

Strategic projection of the research group of combat sports in Holguín Proyección estratégica del grupo de investigación de los deportes de combate en Holguín

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ABSTRACT

The objective of this paper is to show the strategic planning of the combat sport research group based on the model of organization of the process of science and technological innovation, starting from the strategic diagnosis and the dimensions or areas of key results given by the three moments of the process. With its strategic objective and actions, as significant aspects of the planning, the research group is seen as a space for practice and lifelong learning where scientific confrontation is projected, by socializing results of projects, master's and doctoral theses and the possibility of maintaining a collective control over scientific work and achieving greater effectiveness in results. In the same way appreciates from the projection a greater approach to the inter and transdisciplinarity.

Keywords: Research group, Strategic planning, Learning and technological innovation.

RESUMEN

El trabajo tiene como objetivo mostrar la planificación estratégica del grupo de investigación de deporte de combate sustentada en el modelo de organización del proceso de ciencia e innovación tecnológica, partiendo del diagnóstico estratégico y las dimensiones o áreas de resultados claves dadas por los tres momentos del proceso. Como aspectos significativos se aprecia el grupo de investigación como un espacio de práctica y aprendizaje donde se proyecta la confrontación científica,

al socializar los resultados de proyectos, tesis de maestría y doctorados, y la posibilidad de mantener un control colectivo sobre el trabajo científico y lograr mayor efectividad en los resultados. De la misma manera se aprecia desde la proyección un mayor acercamiento a la inter y transdisciplinariedad.

Palabras clave: Grupo de investigación, Planificación estratégica, Aprendizaje e innovación tecnológica.

INTRODUCTION

The dynamics of the physical culture research groups is based on the systemic interaction between the components or dimensions of the organization of the science and technological innovation process that is carried out in the group, where all the activities developed in the implementation of life scientific group characterize it as a community of practice and learning, by materializing the integration of organizational learning, the collaborative philosophy and effective work in the group, in this way progress is made towards the consolidation of a collaborative academic culture of research and organizational learning of the group and its influence in the institution.

There are aspects that should characterize the distinctive actions of physical culture research groups, such as:

- The area of knowledge defined by each group, part of the fundamental processes that are developed in the Physical Culture and Sport System.
- The joint participation of the professors-researchers, the Sports professor and other officials involved from the identification of priorities, demands and needs to the introduction of the results.
- The physical culture research groups are an expression of strategic integration, by aligning its components with the institutional strategy and the demands, needs and priorities of the Physical Culture and Sport System.
- The presence of undergraduate and postgraduate students in the physical culture research group guarantees that the diploma, master's thesis, specialty and doctorate works are also interpreted as scientific results of projects.

- In their mission, they prioritize the role of technological innovation in the substantive processes of the university and in social practice, by stimulating the process of social appropriation of knowledge.

A peculiar element of the physical culture research groups lies in the members of the group, by incorporating all those involved in the solution of the scientific problem, which provides a greater guarantee in the introduction of the result, when the traditional user, in this This situation would be part of the scientific result that you must apply in your work performance, benefits that translate into better results in your work and greater preparation as a professional.

In the dynamics of the research groups, three basic forms of identity are integrated Bianco, M. (2014), the one referring to the theme or area of knowledge, the collective identity in correspondence with the history of group work and the self-identity with the sense of belonging to the group and valuing its usefulness within it, these aspects are of vital importance for the strategic projection of the research group.

The areas of knowledge that each group defines are based on the fundamental processes developed in the Physical Culture and Sports System, as well as the potential of applied sciences, these will reduce their scope and increase groups, to the extent that an area of knowledge achieve a higher level of development and the objective and subjective conditions existing in the university and the territorial system so require.

A situation faced by physical culture research groups is the lack of articulation between the investigations that are developed and networks of scientific problems are elaborated, Padrón, (2004), where the complementarity and sequence between the different problems to be solved and of course, of the different investigations to be developed by the group. In this, the level of complexity of the problems is expressed from highest to lowest, where it is made to correspond with possible doctoral theses or high-level investigations up to the diploma work or course work as scientific work of less complexity.

Something that should characterize the physical culture research groups lies in the active participation of the teacher-researchers together with the other members of

the group in the identification of the priorities, demands and needs of the Physical Culture and Territorial Sports System, upon starting of a diagnosis of the area that allows the conformation of the network of scientific problems and makes it possible to face other organizational and management insufficiencies to obtain the relevant results that are needed.

With the development of scientific, innovative activity and the knowledge society, where the university loses its hegemonic character, the generation of knowledge occurs, basically, in tacit and explicit knowledge, according to Pineda Serna, L. (2015), it is should interpret the generation of socially distributed knowledge and research increasingly in the context of application, as aspects that reveal the necessary integration of the fundamental actors of the system for science and technological innovation throughout the process, from projection to evaluation . In this way, since the group is conceived, the need for networking is expressed, without being limited to this, its territorial, national and international scope must be progressively increased, with an adequate application of information and communication technologies.

One of the aspects that should characterize the dynamics of the science and technological innovation process in physical culture research groups is scientific confrontation, as one of the ways that materializes organizational learning, with systematic evaluations of partial results and ends of scientific and innovative work, sharing experiences, positioning collective intelligence as a function of all and materializing, in this way, unity in diversity. A priority of the physical culture research groups is the work for the integration of the substantive functions of higher education, starting from considering the group, its area of knowledge as a complex, integrating and holistic problem, where it can be valued. the behavior of teaching, research and extension as a whole.

From everything raised about the research groups, it is inferred the need to improve the management in the physical culture research groups, transform the results and products into publications, applications and technology transfers, gain group stability, enhance scientific leadership , the development of schools of thought and perfecting the processes of nouns, for this it must be kept in mind,

among other aspects, promoting a university teaching-researcher culture and its correspondence with the culture of the different research groups of physical culture; promote knowledge of scientific policy and the dynamics of the science and technological innovation process, integrating scientific-academic culture, from a strategic management approach of physical culture research groups, as well as identifying the factors and elements of the change in the management of the processes and dynamics of the physical culture research groups to propose new evaluation indicators of the science and technological innovation process and to be able to measure the effectiveness of the research groups, Pavas, A. (2016) .

As objective of the present work "Develop the strategic planning of the research group of combat sports in the Holguín province"

Development

The organization model of the science and technological innovation process in physical culture research groups proposed by Ávila (2014: 2017) has its practical outcome in a strategy that enables the formation of objectives and actions relevant to transforming scientific culture. of the fundamental actors linked to the scientific and technological activity of the Physical Culture and Sport System, the physical culture research groups, as well as the effectiveness of the introduction of scientific and technological results into practice.

In its conception, the structural-functional systemic method is using as a fundamental method, which provides the practical application of the model proposed in the previous section, aimed mainly at the transformation of research groups in physical culture and institutional development. As a starting point in its elaboration, the analysis and synthesis of the information captured in bibliographies as in experiences of previous studies was applied as a procedure, Fuentes, H. and Estrabao, A. (2004); Left Monica et al. (2008); Casado, I., Falcón, Y. and Macias, M. E. (2009); Prado, A. G. and López E. (2009) and Díaz, Martha (2009), among others.

The strategy is supported by a set of procedures that define its direction and planning, it is structured in two fundamental stages, the first makes it possible to expose the most general aspects of the strategy and projects its strategic

objective. Something peculiar about this stage for a Higher Education center lies in the approach of the premises in correspondence with the current development of the institution and the particular demands of the institution in line with future scenarios, which in turn contribute to the organizational culture, And makes it possible to develop the mission, vision, strategic and specific objectives in the different dimensions or processes defined as fundamental components of the strategy.

The second stage includes the three fundamental dimensions as a synthesis of theoretical modeling, the dimensions conceived in the model: preparation of the science and technological innovation process, scientific or technological production and scientific-technological transformations, which characterize moments of the organization of the process in physical culture research groups. The (fig. 6) represents the scheme of the strategy that establishes its relationships in stages.

The preparation dimension of the science and technological innovation process, a moment where the essential organizational elements are guaranteed for an adequate preparation of the process, something similar to the pre-innovative stage proposed by Castro, F., (2004), the multidisciplinary groups of research with the participation of the main actors and the strategic projection of each research group is carried out in correspondence with the institutional planning. When assessing the priorities, demands and needs of the Physical Culture and Sport System, the scientific problems that give way to the organization in programs and projects are identified, something peculiar in the dynamics of these groups is based on the debate of topics that guarantee a space for practice and learning about the moment of the process that is executed.

Scientific production is the dimension of the strategy that best expresses the dynamics of the group when executing research programs and projects, with a planned and organized scientific life, where scientific confrontation materializes when evaluating the partial and final results of the investigations. In an adequate socio-psychological climate, at this moment the investigative process is regulating

and control, the results are validating and their dissemination is promote through different channels.

The scientific-technological transformation dimension I have been expressed in the introduction of the results obtained and their validation in practice, to the extent that these changes or contributions are lasting and generalizable, to that extent the social relevance of the institution will increase, its relevance. At this time, the evaluation of the scientific results, evaluation by impact, in the corresponding sphere of knowledge and the identification of new priorities, needs and demands are carry out with the purpose of restarting a new level of transformation. As results of the process, one is in a position to evaluate the results of the group in correspondence with the established indicators.

The dynamics of research groups in physical culture are based on the dialectical interaction between these dimensions, establishing a hierarchical order between them by defining scientific or technological production as the most important component in the physical culture research group and promote an organizational structure that integrates all those involved in solving the relevant problems of physical culture and territorial sport, addressed as a whole, as a complex problem that allows a greater approach to inter and transdisciplinarity in scientific results and technological.

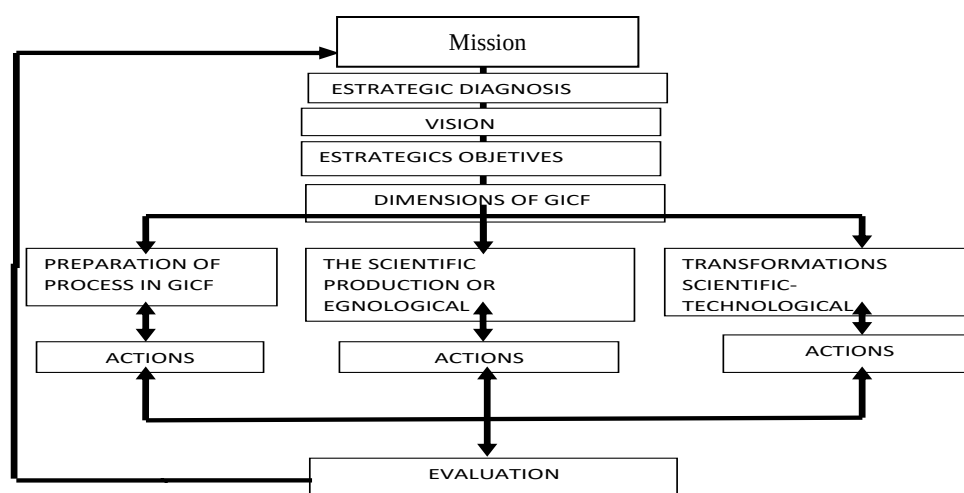


Fig. 6: Graph corresponding to the model implementation strategy

The strategy must maintain in all its conformation a proactive vision. Of projection towards the future, when conceiving the development of capacities in the human resources for the change and the transformation from the current reality, with flexibility, before the possible scenarios, considering the traditions, but with an objective projection to respond to contemporary challenges, basic elements to support an institutional strategy of a social nature such as the university.

It is important for the implementation of the model through this strategy the assessment of the fulfillment of the premises raised in the construction of the model. In these, the need for the managerial apex, both of the university and of the System of culture physics and sports, understand the importance of organizing the process of science and technological innovation, are motivated and committed at the different levels of management in strategic action to achieve the necessary changes. In the way of thinking and acting for transformation and compliance of the institutional mission in correspondence with the demands of the 21st century.

A fundamental aspect to achieve the implementation process lies in the interrelation between the different levels of institutional management depending on the organization of the science and technological innovation process, by appreciating the unity required between the mission of the university and the different levels of management. With the active participation of the main actors of the Physical Culture and Sport System, constitute a necessary premise, which is why the conception of the territorial scientific council, tactically, the science and innovation councils, and operationally are transcendental strategically. , physical culture research groups, among other structures, which in their operation materialize the efficiency and effectiveness of the science and technological innovation process.

Another of the premises that should favor the implementation of the model is based on the organization of research into programs and projects, by managing to establish physical culture research groups by area of knowledge, which generally coincide with the programs and in projects as a subgroup or group, as appropriate. This organizational form can favor the complementarity and sequence of the

investigations in correspondence with the network of scientific problems of the area of knowledge.

The university must achieve its relevance inside and outside the System of physical culture and sport, for this reason it is necessary to reach the highest possible level of coherence in the fundamental university processes. achieving integration and balance between the substantive functions must constitute an expression of the scientific culture reached by cadres, officials, professors-researchers and students in the institution and in this way respond to the contradiction between preserving, developing and disseminating culture as a support for the development of the higher-level institution. The physical culture research groups in their dynamics should favor all these results as a response to the demands of the contemporary university from globalization and the knowledge society.

Strategic planning of the combat sports research group.

Mission.

Promote the organization of the science and technological innovation process in the Holguin sports system through the physical culture research groups, to increase the scientific-technological impact both in the training of the professional and in the solution of the relevant problems of the System of physical culture and sport.

Strategic diagnosis of the organization of the science and technological innovation process in the Holguin sports system.

Threats:

- Political-ideological and competitive scenario that limits the obtaining of financial resources, technology transfers and sources of information to the Cuban Physical Culture and Sports System.
- Tendency for graduates to drop out towards other more attractive sectors of the economy.
- Little social recognition, in the national context, of scientific-research activity.
- Opportunities:

- High political will by the governing bodies of the State regarding science and technological innovation.
- Growing scientific and technological demands of the physical culture and sport system.
- Global tendency to finance scientific-technical programs and/or projects.
- The support given by the State to interface activities of the Science and Technological Innovation System, such as the Science and Technology Forum movement, the National Association of Innovators and Rationalizers (ANIR) and the Youth Technical Brigades (BTJ).
- Possibilities of alliances with other organizations and institutions of Higher Education and national and international sports.
- Strengths:
 - A high motivational level of teachers for self-improvement, as those linked to master's degrees and doctorates increase.
 - Existence of a scientific potential with an adequate level of preparation, in the Institution.
 - To lead the doctoral training of Physical Culture in the eastern provinces, with a degree subcommittee.
 - The development of a Center for Studies, Combat Sports and Physical and Natural Therapies, as the vanguard of scientific work at the Faculty.
 - Stability in the operation of the Scientific-Technical and Computer Information departments, based on teaching and research.
 - Systematic output of the institution's digital magazine.
 - Internet access for students and teachers.
- Weaknesses:
 - Insufficient level of preparation of the teachers of the territorial sports system for the design and execution of projects, as well as for the introduction and generalization of scientific results.
 - Limited the development of postgraduate courses with the purpose of preparing cadres, officials and professors linked to the management of the science and technological innovation process.

- Little access to advanced technologies, obsolescence and deterioration of existing equipment for basic and applied research.
- Lack of integration between the investigations, of these with the substantive functions and with the areas of demands for knowledge and technologies of the System of physical culture and sport.
- Low student incorporation into research and innovation projects.
- Reduced number of publications in foreign journals with a high impact factor.
- The territorial scientific-technological supply and demand is not sufficiently identified.
- Insufficient exploitation of the groups in the development of the science and technological innovation process.
- Low funding for the development of scientific projects and innovation, as well as for the dissemination of results and access to scientific and technological information from the sports system.
- Few management projects for foreign collaboration.
- Vision 2021.
- The Holguin sports movement has a highly developed scientific-investigative culture, by consolidating the organization of the science and technological innovation process from the work in research groups and favoring the relevance of its scientific-technological results, with impacts on levels, local, territorial, national and international, expressed mainly in:
 - The redimensioning of the territorial Sports mission, with greater integration and coherence in its processes aimed at favoring the application of science and the social relevance of the institution.
 - The integrating role of the research groups when conceiving their mission in correspondence with institutional planning and the needs, demands and priorities of the Territorial Physical Culture System, as well as the integration of all those involved in solving scientific problems.

- The recognition of the territorial sports department, as a national reference in the organization of the science and technological innovation process, based on the work of the sports research groups and doctoral training.
- The transformation of the scientific-investigative culture of cadres, professors and students, fundamentally due to the dynamics and scientific life in sports research groups, as they are conceived as spaces for permanent learning and practice.
- The high level reached in the institutional scientific-investigative culture favors the way of conceiving sports research objects as a whole, holistic and systemic, seen in their contextual complexity and ratifies the value of inter- and trans-disciplinary research.
- General objective of the strategy: Implement in the scientific-investigative practice of the territorial sports department the organization model of the science and technological innovation process in the combat sports research group, based on its dimensions, strategic objectives and actions, which allow the promotion of group scientific work with the participation of all those involved, in the interdisciplinary solution of the scientific problems of combat sports, where the research group constitutes a space for practice and learning both in training and in investigation.

The preparation dimension of the science and technological innovation process in the combat sports research group.

Strategic objective 1:

Guarantee the organizational and planning aspects necessary for the process of science and technological innovation in the combat sports research group.

Actions:

- Establish the multidisciplinary research group of combat sports in correspondence with the area of knowledge and incorporate all those involved, undergraduate and postgraduate students, to the solution of the relevant problems of these sports.
- Carry out the diagnosis of the area of knowledge both in the organizational order and in that of the needs, demands and priorities, which allows

defining the scientific problems of combat sports in the territory for the development of the science and technological innovation process in the Investigation Group.

- Conceive the strategic projection of the combat sports research group in correspondence with the diagnosis of the area of knowledge and the institutional strategy.
- Develop training programs on group work and project design, to make the process of science and technological innovation more viable and dynamic.
- Identify the financial needs of the combat sports research group to promote the development of research projects and other scientific activities.
- Schedule activities aimed at the development of motivation and scientific and technological vocation, from the group and strengthen, in this way, the scientific and technological culture of the human capital of its social environment or radius of action.
- Promote the development of the postgraduate from the dynamics of the combat sports research group, based on scientific and technological results, with priority in the training of specialists, masters and doctors.
- The dimension of scientific or technological production in the combat sports research group.

Strategic objective 2:

Strengthen scientific or technological production, as the core of the dynamics of the combat sports research group and materialize the generation, validation and dissemination of the scientific or technological knowledge necessary to solve the scientific problems of territorial sports.

Actions:

- Execute the projects and programs corresponding to the research group, with a closer approach to the application contexts.
- Carry out systematic evaluations of the partial and final results of the investigations, based on scientific confrontation and socialization in the group.

- Promote scientific publications in high-impact magazines, as well as promoting this level in the deportiva magazine.
- Participate systematically in scientific events of a territorial, national and international nature.
- Work for a greater approach to inter and transdisciplinarity in the research carried out in the group, by giving a complex, comprehensive and systemic interpretation to the objects of research in the sciences of physical culture and sport.
- Stimulate the development of scientific events at the combat sports research group level, with student areas and national and international scope.
- Work so that the combat sports research group becomes a space for practice and permanent learning in research and training.
- Prioritize the movements of the science and technology forum, the ANIR and the BTJ as integrating elements of the science and technological innovation process in the group

The dimension scientific-technological transformation of the knowledge areas of combat sports, from the research group.

Strategic objective 3:

Prioritize the treatment of the introduction of scientific and technological results to social practice, both in teaching and in the solution of combat sports problems detected and evaluate the transformations or lasting changes as knowledge, economic or social impact.

Actions:

- Commit the different levels of territorial sports management to the introduction and generalization of scientific and technological results.
- Promote the development of R+D+i projects in the combat sports research group as a means of introducing results.
- Promote meetings aimed at the introduction, generalization and impact of scientific results and technological innovations, in the combat sports

research group, with the participation of all the factors involved in said processes.

CONCLUSIONS

As can be seen, the strategic planning of the combat sports research group was developed based on the organization model of the science and technological innovation process, with the three dimensions of the process, preparation, knowledge production and transformation or introduction. of results, with the corresponding actions, in this process the fundamental method applied was structural-functional systemic, being able to appreciate the dialectical interrelation between the dimensions or components with the necessary dynamics to fulfill the strategic objectives and their actions.

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