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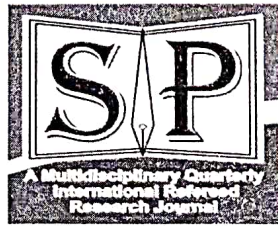
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ICTs: Enthusiastic Supporter of Modern Sports Paradigm

*Dr. Mohammad Sharique**

Abstract:

It is universally accepted that Information Communication Technologies (ICTs) offer immense opportunities for the comprehensive social and economic development of the people all over the world. Without its adoption, there is little chance for countries or regions to develop. Information and Communication technologies comprise a complex and heterogeneous set of goods, applications and services used to produce, distribute process as and transform information. Technology is increasingly playing a leading role in the development of sport and enhances performance in all faces. Thus applications of technology allow for more effective training, stimulations, management and tracking of athletes, accuracy of results, enhanced spectator viewing, developing performance and preventing injuries, amongst many more functions. ICTs have given sports a new height. They are extremely useful in outdoor as well as indoor games. Keeping records of games, making close decisions by umpires and referees, use of digital TV to provide interactive features when watching sports, online booking for tickets to sporting events etc. are some of key performances of ICTs in this field.

Information and communication Technology has revolutionized the world in the fields of healthcare, education, entertainment etc. The role of ICTs in the field of sports and physical education is very significant. Sports, by nature are highly competitive. ICT enables the modern sport organizers to take sports to new heights and make sports fair as well as lucrative for aspirants.

Keywords : Communication, Information, Physical Education, Sports, Technologies.

Introduction:

It is universally accepted that Information Communication Technologies (ICTs) offer immense opportunities for the comprehensive social and economic development of the people all over the world. Without its adoption, there is little chance for countries or regions to develop. Information and Communication technologies comprise a complex and heterogeneous set of goods, applications and services used to produce, distribute process as and transform information. The ICT sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware and software, computer services and electronic media (e.g., the Internet, electronic mail, electronic commerce and computer games) as well as the content of these media.

Traditionally, the relationship between the Information and Communication Technologies (ICTs) and physical education was very low, most of its application in the sports world was reduced to the level of athletic performance.[1] Fortunately the situation is changing, and the ICTs offer a variety of advances that were used and adapted in other areas to complement the activities and knowledge that are taught to students. As with any subject taught in the national education system, physical education teachers can use all the resources available to impart, thus achieving the objectives previously set for your students. For this ICTs are one of the "most attractive to get" tools.[1]

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* Assistant Professor, Department of Physical Education, Khwaja Moinuddin Chishti Language University

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Indeed, technology plays an important part in modern sport, with it being a necessary part of some sports (such as motorsport), and being used in other to improve performance. The thematic applications of technology include, sporting equipment; clothing and wearables facilities, competition adjudication and formats; media broadcasting and communications and performance analytics. Hence, technology and sport have had something of rockey relationship over the years.[2] Tuner (2013) opined that in the beginning sports and technology did not always seem like the most pairing. Considering the nature of sport and equipment use to play and with recent convergence of technologies many functions are fused into one small devices. However, the evolution of modern icons would not be possible without the specialization and personalization of sports science; this allowed athletes to develop in possible ways.

Technology is increasingly playing a leading role in the development of sport and enhances performance in all faces. Thus applications of technology allow for more effective training, stimulations, management and tracking of athletes, accuracy of results, enhanced spectator viewing, developing performance and preventing injuries, amongst many more functions.

Purpose of study:

ICT is opening up new vistas of development. The Information and Communication technologies are for everyone and therefore they have played and are continuously playing a vital role in strengthening sports and physical education. This paper attempts to analyse various types of ICTs that are highly useful for sports & physical education.

Research Methodology:

Secondary data and pertinent literature have been consulted. Documented sources including internet sources have also been perused. Moreover, previous studies, surveys and literature were also consulted for insight stimulation on the topic of the paper.

Types of Sports Technologies :

Technology is changing the face of modern sports, sports psychology and coaching. State-of-the-art technologies are used to optimize performance in sports as diverse as cycling, speed-skating, swimming, golf, skiing, surfing, football/soccer, tennis racket and ball, running facilities and many more. Technology in sport today is found in countless forms with each innovation having potentially positive and beneficial outcomes. While some of the technologies are yet to make an impact on sport, understanding of many types of sports technologies help to obtain a better perspective on which technological options athletes eventually have across to and impact on sport performance.

Self-Technology:

This presents the most obvious and distributing for many people form of technology due to the potential of fundamentally and often permanently alter an athlete's physical or psychological being / make-up. Banned performance-enhancing drugs are the most recognized of these technologies. Self-technologies encompass other kinds of athletic innovations, of which are also controversial. Others include surgical procedures, prosthetic / bionic limbs, sport psychological interventions and genetic engineering are all classified as self-technologies. Although it is unclear whether the long-term effects are safe or not.

Under this view, technology is ethically neutral. It is neither good nor bad in itself. Rather, what matters is the end or purpose to which the technology is merely the means. While equipment such as a prosthesis or a wheel chair are fundamental for some persons with a disability to carry out their daily living, advances in this technology, such as energy storing prosthetic foot, make a lower limb amputee's gait faster and more efficient.[2]

Landscape Technologies:

This form of technology involves the sporting environment which include the way spectators watch sport events. Prominent landscape technology is the increase of modern multipurpose sport complexes, complete with JumboTron screens, retractable domes, soaring cameras, mondo tracks and artificial grass. Bates (1996) argues that modern athletes have an intimated relationship with the technological sporting landscapes. Tracks and field athletes use new tactics because they can monitor their competitors on the JumboTrons coming down the home stretch.

Global Positioning System (GPS) uses 24 satellites and ground stations as reference points to calculate geographic locations and accurately track a specific activity. For example, using a portable GPS unit provides information about altitude, distance, time and average velocity during hiking. A graph depicting the uphill and downhill portions of the terrain is also provided. Global positioning system can be used in conjunction with accelerometers to access and monitor physical activity.[3] As small receivers become more affordable and accessible to the general public in laptop computers and mobile telephones, GPS may be more widely use to assess and promote physical activity. Indeed, the influx of sport technologies has profoundly changed the landscape of sport and exercise science, and perhaps more importantly, technology has in many ways, begun to change the athletic body.

Implement Technologies:

It includes equipment that athletes use or that they kick, hurl or otherwise propel. Other examples include football / soccer helmets equipped with warning devices and radios; shark suits that allow swimmers to move efficiently slicing through the water and high-tech running shoes, golf clubs and tennis rackets.

Rehabilitative Technologies:

These are substances and procedures used to treat moderate to severe injuries making up rehabilitative technologies. They also include medicine used by healthy athletes who just want to counter the otherwise debilitative effects of their training regimens. Typically, these technologies are located in sports clinics and training facilities and are administrated by specialists in athletic training or sports medicine. Rehabilitative technologies include any kind of anti-inflammatory chemical such as acetylsalicylic acid. These also include whirlpool machines and ultrasound equipment that athlete use to treat some muscle and joints. More recent developments such as electronic stimulation or slim send currents into the affected area to stimulate blood flow and aid in the healing process.

Movement Technologies:

It refers to those devices and procedures that are designed to access the form and efficiency of an athlete's body. The most common of such include videotape analysis, although there are much more sophisticated instruments that provide detailed computerized information on the athlete's biomechanics.

Role of ICT in Physical Education:

ICT can play an important role in evaluating the wing students during a physical education class. Focusing on this section Perlman; Fisette& Collier (2013) write that the current trend by teachers to the assessment is to document the physically active participation of students. This is possible by using, for example, heart rate monitors, accelerometers, pedometers, etc., which provide a wealth of information on the work done in the sessions that the teacher can take into account when evaluating the work done by students.

Nye (2008) explains that employ technology as a resource in a physical education class can be very stimulating for teachers and for students. But it points out that teachers

should pay close attention to the way in which they manage and provide instructions for their students to use these resources in their physical education classes. Through his work he aims to guide them in making informed decisions when deciding whether to use technological resources in their classrooms.

Result :

ICTs have given sports a new height. They are extremely useful in outdoor as well as indoor games. Keeping records of games, making close decisions by umpires and referees, use of digital TV to provide interactive features when watching sports, online booking for tickets to sporting events etc. are some of key performances of ICTs in this field.

Discussion:

ICT is an integrated technology which integrates computer, magnetic storage media, television, telecommunication, industries and various softwares to operate all these. There has been a considerable shift in the sporting paradigm due to the introduction of technology and newer methods of promoting sports and physical education.

Conclusion:

Information and communication Technology has revolutionizedthe world in the fields of healthcare, education, entertainment etc. The role of ICTs in the field of sports and physical education is very significant. Sports, by nature are highly competitive. ICT enables the modern sport organizers to take sports to new heights and make sports fair as well as lucrative for aspirants.

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