

USE OF TECHNOLOGY IN DRIVING ACTIVITIES

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Key word: sport, science sports technology, programs, visual feed-back, and visual means.

Abstract: In applied sport, science is used on an increasingly large scale, leaving more and more necessary in the light of both technical information in the media and methodological approaches of conceptual information.

For the coach's possession, the use of technology has a dual function: evaluation of athlete's gesture and, when possible, of his confrontation gesture with his strongest opponents. Therefore, through these actions, continued and appropriate experience, it is possible to establish a more specialized training and also to optimize performance through means of sporting performance can be realized easier if information technologies are used, as a means of training observation, assessment, fields, both individually and collectively, in the physical of technological, tactical and psychological approach in planning and designing scientific sports training.

Introduction

Sport activity today is characterized by high performance and can be achieved by athletes with a good training. This way science information tools provide permanent new sports information, analysis allows the imposition of such methods and creating in consequence of the methodological and technological programmes in physical activities and sports.

Sports science object is to propose a system to achieve mastery of representation and processing of specific sporting activities. The Institute of Mathematics and Science in Sports Sciences mentioned: "informatics, as a sport discipline of a sport science, lies at the intersection of mathematical methods in science and on the other hand the systems that are in service research. It passes through the phase of formalizing data materializing research success through their application in practice sport. Systems are situated halfway between the study behaviour or high performance sports and research in sports science".

In motility there are various means and tools from computer science, with different shapes and quality, considerably improved in

recent scope of their activity with the facility that can be addressed and should serve as a basis for analyzing the game and driven behaviours. One can still say that their use in practice is of rather sporadic nature out of the structural first financial problems rising a lack of personality and on the other brand a sufficient acknowledgement of the possibilities of their use but also for reasons related to acceptance. Therefore, in collaboration with specialists in the field, there are developed through various programmes, which can be represented and processed by computer specific issues, a "collection" of these special methodological knowledge that appears to be necessary on the one hand and to be able to keep pace with information standards knowing that a large development, on the other hand, and in the same time to address the general problem of similar disciplines in particular specific sport science.

There is a developed and interdisciplinary communication between sports and entertainment information a lot lately.

Therefore on the other hand the use of a hardware and software specific to commercial standard, in many environments now, especially in the Olympic training centres and institutes of specific federations. On the other hand the use of these tools not only is raising the issue of analysis of what it already exists on a large scale of the concepts and methods but also on the informatics paradigms that are to be applied.

Between these two poles using computer tools and adopt and convert these concepts and theories there is an ample space for interdisciplinary collaboration which must be the programmed for long term development and the environment of applied sport science. Another equally important aspect the integration training of coaches in relation to science content in order to overcome the barriers is created by the acceptance and competence aiming to such a series of objectives:

- an immediate return of information for analysis in real time, allowing to act a competition/game itself.
- establishment of databases for analysis of tactical events allowing it to act in order to practice change strategies; analysis can be reported equally referring to opponent teams decreasing and the degree of uncertainty.
- technical analysis of the player's behaviour allowing to (intervene) through training either on their technical realisation and that of taking tactical decisions.
- analysis of the impact energy of action game in order to be routed through the solicitations of training requirements specific to situation of competition.
- the attempt of simulation game in a contest for teachers training , for staff and players.

Methods of preparation, technique and physical tactics have improved due to the intake of other environmental information

Today due to laborious technical advances there is evidence of the classical communication oral, written or printed word that have added a multitude of methods that use sound and image to transmit and communicate information. Modern means makes communication using sound and image that has general access to information not only through entertainment but also through culture and education. It is widely acknowledged the importance of modern audio-visual communication in general education to convert the entire education system for young educating and training.

Through new processes and forms of speech, audio-visual means are able to provide processes and phenomena which meanwhile can form accurate representations, and another way to boost the investigation is by using a large amount of information in a unit while service provides and in terms of maximum efficiency. Training of athletes is meant to guide the achievement of high indices of precision and skill that good self-possession lead to enforcement actions and those structures up to perfection, to make possible the execution complex technical and tactical achieving various actions and it is imperative that they are well known by the long exercise to build their performance skills in difficult conditions of the specific training.

In order to be learned and improved, various technical processes and tactical actions should be a more frequent used by means of visual media in the preparation process leading to the acquisition with ease and efficiency of the mechanism of physiological training and strengthening training of driving skills in line implementation correct methods and procedures in compliance with the methodical principles of teaching.

Given the fact that driving habits are formed and fixed by long repeating structures such as movements for their training, there should be given proper knowledge of the mechanism in motion in cause. As for the possibility a detailed knowledge it must be done by as much analysis information in a correct way.

Because during the training, the subject can not observe his own execution making necessary corrections to the coach or teacher observations, or, indirectly through objective analysis on technical structures, many recent studies of video records used for learning of motor skills have focused an their use as visual feedback reviewing these studies there are stressed as reruns of video used as feedback performers in order to form and develop motor skills, and there are not a different form of regular workout and a good feedback designed by teacher. Those

viewing via video recordings can see the users training comfortable and not seen to spontaneously important aspects of their movement to improve performance, one advantage of video recordings, is that can not be detected during the observations in real time .

Recorded performances video can be used many times, can be performed in slow motion and thereby taking observation over capacity. Most specialists in motility should use video equipment to primary qualitative analysis and not try to make measurements through video images unless trained in these techniques or to provide assistance biomechanics. Recordings made for this type of viewing should maximize the size of athletes in the picture. Enlarging image using the zoom it is important for the reasons: first resolution image will be enhanced during the stop frame viewing with slow motion, secondly leaving an image whose background is not ideal is improved when the image are in stop-frame slowed or repeated.

Ability to stop in the key points of motion and the slow movements very quickly increases the visible observation. This is why the video analysis should not be limited to high speed movements or sports skills.

Currently, there are numerous approaches for applying science in sports related to important sectors such as analysis of training and sports competition documentation etc. instruments filming and photography have become indispensable for analysis media complex movements. Otherwise due to the high speed shooting photos and you may review the entire sequence of actions that make a sporting gesture to be reviewed at the discretion any slow motion to dissolve and then in various phases to restored any time a particular positions of configuration adopted by the sportive of his competition aptitude.

For teacher or coach, this type of study has a dual function: of evaluating athletes gesture that was, when it is possible, that a confrontation with the gesture of its strongest opponents; in consequence through his continue action and to experience appropriate it is possible to establish a more specialized training and also to optimize performance or possible competition means.

A special attention should be paid to mislead the images in perspective or to deform them due to technical details of shooting.

Consequently applied sport science facility is rapidly acquiring information and opportunities for automated of their processing. The principle of such methods of analysis, of observable behaviour is the following: objective measurements of performance, objective analysis and structures made technical.

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Titlu: Utilizarea tehnologiilor informatice în activitățile motrice.

Cuvinte cheie: Sport, informatică sportivă, tehnologie, programe, feed-back vizual, mijloace vizuale.

Rezumat: În domeniul sportului informatica aplicată este utilizată pe scară tot mai largă, fiind din ce în ce mai necesară, atât prin prisma inovațiilor tehnice din sectorul mass-media, cât și în ceea ce privește abordările metodologice conceptuale ale informaticii.

Pentru profesor/antrenor, stăpânirea și utilizarea tehnologiilor informatice prezintă o dublă funcție: de evaluare a gestului sportivului respectiv și, atunci când este posibil, de confruntare a acestui gest cu cel al adversarilor săi mai puternici. În consecință, prin intermediul acestei acțiuni continue și al experienței adecvate este posibil să se stabilească un antrenament mai specializat și, în același timp să se optimizeze performanța sau eventualul mijloc competițional.

Atingerea performanței sportive se poate realiza mai ușor dacă sunt utilizate tehnologiile informatice, ca mijloc de pregătire, de observație, de evaluare a randamentului individual și colectiv, atât în plan fizic, tehnico-tactic sau psihic, cât și în demersul de planificare și proiectare științifică a antrenamentului sportiv.

Titre: Utilisation de la technologie dans les activités motrice.

Mots-clés: Sport, des sciences du sport de la technologie, les programmes, les moyens audiovisuels, feed-back, et moyens visuelles.

Résumé: Dans le sport appliquée, la science est utilisée à une échelle plus grande, laissant de plus en plus nécessaire à la lumière de deux informations techniques dans les médias et les approches méthodologiques de l'information conceptuelle. Pour la possession de

l'entraîneur, l'utilisation de la technologie a une double fonction: l'évaluation du geste sportif et, si possible, de son geste confrontation avec ses opposants les plus farouches. Ainsi, à travers ces actions, l'expérience continue et appropriée, il est possible d'établir une plus spécialisés formation et aussi pour optimiser les performances par des moyens de la performance sportive peut être réalisé plus facilement si technologies de l'information sont utilisées, comme un moyen d'observation de formation, d'évaluation, les champs, à la fois individuellement et collectivement, dans la physique de l'approche technologique, tactique et psychologique dans la planification et la conception scientifique de formation sportive.