© Kamla-Raj 2019
PRINT: ISSN 0975-1122 ONLINE: ISSN 2456-6322
Int J Edu Sci, 27(1-3): 1-6 (2019)
DOI: 10.31901/24566322.2019/27.1-3.1092

Content and Functions of Independent Work of Students

E.M. Ibragimova[1] and M. R. Kurbangaliev[2]

Kazan Federal University, Department of Education, Kazan, Russia
E-mail: [1]<immayna@gmail.ru>, [2]<timop2001@mail.ru>

KEYWORDS Educational Process. Educational Tasks. Independent Work. Students' Activities

ABSTRACT The paper shows that independent work of students in current conditions has acquired the status of one of the critical forms of organization of students' activities aimed at the development of graduates' readiness for permanent self-development as a necessary condition for successful adaptation in a continuously changing educational, professional, and social environment. The structural components of the independent work of students as a type of educational activity carried out by students as indirect management from teachers are also revealed. The pedagogical conditions for increasing efficiency of independent work of students also include a clear definition of places, goals, and objectives of independent work in the structure of educational process; use of methods for motivation of students to perform independent work; design and application of a system of successive complicating level of problems of competence-oriented educational tasks; as well as creation of information and educational environment.

INTRODUCTION

The daily systematic work of students on a foreign language, directed by a teacher in terms of its content, form, methods, as well as methods of implementation, is now becoming an urgent necessity; otherwise, the efforts of students and teachers will be equally in vain and fails to provide the desired results (Alshumaimeri 2011; Vaganova et al. 2019). It is necessary to note that students' independent work as a specific form of educational activity can play a significant role in increasing levels of educational and cognitive motivation. In addition, levels of mastering a foreign language require teachers to preteach methods, forms, and contents of this work (Pilat et al. 2014; Abeysekera and Dawson 2015).

The main task of higher education is thus the formation of a creative personality of a specialist capable of self-development, self-education, and innovation. The solution of this task is hardly possible only by transferring knowledge in ready-made forms from a teacher to students. Therefore, it is necessary to move students from passive consumers of culture to active creators who know how to formulate a problem, to analyze ways of solving it, to find optimal results, and also to prove its correctness (Osipov 2013; Shurygin and Krasnova 2016).

Previous studies have shown that independent work still does not have a proper organization, and professional self-education as an essential factor in shaping the personality of future specialists does not take an appropriate place in its preparation (Hashim 2008; Osipov 2013). The study of the real state of independent work correspondingly indicates that students have little knowledge of general educational skills such as note-taking, reviewing, analysis, and synthesis of reading materials (Reed et al. 2016; Kourea et al. 2019). With an independent study of educational materials and primary sources, students can thus find it challenging to identify basics in the formulation of their conclusions, opinions, and evaluation of reading materials. Active independent work of students is therefore possible only if there is severe and steady motivation. The most influential motivating factor is preparation for further productive professional activity.

The essence of independent work can consist of self-organization of an understanding of studied materials extracted from various sources in building students' points of view, and their attitudes are then studied in determining the practical significance of the materials reviewed (Manyika et al. 2016). The organization of independent work begins, first of all, with:

- Determining the content and volume of independent work for each course;
- Establishing a specific dose of materials for self-study in each topic in a particular period;
- Specifying the content of workshops on the formation of students' self-study skills;

- Using an introductory lesson, during which students get acquainted with the program and the nature of the tasks as well as the requirements for independent work.

Many studies emphasized that providing education for a creative specialist is impossible without mastering theoretical foundations of disciplines, developing students' abilities to operate theoretical knowledge in a practical setting, and using them in solving professional problems (Ball et al. 2010). Students should be thus able to answer questions, understand proposed situations, determine ways out of it, and also review or prognosticate monographs, articles, and direct observations of production processes during practice.

The variety of tasks for independent work, giving them not only information but also a professional orientation and establishing a close connection between theory and engineering practice is the incentive that motivates development of skills and abilities of independent work and facilitates restructuring of students' personality structure into that of a specialist (Alm et al. 2019). The effectiveness of students' independent practice as a criterion of quality of pedagogical management of the educational process can be consequently determined by its development in two ways:

- In levels of mastering students' self-training ability to navigate in situations for modeling future professional activity through task situations, special exercises, and use of theory to solve standard practical tasks.
- In a degree of involvement of students in research activities through the performance of non-standard tasks and those of increased complexity and real production practice with the maximum use of life experience of students, orienting them towards the future professional activity.

Therefore, the effectiveness of the independent work of students is mostly determined by the presence of active methods of its control. This emphasizes the importance of organizing and governing functions of a teacher and, at the same time, the need to comprehend students who study by themselves as certain subjects of academic activity.

Literature Review

One of the leading trends in the development of modern education, including higher teacher education, is the orientation towards the formation of a graduating student capable of self-learning, developing knowledge and skills for the purpose of self-actualization, on the one hand, and meeting challenges of the external environment, on the other side. However, an effective and efficient manifestation of this trend requires heightened attention to the issues of effective organization of students' independent work as the most critical educational mechanism for the formation and development of self-education abilities. Taking into consideration the factors of globalization and digitalization of education, the issue of studying students' work as a form of organization of learning, and a way of educational activity is becoming actual**.**

Objective

The primary purpose of this study was to reveal modern scientific ideas about the content and functions of students' independent work**.**

METHODOLOGY

The methods implemented in the current study included as following:

Analysis of Pedagogical Literature

It is a synthesis of what has been published by scholars and researchers on some aspect of teaching and learning. The purpose of the written review is to summarize, synthesize, and evaluate published material on a problem or issue (Kravchenko et al. 2018).

Generalization

Generalization, which is an act of reasoning that involves drawing broad inferences from particular observations, is widely acknowledged as a quality standard in quantitative research but is more controversial in qualitative research. The goal of most qualitative studies is not to generalize but rather to provide a rich, contextualized understanding of some aspect of human

experience through the intensive study of particular cases. The goal of most qualitative studies is not to generalize but rather to provide a rich, contextualized understanding of some aspect of human experience through the intensive study of particular cases. Yet, in an environment where evidence for improving practice is held in high esteem, generalization in relation to knowledge claims merits careful attention by both qualitative and quantitative researchers. Issues relating to generalization are, however, often ignored or misrepresented by both groups of researchers. Three models of generalization (Ting and Witten 1997).

Analysis of Empirical Experience

The empirical analysis is an evidence-based approach to the study and interpretation of information. The empirical strategy relies on real-world data, metrics, and results rather than theories and concepts. The empirical analysis is integral to the scientific method and is the usual approach used to study subjects for a probable answer through quantified observations of empirical evidence. The empirical analysis never gives an absolute answer; however, only a most likely explanation based on probability (Levering 2002).

RESULTS AND DISCUSSION

The nature of the unsupervised activity and its structure as one of the core problems of didactics has been an attractive issue for many researchers (Abasov 2007; Sharf 2011; Kapustin et al. 2014; Strekalova 2014; Vaganova et al. 2019). The analysis of pedagogical literature emphasized that in domestic pedagogy, the most intensive study of self-directed learning of student's falls on the 60-70s of the last century. At this stage, a dominant view of the independent work of students as activities to perform specific tasks without the direct involvement of teachers in lessons, and the process of training activity at home was formed. The main goal of working independently was to develop apprehensive powers and abilities of students as a factor of improving the quality of knowledge (Reed et al. 2016; Kourea et al. 2019).

The next stage in the development of ideas about the independent study of students falls in the 80s of the 20th century and is associated with the name of Pidkasisty (1980). The development of the problem also made it possible to expand and deepen the scientific understanding of individual work. So, students' working alone began to be considered not only as an independently completed educational task but also as a form of manifestation of the independence of thought processes (that is memory and thinking) when performing a task. In addition, it is essential to note that the idea of working independently has formed as a specific pedagogical means of organizing students' unsupervised activities**.**

In 1980, Pidkasisty, as a specialist in the field of independent work, emphasized the idea that, by the 80s of the last centuries, the essence of students' independent work had not been revealed in the didactics of higher education (Pidkasisty 1980). In this regard, a question arises; how do the modern didactics of higher education reveal the essence of the independent work of students?

The analysis of scholarly literature shows the existence of a wide range of definitions of the concept of "independence." It has also been interpreted as a person's ability to determine the general direction (and not just to set particular goals and objectives) of their activity, to plan, organize, actively engage in, and guide their actions without external assistance and supervision; and to see, formulate, and find a solution to a question or a problem on their own (Osipov 2013; Rubinstein and Simon 2013).

Other researchers such as Kourea et al. (2019) and Vaganova et al. (2019) had also defined independence as the psychological state of a person, manifested in need and ability to think independently, to analyze complex learning tasks, to size an unknown situation, and to solve problems without exterior help. In addition, the essential features of an independent personality are critical thinking, the presence of one's own viewpoint, and the ability to defend it using appropriate arguments (Kourea et al. 2019; Vaganova et al. 2019).

As regards, the independent work of students comes into focus as a multidimensional phenomenon. On the one hand, it is considered

as one of the critical types of educational activities of students, involving the use by students of specific techniques and methods in the process of theoretical and practical educational and vocational training. On the other hand, in the context of informatization and digitalization of education students' independent work, it is one of the leading forms of organization of education in higher school. The role and the place of independent study of students are also ever-increasing**.**

The main goal of the independent work of students is that, in the end, each student becomes an active subject of learning activity. The student's subjectivity suggests that they are capable and ready to independently design their own individual educational trajectory, taking into account their needs, interests, opportunities, and living conditions. It also means the presence of skills and motivation to carry out research work as well as skills of searching for and selecting adequate information from all inexhaustible variety of its sources. This fact also be mentioned by Vaganova et al. (2019).

How to achieve this and how to implement the process of turning a student into an active subject of one's educational activities remain as the main questions. In the theory of higher education, as well as among teachers and principals of higher schools, there is a well-established point of view that in order to turn a student into an active subject of one's learning activity, it is necessary to increase proportion of students in the structure of the educational process and also use methods and techniques of active learning. One can agree with this standpoint, but only in part. The point is that students' working alone really helps in increasing the cognitive independence of students to educate the motivational-need sphere, planning skills, and organization of their own learning activities. But this does not happen automatically, only because teachers plan and realize various forms and methods of students' independent work**.**

A true personal inner-directedness in any activity, including learning, takes place in the case when the whole activity (from goal setting to monitoring and evaluating) is carried out by students. Meanwhile, in the traditional practice of learner-centered education, it is a teacher (and not a student) who sets the goal of independent work, they also encourage students to do it in various ways (most often, this is a threat to receive a failing grade), determines the duration of individual work, and also controls and estimates its results. In other words, the teacher manages the independent work of students at almost all its stages, except the actual process of completion assignment. This is also one of the essential drawbacks of the approach to the organization of independent work (Kourea et al. 2019).

With this understanding of the role and the place of the students' independent work, no matter how much its volume and specific weight in the system of training is increased, it is unlikely that students will become true subjects of learning. From this, it follows that students can become a true subject of learning activity when they manage their own learning activity, that is when self-directedness of learning activity takes place (Abasov 2007). It should be borne in mind that when organizing the independent work of students, it is necessary to focus not so much on the development of subject knowledge and skills as on the development of their skills to learn as one of the key competencies of a modern person, regardless of the level and direction of education**.**

As an activity performed by students under the indirect supervision of the teacher, independent work structurally represents the interconnection of organizational, methodological, and regulatory components. An organizational component implies the preparation of teaching aids for independent work of students, containing seminar plans, topics of essays, and research projects, tests, as well as situation-oriented learning activities and situations. A methodological component also includes the development of activities for students to work independently during lectures, seminars, and workshops, and to prepare for tests and exams. A regulatory component is thus focused on the use of techniques and methods aimed at motivated involvement of students in the performance of tasks for independent work as well as the development of their creative potential.

If students' independent work is used as a form of educational organization, it is characterized by external and internal features. External ones include spatial-temporal (that is classroom and extracurricular, virtual, and network), as well as characteristics observed in the activity (that

is; planning, completing assignments without teacher's direct involvement, systematic self-control of progress and results of work performed, as well as its correction and improvement). Internal features refer to needs, motives, and goals as well as cognitive actions of students aimed at achieving a goal without exterior help (Kapustin et al. 2014).

Different forms of independent work of students are singled out. So, for example, according to the training venue, one differentiates extracurricular and classroom independent work. Extracurricular independent work is assigned by teachers but without their direct participation. This includes preparation for seminars, selection and study of special scientific and methodological literature using electronic media, preparation of reports, reference papers, essays; a compilation of an annotated listing, preparation of referee reports on a manual or an article, micro-research, development of presentations, and other visual materials (Vaganova et al. 2019).

Classroom independent work is also carried out within training sessions on instruction and under the direct supervision of teachers. Its types can be encouraging students to ask questions from teachers or fellow students on the topic of the seminar, speaking with an evaluative judgment, test check of students' knowledge, administration of term quiz and express quiz on the topic of the seminar, as well as pair or group work on completing brief assignments.

In terms of the role and the place in the basic educational program, one differentiates independent academic work and research work**.** Academic independent work can be classroom-centered and extracurricular. With regard to research work, it is usually an extracurricular form of independent work aimed at developing students' readiness for projecting and conducting research in the field of education. In the context of a competence-oriented education paradigm, a teacher's position in the process of designing, implementing, and reflecting the results of students' research work also changes. The teacher is already in the role of a mentor and a participant in the independent research work of students. Students' research work as a type of their independent work in modern conditions is also considered as a completed cycle of productive activity, which encompasses three phases of design, implementation, and reflection of the results. Accordingly, it is necessary for students to develop an orientation basis, skills, and abilities for the implementation of all phases and stages of research activities (Sharf 2011).

The idea that independent work should also be built on the training of research activities finds theoretical justification in the work by Strekalova (2014), who substantiated that "when the learning process is transferred into an open information and education environment, students' independent work becomes an information and research activity, the subject of which is large amounts of information, the goal is to acquire new knowledge, the means is modern ICTs, and the peculiarity is the openness of environment and the absence of any restrictions on the material to be studied and knowledge to be advanced in" (Strekalova 2014). At the same time, the students' information and research activity are understood as that based on modern information and computer tools as well as the process of searching, storing, processing, communicating, and producing information; aimed at discovering new knowledge and research methods.

The studies of the theory and practice of organizing students' independent work indicate that the following can be considered as educational conditions for increasing the effectiveness of students' independent study; a clear definition of place, goals and objectives of this form of organization of learning in the structure of teaching; introduction of methods aimed at increasing students' motivation to do independent work (the usefulness of the work performed, intensive training, and business and situation-based classes); thorough preliminary designing of a system of competently-oriented educational tasks that are becoming increasingly complicated by the level of difficulty by teachers, purposeful formation of students' skills and abilities to perform independent work, a combination of different forms, types, and kinds of independent work in a real educational process, taking into account external and internal factors; creation of an information and education environment that provides the possibility of remote interactive access to all didactic resources; and exercise of objective and systematic control of the results of all independent work of students, taking into account the quality and opportune-

ness of their implementation based on the use of a point rating system.

CONCLUSION

Independent work of students in modern conditions has acquired the status of one of the key forms of organization of students' activities aimed at developing readiness of graduates for permanent self-development as an essential condition for successful adaptation in a constantly changing educational, professional, and social environment. The effective realization of the pedagogical potential of students' independent work also involves appropriate use of different types and levels of individual work (that is reproductive, partially research-based, and creative) in the educational process with a dominant organization of productive (project) activities**.**

RECOMMENDATIONS

Future researchers can provide questionnaire data from old teachers/students who experienced different education system and young teachers/ students who are teaching/learning now, in order to reveal modern scientific ideas about content and functions of students' independent work**.**

ACKNOWLEDGMENT

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

REFERENCES

Abasov Z 2007. Planning and organization of independent work of students. *Vestnik nizhegorodskogo universiteta im. NI Lobachevskogo,* 2(1): 61-67.

Abeysekera L, Dawson P 2015. Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research & Development*, 34(1): 1-14.

Alshumaimeri Y 2011. The effects of wikis on foreign language students writing performance. *Procedia-social and Behavioral Sciences*, 28: 755-763.

Alm S, Låftman SB, Sandahl J, Modin B 2019. School effectiveness and students' future orientation: A multilevel analysis of upper secondary schools in Stockholm, Sweden. *Journal of Adolescence*, 70: 62-73.

Ball L, Pollard E, Stanley N 2010. *Creative Graduates' Creative Futures.* China: CGCF Higher Education.

Hashim J 2008. Competencies acquisition through self-directed learning among Malaysian managers. *Journal of Workplace Learning*, 20(4): 259-271.

Kapustin I, Grinchenko V, Kapustina E 2014. Organization of independent work of students in a higher educational institution. *Modern European Researches*, 4: 17-20.

Kourea L, Konrad M, Kazolia T 2019. Effects of a guided-notes intervention program on the quiz and note-taking Greek History performance of high school students with learning difficulties in Cyprus. *Education and Treatment of Children*, 42(1): 47-71.

Kravchenko EV, Galustyan OV, Kovtunenko LV, Kolosova LA 2018. Pedagogical practice of students. *Revista Espacios*, 39(17): 25-39.

Levering B 2002. Concept analysis as empirical method. *International Journal of Qualitative Methods*, 1(1): 35-48.

Manyika J, Lund S, Bughin J, Robinson K, Mischke J, Mahajan D 2016. Independent work: Choice, necessity, and the gig economy. *McKinsey Global Institute*, 11: 1-16.

Matyushkin AM 1983. The psychological structure, dynamics, and development of cognitive activity. *Soviet Psychology*, 21(4): 91-115.

Osipov PN 2013. Training Competitive Specialists as the Priority of Modern Education. In: *2013 International Conference on Interactive Collaborative Learning (ICL)*, Kazan, Russia, 25 to 27 September 2013, pp. 251-254.

Pidkasisty PI 1980. *Independent Cognitive Activity of Students in Learning: Theoretical and Experimental Study*. Moscow: Pedagogy.

Pilat LP, Solomintseva OV, Shevchenko EM, Svintorzhitskaja IA, Ermakova LI 2014. Factors affecting the foreign language teaching quality for the students of the Russian nonlinguistic higher educational institutions. *Life Science Journal*, 11(11s): 34-38.

Reed DK, Rimel H, Hallett A 2016. Note-taking interventions for college students: A synthesis and meta-analysis of the literature. *Journal of Research on Educational Effectiveness*, 9(3): 307-333.

Rubinstein D, Simon B 2013. *The Evolution of the Comprehensive School: 1926-1972*. UK: Routledge.

Sharf IV 2011. Realization of students' independent work in the competency model. *Higher Education in Russia*, 6: 98-103 (In Russian).

Shurygin VY, Krasnova LA 2016. Electronic learning courses as a means to activate students' independent work in studying physics. *International Journal of Environmental and Science Education*, 11(8): 1743-1751.

Strekalova NB 2014. Independent work of students in modern educational information environments. *Informatics and Education*, 9: 45-48 (In Russian).

Ting KM, Witten IH 1997. Stacked Generalization: When Does It Work? *Working Paper* 97/03. Hamilton, New Zealand: University of Waikato, Department of Computer Science.

Vaganova OI, Odarich IN, Popkova AA, Smirnova ZV, Lebedeva AA 2019. Independent work of students in professional educational institutions. *Amazonia Investiga*, 8(22): 295-304.

Paper received for publication in October, 2019
Paper accepted for publication in December, 2019