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Artículo original

Actions to strengthen job training in novice Physical Education teachers

Acciones para el fortalecimiento de la formación laboral en profesores noveles de Educación Física

Ações para reforçar a formação contínua de novos professores de educação física

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ABSTRACT

The incorporation to working life is not considered the end of the training, but a process of completion and development of the acquired skills to face the new working stage. Knowledge of the results of learning during the years of study is the basis for the design of this development plan in its first stage. Job training is the second stage of training and, undoubtedly, the most important of the whole process; its purpose is that the different figures appropriate the basic educational and technical elements they require to be able to start their specific work efficiently. Physical movement as an activity of man in his development evolved with the passing of civilizations, which allows Physical Education teachers to become aware of the need to study the social components that regulate physical activity and act in accordance with the characteristics of the individuals working at different levels or age groups. Hence, the objective of this research is aimed at proposing actions for the strengthening of the labor training of novice Physical Education teachers in the Boyeros municipality. Different theoretical methods were used like, inductive-deductive and analysis of documentary, as well as empirical methods, as observation, interview, methodological triangulation and psychological techniques for the implementation of actions to eliminate the difference between the current situation and the desired one.

Keywords: Job training; Learning; Psychological components.

RESUMEN

La incorporación a la vida laboral no se considera el fin de la formación, sino un proceso de completamiento y desarrollo de las habilidades adquiridas para enfrentar la nueva etapa laboral. El conocimiento de los resultados del aprendizaje en los años de estudios es la base para el diseño de este plan de desarrollo en su primera etapa. La formación laboral es la segunda etapa de la formación y, sin dudas, la más importante de todo el proceso; su finalidad es que las diferentes figuras se apropien de los elementos educativos y técnicos básicos que requieren para poder iniciar su labor específica de manera eficiente. El movimiento físico como actividad del hombre en su desarrollo evolucionó con el paso de las civilizaciones, lo que permite a los profesores de Educación Física tomar conciencia de la necesidad de estudiar los componentes sociales que regulan la actividad física y actuar en concordancia con las características de los individuos que trabajan en los diferentes niveles o grupos etarios. De ahí que el objetivo de esta investigación va dirigido a proponer acciones para el fortalecimiento de la formación laboral de los profesores noveles de Educación Física del municipio Boyeros. Se utilizaron diferentes métodos teóricos: inductivo-deductivo, análisis de fuentes documentales y empíricos: la observación, entrevista, triangulación metodológica y técnicas psicológicas para la implementación de acciones para eliminar la diferencia entre la situación actual y la deseada.

Palabras clave: Formación laboral; Aprendizaje; Componentes psicológicos.

RESUMO

A entrada na atividade profissional não é vista como o fim do treinamento, mas como um processo de conclusão e desenvolvimento das competências desenvolvidas para enfrentar a nova etapa de trabalho. O conhecimento dos resultados do processo de aprendizado durante os anos de estudo é a base para a concepção deste plano de desenvolvimento em sua primeira etapa. A formação profissional é a segunda etapa do



treinamento e sem dúvida, a mais importante de todo o percurso; seu objetivo é que as diferentes personalidades se apropriem dos elementos educacionais e técnicos básicos necessários para poder iniciar eficientemente seu trabalho específico. O movimento físico como atividade humana em seu desenvolvimento evoluiu com o passar das civízes, o que permite aos professores de Educação Física tomar consciência da necessidade de estudar os componentes sociais que regulam a atividade física e atuarem de acordo com as características dos indivíduos que trabalham em diferentes níveis ou faixas etárias. Assim, o objetivo desta pesquisa é propor ações para consolidar a formação em serviço de professores iniciantes em Educação Física no município de Boyeros. Diferentes métodos teóricos foram utilizados: indutivo-dedutivo, análise de fontes documentais e métodos empíricos: observação, entrevista, triangulação metodológica e técnicas psicológicas para a implementação de ações para eliminar a lacuna entre a situação atual e a desejada.

Palavras-chave: Formação profissional; aprendizagem; Componentes psicológicos.

INTRODUCTION

The 21st century has begun on a techno-scientific base of high magnitudes and qualities that demands, for the education of man, a higher quality and speed in learning, a citizenship education that allows the sustainability of social life and in the labor field, to develop the correct labor relations in the context where he performs, which is an important component of education in coexistence. Contemporary labor education is becoming deeper and more scientific every day, so it has to be more and more motivated, reflecting the interests and needs of young workers for and by life.

According to UNESCO, the common denominator that emerges from the World Summits and major international conferences is that the State, civil society and the professional and business communities must establish national agreements that lead to sustainable human development. Among the fundamental objectives of Physical Education (PE) classes is the adoption of healthy lifestyle habits (Trigueros *et al.*, 2019).

The history of mankind has shown that, for the development of any nation, the most important thing is the preparation and training of its human resources. Thus, financial and natural resources, etc., are only worthy of being taken into account under the influence of man. This is why new challenges are posed by education, which becomes a key factor for the development of nations.

It can be affirmed that Cuba instructs and educates its children on the basis of national identity; this makes them strong in the development of knowledge and leads to individual freedom, to the possibility of consolidating themselves more fully with a creative and transforming character.

Castro (2003), states in the Pedagogy Congress... "*The intensity and fullness of life in society*"; taking into account that the central nucleus of the progress of society is man, the future of humanity depends on his harmonious development, his fullness, and this must be taken into account by all educators in their professional performance".

The cardinal objective of Cuban pedagogy in schools is to form integral, creative and competent men. Cuban education works to achieve its proposed objectives. Among them, as a necessity, one of the fundamental ones is to prepare human resources, due to the fact that current demands are higher and, as Martí said: "*he who knows more, is worth more*".



In the preparation of these human resources, the communal environment influences, that is, the facilities for the development of Physical Education, work centers, institutions of diverse nature and schools. The family environment, in turn, comprises the conditions that allow man to protect himself from the environment. Both environments complement each other in the process of socialization of the subjects that influence the formation of human resources and, in particular, young people.

Currently, there is a tendency to erroneously relate the term "job training" only to physical or manual work; however, the area of study also includes the qualities that the subject's personality possesses, among others. Vocational orientation is included, then, within the areas of special interest, since a correct articulation between the family, the school and society will depend to a great extent on the correct choice of the young person to study a specific trade or profession.

In observations made in the controls of the individual development plans, related to the characterization of the Physical Education teacher in a given territory, the following difficulties were detected: insufficient quality of the diagnosis related to the graduate's work training; inadequate planning of the actions for the training in values of the graduates; untimely motivations and interests of the teachers to plan the strategy and projects to be attended and little systematic control of the stages of fulfillment of the planned actions.

The objective of the work consists of proposing actions for the strengthening of the job training of novice Physical Education teachers in the Boyeros municipality.

Fernández (2015) expresses that,

"job training is a Process of transmission and acquisition of the set of knowledge, skills, procedures and strategies needed to analyze, understand and provide solutions to the problems of social practice and which are aimed at "knowing", "knowing to do" and "how to do it", guided by the system of values acquired, both in the classroom and in everyday experience".

Fernández (2018) alludes that Professional Formation (PF) is all that study and learning aimed at labor insertion, reinsertion and updating, which main objective is to increase and adapt the knowledge and skills of current and future workers throughout their lives. **Tabasco today, (2019)**, states that currently in most countries it is known as Professional Education and Training.

Education at work and for work is one of the fundamental principles on which Cuban education is based and a fundamental contribution to pedagogy worldwide. **Castro (2013)**. The Cuban school, through the consistent application of the principle of integration of study with work, allows integrating and systematizing the formation of a man with the values required by the working class. The question of the link between education and work cannot be solved in an abstract way, without taking into account the specificities of the work itself and the nature of education. The application of the principle of combining and integrating study with work responds to three fundamental objectives: instructive, educational and productive.



Preconditions for adequate job training

To make the theory-practice relationship evident, according to Valdés (2018), means any kind of introductory class of new content, exercise, lecture, seminar, practical class, etc. Any teaching activity should be organized in such a way that it contains not only the system of knowledge that reflects the object of study, but also the logic of thinking and acting.

Authors such as Arteaga P., Calderón M. and Jiménez P. (2019), state that,

"The effectiveness of teacher training is perhaps one of the greatest concerns of an educational system interested in achieving quality in teaching and student learning. Although the subject has been treated with pertinent criteria from the sciences, there are shortcomings when novice teachers shape and communicate their results". Nieve and Martínez (2016) state that the teacher as a subject of education is a main actor for society, transmitter of the culture that has preceded him/her and facilitator of learning through the educational process. They further state that such training requires teachers committed to the pedagogical process, involved in the educational work, oriented to human development that transcends the learning of contents and procedures in the technical order of future performance.

On the other hand, Kong, *et al.*, (2021) state that,

"Learning is the acquisition of new behaviors of a living being from previous experiences, in order to achieve a better adaptation to the physical and social environment in which he/she/it develops. Some conceive it as a relatively permanent change of behavior, which takes place as a result of practice. What is learned is retained by the organism in a more or less permanent form and is available to go into action when the occasion requires it".

The authors agree with the concept given in Raffino (2021) on learning, when he expresses that it is the process through which new skills, abilities, knowledge, behaviors or values are acquired as a result of study, experience, instruction, reasoning and observation. They also consider that the team of methodologists, such as school directors and teachers and tutors, has the duty to ensure that job training exists as a constant process of learning, skills and knowledge that will allow the graduate to assume the practical situations they face daily in the process.

The activity of man is always provoked by something and what sustains the activity with a certain energy or intensity in a certain direction. The need presupposes speaking of a state of the subject that is characterized because it expresses the dependence of the person on something he does not have, on something that is outside him and is identified by the longing of the subject to achieve that something.

Using the words of Sánchez (2005), who expresses that,

"The study of "the psychological characteristics of the subject immersed in the practice of physical activities, systematic and organized in the school influences the psychological particularities of the motor actions themselves".



This definition allows Physical Education teachers to become aware of the need to study the psychological components that regulate physical activity and that allow to access this whole range of knowledge that makes it possible to act in accordance with the characteristics of the individuals working at the different levels or groups that attend Physical Education.

Psychological demands to be met by Physical Education teachers. The **World Health Organization (WHO) (2018)** states that,

"The daily practice of physical activity provides multiple psychological, physical and emotional benefits. For this reason, physical education classes during primary and, especially in secondary school, have been recognized as an ideal context for the promotion of physical and recreational activities".

The Physical Education teacher plays a fundamental role in the development of positive attitudes towards the practice of physical activity by students, so it is necessary to create a climate during classes where a series of experiences that promote competition, fun, selfknowledge, internal motivation and transfer are generated (**Deci and Ryan, (2014)**). However, motivation is not only affected by the role of the teacher him/herself, but emotions constitute an activating or deactivating element of motivational processes in students (**Macintyre and Vincze, 2017**). They emphasize that confidence is characterized by the strength and conviction one feels oneself to achieve the attainment of one's own goals. The knowledge of the psychological and physiological characteristics of the young age must be present in the planning of the individual development plan of young teachers in order to achieve an effective communication for the pedagogical learning of the graduate. The characteristics of psychic development of novice teachers who perform social service are the following: new duties and social demands appear, among which are obtaining an identity card, the right to vote, joining social and political organizations, being able to start a working life, the possibility of being judged by the laws in force in the country, as well as getting married. All of these converge in greater responsibility and independence, increasing the capacity to direct the conscience towards necessary objects related to work or study.

In the internal conditions, those of the knowledge area are related to those of the intellectual area: attention, as a behavioral and cognitive process of selective concentration on a discrete aspect of information, whether considered subjective or objective, while ignoring other perceptible aspects.

From the psychological point of view, it is understood as the mechanism that controls and regulates cognitive processes, from learning by conditioning to complex reasoning. Regarding perception, the development of observation and the deepening of theoreticalreflective thinking is considered, and regarding memory, the psychic-cognitive process that allows us to fix, conserve and later reproduce previous experience and that reacts to signals and situations that have previously acted upon us. Imagination, on the other hand, is the psychic-cognitive process, exclusive to man, by means of which images are elaborated that transform reality in advance on the mental plane. On the other hand, it is important to point out that thought as a cognitive process is directed towards the search for the essentially new, guaranteeing a mediate and generalized reflection of reality.



In the relationships established between teacher-tutor, the leaders of the work centers where these new teachers work, rarely take into account the character traits and temperament of the teachers in order to achieve an educational work that contributes to their insertion into the teaching staff, with a favorable psychological climate that allows them to overcome the new situations they face in this new stage of their lives.

Valdés (2018), in his study, relates that the incorporation to working life manifests that it is not considered the end of the training, but a process of complementation and development of the acquired skills to face the new stage. The knowledge of the learning outcomes in the years of study is the basis for the design of this development plan in its first stage.

MATERIALS AND METHODS

In this research, the following theoretical methods were applied:

Inductive-deductive, to identify the problem from practice, to make necessary generalizations; analytical-synthetic, during the research process, from the study of the theoretical, scientific and methodological foundations to determine actions that influence the job training of novice Physical Education teachers in the Boyeros municipality; documentary review in the elaboration of the theoretical framework of the research based on the bibliographical and documentary study.

The empirical methods used were those shown below:

Observation: to obtain direct information on the phenomenon or object under investigation. Eighteen classes were observed to evaluate the current state of development and evaluation of work performance by graduates of the Provincial School of Physical Education (Epef in Spanish).

Surveys to professors: they allowed, through direct and indirect questions, to gather information to learn about the labor performance of graduates working in the Boyeros municipality.

Interviews with tutors, methodologists and managers: they allowed to know the criteria related to the work performance developed by graduates of the Epef.

Methodological triangulation offers the opportunity to improve the organizational diagnosis in order to synthesize the results derived from the use of multiple scientific methods into a valid and coherent interpretation. On this basis, the group interview allowed to know the subjects' aspirations about work performance: how they think and what they would like to do.

The expert method was used to theoretically validate the proposal of actions that influence the job training of novice Physical Education teachers in the Boyeros municipality.



Selection of specialists

Study sample. Eighteen graduates completing their first year of social service were selected, aged 17-19 years, ten males and eight females. All of them have a secondary technical schooling and work in schools in the Boyeros municipality, in addition to ten tutors, four methodologists, two leaders and 18 families.

RESULTS AND DISCUSSION

The teacher-student relationship at present requires a methodological preparation that allows the educator to direct the process efficiently and with quality, and this is affected in a considerable part of them, given the little time they devote to self-preparation and selfimprovement. For this reason, great importance is given to training, a necessary and indispensable stage in the formation of qualified human resources. Its absence or inadequate development is one of the main causes of maladjustment to working life, of deficient training, especially in terms of attitudes and values, as well as of abandonment or lack of loyalty to the organization (Figure 1).

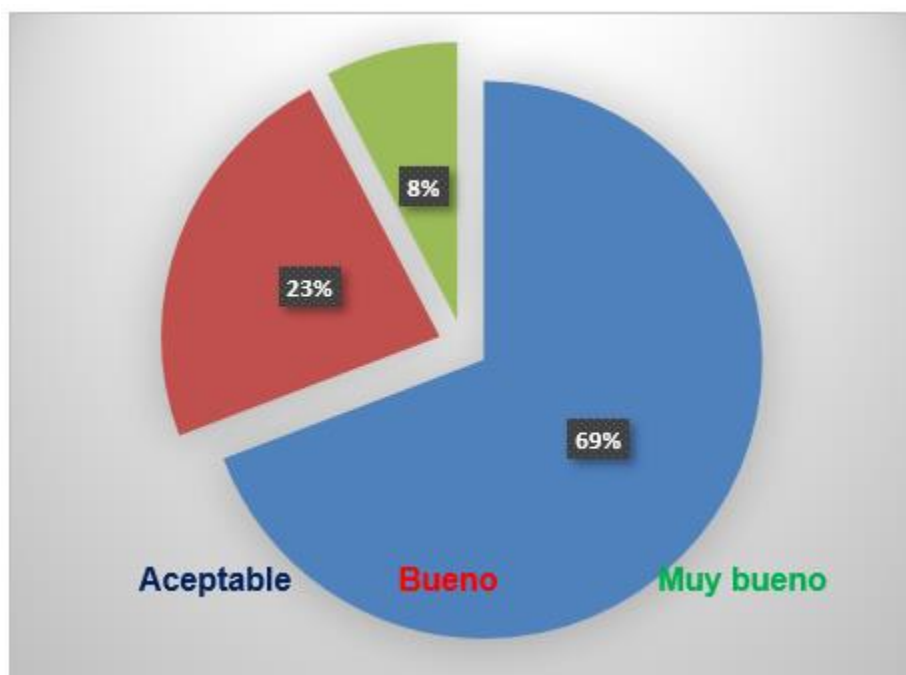


Fig. 1. - Academic index of the school's students

Consider that graduates of different specialties have different experiences with respect to their on-the-job training. Each newly graduated professor develops his or her training under the direction and supervision of a tutor, as established in the regulations on the treatment of recent graduates during the training period of **Resolution No. 9/2007 of the Ministry of Labor and Social Security**.



The responsibility of the tutors is to prepare the individual work training plan, conduct and attend to the progress of the training, carry out partial and final evaluations of compliance with the plan, establish the necessary interpersonal relationships with recent graduates to learn about their concerns, opinions and interests, motivate recent graduates and encourage their participation in the analysis and solution of problems and difficulties faced by the labor group.

The family is the first school of human and social virtues that all societies need; through the family, people are introduced into civil society. It is therefore of utmost importance that parents consider the importance of the family in the formation of future citizens who will lead the destiny of the country, considering that education is an artisanal, personalized process, where one is educated one by one, it cannot be done industrially, so it can only be done within the family.

A considerable percentage of families ignore the conflicts faced by young people in this difficult stage of their lives, and they do not take advantage of the potential offered by family affection to evaluate and reorder professional aspirations and interests based on the work experience of the other members of the family. The family is not simply the building block of society; on the contrary, it is an active agent of social transformation. Thanks to their extra-family relationships and in their various activities outside the home, the members of the household represent their life and their "family function", they appropriate social values. Thus, in the most natural way, the family actively fulfills its task of educating its children and influencing all its members, who, in turn, are active participants in the various human groups that make up society.

The manifestations of the character traits elaborated for the 18 graduates working in the Boyeros municipality (Table 1).

Table 1. - Orientation behavior

Orientations	Totals	%
Orientation towards oneself.	10	55.5
Orientation towards others	3	16.6
Orientation towards the fundamental activity.	5	27.1

It allowed to verify that there is an orientation towards oneself in a majority way for 55.5 % that justifies the main difficulties pointed out to these youngsters, related to noncompliance with the working day, the planning of classes and the school rules. With a smaller percentage of 27.1%, they are oriented towards the fundamental activity and the smallest group is oriented towards others (16.6%).

The improvement of professional training as a process is based on implementing actions to eliminate the gap between the current situation and the desired one.



Stages

Familiarization

The tutor's work cannot be an assigned task, the need to fulfill a task must start from a commitment to a higher responsibility, with the love for the continuity of the subject, therefore, it must start from the sensitivity demonstrated by the future tutor with the importance of the formation of the graduate as a worker, the emission reception of the emission to achieve transmit and capture the objective.

Diagnosis

Identify strengths, problems and prioritize them, discover causes. Consideration is given to the state of manifestation of character traits in novice teachers in their daily actions and the preparation of managers to identify them and design individual development plans that can respond to the needs of each one, individually to achieve superior results. The appointment of tutors is limited by the willingness of experienced teachers to assume tasks with a higher level of responsibility and commitments; the time and communication between graduate and tutor is limited by other tasks contemplated in their work content.

Planning

Design actions to solve the causes of the problems: objective-content relationship of the action, procedures and communication to achieve compliance.

Execution: coordinate, execute and evaluate planned actions.

Evaluation: partial and final assessment of the process and results.

Systematization: critical reflection of what has been experienced in order to learn and improve.

Postulates for the development of actions to improve the performance of graduates: Characterization of graduates: it focuses on the personality of the graduate, his or her technical preparation and the environment in which he or she works, needs and possibilities to fulfill the new position.

Redesign of individual development plans: take into account not only the immediate needs, but also those that the graduate may have in the future and the procedures to achieve them.

The participatory style is based on the creation of a positive socio-psychological climate and favors the processes of socialization and individualization that are part of the process. Ongoing reflection on the results of the work will allow continuous feedback for the selfimprovement of all those involved.

Methodological triangulation: this instrument was applied to correlate the information from the interview, the survey and the observation in order to know the assessments, influence and weaknesses of the work with the graduates (Figure 2).





Fig. 2. - Methodological triangulation

There is a correspondence between the weaknesses declared by the teachers in the surveys and observations; the answers with the highest incidence were directed to the rating scale Almost Never, which gathers 85 % of the answers and 10 % of the answers to the scale Never and the rest of the points that correspond to 5 % are for the rest of the rating scale.

There is little planning, as well as insufficient creativity and variability in the activities they carry out. The didactic means, language and commitment during the classes are scarce. In correspondence with the results of the previous instruments and the interviews with tutors and family members, there is no concern and interest in the planned activities, cooperation and group work of the graduates during the organization, development of classes, activities and diversity of options to be carried out within the center, where low participation of the family is denoted.

The integration of agencies, institutions and political and mass organizations in support of the organization and development of activities with graduates, expressed consensus on the need to achieve greater motivation in the graduates towards the tasks that correspond to them, greater demand for the fulfillment of their responsibilities and greater preparation of the graduates.

The results of the triangulation allowed to focus the group interview with methodologists and managers with three fundamental questions:

1. How can the performance of graduates be reshaped in their professional performance?
2. How to engage graduates in transforming their professional performance?
3. What are the ways or alternatives to improve professional performance?

The following responses were obtained that allow to see the aspirations of the Epef graduate teachers.

1. To achieve a process of development towards self-improvement in the trainees individually and as a team.
2. Detect together, teacher-family-researcher, the processes that need to be improved and derive new priorities to carry out the transformations of the graduate at the middle level.



- To specify improvement alternatives, corresponding to actions that influence the inservice training of novice Physical Education teachers.

To conform the proposal with the following characteristics.

- They must contain a general objective that evidences the desired state to be reached in the transformation process from an active, dialogic, cooperative and multiple mediator process.
- Possess a logical, theoretical and structural foundation, expressed in a holistic vision of development from the educational sciences.
- They must start from the diagnosis of the process under investigation as an essential element of the educational work.
- They must evidence the recognition of diversity and differentiated attention to each user-subject, creating the conditions for the development of the same to reach everyone equitably.
- To be stimulated by the diversity of the educational and curricular context, in addition to the variety of situations and diversified activities.
- To encourage the use of multiple sources and ways of obtaining knowledge and a greater use of information technologies.

Objective of the proposal

To propose actions to strengthen the job training of novice Physical Education teachers in the municipality of Boyeros (Table 2).

Table 2. - Proposals for actions to strengthen the job training of novice Physical

Nº	Actions of the institution	Actions of the graduate	Actions of the family
1	Diagnosis of human resources	Demonstration of skills and knowledge	Sensitization for the knowledge of the new task taken on by the graduate
2	Accuracy in the institutional strategy and from the system of exchange and upgrading of graduates	Participation in workshops, methodological activities and training and development courses	Participation in diagnostic workshops to identify weaknesses, threats, strengths and opportunities.
3	Determination through different organizational forms of the graduate's development priorities.	Reflection on the need for professional development and sociocultural self-improvement.	Determination of the needs and potential of the graduate for the development of labor and socio-cultural activity in the institution and the community.



4	Incorporation of the best experiences developed by graduates in the groups and methodological activities.	To materialize the best experiences developed by teachers in collectives and methodological activities.	Dissemination of results and experiences that result in satisfaction among graduates
5	Institutional coordination with the factors and agents for the development of the process.	Determination of the role and mission of the graduate within the process.	Strengthening the unity of the family with all the factors involved in the process.
6	Stimulation of the results of the graduate in the stage	Active participation in the process	Stimulation of the family by the graduate's results
7	Monitoring of the feedback process for the design of the new plans	Recognition of strengths and opportunities to address new goals	Recognition within the family of the results and design of future goals.
8	Elaboration of new tasks	Active participation in the development of new plans	Family interest in the new tasks to be faced.

Results of the proposal evaluation

In order to respond to the assessment and validation of the proposed activities, seven experts were chosen who were willing, through their individual consent, to participate and collaborate in the research. Among them were the following: three outstanding Physical Education teachers, a professor of the University of Physical Culture and Sports Sciences (UCCFD in Spanish) "Manuel Fajardo" and three leaders of the municipality with a long and meritorious professional career.

Results of the expert evaluation

For the establishment of the indicators, it was determined in advance that only those selected by the specialists as extremely important or very important would be taken into account.

As a final result, out of seven experts, five considered as Extremely Important (EI) and two as Very Important (MI) the proposal for actions to strengthen job training.

Through this research, the authors discuss the results, compare this study with others which objects are the training of Physical Education teachers. This work emphasizes the labor component, not so in other works which optics focus on active teaching methodologies, on a historical view, on the use of technologies, on generic competencies, teachers and attention to diversity among other topics (Fernández-Espínola *et al.*, 2018; Fraile *et al.*, 2018; Aguilar, 2019; Martín *et al.*, 2019; Retamal, 2020; Valencia-Peris, 2020).

CONCLUSIONS

The referents allowed deepening the theoretical studies on job training of novice teachers. The proposal of actions was validated by the experts and demonstrated viability for the strengthening of the job training of novice Physical Education teachers in the Boyeros municipality.



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Authors' contribution:

Orlando Corrales Castro: Conception of the idea, literature search and review, instrument making, instrument application, compilation of information resulting from the instruments applied, statistic análisis, preparation of tables, graphs, and images, general advice on the topic addressed, drafting of the original (first version), review and final version of the article, article correction, authorship coordinator, translation of terms or information obtained, review of the application of the applied bibliographic standard.

Mercedes Valdés Pedroso: Literature search and review, instrument making, instrument application, compilation of information resulting from the instruments applied, preparation of tables, graphs, and images.

José Francisco Monteagudo Soler: Literature search and review, instrument making, compilation of information resulting from the instruments applied, statistic análisis, database preparation, review and final version of the article, article correction, translation of terms or information obtained, review of the application of the applied bibliographic standard.



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