Innovative Approaches to Teaching Professionally Oriented Disciplines “Organization and Economics of Pharmacy”, “Management and Marketing in Pharmacy”

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Abstract
The article presents pedagogical innovations in teaching professionally oriented disciplines “Organization and Economics of Pharmacy”, “Management and Marketing in Pharmacy” at the Department of Organization and Economics of Pharmacy and Technology of Drugs of the Ivano-Frankivsk National Medical University, namely: innovative approaches to practical classes with the elements of business games, training in mini-groups, problematic question discussion; extraordinary defense of term papers and the 4-step monitoring of knowledge, abilities and skills required for future pharmacy professionals. The outlined innovations of classroom interactive training are aimed at involving the entire academic group of students in group discussions, teaching them to substantiate their thoughts, developing the abilities to make joint management decisions and bear responsibility for their fulfillment – these are the qualities, which are constantly improving when studying the disciplines “Organization and Economics of Pharmacy”, “Management and Marketing in Pharmacy”.

Keywords
pedagogical technologies; occupational training of future pharmacy professionals; professionally oriented disciplines; organization and economics of pharmacy; management and marketing in pharmacy; interactive technologies

Problem statement and analysis of the recent research

The reform of education in Ukraine requires systematic approach considering the key factors of economic development. Changes in higher education of our country determine the search for as well as the implementation of educational innovations in occupational training of future pharmacy professionals. These changes primarily relate to innovating and enriching the content of professionally oriented disciplines, searching for and implementing new forms, methods and pedagogical technologies.

Under conditions of modern market economy, occupational training of future pharmacy professionals is dynamic. One of the strategically important vectors in training pharmacy professionals with a high level of professionalism considering the acceptance of innovative and communicative technologies is getting experience in the organization, management and marketing. The level of competence as well as the level of preparing students for their professional activity is demonstrated by their ability to perform their functions and production objectives, which cause the implementation of pedagogical innovations when teaching professionally oriented disciplines.

Occupational training of future pharmacy professionals was studied by L. Kaydalova, V. Chernykh, Z. Mnushko, etc. [5, 8, 11].

The problems of occupational training of future pharmacy professionals, including “Organization and Economics of Pharmacy”, “Management and Marketing in Pharmacy” are mainly investigated by V. Bobruk, S. Sergeyev, O. Blagun, M. Demchuk, A. Gorilyk, B. Hromovyk, V. Malyi, Z. Mnushko, V. Sholoyko, A. Shtroblya and others [1-4, 6-8, 10-13].

However, despite numerous studies conducted to solve the problem of occupational training of future pharmacy professionals in higher pharmaceutical and medical educational establishments, the problem of implementing pedagogical innovations in the methodology of teaching professionally oriented disciplines, in our opinion, remains relevant, considering the implementation of the new generation standard for pharmacy specialties as well as actual requirements for the guidelines in particular.

The objective of the research was to analyze teaching of professionally oriented disciplines “Organization and Economics of Pharmacy” (“OEP”), “Management and Marketing in Pharmacy” (“MMP”) as well as implementing innovation approaches in teaching methods.

Not all the teachers and students usually have a high level
of motivation to both teaching and learning of professionally oriented disciplines, which requires searching for as well as the implementation of pedagogical innovations in pharmaceutical education [7-9].

1. Materials and methods

The materials were the conditions of teaching “OEP”, “MMP” and the approaches to its improvement. The methods of systematic and logic analyses, as well as bibliographic methods were used.

2. Results

Teaching of professionally oriented disciplines “OEP”, “MMP” is aimed at the formation of economic and organizational competence of pharmacy specialists. Its goal is to form as well as to improve professional knowledge and practical skills of pharmaceutical students teaching them the organization of pharmacy depot work, the development and analysis of the constitutional documents, the realization of entrepreneurial activity, document management, namely finance and economics as well as sales and operations planning, financial reporting and financial statement analysis, making motivated management decision based on book-keeping indicators, the calculation, declaration and monitoring of pharmacy pricing taking into account international experience and adjustment to modern realities of local market.

During the 4-year study period, full-time and part-time students are taught educational discipline “OEP” according to their curriculum. They have to acquire knowledge and skills of the organization and structural division of a pharmacy (drugstore), economics of pharmaceutical company, accounting and reporting, providing the population with medicines etc.

During practical classes, students are taught how to compile a document, make economic calculations, register and account economic operations, etc. Students have to solve case studies as well as to design professional situations, business games etc.

During apprentice training of “OEP”, the 5th year students have to improve their knowledge and skills in providing the population with medicines and medical products, the organization and functioning of a pharmacy (drugstore), pharmaceutical management at the state and regional levels.

Professionally oriented discipline “MMP” deals with theoretical fundamentals and applied principles of pharmaceutical management and marketing for subjects of pharmaceutical market aimed at increasing their compatibility at the national and international levels. This discipline is taught to the 4th and 5th year full-time pharmaceutical students as well as the 5th and 6th year part-time pharmaceutical students. Its goal is to form up-to-date management thinking as well as the system of professional management and marketing knowledge. To increase the level of knowledge quality and to adjust the content of a discipline considering the world and European educational processes it is necessary to review as well as to improve

and renew educational methodical material of “MMP”. An important role is currently given to the use of computer technologies in the educational process of professional specialists training.

Students have to complete an apprentice training and write a term paper. The key task of the apprentice training in MMP is to form practical skills in pharmacy. Pharmaceutical students have to know theoretical fundamentals of “MMP” in order to acquire practical skills, including a system of methods for managing pharmaceutical organizations, forms of management communications, motivated and effective decisions management, staff management, human resource management, pharmaceutical marketing management, pharmaceutical market research, positioning and compatibility of medicines, organization and formation of a wide-range of goods, sales, pricing and communicative politics of pharmaceutical companies and drugstores.

A term paper is an important step in training highly-qualified and competitive specialists at the pharmacy market. When writing a term paper, a student has to apply his theoretical skills in practice.

While teaching “OEP” and “MMP”, the following traditional methods are used: lectures, practical classes and seminars, student’s individual work, apprentice training.

As the content of educational disciplines “OEP” and “MMP” is constantly changing, we have decided to renew and enrich educational methodical materials. Thus, at the modern level interactive and problematic lectures are used.

We have taken into account that pharmacy regulations and laws are constantly changing, so we introduce all the information required to the content of educational disciplines and methodical publications. The teachers of “OEP” and “MMP” have to regularly improve educational and methodical materials including textbooks, manuals, practical works, methodical guidelines for students’ classroom and individual work, methodical instructions for teachers, test bases.

While solving application tasks and case studies, mastering knowledge and skills to research the market of medicines during practical classes, the students study the methods of medicine, medical product and accompanying pharmaceutical product pricing as well as pharmaceutical management, therefore, it is important to provide them with professional situations, disputes, case studies, working in mini-groups, manufacturing situations, etc.

A business game consists of the following key steps:

- introduction (the goal);
- preparation (the rules);
- roles and resources for each role;
- a business game;
- analysis of the results, conclusions.

Business games have to be used for systematical revision of training stuff and the improvement of professional knowledge and skills of future pharmacy specialists [5, 12].
Traditionally, we apply business simulation when teaching the following topics: “Organization of Prescription Department of a Pharmacy”, “Guidelines for Prescribing and Taking Prescription”, “Sale of Non-Prescription Medicines”, “Wholesale-Pharmaceutical Companies and Drugstores” (a discipline “OEP”) and “Price, Pricing and Pricing Policy of Pharmaceutical Companies and Pharmacies”, “Marketing Communication. Advertising and Its Function in Communication Policy of the Company” (a discipline “MMP”).

Interactive technology of training introduced into teaching of the disciplines “OEP” and “MMP” has a specific expected goal – to create comfortable training when each student is able to see his/her progress, demonstrate his/her intellectual ability, unlock his/her creativity and develop necessary skills and qualities. During interactive training students become the subject of training; they feel like an integral part of the process that intensifies training motivation thereby ensuring better mastering of knowledge and skills due to the innovation and creativity of interactive methods.

Particularly, the students like participating in the following methods: brainstorming, “Microphone”, “Range of Ideas”, “Aquarium”. The organization of interactive training is supposed to model different situations in pharmaceutical sphere, the usage of role-playing games, joint solution of problems based on the analysis of circumstances and a certain situation.

One of the widely used interactive methods of teaching “MMP” is a method of training in mini-groups. A mini-group consists of 3-5 students depending on their preparation level in finding out new ways of solving the problem and providing the arguments for the certain approach. This type of work develops communicative skills of students being important for their future professional activity; they learn how to give reasons for their opinion, as well as to make comparison of various positions and views, to assess their own mistakes without detriment [5]. The subject “Goods in the System of Marketing. Goods and Innovative Policy of Pharmaceutical Companies” can serve as an example of training in mini-groups.

The experience has showed that in the process of interactive training, there is an active interaction of all students. Due to interactive technologies, students learn to express and defend their own viewpoint, as well as to respect the opinion of the others. In the process of discussion, students improve and expand their knowledge on the disciplines “OEP” and “MMP”. The use of working technologies when discussing the issues intensifies their motivation for training as well as helps form their own point of view and develop critical thinking.

Therefore, the use of interactive methods allows us to involve all the students to work together, to teach the students how to express their opinions in a logical way, to develop the skills of making joint management decisions and bearing some responsibility.

One of the key points of training stipulated by the curriculum is the students’ individual work in order to activate their individual systematic work as well as to increase the quality of the educational discipline.

In order to adjust theoretical training to practical realities of the modern society, pharmacy practitioners are invited by the Department of Organization and Economics of Pharmacy and Drugs Technology of the Ivano-Frankivsk National Medical University to deliver lectures and disputes, practical classes, master classes, presentations. Such meetings ensure better understanding of the importance of pharmaceutical education and orientation training of future specialist at the European level.

An important form of monitoring knowledge and skills in “OEP” and “MMP” is a systematic test control during practical classes and seminars. At the Department of Organization and Economics of Pharmacy and Drugs Technology, 4 types of tests to control knowledge and skills acquired by students during practical classes are used: introduction control (at the beginning of the class), evaluation of the protocol prepared, written final control (solution of case studies), recitation. The total results of these intermediate types of control make up one point for the practical class.

Moreover, the preparation of students for a licensing examination “Krok-2” in “OEP” and “MMP” plays an important role in the formation of a competent specialist. With this purpose, methodical guides have been developed at the Department. Tests and explanations to them contain theoretical regulations of the disciplines and applied materials, which are adjusted to pharmaceutical practice.

Systematic control of the students’ preparation allows us to find out the level of their knowledge and skills as well as to determine the so-called “risk groups” in order to organize additional means of preparation for both the final control and the licensing examination “Krok-2. Pharmacy”. In addition to the aforementioned forms of knowledge control when studying “OEP” and “MMP”, the 5th year students write term papers in the topics chosen by them individually.

A term paper is an important stage of the educational process during which students have to be able to apply their theoretical knowledge and skills in practice. At this stage of specialists training, the process of the formation of knowledge and skills finishes and students have to confirm that they meet all the requirements needed for future organizers, managers and marketing specialists in pharmacy. The purpose of the term paper is to demonstrate the students’ research skills, confirm their capabilities to organize and deliver individual research in order to improve management of pharmaceutical companies, activate motivation of employees, deliver marketing research of pharmaceutical market on the example of medicines of various therapeutic groups, improve marketing of pharmacy, wholesale and retail sales, production of pharmaceutical companies etc.

### 3. Conclusions

The implementation of innovative approaches when teaching professionally oriented disciplines “OEP”, “MMP”, namely business simulations, mini-groups classes, problematic ques-
tion discussion which provide both group training and cooperation, extraordinary defense of term papers, and multilevel control – assists in teaching competent specialists, who will be competitive at the current pharmaceutical market in Ukraine as well as abroad.

4. Prospects for further research

It is recommended to continue the implementation of innovative approaches of interactive training as well as to actively involve pharmacy practitioners using long-distance connection with the help of modern cloud Internet-technologies being available at IFNMU, at the Department of Organization and Economics of Pharmacy and Technology of Drugs of the Ivano-Frankivsk National Medical University in particular. It is appropriate to organize joint round table talks, disputes, challenging and situational analysis and publish their results in professional periodicals.

References


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