

Information Technology in Incentive Management in Student Learning

Nataliia Bakhmat [†], Nataliia Ridei ^{††}, Vladyslava Liubarets ^{†††}, Victoria Ivashchenko ^{††††},
Olga Petrovska ^{†††††}, Kateryna Averina ^{††††††}

[†] Deputy Dean of Scientific Activity and Informatization of Educational Process of Pedagogical Faculty,
Kamianets-Podilskyi National Ivan Ohienko University, Kamianets-Podilskyi, Ukraine

^{††} Department of Adult Education, National Pedagogical Drahomanov University, Kyiv, Ukraine

^{†††} Department of Management and Innovative Technologies, Social and Cultural Activities National Pedagogical
Dragomanov University, Kyiv, Ukraine

^{††††} Department of Publishing, Institute of Journalism Borys Grinchenko Kyiv University, Kyiv, Ukraine

^{†††††} Department of Adult Education, National Pedagogical Dragomanov University, Kyiv, Ukraine

^{††††††} Department of Preschool Education and Social Work, Bogdan Khmelnytsky Melitopol State Pedagogical University,
Melitopol, Ukraine

ABSTRACT

The main idea of the work is to address issues related to the activation of incentives in students of educational institutions, as an integral part of motivation in pedagogy, which is one of the priorities of higher education, in turn, the correct and timely application of motivational factors allows qualitative analysis, on the activation of cognitive interest in training. The purpose of the article is to study and qualitatively assess the methods and ways to stimulate students while studying in higher education.

In solving the set tasks, a qualitative analysis of the known literature on the definition and application of motivation in the educational process. Definitely a stimulating process as a factor of psychological motivation. It is concluded that neither in understanding the essence of the stimulus, its role in the regulation of behavior, nor in understanding the relationship between stimulation and stimulus does not exist.

Keywords: *information technology, stimulus, motivation, learning motivation, adaptation, students.*

1. INTRODUCTION

Today, the main emphasis in the world is on pedagogical education, as it develops and operates in new political and socio-economic conditions that determine not only the ways and directions of its development, but also related problems. The main controversy is in the educational process between the growing demands for professional training. The education of students in the context of modern education is due to many factors, among which the motivation of students' learning activities is important.

The main factor of learning in pedagogy is the motivation of educational activities, which is one of the main unresolved issues in the psychology of learning. It is explained, on the one hand, by the fact that the main psychological characteristic of any activity, including

training, is its motivation. On the other hand, motivation management allows you to manage the learning process.

Contradictions and urgent tasks, in particular, psychologists who study motivation and motivation of educational activities are: development of a conceptual apparatus related to motives and motivation, definition of structural components of motivation, study of behavioral motivation and formation of motivational sphere of personality.

Analysis of the educational process, as well as motivation in it is defined as a special type of motivation. The main factors are determined by: the educational system, the educational institution where the educational activity is carried out; organization of the educational process; subjective characteristics of the student; subjective characteristics of the teacher; specifics of the subject. Student motivation is one of the professionally significant personal characteristics. This point has a double definition of the indicator, and a criterion of success and quality of professional development of the specialist.

During the educational process, the student is faced with many factors that affect his motivational state and attitude to learning in general: first, the level of external control over the student's activities decreases sharply; secondly, the very structure of educational activities is changing - learning motives are complemented and closely intertwined with professional motives; third, there is an introduction to a new social community. The group of students as a social group is characterized by social orientation, formed attitude to the future profession, which are a consequence of the correct professional choice and the adequacy and completeness of the student's understanding of the purpose.

Applying for themselves, as students, motives for learning, socially significant and professionally significant

personality traits, readiness for professional growth, finding optimal techniques and methods of quality and creative implementation of educational and professional activities in accordance with the individual psychological characteristics of the student ensure success.

The purpose of the article is to study and qualitatively assess the methods and ways to stimulate students while studying in higher education.

2. MAIN TEXT

Student stimulus is a specific factor that causes the body's reaction. Guided by the encyclopedic dictionary, the stimulus becomes synonymous with the stimulus. The word itself translated from Latin means a metal tip, which is attached to a pole and is used for a detachment of cattle. In the natural sciences, stimuli are any stimuli that cause the body to respond.

Stimulus in terms of psychology, then this phenomenon means motive.

Sometimes it occurs when talking about stimulation and stimulation. Sounds almost the same, but their meaning is different. Stimulation is a biological effect. Stimulation is a psychological motivation that someone deliberately uses to force another person to take action. From a pedagogical point of view, these are teachers who try to interest the student in learning. You can stimulate with two diametrically opposed approaches.

First - to reward for success. In the second, punish for the shortcomings. The people call this dualism the method of "carrots and sticks". Irritants are external and internal.

Improper use of the stimulus will be ineffective or even harmful. The influence must be appropriate and applied impulsively and situationally. Today, there are techniques that in most cases give the desired effect. Thus, pedagogical motivators:

1. Do as I do! Demonstration by personal example.

2. Gratitude, has a very powerful stimulating effect. If you express gratitude "in advance", it is called bribery, if for the work already done (though not much), then gratitude. that gratitude is a good argument for doing the job, even if it follows actions already taken, it encourages the person to be more diligent).

3. Questions (You don't have to come up with multi-level action algorithms, invent a "wheel" and turn on the strategist mode. You just have to ask. However, education plays a role, and many people try to treat those who responsibly ask them).

4. Confidence (self-affirmation is at a fairly high level. They are characteristic of developed individuals who have been able to transcend their natural desires. Self-affirmation assumes the "lion's share" of life

motivation, as it gives a sense of personal significance. what place it occupies in society.

For the first time, the desire to self-realize, to achieve more, to prove something to oneself or others is compelling. Such a stimulus sometimes exceeds all others, which makes a person forget even about food and drink until he feels pleasure from a job well done).

5. Enthusiasm (a way to motivate to action - to be interested. When passion arises, other motivators are not needed).

6. Interactive (an effective way to increase productivity is to visualize future writing.

Interim conclusion: the main types of incentives that are possible when applied to students of higher education institutions are considered, and there is a need to analyze the types of motivation.

The solution to the urgent problem is to stimulate learning activities is one of the main problems of learning psychology. The status is explained, on the one hand, by the fact that the main psychological characteristic of any activity, including training, is its motivation. Controlling the learning stimulus (or rather motivational-needs-learning sphere) allows you to control the learning process, which seems very important to achieve its goal.

Research is devoted to the study of incentives as motivation to learn, the results of which are described in [14, 15] and many others [12, 13].

Motivation of education is determined by a number of factors: the educational system, the educational institution where the educational activity is carried out; organization of the educational process; subjective characteristics of the student (age, gender, intellectual development, abilities, level of aspirations, self-esteem, his interaction with other students, etc.); subjective characteristics of the teacher and, first of all, the system of his relations to the student, to business; specifics of the subject.

Motivation educates systemically and is characterized by purposefulness, stability [11].

The stimulus of this teaching is based on the actions that the student is instructed to do. This doctrine is characteristic of "performers" who are unable to determine the general direction of their actions, to reflect the reasons for their actions and the actions of others, as well as to carry out productive interaction with others.

The stimulus of spontaneous learning is based on the student's actions "at will", based on his natural curiosity, this type of learning can be unstable and unsystematic, because it does not teach to set certain goals and achieve them, overcome difficulties in achieving them [11-15, 17-20].

Learning activities are characterized by a special type of motivation. The student's ability to self-determination

includes awareness of their motives and values, the ability to make decisions in a situation of conflict of motives and feelings, formulate their position, justify and defend it, make decisions based on different positions, act arbitrarily and purposefully.

We can distinguish between positive and negative cognitive motivations associated with awareness of the negative consequences that may arise in connection with the fulfillment and non-fulfillment of certain conditions.

Exploring the stimulus of education, the central question is the question of the types of motives for learning.

There are several classifications of learning motives. It is known that the motives of teaching are divided into external (not related to the learning process) and internal (derived from different characteristics of teaching) [14]. Well-known scientists distinguish between "motives-stimuli" and "meaning-making" motives. "Some motives that motivate activity at the same time give it a personal meaning; we will call them the main stimuli.

Coexisting with them, acting as stimulating factors (positive or negative) - sometimes acutely emotional, affective - are deprived of meaning-making function; we will conditionally call such motives motives - stimuli".

Thus, Learning Motives are divided into "known" ("understandable") and "actually active".

The most complete known classification of learning motives distinguishes two groups of learning motives: cognitive and social.

Interactive motives are aimed at the process of cognition, increase the effectiveness of its results - knowledge, skills, abilities, as well as methods of cognition and acquisition of knowledge, techniques and methods of educational work, to increase the effectiveness of these methods and methods of cognition. The levels are: broad cognitive motives - focus on knowledge; educational-cognitive - focus on methods of obtaining knowledge; motives of self-education - focus on ways of self-replenishment.

Human motives characterize the student's activity in relation to certain aspects of interaction with another person in the learning process, to the results of joint activities and methods of these interactions, to increase the effectiveness of the results and methods of these interactions. Their levels are: broad social motives - duty, responsibility; narrow social or positional motives - the desire for approval of others; motives of social cooperation - the desire to master the ways of interaction with others [15].

A number of researchers postulate the need for both components (cognitive and social motives) for the effectiveness of education [21].

World trends in the development of ideas about learning motivation in psychology are a gradual transition from an indivisible to a differentiated understanding of motivation to learn; from the idea of motive as an "engine" that precedes the activity, to its definition as an important,

internal psychological characteristic of the activity itself. A different approach involves the selection of significant and dynamic characteristics that have the studied psychological impulse.

We can identify meaningful and dynamic characteristics of the motive of education:

efficiency; dominance in the structure of the motivational sphere; independence of origin; awareness; generalization; dynamic characteristics: stability; expressiveness and strength; switching; emotional coloring; modality [14].

A distinctive trend in the study of learning motivation is the formative approach, which involves determining the conditions that affect the formation of learning motivation in the aggregate of its content and dynamic characteristics.

Studying at the university, the former student faces a number of changes: first, the level of external control over the student's activities decreases sharply; secondly, the very structure of educational activities is changing - learning motives are complemented and closely intertwined with professional motives; third, there is an entry into a new social community [11].

The issue of motivation of students' learning activities becomes especially important.

Modern authors claim different motives for entering the university, which largely depends on the prospects of studying this issue, the socio-economic situation in the country. Well-known motives for entering the university are: the desire to be among students, the great social significance of the profession and the wide scope of its application, the profession's compliance with the interests and inclinations and its creative potential. There are differences in the importance of motives among young men.

Girls more often note the great social significance of the profession, the wide scope of its application, the opportunity to work in large cities and research centers, the desire to participate in student activities and good financial protection of the profession. Young men are more likely to say that their chosen profession meets their interests and inclinations. They also refer to family values.

The stimulus of students' educational education constantly combines the actual educational and professional components. In this regard, the structure of education can be divided into actual motives for learning and professional motives as "internal motives that determine the direction of human activity in professional behavior in general and the orientation of man to various aspects of professional activity" [15]. Incentives are also defined as "motives that push the subject to improve their activities - its ways, means, forms, methods, etc.", "growth motives that realize the focus on production" [11].

As part of a quality approach:

the main activity of students is educational and professional. Motivation, in my opinion, includes two groups of motives: educational and professional and social.

Each of these groups goes through three levels in its development. Formation of educational and professional motives (from lower to higher): broad educational and professional; educational and professional; motive of professional self-education. Formation of social motives of educational and professional activity at the university (from the lowest to the highest): broad social motive; narrow social, positional motive.

In the pedagogical university under the influence of the system of educational work of the university high school students should form motives of professional self-education from the group of educational and professional motives, and motives of professional cooperation from the group of social motives [15].

Studies have shown that the leading educational motives for students are "professional" and "personal prestige", less significant are "pragmatic" (for a diploma of higher education) and "cognitive". Thus, the role of dominant motives changes at different years of study.

In the year of study, the leading motive is "professional", in the second year - "personal prestige", in the third and fourth years - both of these motives, in the fourth - also "pragmatic". Exemplary learning was largely influenced by "professional" and "cognitive" motives. "Enlightened" motives were mainly characteristic of students who work poorly [22].

It is customary to present general social motives (understanding of the high social significance of higher education). According to her, in all courses the "professional" motive took the first place.

In the first year it was given to the "cognitive" motive, but in the following courses the general social motive came to this place, which pushed the "cognitive" motive to the third place. The "utilitarian" (pragmatic) motive took fourth place in all courses; Characteristically, from junior to senior years, his rating fell, while the rating of "professional" motive, as well as "general social" [23]. "Professional", "cognitive" and "general social" motives were more pronounced among students who work well than among ordinary students, and the "utilitarian" motive was more pronounced among the latter.

Characteristic that the "cognitive" motive took the second place among the well-performing students, and the third among the students with the average academic performance [24].

The well-known literature, one can observe the dynamics of changes from the 1st to the 4th year of the motives of creative achievement, "formal academic" achievement and "need for achievement" among students of the Faculty of Psychology. By the motive of creative achievement, the author understands the desire to solve any scientific or technical problem and to success in scientific activity. The motive of "formal-academic" achievement is understood by him as motivation for a mark, good academic performance; "The need to achieve" means a vivid

expression of both motives. Using the motivation of educational activities (professional, cognitive, pragmatic, social and social and personally prestigious), students have a certain attitude towards different academic subjects. It is conditioned by: the importance of the subject for professional training; interest in a particular branch of knowledge and in this subject as part of it; the quality of teaching (satisfaction with classes in this subject); a measure of the difficulty of mastering this subject based on one's own abilities; relationship with the teacher of the subject. All these motivators can be in a relationship of interaction or competition and have a different effect on learning, therefore, a complete picture of the motives of learning activity can be obtained only by identifying the significance for each student of all these components of a complex motivational structure. This will make it possible to establish the motivational tension in the given subject, i.e. the sum of the components of the motive of educational activity: the more components determine this activity, the more motivational stress he has.

The role of positive motivation for learning in ensuring the successful mastery of knowledge and skills has sharply increased. At the same time, it was revealed that high positive motivation can play the role of a compensating factor in the case of insufficiently high abilities; however, this factor does not work in the opposite direction - no high level of abilities can compensate for the absence of an educational motive or its low severity, cannot lead to significant success in studies [11, 17-20]. The exceptional importance of the motive for learning for successful study led to the formation of the principle of motivational support of the educational process. The importance of this principle stems from the fact that in the process of studying at a university, the strength of the motive for learning and mastering the chosen specialty decreases.

Students' positive motive for learning [15]: awareness of the immediate and final goals of learning; awareness of the theoretical and practical significance of the acquired knowledge; emotional form of presentation of educational material; showing "promising lines" in the development of scientific concepts; professional orientation of educational activities; selection of tasks that create problem situations in the structure of educational activities; the presence of curiosity and "cognitive psychological climate".

3. CONCLUSION

The evaluation of the peculiarities of the development of the student's stimulus to educational activity is carried out in the work.

It is investigated that on the basis of the analysis of literature, it is possible to draw a conclusion that there is no unity of views neither in understanding of essence of stimulus, its role in regulation of behavior, nor in understanding of interrelation.

The development of the student's stimulating sphere depends on the methods, conditions and means of learning, awareness of one's own meaning of learning, subject-reflexive attitude to learning, subjective activity and subjective attitude. Peculiarities of the development of the student's personality sphere depend on the identification of the image, the image of the world, the image of future professional activity, self-esteem.

Personality stimulation is determined by activity. Thus, in order for the activity to become a component of development and self-development, it is important not only to deeply understand the nature of its content, but also to constantly improve the motivational side of the individual. Good knowledge and understanding of the motivational sphere can ensure success, direct the activity of the student's personality in the right direction of its improvement.

REFERENCES

- [1] A.A. Verbitsky (2012). Active Learning in Higher Education: A Contextual Approach.
- [2] Zair-Bek E.S. (2010). Fundamentals of pedagogical design: a textbook for students, practicing teachers, St. Petersburg, p. 234.
- [3] Sergeev I.S. (2004). How to organize the project activities of students: A practical guide for employees of educational institutions, M., ARKTI, p. 4.
- [4] Smolkin A.M. (1991). Active teaching methods. M.
- [5] Kuts, M. O. (2016). Problem technologies in foreign languages teaching of higher technical educational establishments students'. Cherkasy University Bulletin: Pedagogical Sciences, 37(370).
- [6] Skliarenko Olesia, Akimova Alina & Svyrydenko Oksana (2019) Psycholinguistic Peculiarities of Contextual Realisation of Concept «MACHT» in Linguistic and Cultural Space of German's. Psycholinguistics. Pereiaslav-Khmelnitskyi Hryhorii Skovoroda State Pedagogical University. 26 (2). pp. 321-340.
- [7] Shytyk Liudmyla & Akimova Alina (2020) Ways of Transferring the Internal Speech of Characters: Psycholinguistic Projection. Psycholinguistics. Pereiaslav-Khmelnitskyi Hryhorii Skovoroda State Pedagogical University. 27 (2). pp. 361-384.
- [8] Bogoyavlenskaya A. E. (2004). Development of students' cognitive independence, monograph, Tver, pp. 160
- [9] Rybnova A. N. (2002). System of management of professionally oriented independent cognitive activity of students, Saratov. state social – economy, Saratov, pp. 200.
- [10] Zimnyaya I.A. (1997). Pedagogical psychology, R., Phoenix, pp. 480.
- [11] Kovaleva T.M. (2009). Innovation school: axioms and hypotheses, Pedagogical community of Russia, pp.170.
- [12] Bugrimenko A.G. (2006) Internal and external motivation among students of a pedagogical university. Psychology at the university, no. 3, pp. 15-28.
- [13] Kolominskiy Ya.L. (2007) The Psychology of Pedagogical Interaction, Speech, pp. 240.
- [14] Ovchinnikov M.V. The dynamics of motivation of teaching students of a pedagogical university and its formation. Author's abstract ... cand. psychol. Sciences: Ekaterinburg, 2008, pp. 26.
- [15] Iasechko S., Tetiana S., Korolova V., Makovetska N., Chernetchenko O. (2020) FEATURES OF LEGAL REGULATION TRANSPLANTATIONS IN UKRAINE. Journal Of Critical Reviews, 7 (13), 430-432. Doi:10.31838/Jcr.07.13.76
- [16] Iasechko S., Vitalii B. Skomorovskyi, Ihor Andronov, Oleksii Zaitsev, Oksana Bortnik. 2020. FEATURES OF THE SUBJECTIVE CIVIL RIGHTS ON PATENT. Journal Of Critical Reviews, 7 (13), 297-299. Doi:10.31838/Jcr.07.13.50
- [17] Iasechko, S., Bratsuk, I., Petrechenko, S., Kazanchuk, I., & Liashenko, R. (2020). Development Of The Doctrine On Certain Personal Incorporeal Rights In European Countries. Journal Of Advanced Research In Law And Economics, 11(4), 1169-1174. Doi:10.14505/Jarle.V11.4(50).12
- [18] Markova A.K. Formation of motivation for learning. M., Education, 1990, pp. 191.
- [19] Leontiev A.N. Activity (2005). Consciousness. Personality. M., Smysl, pp. 352.
- [20] M. Iasechko, M. Kolmykov, V. Larin, S. Bazilo, H. Lyashenko, P. Kravchenko, N. Polianova and I. Sharapa. (2020). Criteria for performing breakthroughs in the holes of radio electronic means under the influence of electromagnetic radiation, ARPN Journal of Engineering and Applied Sciences, 15(12), pp. 1380 - 1384.
- [21] M. Iasechko, N. Sachaniuk-Kavets'ka, V. Kostrytsia, V. Nikitchenko and S. Iasechko (2020). The results of simulation of the process of occurrence of damages to the semiconductor elements under the influence of multi-frequency signals of short duration, Journal of Critical Reviews, 7(12), pp. 109 - 112. doi:10.31838/jcr.07.13.18.
- [22] M. Iasechko, V. Larin, D. Maksyuta, S. Bazilo and I. Sharapa (2020). The method of determining the probability of affection of the semiconductor elements under the influence of the multifrequency space-time signals, Journal of Critical Reviews, 7(9), pp. 569 - 571. doi: 10.31838/jcr.07.09.113.

- [23] S. Piskunov, M. Iasechko, N. Minko, Yu. Dolomakin, O. Palagin, M. Musorina (2020). Taking Into Account The Correlated Errors Of Measurements When Estimating Parameters Of Object Trajectory At Mechanical Movement, *IJETER*, 8(9), , pp. 5603 — 5606. doi: 10.30534/ijeter/2020/112892020.
- [24] M. Iasechko, V. Larin, O. Ochkurenko, S. Salkutsan, L. Mikhailova, and O. Kozak (2019). Formalized Model Descriptions Of Modified Solid-State Plasma-Like Materials To Protect Radio-Electronic Means From The Effects Of Electromagnetic Radiation, *IJATCSE*. 8(3), pp. 393-398. doi: 10.30534/ijatcse/2019/09832019.
- [25] T. Selivyorstova, A. Mikhalyov. Mathematical model of the two-phase zone supply of solidified metal castings under the influence of adjustable gas pressure. 2019. pp.25-28. doi:10.1109/ACITT.2019.8779914.
- [26] T. Selivyorstova, A. Mikhalyov. Analysis of Prediction Mathematical Models of Shrinkage Defects in Castings. 2018. pp.1-5. doi: 10.1109/SAIC.2018.8516811.
- [27] Yu. Dotsenko, V. Selivorstov, T. Selivorstova, N. Dotsenko. Influence of heterogeneous crystallization conditions of aluminum alloy on its plastic properties. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*. 2015. pp. 46-50.
- [28] I. Smyrnova, V. Horbenko, A. Lutsyshyn, V. Kaminskyi, Z. Sasiuk, T. Selivyorstova, I. Ienina. The Method of Determining the Probability of Affection of the Semiconductor Elements Under the Influence of the Multifrequency Space-Time Signals, *IJETER*, 8(5), 2020, pp. 1776 — 1779.
- [29] doi: 10.30534/ijeter/2020/46852020.