

Experience in the Application of Cognitive Techniques in the Field of Physical Education and Sports

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Abstract: *Improving the professional training of managers in the field of physical education and sports today requires the need to use foreign experience in their preparation, especially for the experience of using cognitive psychology techniques in professional and personal training. The study of international experience training of future managers of physical education and sports is of great importance for the implementation of positive trends in higher education in terms of the quality of their training and the formation of their professional competence. And this requires a critical analysis of the achievements of the educational systems of foreign countries and the adaptation of these achievements to national needs. The relevance of the study of world experience is due to the possibility of using the achievements and practices in the context of the establishment of a new paradigm of professional education for managers of physical education and sports, in which the cognitive-contextual goals of forming the professional competence of these specialists should become priorities. The importance of studying international experience in the application of cognitive teaching methods in the training of managers of physical education and sports is also due to insufficient information on relevant studies conducted in this area. Unfortunately, the study of the individual components of the cognitive-oriented education system in higher education institutions of the world space is characterized by the lack of a holistic view of its functioning in modern conditions.*

Keywords: *education; cognitive application; physical education; sports; managers*

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1. Introduction

In modern pedagogy, cognitive learning, along with recognized and well-known areas of learning, such as developmental, programmed, problematic and others, is becoming widespread in many countries. However, the tasks of cognitive learning in these countries are solved differently in accordance with their internal socio-economic and cultural-educational problems.

Cognitive approaches in teaching are aimed at the formation of critical thinking; the ability to distinguish between factual information and value judgments; the ability to distinguish between facts and assumptions; the ability to distinguish logical types of communication; the ability to highlight specific subject types of relationships; the ability to detect factual and logical errors in reasoning; the ability to distinguish material arguments from irrelevant; the ability to distinguish between reasonable and unfounded estimates, etc.

The main goal of cognitive learning is, according to researchers (Shepard, 2005), the development of the entire set of mental abilities and strategies that make learning and adaptation to new situations possible. In our view, cognitive learning is not a combination of various techniques, methods of learning, but a dynamic system based on a model of the individual's biopsychosocial organization. Such a learning system uses not only intellectual cognitive mechanisms that are implemented in traditional verbal teaching methods aimed at developing the reflective activity of students and the formation of intellectual skills necessary for solving educational problems, but primarily sensory-perceptual channels of various modalities, as well as sensually -Intuitive ways to gain new knowledge. The use of cognitive learning methods in our understanding allows us to combine the natural (subjective), subjective-mental and rational principles of the personality into a single whole through interconnected actions, discussions, thoughts and self-control, contributes to an increase in the effectiveness of cognitive development and the intellectual system as a whole. A distinctive feature of training is that the leading role is given to sensory-perceptual and emotionally-intuitive ways of acquiring knowledge. These methods are active, allow you to reveal the procedural aspects of intelligence, contribute to the identification and development of hidden individual abilities of future managers of physical education and sports.

The current field of creative professions has expanded significantly. Uncertainty, a constant change of conditions and an increase in risks,

together with an increase in the requirements for productivity and labour efficiency, made all professions related to intellectual activity demanding on technology able to secure the development of a space of reliability and effectiveness of intellectual efforts.

But the field of higher education is extremely sensitive to the technologicalization of cognitive processes. The variety of cognitive processes involved in this area provides for a diverse multiplicity of cognitive technologies aimed at:

- the implementation of training;
- mental processes providing
- mastering new material;
- development of memory;
- the formation of cognitive experience of the personality of a specialist;
- cognitive development of personality and its self-improvement;
- the formation of cognitive mechanisms of control of intellectual activity;
- cognitive interactions in interactive and communication processes;
- cognitive technologies of joint cognitive and other (decision-making) project activities.

Now in most countries there is an integration of the sphere of physical education and sports in the market environment. This is due to factors such as the transition to a new form of modern society - information, when information is not only an important unit, but also the ability to operate and use it for one's own development, to consistently introduce high standards in education. This is required by the labor market, which sets new requirements for the academic disciplines taught in higher education institutions and, in general, for the quality of educational services. To a large extent, this is also associated with the opening of borders between countries and the integration of educational systems in the global educational space and, accordingly, the growing mobility of students.

The leading trend in the process of formation of professional competence of managers of physical education and sports in the world is that a modern manager must have a sufficient level of education for effective professional activity, be able to use the knowledge and information gained in practice, see real problems and find ways to overcome them, be able to think critically and in a non-standard way, project training, analyse professional activities and anticipate its consequences, be prepared for organizational and managerial work. In addition, he must have certain moral qualities formed: the ability to work with people, solve conflict situations,

take responsibility for managerial decisions, be active, independent, ready to change his professional profile. The requirements for the manager of physical education and sports are considered, the tasks and principles of training these personnel are determined in accordance with the needs of the international labor market.

Theoretical analysis of pedagogical experience in improving the training of managers of physical culture and sports using cognitive training techniques in countries that have achieved some success in this field will allow it to be taken into account in the process of upgrading the vocational education system of the relevant profile. It is as a result of a comprehensive analysis of the system of training sports managers within the higher professional education of foreign countries, a real opportunity to use this experience to improve the training of these professionals and their professional competence in higher education institutions.

The basis of our work was the scientific achievements of leading scientists in the field of improving the psychological component of the professional training of sports students and sports managers. In particular, Sushchenko (2018) in her work described in detail the system for implementing cognitive techniques in the context of developing a professional and personal component.

The experience of introducing methods of cognitive psychology was studied on the basis of the works of such scientists as Dereka (2016), Jacobs (2013), Xiaoyan & Xiaohong (2007) and other.

2. Main research

2.1. The main prerequisites and features of improving the professional competence of future managers of physical education and sports in the context of the use of cognitive techniques

The development of cognitivism in education as an object cognitive psychology actualizes the consideration of the relationship of human activity with manifestations of empirical and theoretical and reveals its role in the development of new knowledge-based formations of cognitive technologies as tools for cognitive, mental and other activities (Flavell, 1979; 1997). The growth of demand in cognitive psychology techniques leads to the formation of a utilitarian-pragmatic point of view on understanding the effectiveness of cognitive technologies, limited only by its effectiveness. The validity of this approach is understandable in the face of constant challenges, reducing resources and increasing requirements for the formation of competitiveness. At the same time, it is the consideration of cognitive psychology techniques

in higher education that reveals their connection with research and pedagogical innovations, the appearance of which is impossible without the comprehensive development of the holistic personality of specialists involved in educational, knowledge, communicative and other processes.

At the World Economic Forum in Davos 2016 (Klein, 2004), experts voiced important skills that can be mastered using the cognitive techniques necessary for a successful career, the acquisition of which will guarantee the competitiveness of physical education and sports managers in modern conditions. Therefore, the competence of these specialists is determined in professional knowledge, the level of success of the use of cognitive psychology techniques, readiness to perform the upcoming work, namely: the ability to make decisions on troubleshooting, critical thinking, creativity, the presence of organizational skills and the ability to manage people, sociability, developed emotional intelligence, skill take responsibility, focus on the client, master the art of communication, be adaptive to modern realities and the like.

It is advisable to immediately note that today in most countries of the world cognitive psychology techniques of the formation of professional competence of managers in physical education and sports complement each other, and also give reason to state the following (Ferkins, 2012):

- university (academic) training of sports managers covers a reasonable combination of fundamental theoretical education and professional practice at various stages of training;
- training of sports managers take place with the priority of special humanitarian disciplines over disciplines related to the natural sciences;
- multilevel training of managers in physical education and sports provides for the presence of basic and specialized stages, the content of training on which are methodologically and methodologically different;
- basic training covers the assimilation by students of the whole range of disciplines that directly relate to future professional activities, including organizational, managerial and economic disciplines;
- specialized training is focused on studying the disciplines necessary for future professional activity and, on the contrary, exempts from studying auxiliary disciplines that are not directly related to the chosen speciality.

So, the formation of professional competence of future managers of physical education and sports, mainly in the context of improving cognitive skills, is considered as an important goal of education, the result of professional training, characterizing the future specialist about his readiness to carry out professional activities. This, in fact, confirms the dynamism of this process, the sequence of its development and to determine the level of

formation of the professional competence of these specialists at each stage of the educational process.

2.2. UK experience of using cognitive techniques in the formation of professional competence of future managers of physical education and sports

The leader in Europe in the field of sports management education is the United Kingdom. In this country, you can get a Master of Business Administration in Sports Management (Master of Business Administration in Sports Management) both in business schools and in the relevant departments of physical education in the existing 11 institutions of higher education. A two-tier education is characteristic of the UK higher education: after passing the first level, graduates receive the qualification "Bachelor"; passing the second level - "master".

We examined the experience of Cardiff University of Cardiff, Cardiff (Osadcha, 2018), and the University of Football Business Campus (UCFB) of Wembley (Maxcy, 2013) in the preparation of Masters in Sports Management (Winn, 2002).

Cardiff University is associated with a number of high-level partner universities both in the UK and abroad. The university was founded 1865 in Cardiff. It is known as a powerful student-oriented educational institution that has been using cognitive psychology techniques in the arsenal of educational technologies for many years, contributes to their employment, and is also known as an active participant in the economic, social and cultural life of Cardiff and southeast Wales and etc. (Michuda, 2020).

The Master of Sports Management & Leadership program is available for both full-time and part-time studies at The Cardiff School of Sports & Healthcare Sciences. Training lasts 1-4 years. This master's program is aimed at professionals and practitioners working in the field of sports and leisure, who want to develop their leadership skills and / or are looking for new opportunities. The program is attractive both for undergraduate graduates and for foreign students (who have received an educational level of a bachelor) and who wish to develop their knowledge for further employment (through controlled employment or a consulting internship) in the field of sports (Vosniadou et al., 2001).

Masters study under the guidance of mentors who conduct interactive lectures, seminars, workshops, etc., as well as independently. In this master's program, the priority is the skills of increased independence and critical reflection, contributing to the promotion of a positive attitude towards learning throughout life. Masters effectively collaborate with a

mentor (in particular, their software mentor) throughout their studies at the Cardiff School of Sport & Health Sciences.

The University uses the virtual learning environment (The University's virtual learning environment (VLE)), this allows masters to communicate with teachers via e-mail face-to-face, provides free access to educational materials, various teaching methods and assessment, etc.

Methods for conducting classes that solve practical problems and master assessment methods help masters to feel reality, to form knowledge and skills related to the practical environment of a modern sports manager or leader, in a controlled and safe learning environment.

University Football Campus (UCFB), Wembley UK has the highest level of training in physical education in the world, providing a bachelor's degree and advanced training in football and sports. There are two campuses with modern facilities in London and Manchester, namely Wembley Stadium and Etihad Stadium (Vosniadou & Verschaffel, 2004).

The University Football Business Campus (UCFB) has developed innovative undergraduate and graduate programs in the strategic, operational and commercial areas of football and various sports and sporting events. Post-graduate qualification courses have been created here for specialists in the field of football and various fields of sports and sporting events that promote career growth and guarantee competitiveness to graduates in this multi-billion-dollar world market industry.

In modern conditions, the specifics of sports, which are covered in the media, the popularity of participants in the field of sports and sports events will require managers to have a high level of cognitive skills and in-depth knowledge about the principles of sports management, which can be implemented using the principles of cognitive psychology. Therefore, the MSc Sport Management program at the University Football Business Campus (UCFB) was designed for those who seek leadership positions in key functional organizational structures of the football business, covering management, marketing, finance, organization and the media. One year full-time study continues.

Applicants with a bachelor's degree or an international equivalent can enter the magistracy. In addition to a diploma, a candidate for a master's program must have a motivation letter or several recommendations from university teachers or relevant practical experience in business or marketing in the field of sports.

Thus, the experience of UK higher education institutions in the field of training sports managers confirms the effectiveness of the educational process with the use of cognitive psychology techniques, in particular each

program Cardiff Metropolitan University (UCFB) developed according to the requirements of modern psychology requirements and the international sports market to ensure that every student has the best business and management skills necessary for success in sports, including football. He was able to use them in practice. The priority is the personality of the Master, the formation of the professional competence of a sports manager who will be competitive in the labor market. The advantage of such programs is the ability to undergo parallel training and internships at universities around the world and successful sports organizations.

2.3. Experience of Scandinavian countries in using cognitive techniques in the formation of professional competence of future managers of physical education and sports

The level of education as a whole in the countries of Scandinavia is one of the highest in the world; states allocate significantly more (approximately 7.7%) from the budget for the development of this industry than the European average (4.9%). Therefore, higher education is available at the proper level. While studying in higher education institutions of the Scandinavian countries there is an opportunity to gain practical experience in local and foreign companies. Given the fact that the economies of the countries are innovation-oriented, the cost of such experience can hardly be overestimated.

Molde University College in Molde, Norway is a specialized logistics university that offers programs in logistics, economics and management, sports, social sciences, health sciences and social services. This institution was one of the first in the country to introduce cognitive methods in its educational and methodological technologies and has been practicing the use of the basics of cognitive psychology for more than a year (Wagner, 2010).

The Master's Program in Sports Management (Master of Science in Sport Management) is designed to maximize the preparation of masters for leadership positions in the sports and sports sectors. It forms understanding and knowledge about sports, as it is practiced in the European space, introduces masters to the legal, ethical, economic, organizational, historical, political and psychological sciences that are necessary to meet the needs of the sports sector (Dereka, 2016).

Molde University College collaborates with the Norwegian Football Association and many other partner organizations and provides Masters with a unique opportunity for internships. The training is flexible, allowing students to study exchange with partner universities in Europe (Maurer & Jordan, 2006).

The two-year (120 ECTS credits) international master's program in sports management is taught in English, it covers 90 ECTS credits and the master's work - 30 ECTS credits. The combination of various topics related to sports, specific tasks of sports management, provides an internship of 15 ECTS credits, which is effective in building the professional competence of future sports managers.

The loan covers all types of master's work, in particular lectures, seminars, laboratory and practical classes, independent work, term papers, consultations. One ECTS loan is 30 hours. The semester the master spends abroad at one of the recommended partner universities.

The goal of the Master of Science in Sport Management program is to obtain, using the assistance of innovative cognitive psychology techniques and the basics of cognitive psychology, modern knowledge of economic and organizational theories in sports management, specialized knowledge in the field of sports management, in-depth knowledge of scientific methods and philosophy, sciences related to the field of sports.

The Master of Science program in Sports Management is designed to prepare students for leadership positions in the field of sports. The program aims to convey to students a clear understanding and knowledge of sports, as well as familiarize students with the legal, ethical, economic, organizational, historical, political and psychological sciences that are necessary for further management in the sports field.

The courses of the program use a wide range of methods and technologies of cognitive learning: interactive lectures, extraordinary tasks, discussions, teamwork and internships (Kalashnikov, 2019, pp. 87-92).

Some courses are conducted for one semester with classes once or twice a week, while other courses are organized as seminars with intensive weekly training. Masters must work individually between lectures. During study, masters undergo an internship at a sports organization. Over the past two semesters, they have been conducting research on a research project and writing a master's thesis.

The workload of the program is at least 40 hours per week. During the first year, on average, the learning process lasts from 10 to 15 contact hours (teaching, seminars and supervision) per week. In the second year, masters use a significant part of their time in internships and for the study of scientific work. The program is not suitable for distance learning.

After completing the master's program, masters acquire such competencies that form them as specialists in the field of sports management.

So, the curriculum aimed at giving masters the opportunity to understand the complexity, heterogeneity of tasks in the field of physical education and sports. At Molde University College, priority is given to classes in the formation of social skills of masters, namely the ability to listen and be sensitive to others in order to produce effective solutions and create a corporate environment in which organizational processes are productive. Passing an internship in sports organizations and completing a master's work, masters develop their ability to solve a problem by identifying and researching it, in particular studying, analyzing, eliminating and upholding their ideas.

Malmö University is Sweden's ninth largest university with 24,000 students. The mission of the university is to be an active center of research, education and innovation. Students have the opportunity to study abroad, since this institution has signed agreements with about 250 universities around the world. The University has many interdisciplinary programs through which students study in different faculties, which are crucial for an increasingly complex labor market in modern conditions.

Master of Sports Sciences (two years) (Master i idrottsvetenskap (två år) is a two-year master's program (the main branch of Sports Science (Huvudområde: Sportvetenskap)), which studies issues in the field of sports and sports science. The program aims to provide local, regional, national and international demands in the fields of sports, sports science and a sustainable society Education is closely linked to the research environment of sports science at the University of Malmö, which has a high-quality research environment and an outstanding Xia role in scientific controversies sport (Johnson, Chang & Lord, 2006).

The program aims to ensure that the master develops cognitive and practical skills and obtains the knowledge necessary to work in organizations involved in sports, leisure and healthcare, as objects for quality social change. The focus is on the ability of the master to use various theories and methods to understand, analyse, change and use sports for sustainable development and the equality of society.

This is achieved not only through the adaptation of the material and methodological work of the university, but also with the help of the staff, which annually undergoes specialized psychological trainings, and as a result has a high level of knowledge in the field of personality psychology and cognitive psychology. This knowledge helps not only in the process of facilitated learning, but also in the student's personal development

The master's program consists of 120 credits and contains both compulsory and selective courses. It covers compulsory continuing

education courses of 105 credits, of which 90 credits are compulsory in the main field and selective courses of 15 credits that correspond to the master's program. They can be selected both at the University of Malmö (Malmö University), and at other colleges and universities for advice on the program administrator. Training is based on lectures, seminars and self-study, and training can be conducted remotely (Jacobs, 2013).

So, the formation of professional competence of managers in the field of sports of the Scandinavian countries takes place at a high professional level and in the application of a wide range of cognitive techniques, directions for the comprehensive development of the student's personality. For the best way to gain knowledge, they use and look for new innovative teaching methods. Also in higher education institutions, student exchange programs with leading European universities are active. Masters are taught to think freely, critically and creatively. The educational system of the Scandinavian countries itself is aimed at the formation of social skills of masters, namely the ability to listen and be sensitive to others in order to produce effective solutions and create a corporate environment in which to successfully go through management processes. Passing an internship in sports organizations and completing a master's work, masters develop their ability to solve a problem by identifying and researching it, in particular studying, analysing, eliminating and upholding their ideas. Masters who completed their studies at universities in the Scandinavian countries with career prospects and the possibility of getting in Europe and the USA, because the local higher education is considered one of the best in the world.

3. Conclusions

A comparative analysis of the foreign experience of European countries in the formation of professional competence of physical education and sports managers using cognitive psychology techniques indicates the feasibility of a phased change in long-standing educational techniques in the formation of professional competence of future managers of physical education and sports

These cognitive techniques formed the basis of the following innovations: introduction of an international multidisciplinary approach to the master's educational program with a diploma signed by partner universities; focus on European educational standards (increase the hours of independent work of masters to 70% of the total number of loans) to promote the mobility of students, teachers and staff in order to increase the

competitiveness of the university; participate in international projects; use high technological standards in education; develop support for masters, even outside the academic environment; give advice and help in developing a professional portfolio for employment.

It should be noted that the peculiarity of using methods of cognitive psychology requires higher education institutions not only to change the methodological and technical base, but also to teach teaching staff in the context of psychological training. This is due to the fact that the methods of cognitive psychology in the field of education imply the development of both professional and personal qualities of students.

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