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PROFESSIONAL SIMULATION AND THEIR USE IN THE EDUCATIONAL PROCESS

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ДІЛОВІ ІГРИ ТА ЇХ ВИКОРИСТАННЯ В ОСВІТНЬОМУ ПРОЦЕСІ

Abstract

Introduction. At the present stage of educational space development in Ukraine there is an acute need for targeting content and learning technologies at the development of future specialist personality that would be focused mostly on professional development during training. Significant potential in this respect are interactive learning technologies. Among these technologies occupy an important place where gaming technology and accented our research.

Methods In the study process were used the methods of analysis, comparison, synthesis, monitoring, etc.

Results. In the article the problem of forming highly qualified professionals through the use of professional simulation in terms of the training context; was investigated and analyzed their significance in the educational process and formulated recommendations for developers and users of professional simulation

Discussion. The results of theoretical and practical studies successfully implemented in the organization of educational process in teaching pedagogy and psychological sciences and foreign language students in higher education.

Keywords: contextual learning, professional simulation, kvazioprofessional activity, professional simulation structure.

Анотація

Вступ. На сучасному етапі розвитку освітнього простору в Україні виникла гостра необхідність орієнтації змісту і технологій навчання на розвиток індивідуальності майбутнього спеціаліста, які максимально були б спрямовані на професійне вдосконалення під час фахової підготовки. Суттєвий потенціал у цьому аспекті мають інтерактивні технології навчання. Серед таких технологій чільне місце посідають ігрові технології на яких і акцентовано наше дослідження.

Методи. В процесі дослідження застосовувалися методи: аналіз, зіставлення, узагальнення, спостереження та ін..

Результати. В статті розглядається проблема формування висококваліфікованих спеціалістів за допомогою використання ділових ігор з точки зору контекстного навчання; досліджено та проаналізовано їх значення в освітньому процесі та сформульовані рекомендації для розробників та користувачів ділових ігор.

Перспективи. Наведені результати теоретичних та практичних досліджень успішно впроваджуються при організації навчального процесу в процесі викладання педагогіко-психологічних дисциплін та іноземної мови студентам у вищому навчальному закладі.

Ключові слова: контекстне навчання, ділова гра, квазіпрофесійна діяльність, структура ділової гри.

Аннотация

Вступ. На современном этапе развития образовательного пространства в Украине возникла острая необходимость ориентации содержания и технологий обучения на развитие индивидуальности будущего специалиста, которые максимально были бы направлены на профессиональное совершенствование во время профессиональной подготовки. Существенный потенциал в этом аспекте имеют интерактивные технологии обучения. Среди таких технологий главное место занимают игровые технологии на которых и акцентировано наше исследование.

Методы. В процессе исследования применялись методы: анализ, сопоставление, обобщение, наблюдение и др.

Результаты. В статье рассматривается проблема формирования высококвалифицированных специалистов посредством использования деловых игр с точки зрения контекстного обучения; исследованы и проанализированы их значение в образовательном процессе и сформулированы рекомендации для разработчиков и пользователей деловых игр.

Перспективы. Приведенные результаты теоретических и практических исследований успешно внедряются при организации учебного процесса в процессе преподавания педагогико-психологических дисциплин и иностранного языка студентам в высшем учебном заведении.

Ключевые слова: контекстное обучение, деловая игра, квазипрофессиональная деятельность, структура деловой игры.

Introduction. In modern ukrainian society the education system develops in the context of market reforms. The education sphere is becoming increasingly important area of the economy, that produces the most significant human benefit - human capital. In this area, as in any other, using certain technologies, some of them have the ancient history, and some appeared quite recently.

In the current dynamic market environment professionals must possess special knowledge and skills, that can not be formed using only traditional methods of teaching. Therefore in recent years the Ministry of Education and Science of Ukraine directs state universities to comprehensive intensification and improvement of the educational process quality through extensive use of professional simulation, discussions, professional situations simulation and other active learning methods

Analysis of recent research and publications. In the scientific literature with psychology and pedagogy problem of educational games has got wide coverage.

The theoretical basis and practical use of game method were outlined in these writings V. Khristenko, L. Belchikov, V. Burkov, Yu. Heronimus, V. Efimov, V. Komarov, V. Platov,

and others .

The professional simulation meaning in summary form was recorded in psychological dictionary, such as « professional simulation- a play form of objective and social content of professional activity, relationships characteristic modeling for this practice type» [1].

The professional simulation is «finding method of new ways to perform certain activities, and effective training methods, because removes the contradiction between abstract academic subject and the real nature of the professional activity» [2].

In scientific studies [3; 11; 12] it is said, that the participation in professional simulation allows students to gain experience toward future careers and professional development, of necessary skills, forming self-confidence, professional identity formation - that is the professional simulation educational.

Purpose. This article is devoted to the theoretical analysis of using the professional simulation method in universities training, determination of their importance for the basic knowledge formation and development and skills from different disciplines, creating recommendations to developers and users of professional simulation in high schools.

Methodology. To reach the purpose there were used the set of interrelated research methods: analysis, comparison, composing and synthesis of scientific literature, observation.

Results. In the professional simulation participants' training happens in the process of general operations, where everyone decides its own separate task in accordance with its role and function.

Professional simulation is not just joint training, this training of general operation, knowledge and cooperation skills [4].

The origins of the professional simulation as scientists call as magic rites of ancient man, and hunting ritual dances, that depicted hunting process before its beginning - the function of these events was not only magical, but also educational.

The immediate prototype of professional simulation is a military game (preparation Kosack troop, «amusement regiment», kings) [5]. In the former Soviet Union the first professional simulation was designed and carried out in the 30's of last century [6; 7; 9, P.65-66]. In pedagogic science the problem of professional simulation began actively develop in the 60's of the 20th century.

Today, professional simulations are used for educational training institutions at teaching conferences and in the classroom as in higher and in secondary specialized educational institutions, technical and humanities direction [5; 8; 10].

The attempts distribution of professional simulation usage has its positive and negative sides. The positive side confirms the possibilities of professional simulations as a tool of identity formation specialist and enhance the learning process. The negative - is associated with not enough deep understanding of the professional simulation essence. Therefore, and in domestic and in foreign scientific literature there is no common concept of the professional simulation (different idea of its meaning, structure, teaching tools). This leads to some difficulties in using it.

In our opinion, the most objective role of professional simulation in the educational process is considered from the contextual learning standpoint [3], professional simulation is a reproduction form of subject content and social future of professional activity, modeling such relations' systems, that are characteristic of this activity as a whole. In the professional simulation students perform a virtual professional activity, which coordinates the training and professional elements. Knowledge and skills which are used by students not abstract, but in the profession context .

At the same time students along with professional knowledge acquire special competence - special interaction skills and people management, collegiality, the ability to manage and submit.

Thus, the professional simulation brings personal qualities, accelerates the socialization process, in its process assimilates professional standards and social actions.

And at that, each participant is in the active position, interacts with partners, balancing the interests of partners and through this interaction knows himself.

Based on the analysis of the scientific literature [3, 4] can be formulated psychological and pedagogical principles of professional simulation:

- The imitative modeling situation principle: a) imitative model of production; b) professional activity game model;

- The problematic content principle of the game - a game subject material is laid in learning problems, that are arranged in the tasks' form that may contain a particular type of conflict, the solution involves finding the way out of the problem situation;

- The role interaction principle in general operations - are the imitative basis of production functions of professionals through their interaction role, providing communication to subject-in subjects relations, which developing mental processes inherent in professionals' thinking;

- The dialogue communication principle and partners' interaction in the game - the thought system of each partner contributes their mutual movement to the problem common solution;

- The principle of dual-progress game training activity - the possibility of individual internal emancipation, the creativity manifestation - «serious» activity, is aimed at training and development of the specialist, is implemented the «non-serious» game form.

These interdependent principles constitute the certain concept, and they should be guided both at the design stage and at the stage of the professional simulations, failure or insufficient processing of at least one of them will affect the result.

In the professional simulations are their advantages and disadvantages and the specific conditions of use. The professional simulation as a form of contextual learning must be chosen to solve such pedagogical problems:

- Formation of students' holistic view of professional activity and its dynamics;
- The acquirement of problem-professional and social experience, making individual and collective decisions;
- The theoretical and practical thinking development in the professional sphere;
- The cognitive motivation formation, providing conditions of professional appearance motivation.

Thus, not any content of professional activities is suitable for gaming simulation, but only one, that contains the problematic, and can not be learned individually. The game object, like the ball, must play with the «players». The optimum number of professional simulation participants is no more than 30 people. Professional simulation can be lead to the statement of lectures to determine gaps in knowledge or after lectures to consolidate and update knowledge in practice. Also, you can organize all of the educational process on the basis of continuous business game.

The professional simulation conceptual understanding (as a form of semantic-contextual learning) has led to block diagram of professional simulation (Figure 1).

The imitative model reflects the selective fragment of reality and sets the objective context of specialists' professional activity in the classroom process.

The game model is a way of describing members work with imitative model that defines the social context of professional specialists activity.

The game aims - one of the complex structural components. The educational goals are set (goals of training and education, teaching and educational) and games (game motivation, corresponding emotional background) - perform a secondary role, the role of achieving educational goals.

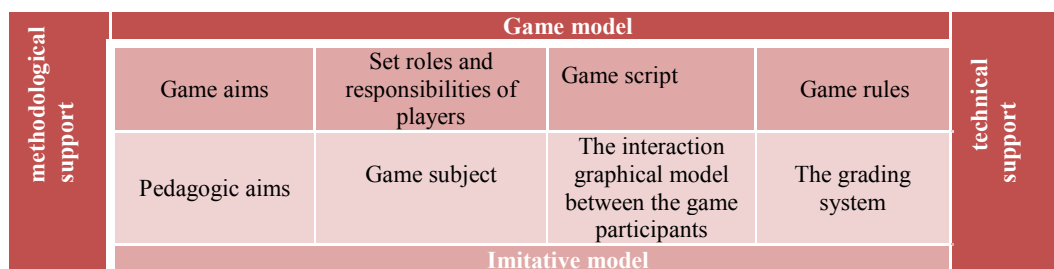


Figure 1. Block diagram of professional simulation for A. O. Verbutskyi

The game object- the subject of game players' action. It sets based on expert models, and there is a list of processes and phenomena, which imitate in professional simulation and require the professional and competent action.

The game scenario- a verbal description or graphic form of subject matter, that is expressed in the character and players' actions sequence, teacher or leader. In scenarios are reflected the problematic principles, dual-progress, general activities.

Graphic role model of participants' interaction reflects the game quantitative composition, their job functions, between group and intra-group relations, their interactions structure at every stage of the game, and also gives an idea of the possible spatial arrangement of the participants.

The roles' complex and players' functions should adequately reflect the "official picture" of the professional activity fragment, which is modeled in the game.

The game rules - game participants normal behavior, the main task is to display real and game (equivalent) plan of the professional activity, its objective and social context.

An example of the game basic rules can serve such list:

- Strict adherence to speeches and discussions regulations;
- The reporters use of different media, the usage of the latest active forms presentation;
- The speakers are questioned in such way, to cause the debate.

The evaluation system performs the monitoring function and self-evaluation, foresees content mark, provides competitive nature, can assess the activity and participants' personal qualities in the game, and the gaming groups success works. We construct as system of players' self-evaluation, and then - the teacher- guiding evaluations.

The game methodological support provides for the following materials: prospect and game options, set real and game documentation. Detailing methodological guidelines depends on the complexity of the imitation object, contingent and other factors.

Professional simulation technical support- limits the computers use in the gameplay. In scenarios should be clear instructions how to use computers and TMT. Technical means are selected depending on the game purpose and content and perform only the functions, which are essential dispense or performed manually worse and slower.

So, summarizing the abovementioned, we believe, that developers and users of professional simulation in high school should adhere to the following guidelines:

1. Professional simulation should be used only there, where it is supposed to get a holistic experience for future professional activities
2. While game development must take into account its impact on different educational work types with students, and other teachers reaction.
3. Preparing for the professional simulation should begin with the analysis of production specific situations in the roles' playing process, of students' cultural debate previous formation.

4. To professional simulation would not turn into a game of chance, it must be required structural components coordination.

5. The game must be based on the principles of self-regulation. The teacher is an active participant in the game at all stages, which requires high preparatory work, theoretical and practical skills of designing

6. Students' daily work in the professional simulation process must obey to the manufacturing process logic, that is simulated, but not the traditional behavior pales in the classroom.

7. In high school the most affordable compact professional simulation, are designed around four hours practical training, the time should be chosen by focusing on the students' emotional charge.

References

1. *Psixologiya. Slovar'*: 2- izd. (1990). [Psychology. Dictionary]. Moskow: Politizdat [in Russian].
2. *Psixologiya A.Ya. Psixologicheskij slovar'* [Psychology AY. Psychological dictionary] at: <http://azps.ru/handbook> [in Russian].
3. Verbizkij, A.A. (1991). *Aktivnoe obuchenie v vy'sshej shkole: kontekstny'j podxod [High society Aktivnoe Learning in Schools: kontekstny approach]*. Moskow: Higher School [in Russian].
4. *Upravlenie personalom. Slovar'-spravochnik [Manage personnel. Directory dictionary]* at: <http://psyfactor.org/personal0.htm> [in Russian].
5. Ezhova, L.V. (2005). *Postanovka i reshenie upravlencheskix zadach na promy'shlenny'x predpiyatnyx metodom delovy'x igr [Setting a decision on upravlencheskix problems of industrial enterprise by delovy'x igr]*. Moskow: SPb: Neva [in Russian].
6. Xruczkij E.A. (1991). *Organizacziya provedeniya delovy'x igr [Organization conducting delovy'x igr]*. Moskow [in Russian].
7. *Xarakteristika i znachenie delovy'x igr v medeczyne [Characteristics and importance in medicine delovy'x igr]*: Retrieved from <http://hippocrate.narod.ru/h/harakteristika.htm> [in Russian].
8. Geronimus, Yu.V. (1989). *Igra, model', eronomika [Yhra, model, Economy]*. Moskow: Znanie [in Russian].
9. Komarov, V.F. (1989). *Upravlencheskie imitacziionny'e igrы' [Upravlencheskiye simulation games]*. Novosybyrsk: Nauka [in Russian].
10. Krasovskiy, Yu.D. (1989). *Mir delovoy igrы': (Opy't obucheniya xozyajstvenny'x rukovoditelej) [Delovoy Mir games: (Experience of teaching hozyajstvennh Director)]*. Moskow: Ekonomika [in Russian].
11. Smolkin, A.M. (1991). *Metody' aktivnogo obucheniya [Methods of active learning]*. Moskow [in Russian].
12. Platonov, V. Ya. (1991). *DelovY'e igrы': razrabotka, organizacziya I provedenie [Dusiness games: development, organization and Conduct]*. Moskow: Profizdat [in Russian].

Список використаних джерел

1. Психология. Словарь [Текст] / Под общ. ред. А.В. Петровского, М.Г. Ярошевского. - 2-е изд., испр. и доп. - М.: Политиздат, 1990. - 494 с.
2. Психология А.Я. Психологический словарь [Электронный ресурс] / Режим доступа: <http://azps.ru/handbook>.
3. Вербицкий А.А. Активное обучение в высшей школе: контекстный подход [Текст] / А.А. Вербицкий. - М.: Высшая школа, 1991. - 207 с.
4. Управление персоналом. Словарь-справочник [Электронный ресурс] / Режим доступа: <http://psyfactor.org/personal0.htm>
5. Ежова Л.В. Постановка и решение управленческих задач на промышленных предприятиях методом деловых игр [Текст] / Л.В. Ежова. - СПб.: Нева, 2005. - 98 с.
6. Хруцкий Е.А. Организация проведения деловых игр [Текст] / Е.А. Хруцкий. - М.: Высшая школа, 1991. - 320 с.
7. Характеристика и значение деловых игр в медицине [Электронный ресурс] / Режим доступа: hippocrate.narod.ru/h/harakteristika.htm

8. Геронимус Ю.В. Игра, модель, экономика [Текст] / Ю. В.Геронимус.- М.: Знание, 1989. - 208 с.
9. Комаров В.Ф. Управленческие имитационные игры[Текст] / В.Ф. Комаров. - Новосибирск: Наука. Сибирское отделение, 1989. - 272 с.
10. Красовский Ю.Д. Мир деловой игры: (Опыт обучения хозяйственных руководителей) [Текст] / Ю.Д. Красовский. — М.: Экономика, 1989. - 175 с.
11. Смолкин А.М. Методы активного обучения[Текст] / А.М.Смолкин. - М.: Высшая школа, 1991.-176 с.
12. Платов В.Я. Деловые игры: разработка, организация и проведение [Текст] / В.Я. Платов. - М.: Профиздат, 1991. – 156 с.