

Strategy of professional upgrade for the archery professors of the province Camagüey

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ABSTRACT

The present research starts from an empirical and theoretical analysis linking these, with the components of archery preparation, which allows diagnosing the current state of the problem and the professional performance, which allowed arriving at conclusions. The importance lies in the potentialities that can be achieved in the internalization process for the development of teachers. The strategy is structured in five stages: diagnosis, planning of the organizational forms of professional development, execution, evaluation and control, as well as a set of actions that guarantee its operability in practice.

Keywords: Professional upgrade; Teaching-learning process; Professional performance; Improvement strategy; advanced education

Introduction

The vertiginous development of the Scientific and Technical Revolution in the different areas of knowledge has generated a dynamic and complex political, economic and socio-cultural reality worldwide. In this convulsive context, higher education is inserted, which has as its fundamental function "to be in contact with the needs of society, which is the foundation of the relevance of educational activities, research, counseling, and service to

the community" (United Nations Educational, Scientific and Cultural Organization (UNESCO), 1998, p. 6).

This implies understanding its extension throughout professional life, responding to personal needs and social demands that stimulate the acquisition, updating and improvement of knowledge, skills and attitudes; starting from conceiving teaching as the essential scenario that orients and guides professional development.

In full coincidence with the preceding paragraphs, it will be possible to recognize that one of the ways to reach higher levels of preparation and professional performance in physical culture teachers is the continuous and permanent education of those who direct the teaching-learning process at the different levels of education.

The training of teachers during undergraduate studies is basic, so that the improvement, scientific research and professional performance itself, promote the systematic improvement of these, stimulates the training of their ability to understand, combine their knowledge, consider new procedures that allow them to introduce new educational strategies in practice and the production of knowledge that contribute to their professional development.

The objective of this article is the elaboration of a strategy linking its components with the preparation of archery. It is structured by several stages such as: diagnosis, planning of the organizational forms of improvement, execution, evaluation and control.

Development

In the literature consulted for the recognition of these realities we find the experiences that have been contributed by various national authors from pedagogy, among these: Alvarez, 1999, 2011; Gonzalez De la Torre, 1996), these authors have ventured into the theoretical approach of the preparation and professional improvement of teachers in the pedagogical field, however their research does not accurately address the issues related to archery.

From the Theory of Advanced Education it should be highlighted the research developed by authors such as: (Armenteros, 1998, 2009; Añorga, 2010, 2012, Valcárcel & Pérez,

2012), these authors address from their works the educational complexity and the means to carry out their advanced training, but it should be noted that they do not venture into elements such as the advanced training of archery teachers.

Several authors have addressed the subject Campos (2019), González & Rodríguez (2020), Herrera (2012) among others emphasizing the improvement of archery teachers, planning of sports training, preparation for the teaching of skills, as well as the application of technology in the teaching of archery, highlighting how the use of digital tools can improve learning and student performance, however, there are still insufficiencies in the systematization for the teaching and learning of skills.

The scarce presence of Cuban authors in this regard, has made it possible to deepen in the contradictions present in the object of study and to know more precisely the existing problems in the teaching-learning process of the sport skills, the improvement and professional performance of the archery teacher in the province of Camagüey.

From the previous analysis, it is clear the importance of the preparation of teachers so that they can exercise their knowledge, linking these with the components of archery preparation, so that they can perform in different options and modalities; adapt to the permanent change of knowledge and creatively use the advantages of new technologies.

However, from the empirical and theoretical results (interviews, surveys, documentary analysis and classroom observations), carried out in the exploratory stage of this research, the author was able to summarize that sports teachers present difficulties in the adequate attention to the components of archery preparation. In addition, it was possible to identify within the background of this research a set of situations that have made it possible to verify the traditional, descriptive and limited character, with which the teaching-learning process of sport skills has been approached in the province of Camagüey, which allowed him to identify the following problematic situation.

The preparation they received in the undergraduate on appreciation and competitive art does not address the specialty of archery; the specialized bibliography referred by sports teachers is outdated, which affects their teaching performance; the results of the technical tests in the last four years show pedagogical inadequacies in the performance of sports teachers; the indications of the athlete's preparation program have a restricted character, since it does not approach teaching from an integral perspective and there is no unity of criteria in the teachers on the work of sports skills.

From the analysis of the factors that affect these situations, the following scientific problem is determined: How to contribute to the systematization of the teaching-learning process of the skills for archery teachers in the province of Camagüey? It has as its object the process of professional improvement of sports teachers and as a field of action the professional improvement for archery teachers in terms of the systematization of the teaching-learning process. Hence, the objective is to elaborate a professional improvement strategy for the systematization of the teaching-learning process in archery teachers in the province of Camagüey.

The selection of the sample is carried out intentionally, with a population of 19 subjects; 15 teachers, three (3) directors and one (1) methodologist of the sport in the province, following sampling, spatial, structural selection criteria, using the same spaces and contexts of performance, in the period between 2020 and 2022.

Documental analysis: it allowed consulting data and information from documents established in the athlete's preparation program, specialized bibliography, improvement, professional improvement, Advanced Education, and pedagogical performance, which allows us to reveal the contents of the improvement plans.

Analytical-synthetic: the phenomenon is analyzed in a general way, in order to reach conclusions about the specific aspects related to the improvement of teachers on the teaching-learning process of archery skills.

Inductive-deductive: it was used to specify the essential aspects in relation to the particularities of the teaching-learning process of archery skills.

Survey to methodologists and managers: applied to four, to obtain information about the current state of preparation, the archery teacher's performance, as well as the forms of improvement developed and the contents addressed.

Teachers' survey: applied to 15 teachers participating in the process in the province, with the objective of evaluating the preparation received and determining the need for improvement for professional performance in the teaching-learning process of archery skills.

Observation: it was carried out to the activities developed in the training units by the archery teachers before; during and after the improvement strategy was applied, in order to determine the insufficiencies.

Professional performance test, in a combined and stratified way through participant observation, assumed by the criteria of Valcárcel & Pérez (2012). It was conducted to determine the level of the current performance of teachers, their needs and potentialities from the cognitive dimensions to evaluate the level of knowledge, instrumental to evaluate the development of skills and attitudinal to develop the teaching-learning process of archery skills.

Methodological triangulation, used to analyze and confront the different results obtained through the application of different instruments in order to contrast and interpret them.

Criteria of specialists: Used for the theoretical evaluation of the specialists about the proposal.

The data were processed using Crespo (2013) statistics software.

Diagnosis and characterization of the current state of the problem

Results of the methodological triangulation:

In the evaluated items of each indicator of the three dimensions, the following information was collected:

In the cognitive dimension, 67 % of the teachers were evaluated as deficient, while 33 % were rated with some deficiencies. In reference to the instrumental dimension, 73% were rated as deficient and the other 27% were rated with some deficiencies. Finally, the attitudinal dimension showed the best results achieved, 23 % were rated as acceptable, 22 % with some deficiencies and 55 % as deficient.

Regarding professional improvement, the following irregularities were observed:

- In the undergraduate and postgraduate training, the teachers did not receive the necessary preparation to face the work for the teaching-learning process of archery skills.
- There is no correspondence between the improvement actions carried out to date within the methodological work system of the municipality and the province.
- The improvement has not been projected taking into account the different organizational forms of professional improvement, where the preparation of teachers

is emphasized and prioritized, for the attention to the teaching-learning process of archery skills.

Limitations identified:

The professional improvement centers, both from the level of the municipality, the province and the universities that train these teachers, do not conceive the improvement attending to the context in which the professional performs; they do not start from a diagnosis of the real needs of the teachers.

- Archery teachers, for the most part, present insufficiencies in theoretical and practical knowledge about the attention to the teaching-learning process of archery skills.

Identified Strengths:

- The revelation of the directors, the methodologist and the teachers of the need for improvement in relation to the teaching-learning process of archery skills.
- The experience of collaborating in the professional improvement process, facilitating the improvement of teachers and providing the necessary means to carry out this process.
- Important are the criteria issued regarding the need to conceive a new model of improvement that responds to the current demands of the training of a competent professional.

The results of the diagnostic study allow confirming the research problem, thus fully justifying the need to implement a strategy based on an improvement model for teachers, oriented to the teaching-learning process of archery skills.

The overcoming: Over the years, the concept of improvement has been defined by different authors (Añorga, 1995 and Santiesteban, 2003). All of them specify the following ideas: it constitutes a process; its purpose is aimed at the acquisition of knowledge, the development of skills, cultural training and enabling better performance in professionals. This criterion is shared by the author, since it highlights the performance of actions that allow updating knowledge, developing skills and strengthening values, which implies the transition to higher levels in the professional activity to face the educational reality and contribute to increase the effectiveness and quality of work.

Professional development: The bibliography consulted shows how the concept of "professional development" is sometimes identified with others such as: training, formation and development, however, in their essence, they refer to similar aspects.

The author agrees with Añorga and Valcárcel (1996), who defines training as “the set of teaching and learning processes that enable university graduates to acquire and continuously improve the knowledge and skills required for a better performance of their responsibilities and work functions” (p. 46).

In this way, the author adheres to the Regulations of Postgraduate Education of the Republic of Cuba, in its resolution 132 of 2004, modified by Resolution No. 166 of this same authority, on July 20, 2009; it is presented with a more renovating and developing conception in its projection.

The norms and procedures for postgraduate management take into account the experiences contributed in its application for several years, the same takes value from its approval in resolution 140 of 2019, which in its second section defines professional improvement as:

The training process that enables the graduate of higher education centers to acquire, expand and improve continuously and systematically the knowledge, basic and specialized skills those are required to have a better performance in their job functions, as well as for their cultural development in general. (MES, 2019) which is sustained on legal bases of The Constitution of the Republic of Cuba in its article 145 (subsection d)

Although authors such as, Campos (2019) provides a detailed guide on the fundamentals of training in archery. It includes techniques and strategies to teach and improve the performance of archers, however; González & Rodríguez (2020), present a didactic proposal in this academic article, to include archery in school physical education. They analyze the benefits of this discipline and provide guidelines for its teaching.

Consequently, Herrera (2021) In his article presents the application of technology in the teaching of archery, highlighting how the use of digital tools and mobile devices that can improve learning and performance of students and teachers.

The strategy:

However, for the research it becomes necessary the concept that on strategy brings advanced education elaborated by Añorga (1999), and that the author assumes for the research, as it is the fundamental form of the model that is proposed, this concept is conceived as:

(...) conceptualization of the forms, other strategies, technologies, instruments and methods in which action must be organized to achieve certain proposed objectives in the short, medium and long term, making explicit in writing the certainty of the possibility of achieving the objectives and which factors will be addressed. (p. 19)

During the stage of elaboration of the theoretical framework of the research, a historical-logical analysis related to the object of study (the process of improvement of sports teachers) was carried out, the background of the training and improvement of sports teachers, its general foundations, as well as the teaching-learning process and its behavior in the archery sports areas in the province of Camagüey were studied, and the principles of advanced education were also specified.

The proposed strategy has the following characteristics: it is flexible, objective, systemic, problematizing, updated and formative. Its structure is determined by a general objective, five phases that establish the foundation, diagnosis and characterization, planning, execution, follow-up evaluation and impact of the strategy. It pursues the following objectives: To achieve that archery teachers, in the province of Camagüey through different actions, allow the development of knowledge, skills and attitudes necessary to systematize the teaching-learning process of the technical and pedagogical skills of the sport.

Results after the strategy:

Results of the specialist criterion for the theoretical and empirical verification of the improvement strategy proposed by the author, for this purpose the author contacted 30 specialists, the results obtained from the criterion, allow assuring that the proposed professional improvement strategy is feasible, viable, becoming an effective alternative within the pedagogical proposals related to the proposed professional improvement.

Once the integral impact of the implemented proposal on the professional performance of archery teachers in the province of Camagüey has been analyzed

The first instrument subjected to comparison is the survey to the methodologists of the municipality and the province, the results obtained in the evaluation of the items that are

derivations of the items of each indicator, showed a remarkable increase with respect to the results of the pretest, where it can be appreciated that:

In the cognitive dimension the results were, the category of broad knowledge and that he/she possesses necessary knowledge. While in the instrumental dimension, the results revealed that the teachers possess ample knowledge and that they possess necessary knowledge. In the attitudinal dimension of attention to the process of teaching and learning skills, the results obtained showed that all teachers have extensive knowledge, i.e., it was the best result obtained through the evaluation by the methodologists.

The comparison of the pretest and posttest survey, which analyzed the level of knowledge of the sport activity, expressed in the application of the sport activity in the teaching-learning process of the skills and the attitude of the teachers, for their professional performance, showed a significant improvement in terms of knowledge, skills and attitudes in 100% of the teachers. The second instrument analyzed is the teachers' survey, unlike the pretest survey, which showed deficiencies in the bibliography used by the teachers, in the posttest positive results were identified since 100% of the teachers have a source of updated bibliography. Similarly, a favorable increase was observed in the results of the post-test regarding the level of knowledge of the sport activity for teaching and learning skills, since 79% of the teachers showed ample knowledge and only 21% stated that they had the necessary knowledge.

The same occurs with the results obtained from the application of the attention to the teaching-learning process of the skills, confirming that 100% of the teachers considered the category of good and it occurs in the same way in the remaining items the predominant evaluation of good was registered. In addition, it was possible to verify a notable improvement regarding the questions related to the level of attitude they have for the attention to the teaching-learning process of sport skills, which was manifested in that 100% obtained the category of good.

The comparison of the pretest and posttest survey in which the cognitive, instrumental and attitudinal level of the teachers was analyzed, to carry out the teaching-learning process of the skills, showed an increase in the knowledge, skills and attitudes, as well as the Mc Nemar test is applied where it reflects that there are significant differences.

The third instrument analyzed is the professional performance test, through the application of observation to the teachers who attend the teaching-learning process of the

skills, which was evaluated for each of the items, achieving the following results by dimensions:

In the instrumental dimension, the results reflected in item 2.1.1, the majority of teachers representing 64% achieved the evaluation of good, thus being the appreciation of good. In correspondence with item 2.1.2, 100% of the teachers achieved good; while in item 2.1.3, 21% of the teachers achieved the evaluation of very good, 29% of good and the rest 50% of acceptable, therefore the final result is acceptable. It was revealed that in items 2.1.4 and 2.1.5, 36% obtained the evaluation of very good and 64% of good, therefore it is considered good. Similarly, in item 2.1.6, 43% obtained the evaluation of very good and consequently the remaining 57% obtained the category of good, so it is generally determined as good.

In the attitudinal dimension, the results obtained in items 3.1.1 and 3.1.2, 100% of the teachers were good. However, in item 3.1.4, 64% of the participants in this research obtained the category of very good, that is, they were evaluated as very good. Positively, 100% of the teachers were evaluated as very good in item 3.1.5, while in item 3.1.6, 57% of the teachers were evaluated as very good.

The comparison of the pretest and posttest professional performance test in which the items of the indicators that make up the dimensions of the research were analyzed to evaluate the performance of the teachers who attend the teaching-learning process of archery skills, revealed a significant improvement in the skills and attitudes of each teacher.

Similarly, these results were subjected to the Mc Nemar test, so it can be evidenced that there are significant differences between them, from the statistical point of view, so the chi-square value is greater than the critical chi, which means that the alternative hypothesis that there are significant differences between the values before and after the experiment is accepted.

Conclusions

The documentary analysis and the bibliography consulted allowed to recognize in the state of the art and systematization of the theoretical and methodological assumptions on

the importance of advanced education to promote a more harmonious and integral professional improvement of archery teachers in the province of Camagüey, as well as the results of the instruments applied made possible the characterization of the current state of the professional improvement needs for archery teachers in the province of Camagüey, revealing the limitations and strengths related to the knowledge for the development of their teaching work, manifested in the teaching-learning process of the sport's skills.

The elaboration of the professional improvement strategy for archery teachers has a systemic approach, manifesting the relationships of its five stages, the system of actions that compose it, to raise the level of knowledge, as well as to develop skills and attitudes, for the level of teachers and the teaching-learning process of the sport skills, which make the implementation of the strategy feasible.

The evaluation of the specialists' criteria shows that the model and the improvement strategy have an appropriate and sustained structure which makes it pertinent in its planned actions and the results obtained in the pre-experiment through the application of the planned strategy, ensure significant progress in the different indicators used for the evaluation of the professional performance of the teachers in their flow of knowledge, skills and attitudes related to the development of the teaching-learning process of sport skills.