### 1. Introduction

In fact the significance of independent study activities for the personal and professional development of students is indisputable. The review of the primary sources and the authors' own experience has been convinced that the existing system of students' independent study activities completely doesn't satisfy the trends of modernization of the national higher pedagogical education. There is still a contradiction between the high priority level of the holistic formation of a socially active, independent and creative self-realized specialist in a higher education institution and the actual role and importance of students' independent study activities.

Scientists and pedagoguespractitioners emphasize the need to create a number of terms in the educational process for solving these problems [1]. As it was shown by research [2, 3], such terms should take into account the logic and systemic organization of students' independent study activities to rely on its specifics, character and forms of its organization, to consider the actors' positions of lecturers and students, to orientate on material and technical capabilities and used technologies.

In our researches, we consider independent study activity as a logical continuation of educational work, which embodies the educational and cognitive minimum that ensures the mastery of students, autonomously determined level of professional competence [4]. At the same time, we give preference rather to self-management of students' independent study activities than strict control over its organization and implementation.

As H. Fayol emphasized, the management means to direct the process towards the goal and at the same time seeks to make the best use of its resources; in contrast, control signifies to oversee everything happen in accordance with established rules and committed orders [5, p. 18]. What's more the main goal of management is to ensure stability, optimality of the system or activity, to transfer it to a higher quality level [6, p. 91].

Pedagogical management is distinguished by its objects and character, caused by the specifics of pedagogical activity that was found out by G. Yelnikova, L. Karamushka, Y. Konarzhevsky [7, 8]). As to pedagogical systems, which includes the students' independent study activities, the management means

# THE THEORY AND PRACTICE OF MANAGING STUDENTS' INDEPENDENT STUDY ACTIVITIES VIA THE MODERN INFORMATION TECHNOLOGIES

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Abstract: Theoretical foundations and existent practical experience in providing scientifically grounded management of students' independent study activities with the use of the latest information technologies have been studied in the research. The issues of organization of various types of management of students' independent study activities have been considered. It has been reported, that there are direct, indirect, and dynamic types of management. The possibilities of ICTs in the implementation of each type of management the students' independent study activities have been shown. It has been taken into account, that the introduction of computer-oriented means of co-management and co-organization into the educational process reflects the realization student-centered concept of learning. There has been emphasized the need to use both direct and indirect types of management, which will make it possible for students to move to the position of an actor of independent study activity and capable of exercising self-government. The authors have been paid special attention to the means of developing the students' personality and forming their motivational readiness for independent study activities and self-education.

It has been shown, that such necessary means include the following: to promote the development of students' self-organization, self-actualization, as well as their socialization, to encourage self-assessment and reflection throughout the process of organizing independent study activities; to personalize independent study activities, to offer personally and professionally meaningful learning tasks with clearly defined and understandable goals for a student, and to ensure their gradual complication; to create informative feedback; to strengthen students' motivation.

**Keywords**: students' independent study activity, didactic terms, direct and indirect types of management, self- management.

not suppressing or imposing the course to a process that contradicts its nature, but, conversely, it maximizing the particular qualities of this process, coordinating each impact with logic of ones. This fact was established by N. Kapustin, T. Shamova, N. Talyzina, P. Tretyakov [9]. The management is a continuous sequence of actions in condition of constant changes of the internal and external environment that is being carried out by lecturers and in that way they provided a purposeful influence on the student's trait personality. As a result of scientifically grounded management, mechanisms of self-management are being created and developed as O. Marmaza considers [6].

At the same time, the introduction of a new structure, the newest ICT and tools and whatever in the educational process involves the search of means for modernization of management and self-management by students' independent study activities.

The aim of the research is to study theoretical foundations and present practical experience in providing scientifically grounded management of students' independent study activities with the use of the latest information technologies.

## 2. Materials and Methods

In order to determine the peculiarities of the organization of students' independent study activities and means, utilized for formation of its actors, someone should use a number of methods. Ones are the *theoretical methods* (retrospective, comparative and system analysis, generalization, classification, extra-

polation of theoretical and research data, modeling), others – *empirical methods* (participant systematic observation, expert evaluation, self-evaluation, interviews, talk, questioning of lecturers and students, method of problem issues' position).

Methods and diagnostics' procedures should cover the content and system of students' independent study activities, generalize approaches to their organization, reflect the attitude of students towards learning and means of self-assimilation of knowledge, the degree of their motivation in timely and systematic fulfillment of educational tasks, the desire for self-development and self-improvement through the scientific activities, interest to communication with educational purpose and the use of ICT in this process.

### 3. Results

We proceed from the fact that the organization of students' independent study activities is the process of implementing a system of ordered and coordinated actions of a lecturer and student aiming at the implementation of educational goals via ICTs. It implies the creation of a system of all elements of the organizational and psychological structure of study activities. We consider the external side of the organization of independent study activity as a phased implementation of the objectives, set by the actors of the organization in accordance with the academic calendar.

At the same time, the internal psychological basis of this process is the actor's actions toward the transformation of teaching material, which are mediated by his/her motives, needs, goals, experiences, formed competences, available knowledge [1].

Extrapolating the theory of management to pedagogical systems we consider it expedient to implement at each stage of the study a *holistic management cycle of students' independent study activities*, namely: from setting goals to its achievement. This cycle can be specified as follows:

- 1) *analysis* establishment of the source level of independent study activities organization;
- 2) the goal-setting definition of the goals and objectives of independent learning activities in accordance with the type of activity that students are forming;
- 3) forecasting of results, ways of their achievement, critical success factors (means, norm-time spends, regulations in using ICTs);
- 4) *planning* creating a management project together with the means of feedback between a lecturer and student;
- 5) in the end it is *a motivation* of students to the coordination of their own actions, the distribution of resources, the establishment of feedback, the record of results to implement the planned management project;
- 6) *self-control* by a student *and control* by a lecturer for the purpose to compare the forecast and the results of independent study activities;
- 7) correction and regulation. This cycle should be pursued until the goals of students' independent study are achieved or the duration of the process exceeds the timeframe [6, p. 105].

An illustration of this process is the technological cycle of organization of independent study activities:

FINPUT – initial diagnostics – introductory module (putting forward requirements for results, formation of the motivational background and the normative basis of students' independent study activities with the use of ICTs) – autonomous module (solving the system of educational tasks by students (solving the system of educational tasks by students under the indirect lecturer's supervision) – final module (assessment, self-assessment, correction) – EXIT=

Based on works of T. Noskova, T. Pavlova, S. Kulikova, O. Yakovleva [10, p. 92]), we distinguish three main modes of management of students' independent study activities. There are direct and indirect types of management, and apart from that there is self-management.

Direct management with the use of ICTs takes place through techno-mediated interaction in the synchronous regime (chat, videoconference, webinar, workshop, web-forum, e-pager, IP-telephony) or asynchronous one (correspondence, forum, bulletin board, blogs, delayed teleconferences, e-lectures-and-consultation). Thanks to direct management the goals of independent study activities are being communicated; recommended sequence of this activity is being created and in the end ones are being regulated, rationed, and planned and forecasted [10, p. 92].

In spite of its apparent simplicity, this type of management requires the development of special techniques, significant technical support, as well as a certain level of students' mastery in the information and organizational skills area.

Indirect management of students' independent study activities can be laid into the ICTs structure (for example, the Learning Content Management System), and implemented via informational messages, prepared a lecturer – prescriptions, algorithms, manuals, tutorials, methodical instructions, recommendations, context guides, template forms, workbooks and whatever. Under such a management, a student has the opportunity to choose from the existing diversity of facilities those that most meet his/her needs in the organization of independent study activities [10, p. 92].

Dynamic management is a kind of indirect one; it is carried out via the interaction of a student with electronic resources, ICTs, ICT and tools. Due to this fact, the measure of assistance is determined by both a student and computer-oriented technologies and a lecturer, who offers such ICTs for the organization of independent study activities [10, p. 92]. Finally, self-management means that a student sets goals, ICTs, and other didactic supply of organizing independent learning activities.

The scientific organization of students' independent study activities suggests the presence of two *actors* – a lecturer and student, and its effectiveness and successfulness are directly related to the awareness of their identified actor's position.

The actor's position of a lecturer is associated by researchers [1, 8] with the importance level of creative cooperation with students for him/her in the organization and management of independent study activities; with the type of communication and pedagogical interaction with students; with the main, accepted by a lecturer, methods of didactic influence on students; with features of the lecturer's orientation on him/herself [8, p. 29]. At the above mentioned actor's position, the style of lecturer's management of students' independent study activity – authoritarian, liberal or democratic – is being introduced, as well as the model of its organization is being realized; they are whether managed or unmanaged (spontaneously organized) or self-organized process.

We emphasize that co-management, co-organization reflect the domination of the student-centered concept of learning, which changes the actor's position of a lecturer and student in the educational process. In this concept a lecturer is assigned the role of mentor, organizer, facilitator, who indirectly participates in the organization of students' independent activity by the way of didactic terms that he/she purposefully created. A lecturer is guided by the students' motives, needs, opportunities and subjective experience. Last but not least is the system of distribution of powers, designed by a lecturer, in the organization of independent study activities it must correspond to the student's operations. We means the following: due to the established principles of organization, in a higher education institution such a didactic system is created, in which a student gradually takes a credit for an action from outside and becomes the actor of organization of independent study activities. A student independently performs all the parts of the study activity, "from the learning action to the self-control and self-assessment" [3, p. 22], realizing ones right to free choice of conditions, means and technologies. At the same time, ICTs take on a significant part of managerial functions, since they add to this process flexibility, variability, dynamism, algorithmicity, they create the recommended sequence of students' learning actions; provide a positive emotional background to their cognitive activity.

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Growing of the actor of management of independent study activities involves the formation of the students' ability to effectively perform all types and forms of this activity, with knowledge of the case to incarnate the full management cycle. This actor's position will become possible if you do the following:

- Facilitate the development of students' self-organization to provide them with as much autonomy as it is feasible in choosing their own educational trajectory and means of mastering it using ICTs;
- Personalize independent study activities via variety options of educational tasks, computer-based tools for their decision, and sources of information;
- Offer for a student personally and professionally meaningful educational tasks with clearly defined and understandable goals;
- Encourage students to self-assessment and reflection in the process of organizing their own study activities;
- Promote self-actualization in the choice of forms, types of independent study activities using ICTs;
- Provide gradual complication, consistent progression from reproductive, productive to creative-transformative types of independent study activity;
- Assist students in socializing through the organization of cooperative self-study activities, with clear goals, roles and responsibilities;
  - Create informative feedback.

Intensify students' learning motivation via the use of ICTs and tools, by means of ranking, gamification, positive reinforcement, presentation their achievements into social networks.

# 4. Discussion

In spite of the numerous scientific researches in the context of European integration and harmonization of educational structures, increasing the role and importance of students' independent study activities, the current educational situation is characterized by a significant contradiction. On the one hand, the organization and management of students' study activities

are mainly carried out by external actors – lecturers, higher education institutions. On the other hand, the formation of students' professional and personally important qualities is mainly the result of their own, internal development. We fully and inclusively agree with the conclusions of I. Vakulenko [11], G. Yelnikova, O. Malikhin, and T. Shamova that the conflict resolution requires recognition the equality of rights of students and lecturers as actors of organization of independent study activities.

Consequently, we arrive at a conclusion that precisely on the basis of purposeful management it is possible to transfer the organization of students' independent study activities to a qualitatively different level. Inclusion and subordination of the organization of students' independent study activities to the system of their management with the use of ICTs is predetermined, as quite rightly noted T. Noskova [10], by the following: students as actors of independent study activities must self -consistently identify their goals by virtue of knowledge about his/her own advantages, cognitive styles and disadvantages; student have to make decisions about ways to achieve them, to be able to create a management project and to realize its implementation, choice of means, tracing the process and result, make corrections, and that the most importantly – form the abilities to take responsibility for the course and outcome of own study activities.

When all's said and done, it should be noted that the wide-spread introduction ICTs into the organization of students' independent study activities, observing in nowadays, does not at all mean an automatic increase in the efficiency of this process and its transfer to the self-government mode. Still need to answer the questions about the extent and appropriateness of the ICTs' use in certain parts of the management cycle. It is also necessary to solve the problems of rationing the labor of students and lecturers, determining the degree of labor-intensiveness of educational tasks with using ICTs, building a fundamentally new logic and system of independent study activities in the information and educational environment of a higher educational institution.

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