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The interactive technologies as a component of a supporting educational environment on university

Technologie interaktywne jako wsparcie procesu edukacyjnego w szkolnictwie wyższym

Abstract: In the article the interactive technologies are revealed in the terms of the university education. The aspects of this phenomenon as a component of a supporting educational environment. Analysis of the results of the research and approbation of the model makes it possible to draw conclusions about pedagogical conditions the presence of which contributes to the provision of a supporting environment.
Keywords: university, interactive technologies, supporting environment

Streszczenie: W artykule przedstawiono zastosowanie technologii interaktywnych w kształceniu uniwersyteckim jako wsparcie procesu edukacyjnego, wnioski z analizy uwarunkowań kształcenia, które przyczyniają się do tworzenia środowiska wspierającego.
Słowa kluczowe: uniwersytet, technologie interaktywne, środowisko wspierające

Social and personal orientation of higher education and its quality require the appropriate and adequate pedagogical content tools. In fact, the modern didactic concept emphasizes the creation of educational technologies which intensify the process of interaction and students are placed in active position.

The objective of this article is to reveal the dimensions of the interactive technologies as a component of a supporting educational environment on university and to analyze the qualitative parameters towards professional - personal development of students.

The resources and integrating mechanisms in determine the educational environment. In various types of auditor and extracurricular activities the competencies of students are formed.

The analysis of practice shows that the numerous unsolved problems concerning university education are the main reason to explore interactive technologies. These unsolved questions concern de facto the human realization of the components of the pedagogical process. Not enough

attention is paid to the ways of interaction between teachers and students, to the dialogue in the process of collaboration and to the exchange of ideas. Some of the teachers did not show due consideration to the development of students' personality making them a subject of the educational process. As a result, the lowering student motivation and the systematic absence of academic classes raise our concern.

The analysis of literature shows that different aspects of pedagogical technology have been already explored but mainly in the context of school education. In the following report, interactive technologies in the terms of the university education are revealed. The theoretical and methodological aspects of the phenomenon of preparation of future student-teachers are also considered. In the context of education, the training technology could be defined as the purposeful interaction between teacher and students. In addition to that, through this interaction the scientific and academically proved rules, procedures and operations obtain guaranteed results. The key concept of interactive technology is defined as a kind of an educational technology in which the interactive methods dominate. These methods bring intensity to thei teacher interaction and interpersonal communication, dialogue, energy to the common work, expression of the subject - subjective relations, partnership and cooperation. E. Rangelova emphasizes the possibilities of pedagogical interaction, developing in the direction of its humanization [Rangelova, E., 2016].

As far as research at the university is interpreted as a targeted, individually driven and pedagogically organized process of creative development of personality of students, the implementation of educational experimentation in the context of personality - centred training has a paradigmal basis. In this sense a leading landmark, main content and main criterion for the quality of scientific projects, which students participate in, are not only their knowledge and skills for research and solving problems, but also the development of personal qualities, which let them be adaptable, competitive, able to set and achieve goals, working towards perfecting themselves and their surroundings.

The functions of the instructor regarding the participation of students in scientific research are related to motivating, stimulating, energizing for thoughtful and productive implementation, planning, organizing, communicating, coordinating, controlling, regulating, correcting, counselling, diagnosing, prognosing, etc. These functions are interrelated and are effected only if the university instructor is a personality, who can create and develop personalities. Orientation to the development of students' personalities requires the instructor to possess professional and pedagogical competence, to be a hu-

mane personality with his or her own individual style, tact and culture. Research activity, centred on personality, is associated with the implementation of intensive interaction, emotional value-based communication and the creation of psychological climate, which guide students to rational choice of research strategy.

Every instructor and student has their own experience in scientific research. Therefore the paradigm of competence - oriented study is related to those competencies, which they need to master in order to implement the experiment qualitatively: specific to solving the problems of a specific scientific field, constructive, communicative, informative, socio - cultural, health and environmental, organizational and technical. This reflects the integral nature of research competence.

The joint research work of faculty and students is teamwork, during which interaction is used; intensive interaction, dialogue, exchange of scientific ideas, assumptions, surmises are performed. In view of this the paradigm of partnership, coordination of both parties, their cooperation and agreement makes the instructor assume the role of a consultant, mediator, assistant. The voluntary inclusion of students in activities, based on experiment, is a prerequisite the specific learning content, culture and methodology of scientific research to be mastered in unity and students to be placed in the position of the discoverers of scientific truths, as well as to turn to creative self-improvement.

Interactive technologies in the context of university preparation of future teachers are specified through the following types:

- Interactive heuristic technologies related to solving problems, conducting discussions, brainstorming, SWOT-analysis and others;
- Interactivity research technologies related to experiment and projecting;
- Simulative technologies related to situational methods and games;
- Informative technologies.

The summarizing characteristic of the results of the study findings is based on the developed theoretical model. The theory of the inter subjection of the interactive technologies is associated with analyzing the conception of teachers and students regarding the design and the implementation of the interactive technologies. The assessment of the results of the interaction between the participants allows establishing the nature of communication between them, techniques for activating the students. It is noted whether the applied technologies assist the students in their preparation for their work as

teachers. The reasons for counteract to the efficient implementation of the interactive technologies are revealid.

The study findings show that in practice the highest percentage is of teachers who realize interactive technologies, but their implementation is episodic in nature. Pedagogical interaction is generally not characterized with interpersonal intensive dialogue, partnership, cooperation. A lot of teachers and students are oriented to the interactive technologies, but fail to implement them as a system of adequate tools. That is why the expected results are not always achieved.

The results of the transformed examination confirm the research thesis and the regularity of the practical realization of basic directions of the experimental activity: establishing a system for assimilating of the interactive technology, getting experiences for the students in the implementation of interactive technologies, designing and realizing interactive technologies by trainee teachers in real classroom conditions.

The pedagogical testing shows better results in the experimental groups that systematically implement interactive technologies with the following appropriate methods: use of discussions, projects, analysis of situations, cases, incidents, a virtual and a laboratory experiment, multimedia and others.

Analysis of the results of the research and approbation of the model makes it possible to draw conclusions about pedagogical conditions the presence of which contributes to the provision of a supporting environment as follows:

- An appropriate selection of the type of interactive technologies, expression of scientific merit, methodology, systematic feedback, intense interpersonal communication;
- Explicit, detailed specification and arranging of purposes such as tools and subjects are oriented towards achieving them, adaptive-target mechanisms, balancing algorithm and creative variation;
- Procedure and operation, which is imported through interactivity, to be elected by teachers and active participation of students;
- Personal centeredness of interactive technologies, students as the center of learning. Implementation of priority procedures and operation, which include social experience, knowledge and skills of students, diagnostic technologies to support students for successful learning;
- Establishment situation for success, maintenance at optimistic, supportive atmosphere of trust, mutual respect, collegiality, tolerance;

- Rational combination of traditional and non-traditional teaching methods, projects and teamwork;
- Provision of resources for the scientific research, participation in conferences and other kinds of scientific events and publication of results;
- Using modern audiovisual equipment, multimedia, internet and other means to facilitate learning, cooperation and implementation of a feedback system; combining online and offline training, improvement of access to databases and electronic libraries, integration of the research space of the university with international university networks;
- Professional and pedagogical competence of the instructor to project and implement interactive technologies, to motivate, advise, encourage, stimulate undergraduate, graduate and postgraduate students' ideas, their scientific potential and activity and support them in the implementation of a scientific career, confirmation of the practice of tutors, mentors, advisors.

In conclusion it is useful to be highlighted that the motivated and active involvement of students in interactive technologies is a prerequisite for mastering of professional, communicative and social competences, development of the culture of learning and research, autonomy and responsibility. Finding adequate solutions for implementation of interactive technologies as a component of a supporting educational environment contributes to the improvement of the quality of overall academic preparation of students and their professional and personal development.

Bibliography

Rangelova, E. *The formation of the citizen and the professional – main objective of the university education*. Contemporary university education, 1, 2016, p. 5-8, ISSN 23-67-8232.

Shivacheva, V. *Interactive technologies in the training of future teachers*. EKS-PRES, G. 2009.