Pedagogical tools of eutagogy in the higher education system

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Abstract. The dynamics of the socio-economic sphere development occurs due to the high requirements for the level of training of university graduates. At the same time the level of knowledge at the university does not always suit employers. As a rule, the organization has a need for more experienced and qualified employees. Young specialists who come to work are forced to undergo additional advanced training to develop both professional competencies and over-professional skills. This led to the emergence of the concept of lifelong education, one of the priority areas of which is eutagogy.

The need for additional education among young people is a consequence of the dynamics of socio-economic, scientific and technological progress, as well as changes in the content and nature of the social activity of students. The organization of the educational process for the purpose of personal and professional development of student youth involves not only the development of professional competencies, since the formation of the younger generation is also realized through the development of a system of over-professional competencies [1].

Eutagogy is viewed as a science of self-education, which can be considered a natural development of the previously formed classical pedagogical methodology. Going beyond the framework of classical higher education is focused on motivating socially active youth to constant self-development and improving their skills, and also contributes to the development of an individual learning path, in which the student sets his priorities and pays attention to what is interesting and important to him.

The concept of independent learning, eutagogy, is based on the humanistic and teaching approaches described in the 1950s. We assume that eutagogy serves the educational needs of students, in particular, contributes to the development of individual abilities.

A necessary condition for the development of eutagogy as a scientific direction is a new understanding of the goal of education as a way of life and self-education as the leading form of education. According to the authors of the concept, the rapid pace of changes in society and the so-called information explosion meant the need to find a new approach to the organization of education, in which the student determines what he will study and how the educational process should be structured [2]. In this sense, the doctrine of self-study can be seen as a natural transition from the established classical theories and methods and can provide an optimal approach to learning in the modern education system.

The goal of the new approach is to collect the best innovative practices in the organization of self-education, to find effective ways of self-development through conscious integration into education, to draw the attention of the teaching community to the search for a new paradigm of education, in which students begin to play a new role as a manager of their knowledge. At the same time, eutagogy as a
modern doctrine of lifelong education can indicate the emergence of a new scientific field, which can be arbitrarily called the pedagogy of independent education.

Fred Garnett systematized the differences between pedagogy, andragogy and eutagogy, based on the understanding of pedagogy as a science of education for children and adolescents, andragogy as a science of adult education, eutagogy as a science of self-education [3]. In the student environment, as the development of motivation for self-education, the involvement of students in the implementation of social projects through education and the development of successful communicative and team methods of work, project activities, the implementation of youth grants, participation in cultural, historical and spiritual events becomes.

Taking into account the new technologies offered by eutagogics, it is recommended to use modern pedagogical tools, such as:

- Developing and multilevel education through problematization of the social situation;
- Project-based teaching method using gaming technologies. The concept of delegation is used, interactive training is carried out and the necessary skills and knowledge are acquired;
- Technology of creative workshops using the case method;
- Tandem method as mutual recognition of each other's values;
- Network technologies: forums, discussions, workshops, educational games;
- Tutorial - the leading form of interaction between a tutor and teachers, focused on the formation of awareness and responsibility, self-determination, understanding of leading motives and values;
- Workshop (workshop) - "workshop", a collective method of teaching, implies the active participation of each student. Participants are maximally involved in the educational process, experiment, study the topic with specific examples, argue, try to come to a compromise;
- Coach technologies aimed at unlocking the potential of the individual. Coaching is a system of techniques and tools that contribute to the development of the student's potential, as well as ensure maximum disclosure and effective implementation of this potential, a process aimed at achieving goals in various fields of activity [4].

The use of these technologies will increase the level of interest of participants in the educational process, including in self-education.

It should be noted that when using eutagogic technologies, a number of factors must be taken into account:

- A conscious attitude to the process of their learning;
- The need for independence;
- The need for meaningful learning (to solve an important problem and achieve a specific goal), which provides motivation;
- Practical orientation in relation to training, the desire to apply the acquired knowledge, abilities and skills;
- Life experience - an important source of learning;
- Influence on the learning process of professional, social, household and temporary factors.

Thus, there is a need to create an open communicative space in the education system, to build trusting relationships between teachers and students, in which there is a common empathy that provides a deeper understanding of the knowledge gained. A new understanding of the problem arises, non-standard solutions are born. This may not be achieved the first time, but the foundation laid at the very beginning of the study will already create that fertile ground that will motivate students to creative work.
The cyclical model developed in 1984 by D. Kolb [5] is used as one of the tools of eutagogics in the learning process. The author of the model proceeds from the assumption that we develop through conscious activity and thinking.

Kolb discovered that people learn in one of four ways, from which he developed the repetitive cycle required to acquire professional and non-professional competencies:

- Direct experience - everyone already has experience in the field or area that they want to learn.
- Observation and reflection or mental observations - reflection and analysis of the existing experience and knowledge is carried out.
- Formation of abstract concepts and models or abstract conceptualization - models are built that describe the information and experience received. Ideas are generated and new information added on how things work.
- Active experimentation - Based on experimentation and validation of a created model or concept. The result of the stage is an immediate new experience. Then the circle closes.

At the same time, it is important at the initial stage to determine the leading learning style; it is proposed to use the diagnostics of the learning styles of Honi and Mumford [6]. The Learning Styles Questionnaire will provide a realistic picture of the learner's individual inclinations. Based on the results of diagnostics, the leading teaching style is determined: an activist, thinker, theorist, pragmatist.

By combining the data obtained as a result of diagnostics with a specific stage of the Kolb cycle, it becomes possible to better build the educational process and select the appropriate pedagogical tools for the learning style (figure 1).

**Figure 1. Learning model.**

To conduct an empirical study, the methodology "Motivation of educational activity", developed by I. S. Dombrovskaya. The study involved 195 students, from among the activists of the youth associations of the Reshetnev Siberian State University, of whom 126 are women and 69 are men. The purpose of the methodology is to identify the leading motivation for learning. The questionnaire includes 30 questions, which are distributed on 6 scales corresponding to the levels of motivation:

- The level of broad cognitive motives;
- The level of narrowly or specifically cognitive motives of teaching;
• The level of self-development motive or personal motives of educational activity;
• The level of broad social motives or the motive of a binding or forced teaching;
• The level of narrow social motives;
• Level of cooperation or sociality of knowledge.

The severity is interpreted as follows:

• if the indicators obtained are more than three, then we can talk about a high degree of severity of the level or type;
• if more than two, but less than three - about the average degree;
• if the indicator is below two points, then it can be assumed that an individual student or group has a low level of motivation for learning activities in general, by type or level.

Data interpretation is presented in table 1.

| Learning motives              | Women amount (%) | Men amount (%) | Total amount (%) |
|-------------------------------|------------------|----------------|------------------|
| Wide knowledge                | 24 (19%)         | 15 (21.7%)     | 39 (20%)         |
| Narrow knowledge              | 18 (14.3%)       | 8.7 (3%)       | 24 (12.3%)       |
| Self-development              | 9 (7.1%)         | 8.7 (3%)       | 15 (7.7%)        |
| Forced teaching               | 51 (40.5%)       | 33 (47.8%)     | 84 (43.1%)       |
| Narrow social                 | 3 (2.4%)         | 3 (4.4%)       | 6 (3%)           |
| Socially significant          | 21 (16.7%)       | 8 (8.7%)       | 27 (13.9%)       |

It can be seen from the table, the predominant motive for learning is forced learning, this indicator comes with a huge gap from other indicators. In a situation of forced learning, which is most typical for training in an educational organization, the student learns certain knowledge, skills, skills not because he wants to get them, and not because he has set himself the goal of learning something and goes to it, but simply because the educational process is so structured.

• The first component of the system for motivating a given teaching is the teacher's power over the student, in which he is forced to fulfill the teacher's tasks and requirements. This explains the low level of student involvement in the educational process itself, the lack of desire to develop their competencies [7]. Note that with correctly selected pedagogical tools, it is possible to change motivation to any type of cognitive motivation.

• The second place is taken by the motive of broad knowledge, this motive belongs to cognitive, broad cognitive motives, which consist in the orientation of students to acquire new knowledge. Interest may arise in new interesting facts, phenomena, in the basic properties of phenomena, theoretical principles, key ideas and concepts, the first deductive conclusions appear.

• The third place is taken by the scale of socially significant learning, the student not only wants to communicate and interact with other people, but also tries to understand, analyze the ways, forms of their cooperation and relationships with the teacher and colleagues in order to constantly improve these forms. This motive is an important basis for self-education and personal improvement.

• The fourth place is taken by the scale of narrow knowledge, the task of which is to orient students towards mastering the methods of acquiring knowledge, interests in methods of independent acquisition of knowledge, methods of scientific knowledge, methods of self-regulation of educational work, rational organization of their educational work.
The fifth place is taken by the scale of self-development, this motive of learning refers to social motivation, consists in the orientation of students towards self-improvement of the channels for obtaining and receiving knowledge.

The sixth place is occupied by the scale of narrow social motives, this motive of learning also refers to social motivation, which consist in the student's desire to take a certain position, a place in relationships with others, a desire to get their approval, to earn their authority.

Thus, in the education system, in order to reduce the level of “forced learning” and to increase the level of motivation for learning, for self-development and self-organization of the educational process, it is necessary to apply eutagogic technologies, taking into account the leading learning style.

For the “Doer” style, educational information should be in colorful form, presentations, films. This learning style is based more on intuition than logic. Students are often guided by a sixth sense; when receiving information, they rely on others, after which they independently analyze it; prefer to work out their plans carefully. They are attracted to new situations and challenges. There is no need for lectures, classes should be more interactive: workshops; master classes; teambuilding; trainings; demonstration films; technical installations; brainstorming method; discussion; modeling; virtual excursions; educational network games; cases; video simulators.

The “Thinker” style is characterized by thoughtfulness, caution, and discretion. Learners with this learning style prefer to observe rather than do and solve problems through information gathering and imagination, they are able to view situations from different points of view, and they are best at themselves when it is necessary to generate new ideas. Recommended pedagogical tools: interactive technologies (support all information with graphs, real examples); seminars; interactive lectures; case study (written practice); excursion; network discussion; network lecture; demonstration films.

“Theorist” learners tend to build logical sequences of events, love patterns, systems and rules. Here the emphasis is on a logical approach to abstract ideas and concepts that these people find more important than interpersonal communication or practical applications. They are able to understand a wide range of information and organize it in a clear logical order, which makes assimilation more effective in the scientific environment. The most acceptable for them are: lectures; study of scientific articles; work with sources of information; independent work; brainstorming (in order to build logical connections); short discussion groups; conferences.

Style “Pragmatics” strives to test new ideas in practice, quickly and confidently work on the ideas that attracted them, like to experiment in practice. These learners are called techies; they are more attracted to solving technical problems than to interpersonal problems. They most fully realize their potential when solving practical problems, and make a decision by looking for specific answers to specific questions; love to experiment with new ideas, simulate and work with specialized applications to solve real-world problems:

- games;
- cases;
- work in groups;
- master classes;
- project teams;
- workshops;
- imitations;
- tutorial.

The educational process, designed with the account the needs for training, will allow to maximize the level of involvement and motivation for learning, to reveal the potential of students.

Thus, the main tasks of modern education are not only the transfer of knowledge to students, but also the formation of their skills and desires to learn all their lives, to interact at the command level, to form
the competence of self-development and self-realization. The use of the proposed tools will further develop the ideology of the concept of lifelong education.

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