Man In India, 97 (14) : 85-102 

# STUDENTS SELF-WORK ORGANIZATION: EDUCATIONAL ACTIVITY SELF-REGULATION'S TECHNOLOGICAL ASPECT

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Approaches existing to the university students' independent work organization mostly are represented by inefficient forms of time-delayed verification of the assignments received by students as well as do not meet the set tasks and need a qualitative update. The most important in this process is the problem of self-regulation of students' learning activities in planning, simulating, programming and evaluating independent work, interacting with teachers, expanding the spatial and temporal boundaries of learning for communication and information exchange with the involvement of modern Internet technologies. In this regard, the paper is aimed at justifying the didactic content of Internet technologies for self-regulation of student learning activities in organizing independent work within the university. As the guiding method of research, the method of pedagogical monitoring is applied, this enables to carry out continuous monitoring of Internet technologies' implementation for self-regulation of students' learning activities in organizing independent work and to adjust problems arising in this process. Based on the results of the research conducted, the structure and content of self-regulation process of students' learning activities is established; the classification of kinds and types of Internet technologies of educational activity self-regulation in the organization of independent work is defined; as a didactic condition, ensuring the quality of independent work, coaching "Self-regulation of student learning activities" is justified. The effectiveness of the training is proved by the criteria of "high", "medium" and "low" levels of quality of self work in accordance with the indicators of knowledge, the formation of reproductive, productive, creative skills, general professional, functional and operational competences of Internet technologies for self-regulation of educational activities.

***Keywords:*** independent work, university students, self-regulation of educational activity, self-organization, self-control, self-transformation, pedagogical mechanisms, internet technology, training website, coaching.

## INTRODUCTION

### The study urgency

The objectives of students' vocational training in modern university are characterized by a focus on the development of personal and professional qualities

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and competences of self work that allow not only acquiring the necessary knowledge, but skillfully applying them in practice for solving various tasks, critical thinking, competent working with a variety of information, adapting to the mutable demands of the labor market (Rybakova, 2011; Fomin, 2013; Khlupina, 2014; Christensen & Eyring, 2011; Ermolaeva, 2016; Rakhimova *et al.*, 2017). These processes are evidence of the transition of higher education from the paradigm of learning to the paradigm of education (Valeeva & Biktagirova, 2016; Tchoshanov *et al.*, 2017; Irgalieva, 2011; Morosanova & Konoz, 2000; The European Employment Strategy, 1997; Shaikhelislamov, Shaekhova & Murzalinova, 2016; Bayanova & Mustafin, 2016; Sidelnikova, 2016). In the traditional education system, the student accumulates knowledge "for life", and the new format assumes an independent acquisition of basic knowledge necessary for "life", that is, the "trainee which is trained" becomes a "trainee which is training". If previously the student was taught, now basically he must study himself (Letter of the Ministry of Education of the Russian Federation on the recommendations for planning and organizing independent work of students of secondary and higher vocational schools, 2000). It has been established (Belyaeva, 2003; Osetrin & Pyanykh, 2011; Khlupina, 2014; Shuklina, 2004) that the modern educational paradigm provides for a constant increase in the study time for students self-work. In different disciplines, it reaches 50-80% of the total number of academic hours allocated for their study at the university (Federal State Educational Standards of High Professional Education, 2009). Moreover, in the prevailing conditions, in connection with the wide application of computer and telecommunication technologies, approaches to organizing independent work are radically changing. The study found that independent work today is not just a time-lapse check of students' assignments, but a constant monitoring of the self-regulation of their learning activities in planning, simulating, programming and evaluation, in interaction with teachers, in expanding spatial and temporal boundaries of training for communication and information exchange with the involvement of modern resources of Internet technologies. At the same time, the pedagogical experience of most universities (Titova, 2010; Senashenko & Zhalnina, 2006; Kalimullin & Utemov, 2016) proves that increasing the time budget for independent work of students does not give the expected results under the influence of inertial tendencies that persist in the educational process:

- the content of independent work, implemented by different teachers within the framework of the courses being read, is characterized by high level of fractals of traditionalism in the mass practice of universities, is not determined by innovative goals of implementing Internet technologies in the process of forming the personal qualities and competences of students (Bublik, 2014; Gordeyeva, 2012; Yefremova, 2011);
- due to their unformed purposefulness, weak control, insufficient differentiation and variability, in which the individual capacities,

needs and interests of subjects of educational activity are minimally taken into account, independent work does not ensure a qualitative realization of the tasks assigned to it (Drobyshevsky, 2013; Dybina, 2015);

- a significant volume of tasks offered for independent work is not performed at all, or it is performed formally or simply they are the copies of texts of various and available sources placed on the Internet (Yermakov & Galatenko, 1996; Irgalieva, 2011; Kovalev, 2000);
- The didactic resources of Internet technologies in teaching are poorly used, the collegial nature of the interaction of teachers and students, the forms, methods, means, mechanisms of control, self-control and feedback "student-teacher-educational environment of the university-educational environment of Internet resources"; there is no permanent computer monitoring of the content and results of self-regulation of student learning activities (Drobyshevsky, 2013, Shuklina, 2004).

Based on the analysis carried out in the course of the study, the regularity was established in the change of the whole ideology in the organization of students' independent work and the need to rethink its role in improving the quality of student training. According to leading experts (Bailuk, 2012; Konysheva, 2009; Kostromina & Dvornikova, 2007; Shuklina, 2004) and the results of practical activity of universities (Letter of the Ministry of Education of the Russian Federation on the recommendations for planning and organizing independent work of students of secondary and higher vocational schools, 2000) the established trends determine the imperative goals of updating the organization of independent work of university students. In this regard, this paper is aimed at justifying the didactic content of Internet technologies for self-regulation of student learning activities in organizing independent work in the university. To substantiate the theoretical and practical significance of the research goal, the paper reveals the pedagogical essence of the concept "organization of independent work of students"; based on the results of the materials of the conducted research, the structure and content of the process of self-regulation of students' learning activities are established; the classification of kinds and types of Internet technologies of self-regulation of educational activity in the organization of independent work is defined; as a didactic condition, ensuring the quality of independent work of students, coaching - training "Self-regulation of student learning activities" is justified. The effectiveness of the training is proved by using the criteria of "high", "average" and "low" levels of quality of independent work in accordance with the indicators of knowledge, the formation of reproductive, productive, creative skills, general -professional, functional and operational competences for self-regulation of student learning activities.

## LITERATURE REVIEW

### The pedagogical essence of the concept "organization of independent work of university students"

In the context of this approach, it is considered at the informative, procedural and evaluation levels:

- informative level. The organization of independent work is justified as an important component of vocational training, providing a purposeful, motivated, structured by the performed activities, independent cognitive activity of the student on the basis of indirect system management by the teacher or a training program;
- procedural level. The organization of independent work is carried out by the teacher within the framework of the educational paradigm in the field of vocational training: the didactic possibilities of Internet teaching technologies; collegial nature of the interaction of subjects of the educational process; forms, methods, means, mechanisms of control, self-control and feedback in the course of independent work;
- evaluation level. The organization of independent work is accompanied by constant computer monitoring of content (cognitive activity, independence, self-organization) and results (the level of knowledge, skills to apply the acquired knowledge to solve learning and professional tasks, independence and self-organization competencies) of implementing Internet technologies for self-regulation of student learning activities.

### The views of scientists on the research problem

The methodological basis of the study is the concept of a person-centered approach (Rogers, 1994), the psychological theory of self-actualization (Maslow, 1982), the concept of self-regulation of educational activity (Kostromina & Dvornikova, 2007; Morosanova & Konoz, 2000; Titova, 2005; Borisova *et al.*, 2016). The contents of the presented concepts outline the basic approaches and directions of the development of the personality in the process of educational activity, which are of great importance for the development of modern models of organizing students' independent work. In the works of researchers of the American school (Louie *et al.*, 2003; The European Employment Strategy, 1997; Trigwell, Prosser & Watrrhoudse, 1999) independent work is considered as an important condition for the development of the individual's motivation for the qualitative exercise of his professional activities, the implementation of professional competences and attitudes towards the profession as values of career growth and personal well-being. The authors of the American school place special emphasis on the use of Internet technologies in organizing independent work of students in an online format. In

the works of scientists of the Russian group (Minina, 2013; Morosanova & Konoz, 2000; Osetrin & Pyanikh, 2011; Pyanikh, 2010; Rybakova, 2011; Senashenko & Zhalnina, 2006; Titova, 2010; Fomin, 2013; Khlupina, 2014; Shuklina, 2004) the effectiveness of approaches to the design of innovative models of independent work of students centered around Internet technologies is proved. The results of these authors' studies confirm the effectiveness of using Internet technologies in organizing independent work of students. It is proved that the technologies create a number of fundamentally new opportunities in the organization of this process: they provide prompt transfer of assignments to trainees, interactivity and mobile feedback; form the competences of the professional use of various search systems to obtain information on the issues of interest; develop technical abilities and skills necessary for Internet users to communicate and collect information; develop analytical skills and abilities to synthesize knowledge into a single whole; provide access and selection of various sources of information; are an affordable means for creating educational curricula, placed on the site of the university or on the subject WEB page of the teacher. The established approaches were used in the research as a scientific and methodical basis for implementing Internet technologies for self-regulation of students' learning activities.

## RESULTS

### Structure and content of the process of organizing independent work of university students

In the course of the study, the tendency of a high status of independent work as an integral part of the educational process of a modern university, which is implemented in all types of employment, is justified. It is also confirmed that in practical and laboratory studies the share of independent work is significantly increased due to the use of research forms of educational and cognitive activity of students requiring more time for independent reproduction of information; observations and study of the phenomena described in the lecture material; adjustment and regulation of equipment; measurement characteristics and patterns of development of the studied processes, presented in the content of educational subjects (Federal State Educational Standards of High Professional Education, 2009). It is established that two types of independent work are traditionally used in the practical activity of universities: classroom and extracurricular. Auditoria types are mainly represented by various organizational forms of control, creative and practical assignments during the seminars or practical classes: detailed acquaintance with the current educational material on the abstracts and recommended literature; with practical, laboratory and seminary tasks; with the requirements for the implementation of planned laboratory and control works; group and individual consultations. Extracurricular activities are represented by a wide variety of

homework assignments, preparation for classroom activities and independent assignments at laboratory and theoretical workshops, seminars and workshops, work on specific subjects of educational disciplines, practices and the fulfillment of tasks foreseen by them, preparation for all types of control tests (credits and examinations, course and diploma works (projects), final certification and qualification graduation works), implementation of research work, participation in scientific and scientific-methodical work, in scientific and practical conferences and seminars. It is established that the writing of abstracts (Bublik 2014; Drobyshevsky, 2013) has the predominant value in the implementation of extracurricular types of independent work.

In the course of the study it is revealed that five types of organization of independent work are used most widely among all audit and extracurricular types:

1) reproductive (passive cognitive activity by memorizing what is needed "here and now") and productive (the exercise of creative types of independent work in the presence of immediate external stimuli and motives) presenting of information;
2) independent work on the model (performing independent tasks only within the established tasks, preference is given to algorithmic patterns in a familiar situation);
3) reconstructive independent work (active independent cognitive activity, priorities in which are assigned to research, creative assignments, oriented to the design of ideal models of independent work);
4) heuristic independent works (creative fulfillment of tasks with non-standard decision making in extreme conditions of problem situations);
5) creative research works (implementation of independent research projects, assignments in training activities based on the adoption and implementation of their own decisions, personal responsibility for their results).

The established classification of kinds and types of organization of independent work in the practical activity of universities is based on the basic core of independent work - the educational (professional) task. Disclosure of the essence of the task in the process of solving it becomes a means of logical and didactic organization of the material for independent cognitive activity, self-regulated by the student, and the main indicator of its quality. In the practical activities of universities these functions are the prerogative of scientific, methodical and resource maintenance for the organization of independent work. As a rule, the structure and content of scientific, methodical and resource maintenance for the organization of independent work of students in the modern educational process of the university are:

– funds of classrooms, cabinets and scientific laboratories equipped with modern electronic and computer programs, devices and equipment, computer support of reading rooms of libraries with access to the Internet;

- instructional and normative documentation necessary for individual educational work, presented in electronic and traditional (paper) types;
- the necessary number of educational literature, textbooks, educational and visual aids of the traditional and electronic types;
- educational and methodical documentation on the organization and planning of various types of independent work of students;
- methods of control over the progress and results of independent work, options for assignments and methodical recommendations for their implementation;
- fund of scientific and popular scientific periodicals.

It is proved that the renewal of the scientific, methodical and resource maintenance of the organization of independent work places higher demands on the professional qualities of the university teachers and the goals of the students' learning activities. The valuable attitudes of subjects of educational activity are updated:

1) of teachers:
   - understanding of the importance of independent work as a type of educational activity of students leading in the process of forming a modern specialist with a high level of personal and professional competences of self-organization, self-control and self-regulation;
   - mastery of innovative methods of organization of independent work, requiring high pedagogical skills and special personal qualities in the use of Internet technologies for self-regulation of student learning activities;
   - active participation in innovative processes of organization of independent work;
   - constant updating of knowledge and professional culture improvement;
   - perfection of forms of self-control and continuous self-regulation of professional growth;
   - increase of role activity in the conditions of increase in technological equipment of educational process;
2) of students:
   - continuous improvement of the level of general training, possession of Internet technologies for self-regulation of educational activities and other interactive technologies of independent work;
   - awareness of the educational goals of Internet technologies for self-regulation of educational activities, their importance for organizing independent work.

The final stage in the process of organizing the independent work of university students is a control system. It is established that university teachers in practice use methods of control in accordance with the kind and type of independent work:

- oral survey, interviewing (frontal, individual, combined, group);
- checking assignments: written, mixed, practical;
- standardized control (testing).

The control of the results of independent work using Internet technologies is used mainly in evaluating educational achievements and promptly adjusting the process of formation and accumulation of ratings of students in all disciplines and modules of the educational curriculum, as well as in assessing practical abilities and skills in working with information resources (Drobyshevsky, 2013).

**Pedagogical algorithm of self-regulation of educational activity of university students in the organization of independent work**

Self-regulation in this study is considered as a property of students' learning activities to modify, restore its structure and content in accordance with the goals of organizing independent work. In the course of the study, the pedagogical structure of the process of self-regulation of students' learning activities in the organization of independent work is grounded:

- planning (based on individual characteristics of the goal-setting of independent work: awareness and autonomy, efficiency, realism, stability, determinism);
- simulating (corrects the existing ideas of students about the self-regulation of educational activity in the organization of independent work, creates significant conditions for self-regulation of educational activities in the conditions of the educational environment created by Internet technologies);
- programming (reflects the subjective ways and sequence of performing actions to achieve the set goals, is determined by the kinds and types of independent work);
- evaluation of the results (represents the adequacy, autonomy of self-assessment, the results of activity and behavior, the stability of subjective criteria for assessing the success of the results achieved).

It is established that the content of self-regulation of educational activity in the organization of independent work in a university is determined by the realization of the step-by-step formation of cognitive actions of students: the adopted goal of educational activity is the model of significant conditions for learning activity - the program of one's own performing actions - the system of criteria for the success of activity - information on actually achieved results – compliance of real results

with success criteria - making decisions about the need and nature of correction of activities. In the course of the research, the effectiveness of the step-by-step formation of cognitive actions that create the necessary conditions for the self-regulation algorithm of the student's learning activity is proved: personal planning of the goal of its activity, educational and professional tasks - giving them a personal meaning - submission to the accomplishment of these goals and tasks of other areas of educational activity, interests and forms of employment - correction of self-organization and self-distribution of training activities in time - self-control of their implementation. It is proved that in this process the active principle belongs to the teacher as the managing subject. The student has the role of a controlled subject. The resources of Internet technology, their didactic environment with mechanisms of control, self-control, feedback for objective evaluation of results and correction of the interaction process become the means of communication between the managing and controlled subjects.

**Classification of kinds and types of Internet technologies for self-regulation of student learning activities**

The structure and content of the process of self-regulation of students' learning activities, established during the research, ensures the active use of the didactic capabilities of Internet technologies:

1) the interactive nature of the connection between teachers and students, innovative types of control and self-control, the implementation of feedback through various test systems available to all subjects of self-regulation (teachers and students) simultaneously, monitoring the process of self-regulation and the results of independent work;
2) search, processing, storage and presentation of information:
   - formation of skills to enter, edit and display text on electronic resources;
   - work with graphic information, use the computer for calculations, compilation of spreadsheets;
   - the search for data from various sources, the use of abstract information, verification of its reliability;
   - organization of information storage, adequate forms of its presentation;
   - use of information received for solving problems;
3) expansion of spatial and temporal boundaries for communication, exchange of information, access to electronic libraries, Encyclopedias, dictionaries and other information resources;
4) ensuring active interaction of students in the process of collective independent work to find a solution to a particular problem, getting the necessary consultation in a remote format, sharing experience with other students;

5) the innovative character of the representation of educational tasks for students through greater visibility, variation, the expansion of the thesaurus, the use of a complex of situations and tasks of various levels of complexity, increasing the number of information resources for finding the necessary knowledge, electronic lecture notes, a bank of control tests, orientation (technological) maps, work samples, regulatory requirements, educational and professional assignments of different level, options of content for the instructor's subject page on the WEB-site of the department, university;
6) constant monitoring of independent work of students, correction of its course and directions of searches at the decision of educational and professional tasks;
7) practical orientation of independent work on the basis of virtual trainings, laboratory works, practicum.

It is proved that self-regulation of students' learning activity is based on the complex application of Internet and multimedia technologies, as well as knowledge of maps and computer programs for educational purposes (Drobyshevsky, 2013; Khlupina, 2014; Shuklina, 2004). In the course of the study it is established that the classification of Internet technologies most effective for self-regulation of student learning activities is represented by:

- multimedia technology (electronic multimedia textbooks, electronic lecture notes, presentations, etc.) allow in a computer system to combine text, sound, video, graphics, animation, a set of hardware and software that provide the perception of information at the same time by several bodies of feelings, which makes their application in the organization of independent work of students very effective means;
- WWW - technologies of work in a network with hypertexts;
- FTR - technologies for transferring files of arbitrary format over the network;
- IRC - technology for negotiating in real time;
- e-mail for sending and receiving emails, information service for sending network subscribers reviews, summaries and other reference materials from various sources;
- maps of knowledge (mental maps, smart maps, clusters) - Internet technology for structuring information, identifying supporting concepts, theses, simulating relationships between them. In the organization of independent work, knowledge maps are used to solve various problems: book review, articles, lectures; writing papers, essays, coursework; analysis and structuring of a large amount of information; solving creative tasks; memorization; presentations, etc.;
- computer programs for educational purposes: teaching programs, simulators, controlling, information-reference, simulation, demonstration, game.

The established technologies of self-regulation of students' learning activities in the organization of independent work ensure the transfer of assignments to learners, interactivity and operational feedback; form the skills of using various search systems to obtain information on an issue of interest; develop technical abilities and skills necessary for students as Internet users for communication and information collecting; form the ability to analyze and synthesize knowledge into a single whole; provide access and selection of various sources of information; are an effective tool for creating educational programs, for example, the subject WEB page of the teacher, which contains all the information necessary for the student's independent work.

During the research it is proved that the level of readiness of students for self-regulation of educational activity is of big importance in the organization of independent work of students in the process of implementing Internet technologies. At low rates of readiness for self-regulation, the effectiveness of using Internet technologies is not very high. Therefore, in the algorithm of self-regulation of students' learning activities, these indicators create a barrier between the student and the result, providing either high or low efficiency of using Internet technologies in organizing independent work. The most important components of the algorithm, combining all the previously described components into a single whole, are diagnostics, feedback and self-control of students. Internet technologies allow: to carry out all kinds of control; receive feedback; accumulate information about the results of the tasks; to represent any action in the expanded sequence of operations; show the results of the assessment on the first request; to assess the student's chosen structure of independent work.

The effectiveness of the pedagogical algorithm for self-regulation of students' learning activity in organizing independent work with the use of Internet technologies is substantiated: the managing subject (teacher) - a subject managed (student) - means of interaction between them (Internet technologies, multimedia technologies, knowledge maps, computer programs for educational purposes) - control, self-control mechanisms – of feedback to evaluate the results achieved. The use of the established algorithm of self-regulation of educational activity in the organization of independent work with the help of Internet technologies ensures the implementation of individual student routes: 1) knowledge-oriented; 2) to form oneself as an educated person; 3) to form oneself as a future specialist; 4) focused on the continuation of education associated with scientific activity.

**Coach - training "Self-regulation of student learning activities"**

Coach - training in the organization of independent work in the university is an innovative process of forming the student's motivation in achieving maximum results in self-regulation of educational activities both in sports, with maximum benefit both in business and willingness to use the abilities and skills in a real

educational process. At the heart of the methodology and tools of coach- training is interactive communication, discussion: a question-answer (Q & A), which is conducted in the form of coach classes. It can be a personal meeting, a phone contact, communication on the Internet (Timothy, 2005).

**Preparatory stage**

All the materials of the training are presented in the electronic educational-methodical project developed by the leading coach. It includes: "menu", which presents the authorization system and the names of the main sections of the training; electronic abstracts according to the sections of the training; test tasks for each issue and recommendations for their implementation; the game section of the training, where the scenarios of each participant's activity are posted; the basic requirements and training rules are listed in alphabetical order; Discussion topics; Variants of assessments and reflection of training are presented. The "electronic training diary" presents: scenarios for the creation of working groups and the development of a general methodic for training in section headings; variants of the training; didactic and technological means; schedules of consultations with the coach.

**Organizational stage**

Creation of micro-groups. Distribution of roles and their functional responsibilities:

- "Lead Coach" - provides guidance of the general course of the training, conducts individual coaching. First of all, this is the clarification of the goals and tasks set by each participant. The direction of the forthcoming material, its tasks and ways of applying by the students in practice is determined. For example, what will be discussed in the upcoming lesson and how the proposed material the participant will be able to apply in a specific case? The coach's task is to help each student with the help of leading questions to formulate a definition independently, and get a feedback reaction: listen to one-self, evaluate his or her own ideas and decisions. This approach helps the student to carry out introspection, removes internal self-restraint to create ideas, forms a stable willingness to use Internet technologies;
- "Coach experts" - oversee the implementation of the overall course of the training; constitute criteria for evaluating the ideas put forward; systematize the recommendations of participants on the classification of Internet technologies, on the scale of ranking students' self-regulation in the organization of independent work; about the levels of quality of independent work, the number of visits of the training site or "electronic diary";

- "generators - coachers" - carry out the development of leading ideas;
- "alternative generators - coachers" - search for opposite innovative ideas;
- "genius generator - coacher" - receives an individual assignment and works in isolation from the group. He designs an ideal model for organizing independent work of university students using the Internet technology of its presentation.

Rules of coaching- training: all instructions and requirements must be submitted electronically; the participants of the training should accept and carry out any information without objection; record counter the arguments on the screen; record all ideas, considerations during the training; do not panic if the thread of communication is lost. Concentrate and continue the dialogue; follow the short description rule; put forward convincing arguments in "defense" or "against" the sounded idea.

**Formulation of the problem:** What are the advantages of organizing an independent work with the help of Internet technologies and what is the role of self-regulation of students' learning activities in this process?

**Problem solution:** generalization of ideas, general discussion, adoption of alternative solutions, classification of proposals on the level of solutions, evaluation of the effectiveness of decisions taken.

**Report on results:** Presentation of experts, analysis of training and reflection.

Training analysis:

- what problem was identified as the main one;
- what is the list of proposed solutions?
- which of the possible solutions is considered the most optimal and why;
- whether you succeeded in staying with the training in the established mode;
- what form of training (individual, group) is preferable for you;
- the role of the teacher as the coacher - facilitator;
- what disruptions in the training are unpleasant for you;
- how often participants committed violations of rules and regulations;
- what problems arise between the teacher and the student in the training process and why.

**Reflexion of the training "Satisfied faces"**

Instruction: to post in the "electronic diary" an assessment (10 points scale of assessments) next to the image of the students - "before" the training and "after" (smiling or sad smiley depending on the assessment).

It is proved that the positive results of the presented technology of coach-training are: a stable manifestation of the students' abilities to solve educational

and practical situations promptly and with the help of Internet technologies; readiness for self-regulation of educational activity and flexible adaptation to technological changes in independent work; transition from competitive rivalry in the relationship of students to a collegial partnership.

## DISCUSSION

The results of the research confirm the relevance of the research problem, its theoretical and practical significance for the implementation of Internet technologies for self-regulation of educational activities in the organization of independent work of university students. The assumption is grounded: the main indicator of the effectiveness of the organization of independent work in a modern university is the willingness of students to self-regulation of educational activities. It is proved that Internet technologies create a number of fundamentally new opportunities in organizing this process from the operational transfer of assignments to students before the creation of curricula posted on the site of the university or on the subject WEB page of the teacher. The revealed tendencies are confirmed by the results of studies of the theory and practice of organizing independent work of university students (Minina, 2013; Khlupina, 2014; Shuklina, 2004; Louie *et al.*, 2003; The European Employment Strategy, 1997; Trigwell, Prosser & Watrrhoudse, 1999). In the course of the research, the pedagogical essence of the concept "organization of independent work of students" is revealed, the structure and content of the process of self-regulation of students' learning activities are determined, and the classification of kinds and types of Internet technologies of self-regulation of educational activity in the organization of independent work is determined. As a didactic condition, ensuring the quality of independent work of students, coaching - training "Self-regulation of student learning activities" is justified. The effectiveness of the training is proved by the criteria of "high", "average" and "low" levels of quality of independent work of students in accordance with the stability of knowledge, the formation of reproductive, productive, creative skills, general professional, functional and operational competences, Internet technologies for self-regulation of educational activities (Table 1).

## CONCLUSION

The conducted research confirms the theoretical and practical significance of the organization of independent work of students as a leading component of the educational process of a modern university. It is established that the readiness of students to independent work is determined by the use of Internet technologies for self-regulation of educational activities. At low rates of use of Internet technologies, readiness for self-regulation of educational activity is manifested at a low level and creates a barrier between the student and the result, ensuring low effectiveness of organizing independent work. To substantiate the didactic approach to the

TABLE 1: QUALITY CRITERIA FOR THE ORGANIZATION OF INDEPENDENT WORK OF STUDENTS IN THE PROCESS OF IMPLEMENTING THE COACHING-TRAINING "SELF-REGULATION OF STUDENT LEARNING ACTIVITIES" (USING A 5-POINT SCALE OF ASSESSMENTS)

| *Criteria of quality of self work* | *Indicators of Internet technologies' effectiveness for educational activity's self-regulation* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Sustainability of knowledge* | | *Skills* | | | | | | | | *Competences* | | | |
| | | | *Reproductive* | | *Productive* | | *Creative* | | *General Professional* | | *Functional* | | *Operational* | |
| | *The beginning of the experiment* | *The end of the experiment* | *The beginning of the experiment* | *The end of the experiment* | *The beginning of the experiment* | *The end of the experiment* | *The beginning of the experiment* | *The end of the experiment* | *The beginning of the experiment* | *The end of the experiment* | *The beginning of the experiment* | *The end of the experiment* | *The beginning of the experiment* | *The end of the experiment* |
| High | 1,8 | 4,5 | 2,0 | 4,0 | 1,6 | 3,8 | 2,5 | 4,5 | 2,5 | 4,9 | 2,3 | 4,8 | 2,5 | 5,0 |
| Average | 1,2 | 3,8 | 1,5 | 3,2 | 1,3 | 2,5 | 1,9 | 2,8 | 2,1 | 3,5 | 2,0 | 4,3 | 2,0 | 4,1 |
| Low | 0,5 | 1,5 | 1,0 | 2,3 | 0,9 | 1,7 | 1,5 | 3,0 | 1,9 | 3,8 | 1,9 | 4,0 | 1,5 | 3,3 |

implementation of Internet technologies for self-regulation of educational activities of university students in the organization of independent work, the article reveals the pedagogical essence of the concept "organization of independent work"; the structure and content of the process of self-regulation of students' learning activities are established; the classification of kinds and types of Internet technologies of self-regulation of educational activity is defined. The effectiveness of the implementation of the coaching-training "Self-regulation of student learning activities" as an innovative didactic condition for organizing independent work is proved.

This problem as a scientific and methodical direction does not exhaust itself by the solution of the set goals and tasks. Important for the development of theory and practice of organizing independent work of university students are: the educational space of Internet technologies, aspects of the pedagogization of this process; the problem of training teachers of a new generation with mobile competences for organizing independent work of students in non-standard situations with using Internet technologies; design of integrative models of the activities of teachers and students in the educational space of Internet technologies.

## *References*

Bailuk, V.V. (2012). Humanistics. Self-training and self-educating realization of personality as the law of success: monograph. Ekaterinburg: Publishing house of the Ural State Pedagogical University.

Bayanova, L.F., Mustafin, T.R. (2016). 'Factors of compliance of a child with rules in a Russian cultural context'. *European Early Childhood Education Research Journal*, 24(3), 357-364.

Belyaev, A. (2003). 'Management of independent work of students'. *Higher education in Russia*, 6: 106-109.

Borisova, O.V., Vasbieva, D.G., Malykh, N.I., Vasnev, S.A., Bírová, J. (2016). 'Problem of using innovative teaching methods for distance learning students'. *International Electronic Journal of Mathematics Education*, 11(5): 1175-1184.

Bublik, G.A. (2014). 'Planning and organization of independent work of students'. *Bulletin of the Nizhny Novgorod University named after N.I. Lobachevsky*, 2(1): 61-67.

Christensen, C.M., EyringM H.J. (2011). The Innovative University: Changing the DNA of Higher Education from inside out. The USA: Jossy-Bass.

Drobyshevsky, A.A. (2013). Organization of independent work of students with the use of computer learning technologies. Author's abstract. Thesis. Cand. Ped. Sciences. Saratov.

Dybina, O.V. (2015). 'Control of independent work of students in the university'. *Theory and practice of social development*, 4: 122 - 128.

Ermolaeva, P. (2016). 'The Ecological Culture of Russian and American College Students'. *Russian Education and Society*, 56(1): 19-33.

Federal state educational standard of higher professional education. In the direction of preparation. Approved by the order of the Ministry of Education and Science of the Russian Federation

December 29, 2009 / No. 816 (qualification: Bachelor's degree). Moscow. Http://fgosvo.ru/fgosvpo/7/6/1

Fomin, N.V. (2013). 'Methodical aspects of the organization of students' independent work in conditions of a two-level education system'. *Standards and monitoring in education*, 1(88): 29-34.

Gordeyeva, V.V. (2012). 'Active and interactive forms of organization and pedagogical support of students' independent work'. *News of PSPU named after V.G. Belinsky*, 28: 736-738.

Irgalieva, A.I. (2011). 'Independent work of students: an activity approach to the definition of a concept'. *Integration of education*, 2: 19-24.

Kalimullin, A.M., Utemov, V.V. (2016). 'Open Type Tasks as a Tool for Developing Creativity in Secondary School Students'. *Interchange*, 1 November 2016, 1-16. **DOI:** 10.1007/s10780-016-9295-5

Khlupina, N.D. (2014). 'Organization of independent work of students: concept and approaches'. *Professional education in Russia and abroad*, 3(15): 80-83.

Konysheva, A.V. (2009). 'Modular training as a means of managing students' independent work'. *Higher education in Russia*, 11: 18-27.

Kostromina, S.N., Dvornikova, T.A. (2007). 'Teaching strategies as a means of organizing students' independent work'. *Bulletin of St. Petersburg State University. Series*, 6(3): 295-306.

Kovalev, I. (2000). 'Organization of independent work of students'. *Higher education in Russia*, 1: 114-115.

Letter from the Ministry of Education of the Russian Federation (2000) from 29. 12. ¹ 16-52-138 IN / 16-13 on recommendations on planning and organization of students' independent work of educational institutions of secondary and higher vocational education in the context of State Educational Standards of Secondary Vocational Education Moscow.

Louie, B.Y., Drevdahl, D.J., Purdy, J.M., Stackman, R.W. (2003). 'Advancing the scholarship of Teaching through Collaborative. Self-Study'. *The Journal of Higher Education*, 3-4(March/April): 150-169.

Maslow, A. (1982). Self-actualization. Psychology of Personality. Moscow: Publishing house of Moscow University.

Minina, E.V. (2013). 'Self-education as a form of independent work'. *Pedagogical education in Russia*, 2: 54-57.

Morosanova, V.I., Konoz, E.M. (2000). 'Style self-regulation of human behavior'. *Questions of psychology*, 2: 118-127.

Osetrin, K.Ye., Pyanykh, E.G. (2011). 'Information technologies in the organization of independent work of students'. *Bulletin of the TSPU (TSPU Bulletin)*, 13(115): 210-213.

Rakhimova, A.E., Yashina, M.E., Mukhamadiarova, A.F., Sharipova, A.V. (2017). 'The Development of Sociocultural Competence with the Help of Computer Technology'. *Interchange*, 48(1): 55-70.

Rogers, K. (1994). A look at psychotherapy. The formation of man. Moscow: Progress.

Rybakova, N.N. (2011). 'The role of independent work of students in modern professional education'. *Bulletin of Siberial State Automobile –Road University*, 1(19): 89-96.

Senashenko, V., Zhalnina, N. (2006). 'Independent work of students: actual problems'. *Higher education in Russia*, 7: 103-109.

Shaikhelislamov, R.F., Shaekhova, R.K., Murzalinova, A.Z. (2016). 'Modern pre-school education from the standpoint of self-worth childhood' ['Modernus ikimokyklinis ugdymas vaikystës savivertës poþiûriu']. *Pedagogika*, 121(1), 113-123.

Shuklina, E.A. (2004). 'To the new paradigm of education of the 21st century: from education to self-education'. *Education and society*, 3: 63-67.

Sidelnikova, T.T. (2016). 'The Potential and Limitations of Visualization as a Method in Learning Social Sciences and Humanities'. *Integration of Education*, 20(2): 281-292.

The European Employment Strategy (1997). Luxembourg.

Tchoshanov, M., Cruz, M.D., Huereca, K., Shakirova, K., Shakirova, L., Ibragimova, E.N. (2017). 'Examination of Lower Secondary Mathematics Teachers' Content Knowledge and Its Connection to Students' Performance'. *International Journal of Science and Mathematics Education*, 15(4), 683-702.

Timothy, G.W. (2005). Work as an internal game: Focus, training, pleasure and mobility in the workplace. Moscow: Alpina Business Books.

Titova, G.Yu. (2010). 'On the technology of independent work of students'. *Bulletin of TSPU*, 1(91): 123-125.

Trigwell, K., Prosser, M., Watrrhoudse, F. (1999). 'Relations between teacher`s approaches to teaching and student's approaches to learning'. *Higher Education*, 37.1: 23-25.

Valeeva, R.A., Biktagirova, G.F. (2016). 'The Problems of Family and Family Education in the Works of Tatar Educators G. Bubi and R. Fakhretdin'. *Russian Education and Society*, 58(1), 69-75

Yefremova, O.V. (2011). 'About methods of organization of independent work of students'. *Higher education in Russia*, 2: 150-153.

Yermakov, A.L., Galatenko, N.A. (2001). Fundamentals of independent work of the student. N. Novgorod: Publishing house of Nizhny Novgorod State University.