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SIMULATION AND GAME-BASED APPROACH TO TRAINING FUTURE PHYSICAL EDUCATION TEACHERS FOR PROFESSIONAL ACTIVITY

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Abstract. *The article focuses on the process of training future physical education teachers for future activity on the basis of simulation teaching as a training prerequisite. The essence and significance of simulation and game-based learning in the process of future teachers' professional training are described. The following means of simulation and game-based learning are distinguished: simulation game, business game, role-playing game, problem situations, game training; the feasibility of their usage is argued.*

Keywords: *professional activity, simulation and game-based learning, training of students, physical education.*

Introduction. The urgency of the study is determined by the necessity to expand and deepen the professional worldview of future physical education teachers, to construct models of pedagogical actions in certain pedagogical situations.

The need for teaching how to creatively use the existing theoretical knowledge and transfer it to solving practical problems that arise from a particular pedagogical situation, is satisfied by the game training which is an active cognitive activity where students are participants of the simulation and game situation, have the ability to show initiative and perform amateur activities, to elaborate an active professional position and creative activity style [2].

Simulation is the process of copying others. Simulation and game-based learning is learning simulating real-life situations [3].

Simulation and games are the simultaneity of double communication: real and imaginary, that is, which is played out [2].

Simulation and game modelling is the creation of professional situations and the search for optimal solutions of educational problems, when students are excited by professional interest, actualize existing knowledge, form skills in pedagogical analysis and game simulation, develop pedagogical abilities and professional settings.

The important moments of implementing the simulation and game-based learning approach are participants' empathy and reflection.

We understand empathy as an ability to understand the mental state of other

people, empathy, emotional response, emotional identification with others, which is so important during the formation of moral qualities. Reflection is seen as self-deepening, orientation of cognition in its inner world, vision of its position from the outside, the ability to simulate partner's thoughts.

Presence of empathy is necessary, firstly, for the real game plan – as the consideration of partner's mental states. Secondly, a high degree of empathy is necessary when moving from a real plan to an imaginary one – as an emotional identification with a game character whose role is performed. Thirdly, being in an imaginary role, it is necessary to feel partner's role experiences. It is the various combinations of these manifestations of empathy that provide the highest degree of play.

Reflexive personality traits characterize human intellect, as well as the flexibility of their behavior, that is, the ability to orient in the environment. Because of the presence of such traits as empathy and reflection, the game is a universal means of learning the features of communication and teaching communication. The development of reflection (that is, readiness for self-examination and its skills) at the student's age is especially significant due to two circumstances, on which their professional development depends in many respects. Firstly, developed reflection is the basis for the professional growth of a future specialist, his self-education and self-development. Secondly, a specialist with advanced reflection "plays" in his imagination typical professional situations, his reaction and the reaction of others in response to his actions, allowing them to work out creative, professional style of activity and active professional position. Reflexivity is student's ability to identify themselves with partners, the ability to see the whole situation as if from above and themselves in this situation. Their attitude to the world, a chosen career, themselves and with themselves largely depends on how deep they cognize themselves and surrounding people.

The aim was to describe the means of simulation and game learning that are used in the process of preparing future physical education teachers.

On this basis, we tried to prepare the classes aimed at improving reflection, developing future teachers' introspection skills. During the classes, those situations were modelled, which induced students to self-examination, self-esteem correction. Games and simulation is always a recognition of the behavior type and the choice of the appropriate system of actions.

The means of the simulation and game-based learning, in our opinion, includes: educational games (simulation, business, role plays), creation of special situations, problem and exercise solving, game training.

1. Simulation game. Its basis is the role-based pedagogical situations that are played by students. Plots for these situations are offered by the students themselves. The content of these plots allows the teacher to see students' different social experience, intellectual level and different awareness of their

pedagogical difficulties that arise during modeling the situations of professional orientation.

The goal of the simulation game is to find the optimal behavior strategy in such situations. Herewith, the main aspect of the game is in the logic of the participants' behavior, their artistry, emotionality, initiative and amateur performance. A prerequisite for simulation games is the change of game positions. All students must go to the game's leading positions and must always play the role of ordinary participants in situations that are played out.

2. Business game is a model of pedagogical activity and relationships in the pedagogical team. The basis of the business game is the problem situation, which, with a high degree of reality, has to simulate the specific conditions and dynamics of actions that ensure the inclusion of players in a particular situation and allow them look at themselves with the partner's the eyes. The ability to comprehend other people's prognosis and someone's behavior motive through it is a necessary condition for mutual understanding, which is, to some extent, realized through the role-based interaction [1].

The educational business game serves as a didactic tool for the development of pedagogical thinking, which is expressed in the ability to analyze, synthesize, compare, generalize pedagogical situations, solve and prove (substantiate) subjectively new professional tasks for the learners. This is achieved by designing and implementing (in the game) the system of problem situations and cognitive tasks.

The educational business game is designed and conducted as a joint activity of participants of the educational process in the course of formulating professional goals and their achievement through the preparation and adoption of appropriate individual and group decisions. The joint activity has the character of role-playing interaction, which is developed in accordance with the rules and norms that are implied or adopted during the game itself. Keeping to the game rules on the side of participants, following the "norms" of professional relationships and actions becomes a prerequisite for the deployment of a full-fledged game in the context of conventional practice.

In business game, the students who play, gained a motive, whose essence was determined by how to perform the role to its best. This required a successful reproduction of the activity which this role was connected to. In accordance with this, there was a need for knowledge of the system of actions, their composition and the sequence necessary for the success of the role. The system of actions simulated in the game, was for the player as a goal of cognition, and as any goal, became the direct content of his consciousness. Everything that was studied under the course program for business game could help in a successful performance of the role, was filled with a real meaning for players.

Role-playing games, such as based on subject-subject relations, are closest to the category of "communication". We can say that the role-playing game is the

simultaneity of double communication: the real and the imaginary one (that is, what is played out). The important moments of communication are empathy and reflection which determine the success of the gaming process. But in the game, they have specific features that are dictated by the duality of the gaming process.

We tried to ensure that during the business and role games, the subject-matter and social context of students' future professional activity is reproduced in conditions that simulate pedagogical reality. The game method was chosen by us as an optimal means of intensifying the educational process. This method is aimed at attracting future teachers of physical education to the situation of choice between certain behaviors based on modelling decision-making in the game.

3. Problem situations, game training implement the ideas of the context-based approach the best: most of them contain real life situations (cases, stories), which usually describe some events that were or could have occurred and which led to errors in solving the production problem. The student's task is to identify and analyze these errors using the concepts and ideas of the course. Such approach to professional training is much more realistic than a set of separate issues on a studied subject, considered without any relation to reality. Situational science focuses on the fact that knowledge and skills are given not as an object to which the student's activity should be directed, but as a means of solving the specialists' activity tasks. By means of learning situations, real professional fragments of production and interpersonal relations are reproduced. In this way, the student is given the outlines and contexts of his future professional work. The coefficient of usefulness of situational learning is very high, but educational manuals containing sets of educational situations are very few.

Future teachers need to interact with their children and try to solve a lot of conflict, problem situations during pedagogical practice in school. Often, these situations are of an ethical nature and require of a student a certain level of professional culture that would be able to provide adequate behavior in such situations and would stimulate making an optimal situational solution. The main problem of creative situation, taking into account the interdependent relationship between the teacher and learners, is to identify and translate into the pedagogical process the developmental, co-creative potential of these relationships. Problem situations, in turn, require dialogical, problem relationship, condemning anyone learning for a life-long search for truth, the disclosure of universal values, constant reflection. During the organization of dialogical relationships, co-creativity was manifested in the fact that each student has the right to express his judgment on any question, to make mistakes, to find his way of solving the problem. This leads to openness, interest, a desire to understand each other, serves as an incentive for the further effective

development of pedagogical thinking and the generation of new ideas.

Game training, search for the way out of the proposed communicative and game situation, analysis of the situation and achieved results will promote students' self-cognition, manifestation of personal qualities, their actions, emotions. It stimulates the search for methods of self-regulation and gaining cognitive and communicative experience.

Conclusions. The process of training future physical education teachers can not be limited to classroom activities, therefore, it is necessary to carry out its transfer to real conditions of pedagogical activity during students' practice in school. For a more thorough preparation for professional activity in real conditions, it is necessary to create the same conditions in advance, which is more strongly facilitated by simulation and game-based learning.

At the heart of simulation technologies lies imitation or simulation and game-based modelling, that is, the reproduction in the learning environment of processes occurring in the real system. The construction of models makes it possible to reflect various types of professional context in the educational process and to form professional experience in conditions of quasi-professional activities.

The means of simulation and game learning discussed in the article were: simulation game, business game, role-playing game, problem situations, game training. These means do have great potential, since they make a more understandable problem that may arise in the course of professional activity and reveal important cause and effect relationships. Based on this fact, games as models of a particular subject activity are widely used in the field of training and education, the professional and social contexts of activities that motivate both cognitive and professional orientation are modelling successfully.

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