work is associated with current conditions of economic globalization and the internationalization of education. In connection with this, the constant question arises of self-organizing educational and cognitive activity, allowing students responding to changing conditions and realizing their pro-active position quickly. Today, in the conditions of existence in the information society, we can declare the dominant role of self-regulatory learning.

## References

- Boekaerts, M. (1996). Self-regulated learning at the junction of Cognition and Motivation. *Europ. Psychologist*, 1(2), 100–112.
- Deci, E. L., & Ryan, R. M. (2000). What is the self in self-directed learning? Findings from recent motivational research. In G.A. Straka (ed.): *Conceptions of self directed learning: Theoretical and conceptual considerations*. LOS, Learning Organized Self-Directed Research group (pp. 49–57). Münster: Waxmann.
- Gorina, V. A. (2012). Professionally oriented text in a textbook for students of psychological specialties. *Bull. of MSLU*, 26(659), 30–40.
- Goverdovskaya, E. V., & Mkrticheva N. M. (2015). Organization of the educational space of a modern university. *Human., socio-econ., and soc. Sci. Econ. and Human. Studies of Reg.*, 9, 230–232.
- Heckhausen, J., & Dweck, C. S. (Eds.). (1998). *Motivation and Self-regulation Across the Lifespan*. Cambridge, UK: Cambridge Univer. Press.
- Hiemstra, R. (2000). Self-directed learning: The Personal Responsibility Model. In G.A. Straka (ed.): *Conceptions of self-directed learning: Theoretical and conceptual considerations*. LOS, Learning Organized Self-Directed Research Group (pp. 93–108). Munster: Waxmann.
- Houle, C. O. (1961). *The inquiring mind*. Madison: Univer. of Wisconsin Pres.
- Kirgintseva, N. S. (2002). Computer-mediated methods of communication in the process of self-directed teaching of students of linguistic majors of universities. *Mater. of the 1st Int. Sci. Conf. "Methods of modern communication: problems of theory and social practice"* (pp. 156–158). Moscow: MSLU.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. New York: Association Press.

- Kolosova, O. Y. (2009). Anthropological dimension of global problems of our time. *Sci. probl. of human. res., 1*, 126-131.
- Koryakina, Y. V. (2016). The procedural aspect of the formation of educational and cognitive competence in the conditions of self-regulatory learning. *Modern probl. of sci. and ed., 4*. Retrieved from <https://science-education.ru/ru/article/view?Id=24950>
- Koryakina, Y. V. (2017). The competency-building model of the linguostylistic analysis of a literary text in the context of self-regulatory training. *Europ. Soc. Sci. J., 1*, 267–276.
- Koryakovtseva, N. F. (2010). *Theory of teaching foreign languages: productive educational technologies*. A textbook for students of higher educational institutions. Moscow: Academy.
- Little, D. (1991). *Learner autonomy: definitions, issues and problems*. Dublin: Authentik.
- Lomteva, T. N., & Kirgintseva, N. S. (2003). *Self-regulatory learning strategies for students of linguistic specialties*. Textbook for students of higher institutions. Stavropol: SSU.
- Maslow, A. (1954). *Motivation and personality*. New York, NY: Harper & Row.
- Osadchuk, O. L. (2008). The didactic model of self-regulatory learning. *Ed. and Sci., 8*(56), 1–10.
- Ostrovaya, Y. S. (2016). On the issue of the formation of French texts on the example of texts and multimedia messages. *Sci. and ed. in a modern competit. environment, 1*(3), 118–120.
- Provotorov, V. I. (2006). Annotation and abstracting. *Sci. notes. sci. J. of Kursk State Univer., 2*, 129–135.
- Ruvinsky, L. I. (1986). *Activeness and self-education*. Moscow: Progress Publ.
- Schunk, D. H., & Zimmerman, B. J. (2008). *Motivation and self-regulated learning: Theory, research, and applications*. New York, NY: Lawrence Erlbaum Associates.
- Tikhonova, E. V. (2000). *Self-regulatory education as a condition of teacher's professional self-education (based on the materials of muses. Departments of the college)* (Cand. dissertation thesis). Yekaterinburg.
- Zimmermann, B. J. (1990). Self-regulating academic learning and achievement. The emergence of the social cognitive perspective. *Ed. Psychol. Rev., 2*, 173–201.