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THE MODEL OF PHYSICAL EDUCATION TEACHERS' PROFESSIONAL DEVELOPMENT SYSTEM AT MULTIDISCIPLINARY INSTITUTIONS OF HIGHER EDUCATION

The article is devoted to the presentation of the model of physical education teachers' professional development system at multidisciplinary institutions of higher education. The goal of the article is to present the author's concept of model development of physical education teachers' professional development system at multidisciplinary institution of higher education. According to the goal the following objectives are distinguished: 1) to analyse the research literature which highlights various aspects of physical education teachers' professional development, 2) to present the model of physical education teachers' professional development system at multidisciplinary institution of higher education and characterise its components. The results of processing the source base of the research make it possible to conclude that various aspects of the problem of professional development of physical education teachers are reflected in various publications: the development of physical education teacher's career development, professional development of physical education teachers at different stages, the use of ICT in physical education teachers' professional development, various forms and methods of professional development, professional development content, etc. The model of physical education teachers' professional development system at multidisciplinary institutions of higher education reflects its main components, relationships between them and functional characteristics, which in aggregate is aimed at achieving a defined goal. The proposed system of physical education teachers' professional development at multidisciplinary institutions of higher education includes subsystems: target subsystem (goal and objectives), conceptual-methodological subsystem (the author's concept, the principles underlying physical education teachers' professional development, methodological approaches, theoretical-content subsystem (the content of professional development, formed in accordance with the specifics of professional activity and professional functions), organizational-operational subsystem (professional development stages, functions of the system, tools, institutional forms and models, individual forms and methods), and diagnostic-resultative (criteria, levels, result) subsystem. The conclusion are presents as well as prospects for further research.

Key words: *model, professional development, system, multidisciplinary institution of higher education, physical education teacher.*

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МОДЕЛЬ СИСТЕМИ ПРОФЕСІЙНОГО РОЗВИТКУ ВИКЛАДАЧІВ ФІЗИЧНОГО ВИХОВАННЯ БАГАТОГАЛУЗЕВИХ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ

Стаття присвячена презентації моделі системи професійного розвитку викладачів фізичного виховання багатогалузевих закладів вищої освіти. Мета статті – представити авторську концепцію розробки моделі системи професійного розвитку викладачів фізичного виховання багатогалузевих закладів вищої освіти. Відповідно до поставленої мети виокремлено такі завдання: 1) проаналізувати наукову літературу, яка висвітлює різні аспекти професійного розвитку викладачів фізичного виховання, 2) представити модель системи професійного розвитку викладачів фізичного виховання багатогалузевих закладів вищої освіти та охарактеризувати її складові. Результати опрацювання джерельної бази дослідження дають змогу зробити висновок, що різноманітні аспекти проблеми професійного розвитку викладачів фізичного виховання відображені в різноманітних публікаціях: розвиток кар'єри викладача фізичного виховання, етапи професійного розвитку викладачів фізичного виховання, використання ІКТ у професійному розвитку викладача фізичного виховання, різноманітні форми і методи професійного розвитку, зміст професійного розвитку тощо. Модель системи професійного розвитку викладачів фізичного виховання багатогалузевих закладів вищої освіти відображає її основні складові, зв'язки між ними

та функціональні характеристики, що в сукупності спрямовано на досягнення визначеної мети. Запропонована система професійного розвитку викладачів фізичного виховання багатогалузевих закладів вищої освіти охоплює підсистеми: цільову підсистему (мета і завдання), концептуально-методологічну підсистему (авторська концепція, принципи, покладені в основу професійного розвитку викладачів фізичного виховання, методологічні підходи), теоретико-змістовна підсистема (зміст професійного розвитку, сформований відповідно до специфіки професійної діяльності та професійних функцій), організаційно-операційна підсистема (етапи професійного розвитку, функції системи, засоби, інституційні форми та моделі, індивідуальні форми та методи) та діагностико-результативну (критерії, рівні, результат) підсистеми. Сформульовано висновки та перспективи подальших досліджень.

Ключові слова: модель, професійний розвиток, система, багатогалузевий заклад вищої освіти, викладач фізичного виховання.

Problem statement. The professional activity of physical education teachers coincides with the development of higher education and the functioning of higher education institution, which substantiates the feasibility of further studying the specifics of scientific and pedagogical employees' professional development. The regulatory documents declare the competence characteristics of modern university staff, their functions, as well as their rights and obligations regarding their professional development. The analysis of regulatory documents of leading multidisciplinary institutions of higher education, justifies outlining the specifics of physical education teachers professional activity, which comprises organizational, educational, educational-methodical, scientific, international, health-prophylactic, sports-leisure and sports activities. In the field of higher education at the national and institutional levels, a legal framework has been developed that regulates the professional development of university staff.

The analysis of the latest research and publications. The results of processing the source base of the research make it possible to conclude that various aspects of the problem of professional development of physical education teachers are reflected in various publications: the development of physical education teacher's career development (Aghili & Asadifard, 2013; Henninger, 2007); professional development of physical education teachers at different stages (Armour & Yelling, 2004); the use of ICT in physical education teachers' professional development (Bakhmat, Maksymchuk, Voloshyna, Kuzmenko & et. al., 2019; Carraro, Colangelo, Santi, Conti, & et. al., 2022); various forms and methods of professional development (Bardaglio, Marasso, Magno, Rabaglietti & Ciairano, 2015; Derri, Vasiliadou & Kioumourtzoglou, 2015; Hastie, MacPhail, Calderón & Sinelnikov, 2015); professional development content (Braga, Jones, Bulger, & Elliott, 2017; Dowling, 2006; Ennis, 2013; Hodges, Kulinna, Lee & Kwon, 2017), etc.

However, all these studies have a fragmentary nature, highlight individual cases, and do not provide

an understanding of the integrity of teachers' professional development system at multidisciplinary institution of higher education.

The goal of the article. The goal of the article is defined as follows: to present the author's concept of model development of physical education teachers' professional development system at multidisciplinary institution of higher education. According to the goal we distinguish the following objectives: 1) to analyse the research literature which highlights various aspects of physical education teachers' professional development, 2) to present the model of physical education teachers' professional development system at multidisciplinary institution of higher education and characterise its components.

Research results. In the context of our research, we will model the system of physical education teachers' professional development at multidisciplinary institutions of higher education, which would reflect its main components, relationships between them and functional characteristics, which in aggregate is aimed at achieving a defined goal. Modelling the system of physical education teachers' professional development at multidisciplinary institutions of higher education involves the implementation of a certain algorithm, according to which the idea of creating a system is formed, aimed at providing opportunities for the professional development of scientific and pedagogical employees taking into account their interests and requests, the needs of higher education institutions themselves in the context of the regulatory framework of higher education and normative documents.

According to the author's idea, the system should cover interconnected components and reflect functional connections between them, as well as serve as a model that can be used by multidisciplinary institutions of higher education in order to form their own systems of physical education teachers' professional development. The modelling of the system of physical education teachers' professional development at multidisciplinary institutions of higher education is based on the results of the analysis of: regulatory and legal field outlining the professional competence of

a modern teacher of a higher education institution; requirements of higher education institutions for the professional competence of physical education teachers representing employers in the modern labour market; various aspects of the professional activity of physical education teachers at multidisciplinary institutions of higher education.

The proposed system of physical education teachers' professional development at multidisciplinary institutions of higher education includes subsystems. Among them there are: target subsystem, conceptual-methodological subsystem, theoretical-content subsystem, organizational-operational subsystem, and diagnostic-resultative subsystem. All the listed subsystems are interconnected and form the integrity of the system of physical education teachers' professional development at multidisciplinary institutions of higher education.

In the context of the target subsystem of physical education teachers' professional development system at multidisciplinary institutions of higher education, its goal and objectives are determined.

The determine the goal as follows: to implement the professional and personal development of physical education teachers on a continuous basis in a constructive academic environment of a multidisciplinary higher education institution that meets their interests, as well as the needs of the higher education institution itself, which carries out educational, scientific and innovative, international and organizational activities in response to requests of society, taking into account the specifics of its social, economic, political and cultural development.

To achieve the specified goal, the implementation of specific objectives is provided, among which we single out the following:

1) formation of motivation and positive attitude of physical education teachers of multidisciplinary institutions of higher education towards professional development on a continuous basis;

2) deepening of knowledge, formation and development, improvement of abilities and skills, further development of professional values and attitudes, as key factors in ensuring high quality of professional and pedagogical activities of physical education teachers;

3) improvement of the academic environment of a multidisciplinary institution of higher education, which contributes to the functioning of physical education teachers' professional development system;

4) provision of conditions for the implementation of physical education teachers' professional development at a multidisciplinary institution of higher education based on the integration of external and internal resources.

While working on the development of the conceptual and methodological subsystem of physical education teachers' professional development system at multidisciplinary institutions of higher education, we singled out among its components:

– the author's concept, which presents methodological, theoretical, technological concepts and presents the professional development of physical education teachers at multidisciplinary higher education institutions in systemic and procedural dimensions;

– the principles underlying physical education teachers' professional development at multidisciplinary institutions of higher education (scientific and practical orientation, flexibility, integration, openness, systematicity, variability, collegiality, contextual learning, individualization and personal direction, problem solving, reflexivity, active learning);

– methodological approaches to physical education teachers' professional development (anthropocentric, andragogical, interdisciplinary, paradigmatic, systemic, system-structural, synergistic, competence-based, activity-based, acmeological, axiological, culturological, competence-based, personality-oriented, modular).

The theoretical and content subsystem of physical education teachers' professional development system at multidisciplinary institutions of higher education presents the content of professional development of scientific and pedagogical employees, which is formed in accordance with the specifics of professional activity and professional functions in such areas as organizational, scientific, educational, educational and methodological, international, health-preventive, sports and leisure, sports.

The organizational and operational subsystem of physical education teachers' professional development system at multidisciplinary institutions of higher education presents the stages of professional development of scientific and pedagogical employees. Extrapolating the data of the analysed scientific surveys, which make up the source base of the research, we justify the expediency of distinguishing the following stages in the professional development of physical education teachers of multidisciplinary institutions of higher education:

– I stage of adaptation in the academic environment of a multidisciplinary institution of higher education;

– II stage of further professional competence development;

– III stage of experience accumulation;

– IV stage of proficiency and expertise.

According to the author's concept, physical education teachers' professional development system

at multidisciplinary institutions of higher education should be characterized by multifunctionality and perform a number of functions:

- diagnostic (implemented to obtain information about the level of professional competence of physical education teachers at the initial stage (including in the process of reflection and critical analysis of their own experience), with the aim of identifying the needs for professional development, professional improvement, research of causal consequential relations, specifics of previous experience and professional activity, analysis of the received data for the development of an individual trajectory of professional development; during the implementation of professional development (according to various forms and models) for monitoring the process of professional training and self-study, identifying its advantages and disadvantages, factors, that exert a positive or negative influence in order to minimize the latter; after the completion of professional training (according to various forms and models of professional development) in order to identify its impact on the professional activity of physical education teachers, the application of their mastered knowledge, skills, etc. skills in practical activities and their importance for improving the learning outcomes of students);

- adaptive (implemented with a dual purpose: joining, adapting and harmonizing in the academic environment of a multidisciplinary institution of higher education, which has its own culture, presenting the values, beliefs, ethical norms that the academic community of the university professes; as well as in the professional community of specialists in the field of physical culture and sports, with defined values and semantic orientations);

- compensatory (presupposes the construction of one's own knowledge system, in which new knowledge is balanced with previously mastered one, which allows the individual to form an understanding of himself, his professional activity, his place and role in the academic and professional community, to form his own pedagogical identity, pedagogical style, and in this way to ensure a balance between one's own professional competence and the requirements for scientific and pedagogical employees of a modern university);

- cognitive (implemented through the formation of an organic coherent system of knowledge that reflects the synthesis of knowledge from the fundamental, scientific-research, psychological-pedagogical, methodical, information-technological, practical, social-humanitarian spheres, as well as the skills and abilities of their application in practice);

- communicative (implemented for the purpose of finding, processing, perceiving, assimilating per-

sonally and professionally important information, organizing communication processes in an academic and professional environment with the aim of its further use and transmission, based on the use of various means, forms and methods);

- stimulating (implemented with the aim of encouraging physical education teachers to continuous professional and personal development, professional improvement through the use of mechanisms of material and non-material incentives);

- prognostic (implemented with the help of short-term (development of practical recommendations, identification of professional development trends) and long-term (determination of patterns of functioning and development, factors that exert a significant influence on the professional development of scientific and pedagogical employees) forecasting of real opportunities for improving both professional development and professional activities of physical education teachers).

The model of professional development system, in particular its organizational and operational subsystem, includes means, forms and models, methods of professional development of physical education teachers' professional development at multidisciplinary institutions of higher education:

- tools: the author's educational and methodological complex for physical education teachers' professional development at multidisciplinary higher education institutions, educational and methodological manuals, textbooks, methodical recommendations and instructions, Internet information resources, professional development courses on open educational platforms, professional development courses of multidisciplinary institutions of higher education, programs of professional development for scientific and pedagogical employees, physical education teachers' individual plans of professional development, video library, etc.;

- institutional forms and models: internships, professional development programs, advanced training courses, cooperation between different higher educational institutions, cooperation between different departments of the higher education institution, cooperation between the department of physical education and other departments of the higher education institution);

- individual forms and methods: mentoring, coaching, consulting, lectures-discussions, pair teaching, case-study, business games, role-playing games, educational trainings, master classes, seminars, webinars, discussions, modelling, delegation of functions, rotation, teamwork, cascade method, creative tasks, project method, portfolio, etc.

The diagnostic and resultative subsystem of physical education teachers' professional development system at multidisciplinary institutions of higher education includes: criteria (motivational, cognitive, operational, reflective), levels (low, medium, sufficient, high), result (positive dynamics of the level of readiness of physical education teachers for professional functions fulfilment at a multidisciplinary institution of higher education).

During the study of the problem of physical education teachers' professional development at multidisciplinary institutions of higher education, it was found that there should be organizational and pedagogical conditions for its implementation: the use of effective stimulation mechanisms to activate the positive motivation of physical education teachers for professional development on a continuous basis; harmonization of the content of professional development of physical education teachers with the needs of professional activity and interests of scientific and pedagogical employees, department of physical education, faculty, multidisciplinary institution of higher

education at various stages of professional development; the integration of internal and external forms and models, methods of professional development of physical education teachers that correspond to the principles of active learning; the formation of a constructive academic environment of a multidisciplinary institution of higher education, in the conditions of which the system of professional development of physical education teachers is implemented.

Conclusions. Based on the analysis of scientific and pedagogical literature on the research problem, considering the experience of modern multidisciplinary institutions of higher education and the authors concept, a model of the system of physical education teachers' professional development have been presented. Its subsystems are characterized. We conclude that there is the expediency for further research to find out the possibilities of providing the conditions, necessary for the implementation of physical education teachers' professional development system at multidisciplinary institutions of higher education.

BIBLIOGRAPHY

1. Aghili, A., & Asadifard, A. (2013). An investigation of Career Anchors Model among Education Organization, Physical Education organization and higher education Employees in Iran. *Journal of Novel Applied Sciences*, 2(8), 282–285.
2. Armour, K. M., & Yelling, M. R. (2004a). Continuing professional development for experienced physical education teachers: Towards effective provision. *Sport, education and society*, 9(1), 95–114.
3. Bakhmat, N., Maksymchuk, B., Voloshyna, O., Kuzmenko, V., Matviichuk, T., Kovalchuk, A., & Manzhos, E. (2019). Designing cloud-oriented university environment in teacher training of future physical education teachers. *Journal of Physical Education and Sport*, 19 (Supplement issue 4), 1323–1332.
4. Bardaglio, G., Marasso, D., Magno, F., Rabaglietti, E., & Ciairano, S. (2015). Team-teaching in physical education for promoting coordinative motor skills in children: the more you invest the more you get. *Physical Education and Sport Pedagogy*, 20(3), 268–282.
5. Braga, L., Jones, E., Bulger, S., & Elliott, E. (2017). Empowering teachers to implement innovative content in physical education through continuous professional development. *Teacher Development*, 21(2), 288–306.
6. Carraro, A., Colangelo, A., Santi, G., Conti, C., Petrini, M., & Gobbi, E. (2022). An Internet-Supported Continuing Professional Development Training with Secondary School Physical Education Teachers: Protocol for the Physical Education for Moving (PE4MOVE) Trial. *Sustainability*, 14(18), 11579.
7. Derri, V., Vasiliadou, O., & Kioumourtzoglou, E. (2015). The effects of a short-term professional development program on physical education teachers' behaviour and students' engagement in learning. *European Journal of Teacher Education*, 38(2), 234–262.
8. Dowling, F. (2006). Physical education teacher educators' professional identities, continuing professional development and the issue of gender equality. *Physical Education and Sport Pedagogy*, 11(3), 247–263.
9. Ennis, C. D. (2013). Reimagining professional competence in physical education. *Motriz : Revista de Educação Física*, 19, 662–672.
10. Hastie, P. A., MacPhail, A., Calderón, A., & Sinelnikov, O. A. (2015). Promoting professional learning through ongoing and interactive support: Three cases within physical education. *Professional development in education*, 41(3), 452–466.
11. Henninger, M. L. (2007). Lifers and trouper: Urban physical education teachers who stay. *Journal of Teaching in Physical Education*, 26(2), 125–144.
12. Hodges, M., Kulinna, P. H., Lee, C., & Kwon, J. Y. (2017). Professional development and teacher perceptions of experiences teaching health-related fitness knowledge. *Journal of Teaching in Physical Education*, 36(1), 32–39.

REFERENCES

1. Aghili, A., & Asadifard, A. (2013). An investigation of Career Anchors Model among Education Organization, Physical Education organization and higher education Employees in Iran. *Journal of Novel Applied Sciences*, 2(8), 282–285.
2. Armour, K. M., & Yelling, M. R. (2004a). Continuing professional development for experienced physical education teachers: Towards effective provision. *Sport, education and society*, 9(1), 95–114.

3. Bakhmat, N., Maksymchuk, B., Voloshyna, O., Kuzmenko, V., Matviichuk, T., Kovalchuk, A., & Manzhos, E. (2019). Designing cloud-oriented university environment in teacher training of future physical education teachers. *Journal of Physical Education and Sport*, 19 (Supplement issue 4), 1323–1332.
4. Bardaglio, G., Marasso, D., Magno, F., Rabaglietti, E., & Ciairano, S. (2015). Team-teaching in physical education for promoting coordinative motor skills in children: the more you invest the more you get. *Physical Education and Sport Pedagogy*, 20(3), 268–282.
5. Braga, L., Jones, E., Bulger, S., & Elliott, E. (2017). Empowering teachers to implement innovative content in physical education through continuous professional development. *Teacher Development*, 21(2), 288–306.
6. Carraro, A., Colangelo, A., Santi, G., Conti, C., Petrini, M., & Gobbi, E. (2022). An Internet-Supported Continuing Professional Development Training with Secondary School Physical Education Teachers: Protocol for the Physical Education for Moving (PE4MOVE) Trial. *Sustainability*, 14(18), 11579.
7. Derri, V., Vasiliadou, O., & Kioumourtoglou, E. (2015). The effects of a short-term professional development program on physical education teachers' behaviour and students' engagement in learning. *European Journal of Teacher Education*, 38(2), 234–262.
8. Dowling, F. (2006). Physical education teacher educators' professional identities, continuing professional development and the issue of gender equality. *Physical Education and Sport Pedagogy*, 11(3), 247–263.
9. Ennis, C. D. (2013). Reimagining professional competence in physical education. *Motriz : Revista de Educação Física*, 19, 662–672.
10. Hastie, P. A., MacPhail, A., Calderón, A., & Sinenikov, O. A. (2015). Promoting professional learning through ongoing and interactive support: Three cases within physical education. *Professional development in education*, 41(3), 452–466.
11. Henninger, M. L. (2007). Lifers and trouper: Urban physical education teachers who stay. *Journal of Teaching in Physical Education*, 26(2), 125–144.
12. Hodges, M., Kulinna, P. H., Lee, C., & Kwon, J. Y. (2017). Professional development and teacher perceptions of experiences teaching health-related fitness knowledge. *Journal of Teaching in Physical Education*, 36(1), 32–39.