

**Knowledge management, potentialities and limitations for the
preparation of Physical Education professors**
**Gestión del conocimiento, potencialidades y limitaciones para la
preparación de los profesores de Educación Física**

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Date of reception: October 30, 2020.

Date of acceptance: December 3, 2020.

ABSTRACT

The present investigative work aims to analyze the potentialities and limitations offered by knowledge management for the preparation of Physical Education professors in Higher Secondary Education. To carry out this research, methods of the theoretical and empirical level were used that allowed corroborating the problem under study. A new definition of knowledge management is offered according to the new context where it is applied.

Keywords: Knowledge management; Preparation; Physical education professors; Higher secondary education

RESUMEN

El presente trabajo investigativo tiene como objetivo analizar las potencialidades y limitaciones que ofrece la gestión del conocimiento para la preparación de los profesores de Educación Física de la Enseñanza Media Superior. Para llevar a cabo esta investigación se emplearon métodos del nivel teórico y empírico que permitieron corroborar la problemática objeto de estudio. Se ofrece, una nueva definición de gestión del conocimiento acorde al nuevo contexto donde este se aplica.

Palabras clave: Gestión del conocimiento; Preparación; Profesores de educación física; Enseñanza media superior

INTRODUCCTION

Knowledge is the main path of development in this XXI century and that of the foreseeable future, taking as a premise the technological advances of the last century. In our society, knowledge is an indispensable resource present in all senses, so it will be necessary to have the capacity to create and generate it, absorb it, transmit it and use it. For this reason, the professional of these times in any field that he performs requires to function effectively, efficiently, creatively and with a high capacity for the transformation of their organizations in the context of an increasingly complex world, the so-called knowledge society.

Now a days, the competitive advantages of organizations are in knowledge and it is the human resource who generates and disseminates it, therefore modernity focuses its attention on the creation and distribution of knowledge that encourages them to be more competitive in the environment that develops its management process.

The accelerated scientific-technical development and the complex social dynamics of contemporary times, pose higher demands on education in terms of teacher preparation, so that they can satisfactorily complete the tasks that in the professional, social and personal order requires life; Currently, Cuban schools are undergoing a profound educational revolution with the implementation of numerous programs that are aimed at ensuring quality learning for all citizens.

In correspondence with the policy outlined by the state, the National Institute of Sports, Physical Education and Recreation (INDER) has, since the triumph of the Revolution, devoted special attention to the preparation of teachers, since they constitute its main currency and they have been the protagonists of the achievements made by the organization throughout all these years.

Now a days, one of the concerns of teachers is to achieve the durability of the patterns that are created with the students, maintaining the balance with the environment in which they are inserted, but to achieve this they need to develop efficient management processes and thus preserve the knowledge with which they are inserted. is counted.

So far, the importance and need for the implementation of knowledge management in organizations to achieve superior results has been referred to and the author considers it pertinent to point out that in the specific case of Physical Education professors it is even more important, because They are responsible for developing projects and setting achievable organizational goals for all learners.

The development that Physical Education professors can achieve in knowledge management has to do with adequate planning of the work strategy, the systematic use of computer resources, the real projection of the planned actions in each of the areas of key result and the use of the most up-to-date information at all times of the teaching-educational process.

It is necessary to highlight that the educational teaching process develops amid constant changes, including the new social value of knowledge, discoveries in the sports field and the search for information, which make it necessary to incorporate them into the teacher's work of Physical Education.

DEVELOPMENT

Everything that happens in the world is associated with knowledge, which has been used for its gestation and reproduced on various media for its conservation and transmission in time and space. Knowledge is the subject of study of different disciplines, such as Philosophy, Psychology, Pedagogy, so there are different definitions depending on the point of view and interest of those who speak. For the purposes of this work, the definitions closest to the educational organizational sphere are of interest above all. Here are some that seem more relevant due to their approach: "Knowledge can be defined as justifiably certain beliefs and empirically acquired techniques" Nonaka, I. and Takeuchi, H. (1995) "Knowledge is information that is inside the minds of people; without a person who knows and is aware of it, it does not exist" May (1998), cited by (Almeida, 2007, p.21). Rectify page number "It is the ability to solve a certain set of problems with a certain effectiveness" (Muñoz Seca and Riverola, 1997), cited by (Dájer, 2006, p.34).

The Spanish executive Yen (2001), known in the field of information and communication technologies, cited by (Dájer, 2006, p.35) in his Dictionary of Knowledge Management and Informatics proposes the following definition:

Knowledge: result obtained by applying one or more objective rules of action to a piece of information or set of information. Hernández (2004) maintains that, at present, "knowledge management constitutes a novel way of managing organizational processes of all kinds, based fundamentally on the use of human capital as a generator, carrier and operator, in the appropriate sense, of the knowledge it possesses." (p.149) This means that only people generate knowledge, they carry it explicitly or tacitly and can use it to their advantage.

Vizcaya (1997, p.156) defines knowledge as: "Process by virtue of which reality is reflected and produced in human thought, said process is conditioned by the laws of social becoming and is inextricably linked to practical activity, that is, knowledge is the basis for action."

Sanz (1994, p.21) states that "Knowledge is orderly and structured information; and for the information to become knowledge, the presence of pre-existing structures of understanding in memory is required, which are capable of retaining certain information so that it becomes part of a person's knowledge".

For Malhatra (s. f.), knowledge management is: "the combination of synergies between data, information, information systems and the creative and innovative capacity of human beings." (p.1)

Quinta (1997, pp.385) argues that it is: "the process of continuously managing knowledge of all kinds to satisfy present and future needs, to identify and exploit both existing and acquired knowledge resources to develop new opportunities."

For his part, Macintosh (1997), states that: "Knowledge management involves the identification and analysis of both available and required knowledge, planning and control of actions to develop knowledge assets, in order to achieve organizational objectives. " (p.1)

Brooking (1997, p.364) offers another definition of this approach, which he defines as: "the set of processes and systems that make the organization's intellectual capital grow and is also concerned with the tactics and strategies to manage resources humans."

According to Wallace (1999): "Knowledge Management is a new discipline to enable people, teams and organizations to create, share and apply knowledge collectively and systematically, to improve the achievement of business objectives." (p.1)

As for Prusack (1998), knowledge management has to do with: "the management of the environment that optimizes knowledge. Knowledge itself cannot be managed. Managing the environment is getting people to read, think and coordinate between teams. " (p.1)

Davenport (1997) defines it as: "the systematic process of finding, relating, organizing, distilling, and presenting information in a way that improves understanding of a specific area of interest to members of the organization." (p.1)

In the analysis of these definitions, the differences between information and knowledge are highlighted. At present, the knowledge management or Knowledge-Management (KM), for its acronym in English, as it is also known, offers the possibility of identifying, preserving, organizing, and disseminating the knowledge of an organization making it explicit, managing to group human and technological resources for research on one or more topics, using dissimilar tools and making all members of the organization feel part of it; take actions to improve their performance, in addition to worrying about learning and being part of multidisciplinary teams.

Management is identified as the need to transmit above all the action of directing, administering or managing, among other aspects. This term comes from the Latin meaning *gestionis*, action of the verb *gignere* that means or means action and effect of managing according to the Royal Spanish Academy, that is, to carry out errands that lead to the achievement of any business or desire. (Mesa, 2006. p.1).

"Knowledge management is the system that organizes external or internal information flows, encourages the generation, appropriation, exchange and use of the necessary knowledge to increase efficiency and quality in the fundamental processes of organizations." (Artiles, 2007, p.56).

Knowledge management has been identified as a new approach that recognizes and uses the most important value of organizations: the people and the knowledge

they possess and contribute to the organization, all supported by theory (Drucker, 1993, p . 180) on the existence of a new type of society, that of Knowledge, in which services and knowledge become strategic resources for the molding of a new social order

The contributions of knowledge management go beyond the contribution to successful performance in the economic plane, since the new approach allows organizations to really know the set of values contributed by the groups of people that make up the organization as well as prepare for the future not only on the basis of the material and financial values available, but also on the basis of moral and social values and ruling intellectuals. In particular, knowledge management makes it possible to take advantage of the knowledge acquired by organizations and not always used properly. This will give you the possibility not only to use them but also to protect and increase them. Then you can bring wealth to your organization and to society more effectively.

(Almeida, 2007, p.21) states: "knowledge management is the process where the planning, organization and control of activities aimed at generating and transmitting necessary knowledge to organizations is developed in order to improve its use, renewal and transformation in structural capital for the improvement of the fundamental activities and processes of organizations."

Fernández (2000) alleges that knowledge management "radically improves the results of people, the efficiency of the organization and reliability". (p.3). It is the systematic process of searching, organizing, filtering, and presenting information in order to improve people's understanding of a specific area of interest. (Davenport and Klahr, 1998, p.195).

Canals (2003, p.2) points out that "the new economy, globalization and new technologies are some of the elements that have made knowledge management become increasingly important. Knowledge, as it is understood today, is a resource that not only allows us to interpret our environment, but also gives us the possibility to act.

Knowledge management consists of optimizing the use of this resource by creating the necessary conditions for the flows of knowledge to circulate better" (Davenport

and Prusak, 2001), however, this author remains only in the definition, without reflecting forms or ways of organization, when carrying out the process.

Knowledge management is considered to focus on the preparation and formalization of knowledge-related activities such as creation, capture, transformation, and use.

Managing knowledge means managing the processes of creation, development, dissemination and exploitation of knowledge to gain competitive capacity. (Revilla and Pérez, 2000, p.1)

In the bibliography consulted, it can be seen that numerous authors have addressed the subject of knowledge management, of the concepts expressed the following can be generalized as common elements:

- Knowledge is important as a basis for effective competition, although it is still an area in which organizations have a lot to advance.
- Knowledge is increasingly consolidated as an element of strategic importance in organizations.
- There are difficulties in how to implement knowledge management and how to make it useful for organizations.
- The individual is the center of the knowledge management process because only human beings can assume the central role in the knowledge creation process.
- Knowledge must be shared, disseminated and done.

For (Lara, 2002, p.4) it is then a formal and integrative process, whose implementation is oriented in base to the answer to the following questions:

What knowledge, if we had it in the organization, would allow it to function more effectively?

Is that knowledge already in the organization, but does not reach the right places, or is it knowledge that we will have to acquire outside the organization?

Who uses the knowledge? How can we start transmitting knowledge?

“It is important to highlight that for our research these questions were taken into account because they contributed to the conformation of the potentialities and limitations to satisfy the current demands of the teachers and in correspondence

with the needs of the current and future situation of the country. On the other hand, (Reyes, 2002. p.3) highlights that the objectives of knowledge management are:

- Make knowledge visible.
- Develop an intensive culture of knowledge by encouraging sharing behaviors, and attitudes of seeking and offering knowledge. This author himself states that the basic thing is to understand that the base of the knowledge management value chain in a well-implemented program would be composed of these links:
 - Identify knowledge.
 - Capture that knowledge.
 - Encode and store it, as far as possible.
 - Make it accessible.

From another perspective, the document "Bases for the introduction of Knowledge Management in Cuba" of the Ministry of Science, Technology and Environment (CITMA) indicates that there are currently several factors in Cuba that promote the application of knowledge management techniques based on of the social and economic development in which the country is committed. (2002, p.15)

The objectives of knowledge management in Cuba according to this document are:

1. Create the necessary conditions for the adequate exploitation according to the institutions, of the knowledge created and acquired for the sustainable development of the country.
2. Promote and promote the application of knowledge management techniques in Cuban organizations to achieve better results and development, with the adequate management of strategic elements such as human resources, information resources and knowledge.

On the basis of the above, the value that is currently conferred on knowledge management as an important process to achieve success in Cuban teaching is justified and highlighted, and the preparation of teachers in this subject, increasingly constitutes an important way to help achieve it.

There are several reasons that call today for the improvement of Physical Education professors in knowledge management: one of them is that the value of knowledge, its creation, socialization and development-oriented protection are

current challenges; the second, that the knowledge society depends on a broad general, scientific and technological culture.

It is considered important to investigate how the ideas of knowledge management can be incorporated into Physical Education of Higher Secondary Education in the face of the needs caused by the current social and technological context; Its application should be directed to the improvement of Physical Education classes with the aim of facilitating the development of a competitive sports and recreational system adapted to the new demands of society.

For these reasons, it is necessary to create the foundations of an organizational culture that recognizes the value that the proper use of knowledge management has for an entity, as well as the importance of using and preserving this knowledge on Physical Education, acquired by teachers in the time, which are considered, in turn, a strategic part of its heritage and allow Cubans to maintain the prestige abroad.

This culture must be present in all Physical Education professors to contribute to being more and more efficient. It was found in the bibliographic review that several authors also point out that the implementation and use of knowledge management requires the management of information and documents, the use of information and communication technologies, as well as efficient management of human resources.

In correspondence with the above, it is understood that the evolution of Physical Education, the connotation they have for Cuba, the fact of satisfying needs, with limited resources and their greater needs, requires establishing priorities.

It is recognized that the only inexhaustible resource capable of adding value and that from it all sources of advantages can be generated is human resources. This provides organizations with knowledge, their own organizational dynamics, experience, the ability to analyze and make decisions that allow the constant search for durability and balance with the environment, therefore knowledge is the most precious asset of any organization.

The content of Physical Education of Higher Secondary Education favors the actions and opportunities of knowledge management, they are the knowledge

(facts, concepts, principles), the abilities, the capacities and the values, that have greater or less meaning in the measure that the needs and interests of teachers be identified to be better every day in their professional work.

Knowledge management in its social implementation is not exempt from confronting problems that may constitute limitations as a result of the dependence that teachers have on the knowledge that teachers have on the knowledge management process (concept, importance, tools), use of elements of the knowledge management process (identify, capture, store and share), preparation received in knowledge management, computer tools aimed at finding information for the knowledge management process.

The amount of computer resources available for management, their connectivity, the use of mail by teachers, use of the internet and intranet, all affecting the positive of it.

The potentialities of knowledge management can be used to prepare Physical Education professors of Higher Secondary Education in the development of activities, for example through the use of video and audio conferences, online forums, taking advantage of the knowledge of teachers who already they are not within the educational system and possess essential knowledge for all members, which would enable teachers from other educations and people from other communities to know and incorporate these into their daily work.

As a result of this research work, it is shown that the insufficiencies or limitations raised can be resolved in favor of their total or partial eradication by confirming that knowledge management can enhance the preparation of Physical Education professors of Higher Secondary Education, favoring the link between teachers in order to transform themselves and achieve a substantial increase in the use of this process.

Consequently, the little use of the potentialities offered by knowledge management for the preparation of Physical Education professors declared as an insufficiency that motivated the carrying out of this work is shown to be soluble with the use of methodological preparation.

Taking into account all that has been addressed so far, knowledge management can be defined as: the process that allows people and organizations to identify sources of knowledge, capture, store and then share it to achieve conscious development.

It is necessary to insist that knowledge management occupies an important place in today's world in its educational and sociological significance. There is no sector of the population that it cannot reach. It is necessary that the peoples have the possibility to intelligently inform themselves about other countries and about the great social, economic and political problems of our time.

CONCLUSSIONS

In the present work the potentialities reported by the use of knowledge management for the preparation of Physical Education professors in Higher Secondary Education are addressed. The possible limitations that are given to a greater extent by the lack of knowledge about this process are also related and analyzed, which is why it is demonstrated that the use of the potentialities and benefits that knowledge management provides by allowing teachers to achieve greater professionalization and with This is the increase and improvement of their capacities to function in the field of education; Despite the possible problems that may be faced, they can be solvable through the improvement and preparation of professionals in Physical Education in Higher Secondary Education.

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