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ПЕДАГОГИКА И МЕТОДИКА ОБРАЗОВАНИЯ

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DEVELOPMENT OF STUDENTS' EDUCATIONAL INDEPENDENCE

Abstract

The modern educational environment necessitates the development of students' educational autonomy as a critical factor in their professional growth. The study aims to theoretically justify and experimentally verify the stages of developing educational autonomy. The main tasks included exploring existing approaches, designing a program for autonomy development, and evaluating its effectiveness. The research employed theoretical and empirical methods such as literature analysis, pedagogical observation, and diagnostic surveys. The findings confirmed the significance of a step-by-step approach, which enhanced students' motivation, self-organization, and reflection levels. The developed program can be adapted for use in educational institutions and promotes successful professional preparation. The study contributes to creating a methodology focused on developing educational autonomy, thus broadening the possibilities for pedagogical practice.

Key words: educational independence, professional development, phased approach, student motivation, self-organization, reflection, pedagogical practice.

Introduction

The modern educational environment requires new approaches to student training, focused on developing their independence and responsibility for learning outcomes. The issue of forming educational independence becomes especially relevant in the context of accelerating changes in professional requirements and the need to acquire new competencies. As researchers (Babansky, Lerner, Shchukina) note, educational independence is an integral quality that combines self-organisation skills, reflection, and the ability to independently solve professional tasks.

The problem lies in the fact that, despite a significant amount of research in this field, universal approaches to the formation of educational independence, which take into account the diversity of motivational, cognitive, and organisational factors, are still lacking. Moreover, most students demonstrate a low level of motivation for independent educational activities, which negatively affects their professional development. Thus, the object of the present research is the process of forming educational independence in students, while the subject is the methods and stages of its development in the educational environment.

The goal of the research is to theoretically justify and experimentally test the stages of forming educational independence. To achieve this goal, the following tasks were set:

1. To study existing approaches to the formation of educational independence.
2. To develop a programme aimed at developing students' educational independence.
3. To assess the practical effectiveness of the proposed programme.

The hypothesis of the research is that a phased approach to forming educational independence, which includes elements of both collaborative and individual work, will significantly increase the level of self-organisation and reflection in students.

The practical significance of the research lies in the possibility of using the developed methods in educational institutions to enhance the level of students' independence.

Materials and methods

This section describes the research methodology. A combination of theoretical and empirical methods was used, including literature analysis, pedagogical observation, diagnostic surveys, and experimental work. The theoretical part of the study was based on the principles of the personal-activity approach, which views educational independence as an integrative quality of the individual. The experimental work was carried out in three stages.

Main provisions

The analysis of scientific works showed that the most commonly used levels are low, medium, and high. However, as A.M. Novikov argues, such a division of criteria into levels is not entirely justified, since the experimenter arbitrarily evaluates and assigns students to a particular level of the studied attribute [1]. Therefore, it becomes necessary to apply a more qualitative level-based assessment of the criteria.

One of the mostpread qualitative approaches to level-based evaluation of educational-cognitive activities, with a focus on students' independence and the nature of their activities, is the classification proposed by Yu.K. Babansky, I.Ya. Babansky, I.Ya. Lerner, G.I. Shchukina and several other authors [2–5]. According to this classification, the following levels are identified: reproductive, explanatory-illustrative, problem-based, partially-searching, and searching. D.B. Bogoyavlensky proposes his own system of levels of intellectual activity: reproductive, heuristic, and creative [6].

Results and discussion

In our study, the foundation of educational independence (EI) is not only cognitive-educational activity but also educational activity. Therefore, the levels of EI development will reflect the changes in the nature of students' educational activities as they progress in the development of their EI. Based on this, we identify the following levels:

◆ Reproductive (from French «reproductive» < Latin «reprōdūcere» – to reproduce [7]). At this level, students predominantly exhibit a reproductive character in their educational activity (EA), meaning that EA is most often carried out by imitation without reflecting on their own actions.

◆ Reconstructive (from Latin «re» - again and Latin «construction» – construction [7], literally rebuilding or constructing anew). This level suggests that the student reconstructs their EA based on personal experience and reorganises it according to their own meanings.

◆ Creative (from the words «creator», «to create», «to make» [8]). The presence of this level indicates that at all stages of EA, the student independently designs, creates, and implements their educational activities.

Considering the identified components, criteria, and levels, diagnostic procedures and assessment tools for evaluating the development of students' educational independence were selected. A programme for conducting experimental work was developed (table 1).

Table 1 – Programme of the Experiment on Designing and Implementing the Stages of Developing Students' Educational Independence

Purpose	Objectives	Content of work	Result
Stage I (ascertaining)			
Identify the state of the problem of the development of students' educational independence	- to determine the criteria and indicators of students' educational independence; to specify the forms of diagnostics of the development of students' educational independence	Carrying out the following diagnostics: - L. V. Bayborodova questionnaire to determine the leading motives of activity, - Analysing students' reflective essays; - analysing self-observation diaries, - observation of students' activities during trial sessions, organisational and activity games and case studies, - observation and analysis of students' activities when solving the case study "Teacher as a vocation or profession?". - expert cards for assessing students' cognitive skills and activities during case study sessions	- determination of criteria and indicators of the formation of students' educational independence; - Identification of the dynamics of development of students' educational independence.
Stage II (formative)			
To develop and experimentally test the stages of the formation of students' educational autonomy	- to develop forms of joint and independent activity of students aimed at the formation of educational independence taking into account the organisation of joint activity; - step by step To realise the stages of formation of educational independence of students; - to adjust during the experiment the content of certain forms, methods, techniques of joint and independent work of students.	Defining the main stages of technology and introducing them into practice: 1. The stage of entry into a new activity: - organising introductory classes using case studies on the topic "Teacher - vocation or profession?"; - Reconstruction of school and student experience through description and analysis (essays); - designing and conducting an organisational and activity game "Find a problem and a solution"; - Designing and conducting the organisational and activity game "Self Journalist" (Phase 1); - Conducting trial classes by students in discipline "Pedagogy": initiation by the teacher and students of situations of entry into a new type of activity, preparation and development by students of lesson notes, modelling by them of problem situations that may arise between participants of educational activity, pupils and teachers); - working with a self-observation diary; - holding a special course "Self-organisation of students' educational activity" (once a week, 40 hours a year).	- development of the content of the main forms of joint and independent activity of students; - Creation of author's methods for developing students' educational independence (self-observation diary, organisational and activity games). "Find a problem and a solution", "Self Journalist"); - stage-by-stage implementation of the stages of formation of educational independence of students.

		2. The stage of reconstruction and construction of educational activities: - organisation of trial lessons by students in the discipline "Pedagogy" with their initiation of educational situations "trying out a worked out scheme of remedy"; - conducting trial lessons by students in the discipline "Pedagogy" with the initiation by students of educational situations of "search", "discovery" of knowledge in response to the resolution of their own difficulties"; - further work with the self-observation diary; - conducting Phase 2 of the organisational and action game "Self-Journalist"; - creation of booktreilers. 3. The stage of designing educational activities: - organisation of trial lessons by students on discipline "Pedagogy" with the initiation of educational situations by students "trying out the worked means scheme"; - carrying out trial lessons by students in discipline "Pedagogy" with initiation of students educational situations of "search", "discovery" of knowledge in response to the resolution of their own difficulties"; - conducting trial lessons by students in the discipline "Pedagogy" with students' initiation of educational situations of "transformation", "improvement" of their own OD; - working with a self-observation diary; conducting phase 3 of the organisational-activity game "Self- Journalist".	
		Stage III (summarising)	
To reveal the dynamics of students' educational autonomy formation levels on basis of the developed stages	- diagnose the levels of educational independence of students; - to interpret the results obtained at the establishing and generalising stages of experimental work; - To determine the influence of the developed stages on the formation of students' educational independence	Carrying out the following diagnostics: - methodology for diagnosing students' learning motivation (A.A. Rean and V.A. Yakunin, modified by N.Ts. Badmaeva); - Analysing reflective essays; - analysing self-observation diaries; - observation and analysis of activity in solving educational situations with the subsequent filling in of the expert card of assessment of cognitive skills of students; - observation, analysis of the activity and its fixation with the help of an expert card for evaluating the activity of students during the case study "Visible and Real"; - correlation of initial data using Microsoft Excel software package.	- Identification of the formation of educational independence levels in students at the generalising stage of the experiment; - Interpretation of the dynamics of students' educational autonomy formation levels at the beginning of the DEI and at the end of it; - determination of the influence of the developed stages on the formation of students' educational independence.

Note: Compiled by the authors.

According to this programme, we started to investigate the levels of mastery of educational autonomy of students.

Altai State Pedagogical University (Barnaul) and Shakarim State University of Semey (Kazakhstan) became the base of the research for carrying out experimental work. At the stage of the establishing experiment we involved four academic groups of students of pedagogical orientation. 100 students took part in the diagnostics.

Note: it is usually accepted to define a control group along with the experimental group, which is due to the need to compare the results obtained at the end and at the beginning of the experiment to substantiate the dynamics of development of the phenomenon under study. However, in our study we use a humanitarian approach and adhere to the position of G.N. Prozumentova, who states that "humanitarian research is characterised by comparison with itself" [9]. Hence, the division into control and experimental groups is a sign of non-humanitarian research. In turn, a feature of humanitarian research is "tracing" the changes that occurred in one and the same group over a certain period of time.

In order to identify the levels of mastering the motivational component of educational independence, we used a modified questionnaire by L.V. Bayborodova to identify the leading motive of activity [10], and also analysed reflexive essays.

L.V. Bayborodova's questionnaire presents a list of answers to the question "What attracts you in activity?" and is aimed at determining the motives of joint research activity. We modified the questionnaire, focusing the attention of the researched on educational activity and modifying some answer options in order to find out such motives of educational activity as personal, educational and cognitive and professional. Thus, we attributed:

◆ to personal motives: the desire for self-assertion, prestige;

◆ to educational and cognitive motives: aspiration to search for new knowledge, creativity, independence in educational activities;

◆ to professional motives: aspiration to master professional knowledge, skills and qualities, the need to achieve success in the future professional sphere.

In turn, we compared the proposed groups of motives with the levels of development of the motivational component of educational independence. Thus, the prevalence of personal motives is manifested in students with a reproductive level of mastering educational independence, because in their educational activity they are oriented to the satisfaction of personal motives and are not interested in independent educational activity.

Students with the predominance of learning and cognitive motives are characterised by the reconstructive level of mastering educational independence: they have dominant learning and cognitive motives, but only with personal interest and often they are not related to their further professional activity.

The creative level of development of the motivational component of educational independence is characteristic for students with dominating professional motives, as students of this group are already oriented to professional activity.

As a result of the conducted diagnostics and comparison of averaged data, the indicators were obtained, which are presented in figure 1.

Thus, all interviewees have prevalence of personal motives over educational and cognitive and professional motives, with the least number of choices (8%) in the responses related to the professional sphere. It should be noted that the number of students attracted to OD by the possibility of mastering the skills of independent work with information, greater independence and creativity in performing tasks than at school is minimal. When ranking all the students' answers, the leading option is "Communication with interesting people" (22%), followed by "Getting positive grades" (20%) and in the third place is the choice of "Standing out among others" (11%). The last places are occupied by the following answers: "Greater independence and creativity in performing tasks than at school" (2%), "Creativity" (2%), "Opportunity to use my abilities and skills in my chosen profession" (1%).

"Opportunity to answer interesting questions related to the sphere of future professional activity" (1%), "Opportunity to become the best in their future profession" (1%). Low indicators were also recorded in the item "Acquisition of knowledge necessary for future profession" (4%).
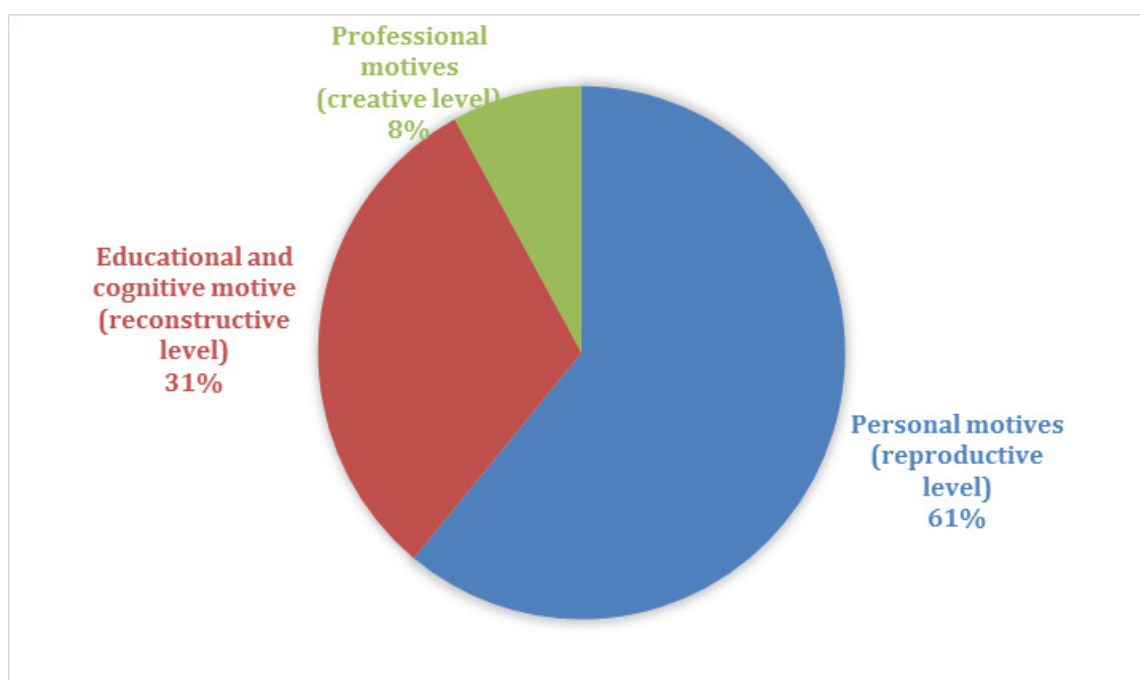
Figure 1 – General results of expression of leading motives of educational activity of students

Note: Compiled by the authors.

All the above-mentioned points to the low level of motivation to independent educational activity: most students are not interested in mastering the skills of independent and creative work, preferring to them their personal motives. The external side of learning - getting positive marks - comes to the fore, while the real goal - mastering a profession and acquiring relevant professional qualities and competences - comes last. In general, the questionnaire revealed the predominance of the reproductive level of the motivational component in all respondents (58%).

Conclusion

The conducted research confirmed the hypothesis about the importance of a step-by-step approach to the formation of educational independence. The developed programme has shown its effectiveness in increasing the level of motivation, self-organisation and reflection of students. The results can be used to adapt educational programmes in other universities and contribute to the creation of conditions for the successful professional development of students.

Practical application of the study is possible in the system of teacher training, as well as in other professional spheres where independent learning and self-organisation skills are important.

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РАЗВИТИЕ ОБРАЗОВАТЕЛЬНОЙ
САМОСТОЯТЕЛЬНОСТИ СТУДЕНТОВ

Аннотация
Современная образовательная среда требует формирования образовательной самостоятельности студентов как ключевого фактора их профессионального развития. Цель исследования – теоретическое обоснование и экспериментальная проверка этапов формирования образовательной самостоятельности. Основными задачами стали изучение существующих подходов, разработка программы развития самостоятельности и оценка её эффективности. В работе использованы теоретические и эмпирические методы, включая анализ литературы, педагогическое наблюдение и диагностические опросы. Результаты исследования подтвердили значимость поэтапного подхода, который позволил повысить уровень мотивации, самоорганизации и рефлексии студентов. Разработанная программа может быть адаптирована для применения в образовательных учреждениях и способствует успешной профессиональной подготовке. Вклад исследования состоит в создании методики, направленной на развитие образовательной самостоятельности, что расширяет возможности педагогической практики.

Ключевые слова: образовательная самостоятельность, профессиональное развитие, поэтапный подход, мотивация студентов, самоорганизация, рефлексия, педагогическая практика.

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СТУДЕНТТЕРДІҢ БІЛІМ АЛУДАҒЫ ДЕРБЕСТІГІН ДАМЫТУ

Аңдатпа

Қазіргі заманғы білім беру ортасы студенттердің кәсіби дамуының маңызды факторы ретінде білім беру дербестігін қалыптастыруды талап етеді. Зерттеудің мақсаты – білім беру дербестігін қалыптастыру кезеңдерін теориялық негіздеу және эксперименттік тексеру. Негізгі міндеттерге бар әдістерді зерделеу, дербестікті дамыту бағдарламасын әзірлеу және оның тиімділігін бағалау кірді. Жұмыста әдебиеттерді талдау, педагогикалық бақылау және диагностикалық сауалнамалар сияқты теориялық және эмпирикалық әдістер қолданылды. Зерттеу нәтижелері кезең-кезеңімен жүргізілетін тәсілдің маңыздылығын растады, бұл студенттердің мотивациясын, өзін-өзі ұйымдастыруын және рефлексиясын арттыруға мүмкіндік берді. Дайындалған бағдарлама білім беру мекемелерінде қолдануға бейімделіп, студенттердің кәсіби дайын-дығының табысты өтуіне ықпал етеді. Зерттеудің үлесі – білім беру дербестігін дамытуға бағытталған әдістеме жасау, бұл педагогикалық тәжірибені кеңейтуге мүмкіндік береді.

Тірек сөздер: білім алудағы дербестік, кәсіби даму, кезең-кезеңмен жүзеге асыру, студенттердің мотивациясы, өзін-өзі ұйымдастыру, рефлексия, педагогикалық практика.