A STUDY ON STUDENTS’ MOTIVATION FOR SELF-EDUCATION

Abstract. The article highlighted the importance of the problem of students’ motivation for self-education in Ukraine.

The authors recommend adhering to the approach to the study of motivational activity, which distinguishes between three aspects of cognitive motivation: intrinsic motivation (IM), extrinsic positive motivation (EPM) and extrinsic negative motivation (ENM). It has been observed that the following ratio between the three types of motivation is most favourable for high performance: IM>EPM>ENM.

The special questionnaire was developed to study the motives of secondary school and college students for self-education. It has been discovered that pupils and students studying in specialized educational institutions have a higher level of interest in self-education than students of regular schools. It can be explained by the professional orientation of the educational activities that pupils and students are engaged in at the above-mentioned institutions.

The authors of the study found that students have limited internal cognitive motivation, which can be explained by the loss of interest in the learning process in general by a significant number of young people, as well as by the lack of teachers’ and lecturers’ targeted activities to form the motivational sphere of students’ self-education.

The questionnaire survey, conducted among students, revealed that when implementing self-directed study through computer-based activity, the most favourable for effective performance is the ratio between three types of motivation: IM>EPM>ENM.

The article suggests using information and communication technologies as a motivating factor for the study of diverse academic subjects.
Keywords: self-education skills and abilities, information and communication technologies, motivation for self-education, intrinsic motivation, colleges, secondary schools.

Семакова Тетяна Олексіївна кандидат педагогічних наук, доцент, доцент Херсонського політехнічного фахового коледжу, Національний університет «Одеська політехніка», вул. Небесної сотні, 23, м. Херсон, 73003, https://orcid.org/0000-0003-1457-5983

Бойко Любов Михайлівна кандидат філологічних наук, доцент, доцент кафедри публічного управління, права і гуманітарних наук, Херсонський державний аграрно-економічний університет, https://orcid.org/0000-0002-8045-3864

ДОСЛІДЖЕННЯ МОТИВАЦІЇ САМООСВІТНЬОЇ ДІЯЛЬНОСТІ СТУДЕНТІВ

Анотація. У статті зазначається актуальність проблеми мотивації самоосвітньої діяльності учнівської молоді в Україні.

Авторами рекомендовано дотримуватися підходу у вивченні мотиваційної діяльності, за якого можна розрізняти три аспекти пізнавальної мотивації: внутрішню мотивацію (ВМ), зовнішню позитивну (ЗПМ) та зовнішню негативну (ЗНМ) мотивації. З’ясовано, що для високої ефективності діяльності найбільш сприятливе наступне співвідношення між згаданими трьома видами мотивації: ВМ>ЗПМ>ЗНМ.

За допомогою анкетування було проведене вивчення мотивів самоосвітньої діяльності учнів загальноосвітніх шкіл та студентів коледжів. З’ясовано, що учні й студенти, які навчаються у профільованих навчальних закладах, мають більш високий рівень зацікавленості в самоосвіті, ніж учні звичайних класів. Пояснюється це професійною спрямованістю навчальної діяльності, якою займаються учні і студенти у вищезазначених закладах.

Авторами дослідження виявлено невисокий рівень розвитку внутрішньої пізнавальної мотивації в учнівській молоді, який пояснюється втратою значною частиною молоді інтересу до процесу навчання взагалі, а також у недостатній цілеспрямованій діяльності вчителів та викладачів з формування мотиваційної сфери самоосвіти учнівської молоді.

Анкетування, проведене серед учнівської молоді, дозволило встановити, що при реалізації самоосвітньої діяльності шляхом використання роботи на комп’ютери має місце найбільш сприятливе для ефективної діяльності співвідношення між трьома видами мотивації: ВМ > ЗПМ > ЗНМ. У статті запропоновано використовувати як мотивуючий фактор інформаційно-комунікаційні технології при вивченні різних дисциплін.
Formulation and substantiation of the problem relevance. The education system of Ukraine, due to the essential processes occurring in the present-day society, needs to update the content of physics teaching technologies and change the methodological orientation of physical education aimed at the student's personality, creating conditions for each pupil and student to attain the optimal efficiency in knowledge, skills and abilities.

Observations of the educational process in educational institutions show that many pupils and students are passive in class and have little motivation to learn: most teachers use authoritarian teaching methods that do not provide the child with freedom to choose educational activities. It is happening at a time when our society needs highly educated and proactive young people who can put our country on a par with the developed countries.

That is why the modern education system faces a challenge to find the ways to develop students' motivation for learning and developing their skills and abilities to self-education.

We are witnessing rapid advancements in computer technology and software. Elements of information technology have the potential to solve the mentioned problems, as they provide young people with access to non-traditional sources of information, increase the efficiency of independent work, enable them with the new opportunities for creativity, and allow for the implementation of fundamentally new learning forms and methods.

In consideration of aforementioned, we believe that the problem of forming self-educational skills and abilities in students is relevant and closely related to the development of cognitive motivation. At the same time, we consider the ability to use the means of modern information and communication technologies (ICT) as one of the components of self-educational skills.

Accordingly, the purpose of our study is to analyze the motivation for self-education of secondary school and college students and to consider the computer proficiency as one of the ways to develop the motivation for self-directed learning.

Analysis of recent research and publications. In the course of this study, we analyzed the works of psychologists [8-10], pedagogical and methodological literature [1-7, 11, 12]. I. Dubrovina [5] considers the methodological aspect of...

A group of scientists [12] in their study paid attention to determining the level of motivation for self-education and self-development of future specialists in the sphere of physical culture and sports.

As a result, we have found that scientists and teachers pay considerable attention to the problem of motivation for self-education. However, in the context of studying specific motives that should stimulate the cognitive motivation of students, especially college students, it is not sufficiently disclosed and requires scientific research. In this regard, the following tasks were set:

1) to analyze the state of development of school and college students’ motivation for self-education;
2) to determine the role of computer work as a factor contributing to the development of self-education motivation.

**Material and results of the study.** The solution of the first task required determining the peculiarities of motivation for self-education. Since the effectiveness of any activity (and self-education in particular) depends on the approach of the subjects to its implementation, i.e. depends on the activity motivation, we consider it appropriate to focus on the study of the coverage of various aspects of this complex formation in the psychological and pedagogical literature.

Following the opinion of the researchers [9], we believe that the motive is the result of motivation and is an internal psychological activity that contributes to the organization and planning of activities and their implementation. The teacher, organizing purposeful work on the formation of self-educational skills and abilities, should try to form students' beliefs and positive attitudes that motivate them to direct their efforts towards self-education.

In our study, we rely on the approach to studying the structure of motivational activity (including self-education) proposed by the Romanian sociologist C. Zamfir [11], who identifies three aspects of motivation: intrinsic motivation (IM), extrinsic positive (EP) and extrinsic negative (EN) motivation. We share the scientist’s opinion that the following ratio between these three types of motivation is most favorable for optimal performance: IM>EPM>ENM.
In the interests of research, several years ago we conducted a study of the secondary school and college students’ motives for self-education, the results of which reveal the reasons for the attitude of contemporary youth to self-education.

At the first stage of the confirmatory experiment, students of Kherson Polytechnic College, pupils of Kherson Secondary School No. 24 and Kherson Physical and Technical Lyceum (PTL) were involved. The survey was conducted on an array of first- and fourth-year students and pupils of 9-11 grades, totaling 125 people. We developed a questionnaire that included the following question: "What reasons motivate you to engage in self-education?" The questionnaire had 18 possible answers to this question, which can be grouped into three categories. The first six questions identified intrinsic motives, the second six questions identified extrinsic positive motives, and the last six questions identified extrinsic negative motives for self-education.

The data analysis from the survey allowed us to identify which type of motivation serves as the driving force for contemporary youth in their self-education activities. The information obtained is presented in Table 1.

These results can be considered indicative, but they show that the IM of self-educational activity in pupils and students, both at the age of 15-17 and 18-19, is only slightly ahead of the EPM.

The inner drive and desire to self-improvement play the same role for modern youth as future material incentives or career growth that can be obtained through self-education.

Table 1.

<table>
<thead>
<tr>
<th>Type of Motivation</th>
<th>Number of respondents who chose this type of motivation for self-education (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High school students</td>
</tr>
<tr>
<td>IM</td>
<td>45</td>
</tr>
<tr>
<td>EPM</td>
<td>41</td>
</tr>
<tr>
<td>ENM</td>
<td>14</td>
</tr>
</tbody>
</table>

We see the reason for this distribution of students in the socio-economic state of a country and the change in priorities in modern society, where most people are in a situation of survival and need financial support.

The principal reason that makes pupils and students engage in self-education is the need to obtain a profession, according to 97% of respondents. The need for additional knowledge drives 94% of students. Interestingly, some graduate students
(29%) and graduate pupils (13%) do not recognize this need. In our opinion, this can be explained by the fact that the most respondents still associate this need with the need to study at an educational institution rather than with the goal of self-improvement. It is also evidenced by the 83% of votes that are driven by the desire to obtain a diploma or education certificate.

The fact that self-education affects career growth is believed by 89%. This is realized primarily by graduates (94% - 96%), for whom professional activity is imminent and employment issues are relevant for students of this age, and the 9th grade students (96%), who, in our opinion, are still quite influenced by their parents' example.

The desire for self-improvement and future financial incentives were chosen by 88%. Among the groups studied, the first motive was chosen as a priority by students of the physics and mathematics class (95%), and the second motive was chosen by students from the class without a specific study profile (100%). In our opinion, it demonstrates the dependence between a student’s intellectual development and the motivation of his or her activities, including self-education.

Among the youth surveyed, 86% understand the social benefits of self-education, and 82% chose a sense of responsibility as the driving force behind self-education.

The reason for this choice is the positive influence of public opinion on the feelings of our country's citizens, which is felt especially in the context of Ukraine's independence.

Respectively, only 73% of pupils and 62% of students chose curiosity and enjoyment of self-study as the motivating reasons to self-education. The analysis of the results demonstrates that the highest curiosity is shown by the 9th grade PTL students (96%) and 10th physics and mathematics grade students (95%). The distribution of answers about the satisfaction of self-education shows a decrease in the number of respondents in the final grades of secondary schools with developed intrinsic motives (26%) compared to the number of students of the physics and mathematics class (84%) and PTL (70%) who preferred intrinsic motivation for self-education.

The study results give us the right to assert that pupils and students studying in specialized education institutions have a higher level of interest in self-education than students in regular classes. In our opinion, it can be explained by the professional orientation of the educational activities of the pupils and students at the mentioned institutions.

On the whole, the low level of curiosity and enjoyment of self-study can be explained by the loss of interest in the learning process by a significant number of young people in general, as well as by the lack of targeted activities of teachers and lecturers to form the motivational sphere of students’ self-education.
Therefore, we believe it is necessary to include measures to develop the motivational sphere of self-education of pupils and students in the study of various disciplines in the system of teachers' work.

One of such measures may be the use of modern information and communication technologies (ICT) and specifically – computer technology.

ICTs are a set of fundamentally new means and methods of data processing that ensure the purposeful creation, transmission, storage and presentation of an information product (data, ideas, knowledge) with the minimal losses and in accordance with the laws of the social environment where this technology is used.

The psychological and pedagogical aspects of ICT use in the educational process have been studied by many scholars (O. M. Arestova, O. E. Voiskunsky, M. I. Zholdak, Y. I. Mashbyts, O. Rezina [8, 10]).

According to the scientists’ research results [2, 3, 7, 8, 10], ICTs provide the following didactic opportunities: diversification of information presentation formats; diversification of types of educational tasks; providing instant feedback, wide opportunities for dialogue in the learning process; wide individualization of the learning process; use of basic and auxiliary educational influences on student development; expanding the scope of their independence; widespread use of game techniques; the possibility of reproducing fragments of learning activities; intensification of students’ learning work, strengthening their role as subjects of learning activities (the ability to choose the sequence of material study, determining the extent and nature of assistance, etc.), as a result of increased motivation to learn (due to the novelty of content and activities and the combination of more diverse and visual teaching methods in conjunction with traditional ones); implementation of a differentiated approach to each student.

While solving the second task of research, we investigated the possibilities of students to use computers and the goals they pursue in doing so.

For this purpose the experiment was extended, the second stage of it involved students of Kherson Polytechnic College and PTL students.

The questionnaire we developed included seven questions aimed at finding out the respondents' attitudes toward computer work, their ability to use a personal computer (PC), the reasons why they are engaged in this activity, and obtaining information about the types of work that pupils and students most often perform on a computer. The survey was conducted on an array of first-year students and 9th grade pupils, a total of 62 people.

The answers to the first and second questions revealed that most students consider computer skills to be necessary for a modern person (100%) and have the ability to use them (99%). It indicates that most students are conscious of the importance of developing computer skills and have the conditions to cultivate them.
The third question asked whether pupils and students use the Internet as a source of additional information on various disciplines. It turned out that 53% use books, 77% use computers, 35% use TV, and 39% use stories from others (including teachers and professors) to find additional knowledge. It means that young people recognize the Internet not to be the only source of information. The fourth question revealed that students believe that computer work affects the development of their mind (56%), memory (55%), precision of movements (52%), communication skills (19%), etc.

Thus, the answers show that the young generation is aware of the developmental role of computer work.

The fifth question was aimed at finding out what types of work respondents are most often engaged in. It was discovered that 77% play computer games, 76% watch movies or listen to music, 48% search for information to write essays and reports, 40% use a PC to type texts, 75% search for fascinating facts on the Internet, 24% draw, and 16% do digital image processing. Only 8% use electronic textbooks in various subjects to improve their knowledge.

The results of pupils' and students' self-assessment of their computer skills can be presented as follows: 75% consider their skills to be excellent or good, and 25% consider them to be satisfactory or absent.

In our opinion, such indicators are not satisfactory and require measures to develop educational and information skills as a component of self-education skills.

The seventh question was to find out what goals pupils and students pursue when using computers.

The picture of students' distribution by types of motives for self-educational activity was as follows: 51% chose reasons that can be attributed to intrinsic motivation (curiosity - 66%, need for additional knowledge - 40%, enjoyment - 34%, self-improvement - 29%); 35% of respondents are dominated by external positive motivation (the need to obtain a future profession - 77%, influence on career growth - 21%, opportunity to earn money - 13%). And only 14% named reasons that can be attributed to external negative motives (fear of judgment, criticism, punishment).

In other words, when implementing self-educational activities through computer work, there is the most favorable ratio between the three types of motivation for high performance: IM > EPM > ENM. It means that ICTs can be employed as a factor that contributes to the development of intrinsic motivation of young people during self-education.

**Conclusions and prospects for further research.** In general, the study results allow us to conclude that the development state of motivation for self-education in secondary school and college students is not satisfactory. To be effectively engaged in self-education, a sufficient level of cognitive motivation in students is necessary, at which the following ratio between the three types of
motivation is maintained: *intrinsic motivation > extrinsic positive motivation > extrinsic negative motivation*. The intrinsic cognitive motivation of young people is underdeveloped and requires the search for measures to promote its development. The use of information technology serves as a motivating factor that needs to be skillfully harnessed in the implementation of activities aimed at developing self-educational skills and abilities.

In the future, it is necessary to investigate which forms of ICT use are most effective in developing information skills and most effectively contribute to the development of motivation in the self-educational activities of young people.

References:


Література:
1. Вовк Б. І. Мотиваційна складова самоосвіти майбутніх викладачів практичного навчання ПТНЗ // Наукові записки КДПУ. Серія: Педагогічні науки. Вип. 147, 2016. – С. 184-188.