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Original article

Diagnosis of the technical training process in Olympic wrestling

Diagnóstico del proceso de formación técnica en la lucha olímpica

Diagnóstico do processo de treinamento técnico na luta livre olímpica

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ABSTRACT

Introduction: International and national organizations demand a training process that facilitates access to technical knowledge, from modern teaching methods, that is inclusive, equitable and of quality.

Objective: In response to this, the research was aimed at diagnosing the current state of the technical training process of Olympic wrestling.

Materials and methods: For this purpose, a longitudinal study was carried out from 2012 to 2021, selecting 18 managers, 59 wrestlers and 24 coaches as a sample. Two mobile phones were used to record and obtain the images of the combats, from where the observations of the technique were made. The methods used were the dialectical-materialist, as well as those of a theoretical and empirical nature, highlighting the review of documents, the interview, the survey and the observation, while as a verification tool the methodological triangulation, fundamental in the process of describing the object of study.

Results: The applied procedures determined the existence of difficulties in the pedagogical-sports direction, the scientific-technical content system and the analysis of key factors of the technique, especially, with handling of the action model (video library), the video -analysis (execution parameters), the common factor (selection of successful and unsuccessful cases) and working documents (technical sheets and comparison list).

Conclusions: Finally, the guidelines of a didactic model for the training of the technique are declared, based on a systemic elaboration of the scientific-technical contents and the analysis of key factors, considering the information and communication technologies (ICT).

Keywords: Technical training process; Olympic wrestling; Direction; Contents; Key factors.

RESUMEN

Introducción: Los organismos internacionales y nacionales exigen un proceso de formación que facilite el acceso a los conocimientos técnicos, desde los métodos modernos de enseñanza, que sea inclusivo, equitativo y de calidad.

Objetivo: En atención a ello, la investigación se orientó a diagnosticar el estado actual del proceso de formación técnica de las luchas olímpicas.

Materiales y métodos: Con este propósito, se realizó un estudio longitudinal desde el año 2012 hasta 2021, seleccionándose como muestra a 18 directivos, 59 luchadores y 24 entrenadores. Se utilizaron dos teléfonos móviles para grabar y obtener las imágenes de los combates, desde donde se realizaron las observaciones de la técnica. Los métodos utilizados fueron el dialéctico-materialista, así como los de orden teórico y empíricos, se destacan la revisión de documentos, la entrevista, la encuesta y la observación, mientras como herramienta de constatación la triangulación metodológica, fundamental en el proceso de descripción del objeto de estudio.

Resultados: Los procedimientos aplicados determinaron la existencia de dificultades en la dirección pedagógico-deportiva, el sistema de contenidos científico-técnicos y el análisis de factores claves de la técnica, en especial, con manejo del modelo acción (librería de video), el video-análisis (parámetros de ejecución), el factor común (selección de casos exitosos y no exitosos) y los documentos de trabajo (fichas técnicas y listado cotejo).

Conclusiones: Finalmente, se declaran las pautas de un modelo didáctico para la formación de la técnica, con base en una elaboración sistémica de los contenidos



científico técnicos y el análisis de factores claves, considerando las tecnologías de la información y las comunicaciones (Tic).

Palabras clave: Proceso de formación técnica; Lucha olímpica; Dirección; Contenidos; Factores clave.

SÍNTESE

Introdução: Organismos internacionais e nacionais exigem um processo de treinamento que facilite o acesso ao conhecimento técnico, a partir de métodos modernos de ensino, que seja inclusivo, equitativo e de qualidade.

Objetivo: Em vista disto, a pesquisa teve como objetivo diagnosticar o estado atual do processo de treinamento técnico na luta livre olímpica.

Materiais e métodos: Para este fim, foi realizado um estudo longitudinal de 2012 a 2021, selecionando 18 gerentes, 59 lutadores e 24 treinadores como amostra. Dois telefones celulares foram usados para gravar e obter as imagens dos surtos, de onde foram feitas as observações da técnica. Os métodos utilizados foram dialético-materialista, bem como métodos teóricos e empíricos, incluindo revisão de documentos, entrevista, levantamento e observação, enquanto que a triangulação metodológica foi utilizada como ferramenta de verificação, fundamental no processo de descrição do objeto de estudo.

Resultados: Os procedimentos aplicados determinaram a existência de dificuldades na direção pedagógico-desportiva, o sistema de conteúdo técnico-científico e a análise de fatores-chave da técnica, em particular, com o manuseio do modelo de ação (videoteca), a vídeo-análise (parâmetros de execução), o fator comum (seleção de casos de sucesso e insucesso) e os documentos de trabalho (fichas técnicas e lista de verificação).

Conclusões: Finalmente, são apresentadas as diretrizes de um modelo didático de treinamento técnico, baseado em uma elaboração sistêmica dos conteúdos técnico-científicos e na análise de fatores-chave, considerando as tecnologias de informação e comunicação (TIC).

Palavras-chave: Processo de treinamento técnico; Luta livre olímpica; Gestão; Conteúdo; Fatores-chave.

INTRODUCTION

Education must be oriented and designed for the young people who will have to face the challenges of the 2030 decade. This requires: a pedagogical methodology capable of activating critical thinking, awakening creativity and originality, solving complex problems, having cognitive flexibility, valuing emotional intelligence and teamwork, learning to deal with diverse opinions and behaviors and knowing how to make decisions without authoritarian impositions" (Frei, 2021). This position is reaffirmed in the objectives for sustainable development 2020, where number four is pronounced for "Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all" and number nine for building resilient infrastructure, promoting industrialization inclusive and sustainable and foster innovation" (United Nations Organization, 2020).



Educational systems must maintain a work of permanent improvement (Velázquez, 2021). This system has two invariants, the first related to the training of professionals with the highest possible quality indices and the second to strengthen what has been achieved at the highest possible level. This is possible from the development of self-learning skills, the use of new technologies, the various learning resources, independent activity, promoting the role of the entire community and the family in training processes (Saborido, 2021). In this regard, this author himself refers to what is necessary and urgent to attend to diversity (population, individual, cultural differences, making training spaces and times more flexible). This is fulfilled under the principle that the University is also outside the walls and assumes an approach that moves from a didactics centered on teaching to a didactics centered on learning.

With support in the neurological bases for the learning and training of sports technique, Mejía and Zaldívar (2020) state that: in practice, the predominance of traditional methods is observed under a behavioral approach, which barely integrates constructivist methods into the teaching process learning ". The studies carried out by Yáñez (2017) and Ibáñez and de Mato (2019) warn in their research contradictions related to the conceptualization and foundation of the training process in the Wrestling in Cuba.

In the current criteria of several authors (García, 2019; Díaz-Canel, 2019; Morales, 2020; Pérez *et al.*, 2020; Guijarro *et al.*, 2020; Navarro *et al.*, 2020; García & Teva, 2021; Gonzalez, 2021; Ros, 2021), it is promoted the pedagogical model of personality development training, based on meaningful learning, of an ecological paradigm, where man is a bio-psychosocial being. In this model, the integrality of the personality formation process recognizes aspects such as:

- Social: based on theories of human development, biological, psychological, sociocultural and life cycle factors.
- Multidimensional: in attention to the promotion of human development from the dimensions of the training process in which social, cognitive, emotional or socio-affective and physical dimensions are recognized as basic.
- Multidisciplinary: for its approach from the study of disciplines such as Philosophy, History, Biology, Physiology, Medicine, Neuroscience, Pedagogical-Educational, Psychology, Evolutionary Sociology and Cybernetics.
- Psychological: where conceptualism is assumed, based on psycholinguistic development and cognitive psychology, with the aim of approaching a cognitive-affective-value human being.
- Didactic: this from the position that all new learning must start from a significant experience, developing education is what leads to development and goes ahead of it (guiding, orienting and stimulating). It takes into account the current development to continuously expand the limits of the zone of proximal or potential development and, therefore, the progressive levels of development of the subject. The principles of development and practice, characterized in the situations, the problem and the mediating elements that help to form from the conception of the student an active subject with the capacity to build their own learning, whose fundamental competence is to be creative and innovative. contextualized from the studies carried out from the didactic requirements (verticality, horizontality, scientificity, topicality and affordability).



These criteria allowed the authors to infer the conceptual scheme of the technical training process through the sports activity of the Wrestling and define three dimensions of research: the pedagogical-sports direction of the technique (D1), the scientific-technical content system (D2) and the analysis of key factors in the technique (D3).

Based on the above considerations, the authors of this article set out to diagnose the current state of the technical training process in the sport of Olympic Wrestling. Study that aims to reveal how this sporting activity is developed and to discover, from the current didactic positions, the lines of research useful to the sports pedagogical process for the training of wrestlers and thus contribute to maintaining the performance that has contributed so much to the results of the movement. Cuban sports in the last thirty years.

To carry out this research, the criteria of *Hernández et al. (2014)*, *Mesa (2006)* and Resolutions No. 210/2007 and No. 2/2018 of the Ministry of Higher Education were taken into account.

MATERIALS AND METHODS

The research includes a longitudinal study from 2012 to the present, it is linked to the research line of the Doctorate in Physical Culture Sciences at the University of Matanzas, referring to the "Training and preparation of athletes" and, to it's At the same time, it is associated as a research subtask to the task "Management of sports activity in the social and university environment", which contributes to the "Social Interaction" project. As materials in the diagnosis, the following were used: two mobile phones (iPhone 6) used to record the interviews and the video images of the combats, from where the observations of the technique were made, paper, laser printer, pencils for preparation and completion of surveys.

The authors assume as a general conception of the investigative process the dialectical-materialist method. The scientific method referring to the measured use of theoretical and empirical methods. Among the first, the historical-logical, the analytical-synthetic, the inductive-deductive and the systemic-structural-functional were used; while among the latter, the analysis of documents, the interview, the survey, the observation and the methodological triangulation stand out. The research procedure consisted of: firstly, defining the conceptual research scheme, secondly, making the diagnostic observation platform from which to correlate the investigative results (within and between) the evaluative, practical, and theoretical activities. For this, a non-probabilistic sample (by trial) was used, which included the cross-sectional studies carried out for:

- Application of the pilot test to find consensus and refine the conceptual research scheme, which led to interviewing a sample of 18 specialists in the Granma "Cerro Pelado" International Wrestling Tournament in 2014. Very useful criteria were taken that contributed to improving the conceptualization of research. The authors of these criteria are described in the Introduction to this work.
- Preparation of the evaluation scale, used in order to measure the contents to be evaluated in the research, defining five levels of significance for the transit of qualitative transformations into quantitative ones for their evaluation: five (Very significant), four (Fairly significant), three (Significant), two (Little significant) and one (Not significant).



- Evaluation by specialist criteria for the validation of the conceptual research scheme to carry out the observation of the training process. Fact materialized in the first category National Championship held in Camagüey in 2015, it had the collaboration of 25 trainers and specialists. The benefits of the expert criterion method were also considered, specifically the pairwise comparison methodology. It is approved from the quantitative arguments the conceptual research scheme of the technical training process for the methodological step entry and grip to the pelvic girdle in the subgroups of standing offensive techniques in Olympic Free Wrestling. The 96.08% of the specialists' assessments approve the contents of the research conceptual scheme for a 4.80 level of measurement (NM in Spanish) of the theoretical content (very significant) for the aspects shown below:
 - a. Variables in their conceptual and operational definitions, dimensions and indicators.
 - b. Methodological steps of the training process.
 - c. Standing offensive technique subgroups.
 - d. Basic and specific content for the training process.
 - e. Technical training process: in its variables, dimensions and indicators.
- With this background, the observation platform of the technical training process in the sports activity of Olympic Wrestling is created. It includes the contents of the methodological step, the techniques to be observed, the specific and basic contents, as well as those of the training process
- Protocols are drawn up to diagnose evaluative, practical and theoretical activities
- Execution of the diagnosis of the assessment activity (AV in Spanish), this occurred within the framework of the Sport Initiation School (Eide in Spanish) Cup "Luis Augusto Turcios Lima" in 2015, where 18 managers were interviewed and 59 wrestlers and 24 coaches were surveyed
- Execution of the diagnosis of the practical activity (AP in Spanish) included the observation of 127 effective actions of technical executions, in combats selected in a simple random manner in the categories of 11-12 years, 13-15 years in the aforementioned cup in the year 2015 and the observation of 54 didactic units of the technique (OUDT in Spanish) in the year 2016 in the Eide "Luis Augusto Turcios Lima" .
- Execution of the diagnosis of the theoretical activity (AT); this, through the analysis of documents that reached the review of 54 Lesson Plans (PC) in the year 2016 in the aforementioned school and the PIPDL of the years 2009, 2010, 2013, 2016-2020 in the year 2017
- Subsequently, the methodological triangulation was carried out, as a way to achieve the final inferences of the diagnosis.
- Data processing

Ethical observation

The researchers committed to:

1. Provide information to athletes, coaches and managers about the importance of their participation in the investigation that will be carried out.



2. Explain the objectives pursued with the study.
3. Clarify questions.
4. Sign the informed consent on their participation voluntarily. This must be supported by the requirements of capacity, voluntariness, information and understanding. He/she have every right not to participate in the study or to voluntarily withdraw from the study if he/she feel like doing so at any time.
5. Guarantee that all the information provided by the researcher will be confidential and duly guarded.
6. Guarantee that the study will not cause harm to the health of athletes.
7. All the procedures followed were in accordance with the ethical standards of the editorial committee of the institution that supervises the research. In addition, it stands, in the requirements for the process of training children and young people of the UN and human rights, in the Constitution of the Republic of Cuba (2019), the Scientific Policy of the National Institute of Sport, Physical education and Recreation (Inder in Spanish) (2016) and the positions of the Cuban Federation of Wrestling (FCL in Spanish) in relation to the 2016-2020 Olympic Cycle Improvement System.

RESULTS AND DISCUSSION

At first, the results provided by the study are obtained by individual activities. In the case of the evaluative activity (Table 1), through the contrast of the opinions of wrestlers, coaches and managers in the answers given in the surveys and interviews, regarding the training process and specifically on the three dimensions with their respective measurement criteria that were previously determined.

Table 1. - Result of assessment activities on the technical training process

Content of the technical training process	Dimensions			Total
	Pedagogical direction of training	Technical of scientific content system	Analysis of key factors	
Observation Units	36	23	135	194
Theoretical content	5	5	5	5
Wrestlers Assessment Activity	-	-	39.4	39
%	-	-	66.9	66.2
Coaches Assessment Activity	24	24	17.9	21



%	100	100	74.8	87.5
Assessment Activity of Directors	18	18	14.4	16.6
%	100	100	80.5	92.3
Assessment Activity	42	42	71.7	83.2
%	100	100	70.9	84.1
Evaluation of Theoretical Content	5	5	3.54	4.2

The results denote agreement of the subjects in their criteria of 4.20 (quite significant) on the didactic needs of a process that considers the three dimensions.

D1 and its categories show an evaluation of its theoretical contents (ECT in Spanish) of five (very significant). The components of D1 and their categories are reported below:

- The direction of the ways of teaching with its categories (program, plan, evaluate and investigate).
- The direction of the didactic unit of the technique with its categories (mediating elements and roles of mediation in the process).
- The direction of the ways of learning the technique with its categories (process level, content of the strategy, context and content, evaluation of the strategy).

In D2, the following are evident: the external and internal component of the technique, the system of norms and relationships, the knowledge and capacities system, the system of habits and skills, and the experience system in creative activity, manifest in the ECT of five (very significant).

However, difficulties are observed in something essential such as D3 with 29.1 % of the criteria with difficulties in managing subdimensions such as: the action model (video library), the video-analysis (execution parameters), the factor common (selection of successful and unsuccessful cases), working documents (technical sheets and comparison list). It is an achievement that the selected sample recognizes the 32 elements that make up the process in its dimensions, indicators, categories and observation units.

In the case of the theoretical activity (Table 2), the results of the document analysis allowed us to verify that, for the D1 with a very significant ECT of five, there is a verticality to carry out the training process. Regarding the D2 and D3, the ECT lacks a reference system, model representations and theoretical models that favor the analysis of the technique, which does not allow having an action model, makes video-analysis difficult, nor is it counted. with the common factors and working documents that allow the explanation of this. It was possible to demonstrate the absence of content that explains the technical training process, these do not have a defined structure, the existence of scattered and unrelated criteria in the same bibliography, which does not favor its didactics. In general, the study denotes an ECT of 0.92 that is not significant



for the training process, given that only 36 of the 194 measurement criteria that were delimited were met.

Table 2. - Results of theoretical activities (TA) in the technical training process

D/N	Observation content of the technical training process	Result of the analysis of the theoretical activities for the technical execution.								
		CT	OU	PIPDL	%	pc	%	AT	%	TCE
D.1	Pedagogical direction of training	5	36	36	100	36	100	36	100	5
D.2	Technical scientific content system	5	23	0	0	0	0	0	0	0
D.3	Analysis of key factors	5	135	0	0	0	0	0	0	0
Total	OU: 32	5	194	36	18.5	36	18.5	36	18.5	0.92

Legend: PIPDL (Comprehensive Program for the Preparation of the Wrestling Athlete), PC (Class Plan).

In the *practical activity*, the contents to observe in the pedagogical management have an ECT of 1.52 (not very significant). The most relevant insufficiencies are found in the ECT of D3 with a value of 0, as no evidence is found for its indicators, categories and observable units. Units of the technical training process without declared didactic structure are recognized, however it is very favorable that the 32 observation units are fulfilled (Table 3).

Table 3. - Results of practical activities (AP) in the technical training process

D/N	Observation Content of the Technical Training Process	Result of the analysis in the practical activities for the execution of the technique.								
		CT	OU	OUdT	%	OEAT	%	AT	%	TCE
D.1	Pedagogical Direction of Training	5	36	36	100	36	100	36	100	5
D.2	Scientific-Technical Content System	5	23	23	100	23	100	23	100	5
D.3	Key Factor Analysis	5	135	0	0	0	0	0	0	0
Total	OU: 32	5	194	59	30.4	59	30.4	59	30.4	1.52

Legend: OUdT (Observation of the Teaching Units of the Technique), OEAT (Observation of the Executions of the Technical Actions).

The result of the methodological triangulation according to the criteria of Barrera (2004) on the diagnosis, considers this a method aimed at obtaining rigorous and scientific knowledge of the field of action, its limitations and insufficiencies; as well as achievements and strengths of the current state, which must determine the possibilities of development. The same, in the theoretical, practical and evaluative activity (table 4) allows to appreciate the recognition of the 32 contents of the process and its 194 measurement criteria necessary for technical training (Table 4).



Table 4. - Results of the methodological triangulation

Contents	CT	CM	AT	%	TCE	AP	%	ECP	av	%	CVD
Contents of the observation of the technical training process	32	194	36	18.5	0.92	59	30.4	1.52	83.2	84.1	4.20

Legend: CM (Measurement Criteria).

In the results provided by the methodological triangulation, the following regularities can be seen:

Direction dimension: this reflects, from the document analysis method, when contrasting the information of the PIPDL and the lesson plans for the direction of the ways of teaching, of learning and the didactic unit, the use of the method of oral tradition that derives in command and command, as a form of pedagogical management for training in technical execution. These criteria correspond to the insufficiencies observed in the management of technique in competitions and to the needs assessed by wrestlers, coaches and managers through surveys and interviews.

Content Dimension: in this case, from the document analysis method, it was possible to demonstrate the absence of the didactic requirement of a scientific-technical content system applied to the formation of the external component of the technique, knowledge system where the referential system, theoretical model, its phases, specific and basic contents to be able to explain the technique, criteria that prove to be necessary for the analyzes obtained by the method of observation in the management of the class and the technique in the competitions, as well as the evaluations of fighters, trainers and managers, collected by surveys and interviews.

Dimension analysis of key factors: evidenced from the analysis of documents the non-existence of a study from the didactic criteria that reflect the model of action, the video-analysis, the common factor and the working documents, aspects necessary to correct the errors detected with the method of observation in the management of the class and of the technique in the competition. Contents required by the respondents and interviewees, this to contribute to the formation of the motor representation from the feedback of the technique executed by the fighter, evidence of the reflection of the state of the internal component of the technique in the methodological step entry and grab at the waist pelvic

The results obtained in the diagnosis correspond to the general requirements for the pedagogical models of Navarro *et al.* (2020), criteria related to the process, dimensions and subdimensions. They meet the requirements of the formative evaluation demanded by Pérez *et al.* (2020) and, at the same time, following the recommendations of Ros (2021), they are feasible for the treatment of current and future challenges of physical activity and sport.

Taking into account the assessments of López *et al.* (2017) on the teaching-learning process of the Olympic wrestling, highlight the coincidences in the findings of the D1 in which these authors show difficulties in the methodological procedures for individual work and the leading role of the student, the management style of the single command



and its influences on the diagnosis, planning, execution and control of TLP, which is synthesized in a traditional direction of the same. Elements that harmonize with the present study which defines this dimension with limitations in the direction of the didactic unit, the ways of learning and teaching by the use of the method of oral tradition, which derives in command and command, as a way of pedagogical management for training in technical execution.

In the case of D2, these authors found an imbalance in the treatment of the preparation components, affecting the performance of training planning. Inconsistencies are evident in the educational work and the formation of values, little knowledge and treatment of the rules. These results coincide with the present investigation by demonstrating the absence of didactic requirements reflected in a system of scientific-technical contents applied to the formation of the external component of the technique and of a knowledge system where the referential, the theoretical model, its phases, specific and basic contents to be able to explain the technique. Criteria that coincide with those of **Yáñez (2017)** for the development of technical-tactical skills.

In the case of D3, the aforementioned authors state in their studies that there is confusion regarding the TLP components (organization, procedures, evaluation and control), in the development of skills during the execution of the TLP and in the direction of the competitions. Elements that agree with the results of the present investigation, since no study was found from the didactic criteria that reflect the action model, the video-analysis, the common factor and the working documents. These aspects are necessary to correct the errors detected with the method of observation in class management and technique in competition.

The results agree with those obtained by **Yáñez (2017)** and **Ibáñez and Matos (2019)**, in their research on the control of technical-tactical actions. These manifest the existence of deficiencies in the orientation, logic and internal structure of the combat, little analysis and monitoring of the control of the technical-tactical actions and the non-existence of a regular, standardized or scientifically regulated system for the control of the aforementioned actions. during combat. Elements that are confirmed with the results of this diagnosis.

The diagnosis allowed to reveal how this sport activity is developed and to discover from the current didactic positions, useful to the sport pedagogical process for the training of the fighters. To this is added that the contrast of the information (theoretical, practical and assessment), makes evident the need for a didactic model for the formation of the technique in the fights that takes into account the dimensions (D), sub-dimensions and indicators following:

D1- Pedagogical-sports direction. It understands the orientation related to the links between the subdimensions:

- Direction of the ways of teaching the technique in the specialty, related to the relationship between the process of teaching the technique, the contents in the teaching methods and the systemic characteristics that indicators assume such as the contents for working with the technique when programming plan, evaluate and research
- Direction of the ways of learning the technique in the specialty related to indicators such as the level of the process, content of the strategy, context and real conditions, evaluation of the strategy and systematic control



- Direction of the didactic unit of the technique related to indicators such as executing and conducting the teaching-learning process supported by the mediating elements of the class and the roles that the teacher must assume in it.

D2- Scientific-technical content system. It is the current state of applied and specific knowledge of sports activity, it covers the following sub-dimensions:

- Content for the formation of the external component of the technique, related to indicators such as systems of norms and relationships (competitive preparation) and knowledge and skills (theoretical preparation)
- Content for the formation of the internal component of the technique, related to indicators such as the systems of habits and abilities (technical preparation) and that of experience in the creative activity (technical-tactical preparation).

D3- Analysis of key factors. Aspect related to how to organize practical work with new technologies with the contents of observation of the execution of the technique in its subdimensions:

- Action model related to indicators such as the video library, actions used in the technical execution
- Video-analysis related to indicators such as the description of the sequence of action in search of common factors in the technical execution
- Common factor relative to indicators such as the factors present in the successful cases and those absent in the unsuccessful in technical execution
- Working documents related to indicators such as the creation of technical sheets and checklists in technical execution
- Evaluation process of the technique related to indicators such as granting a rating to the performance of the technique, in accordance with certain quality criteria that are defined
- Capacity for innovation, relative to indicators such as the possibility to create, improvise in changing conditions that differ from what has been modeled up to now.
- Ability to make decisions related to indicators such as assuming behaviors, work systems to stop and overcome unexpected, unplanned actions.

Finally, the applied procedures determined the existence of difficulties in the pedagogical-sports direction, the scientific-technical content system and the analysis of key factors of the technique, especially, with handling of the action model (video library), the video -analysis (execution parameters), the common factor (selection of successful and unsuccessful cases) and working documents (technical sheets and comparison list). As a solution, a model is foreseen that allows to contribute to the formation process of the technique in the direction of a process, based on a systemic elaboration of the scientific-technical contents and an analysis of key factors, supported by the information technologies and the communication. This, made in response to the didactic requirements of verticality, horizontality, affordability, scientificity and timeliness, required as quality criteria, which would enhance the innovation, creativity and



improvisation of the wrestler, in the changing conditions of combat (unexpected and not planned actions of the opponent).

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The authors have participated in the writing of the paper and analysis of the documents.



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