



Information Technology in Sports Sciences

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ABSTRACT

The field of physical education and sports is an Inter-disciplinary profession. Information and Computer science has become an important interdisciplinary partner for physical education and sports. Computer can be used as a teaching aid, Power point presentations with the combination of Graphics, Sounds Animation and Video clips become much more attractive and effective than any other technical presentation. Computers can be applied in Sports Sciences. They are computerized scoring systems, computerized test and evaluation, Statistical data analysis, Bio-mechanical analysis and other aspects. Unless and until new innovated and information technologies of sports are brought into daily practice, it would not be easy to get peak performance in sports.

KEYWORDS

ICT, Information Technology, Sports and Sports Sciences.

INTRODUCTION

Necessity is the mother of invention, saying holds true, for the computer, it is the most powerful tool, man has ever created. They were invented because of the men's search for the fast and accurate calculation device. They have made a great impact on our everyday life. Their presence is felt almost every working place, such as in homes, school, offices, hospitals and banks etc.

Computer Science has become an important inter-disciplinary partner for sports, This way physical education has its branches of Sports psychology, Sports Statistics, Bio-chemistry, Sports Medicine, Kinesiology and Bio-mechanics etc. taking into consideration its association with other disciplines and its various aspects, computer can be used and are being used in physical education and sports.

INFORMATION TECHNOLOGY IN SPORTS

Computer technology has greatly modernized the way sports should be. Through this modern technology, increased accuracy in different sporting events has become so much useful as it has helped provide reliable information, from tennis tournaments to swimming competitions. The basic features of cameras, sensors and video recording capabilities have been enhanced with the use of this innovation. It has now become so easy to cater professional as well as amateur sporting competitions around the world due to steadfast information that can simply be uploaded to the Internet to provide simultaneous broadcasting online. Some of the most important breakthroughs in the sporting world have been brought about by computer technology. For instance, the recording of information by official timekeepers and some scouts is done through a reliable automation system. They are able to record statistics, take notes and chat while attending and working at a sports event. Also, most professional sports venues have very modern scoreboards that are programmed to update statistics and information directly to a computer system. so with the use of such modern technology, almost every area of sports has become dependent of automation due to relevance that it implies to the lives of spectators all over the world. Through the help of the internet and other web services, live feeds of sports events have become so accessible anywhere in the planet.

APPLICATION IN SPORTS

The greatest value of computer resides, in the ability to provide improved support in various areas, including physical education and sports the presence of technology in so many different aspects of the professions makes it important to more clearly recognize and appreciate its current and potential role. the integration of modern sensor – information – and com-

munication technologies provide promising means for developing systems to acquire process and wirelessly transmit data during physical activities. During the last about 15 years the spectrum of computer science in sports has changed a lot. The development of computers and information technology as well as of scientific concepts and methods new working areas have been developed. meanwhile, the field of research and applications stretched from data base to artificial intelligence. I.T. will undoubtedly change the way we teach, the way up view physical activity and possibly the way we think and derive our theories. The real benefits will come from those technologies that promote a "Network intelligence" among the people with a variety of ideas, back grounds, and cultures however, we need to realize that many of these technologies have detrimental effects and will also likely reduce the amount of physical activities required or desired in our lives.

The field of physical education and sports can make a significant contribution to the role that technologies play in our lives by carefully considering the benefits and liabilities of new information technologies on the whole person, body as well as mind. Now a days in schools, colleges and other institutions, students are given more organized and disciplined education through I.T. and computers, because it is more authentic innovation and convincing. A variety of programmes are available which help in track- grading, conducting health assessment, monitoring research projects, and analyzing sports performances.

APPLICATION IN PHYSICAL EDUCATION AND SPORTS

- Research Programme : In searching reviews computer can be variously used. As per our need it can be used in storing data.
- Presentation Aid : Now a days computer is widely used as a teaching aid. In this era of globalization black board is quit away. Power point presentations, Video clips, Animation, Graphics, Sound has become much more effective and needful, CD, DVD, MP3, are more useful in teaching. In some way computer is applied in sports sciences, scoring systems, Computerized test all evaluation can be largely followed.
- Coaching Programme : A coach keeps monitoring on the players. A computers helps us if any deficiency is found. Records of the player can be maintained for future plan.
- Selection of Players : Selection of players for various game and sports is an important for this multiple regression helps in many ways. Hence computer plays a significant role in storing research data and its analysis.
- Sports Inventories : The word "inventory" means taking maximum benefit of level stock of supplies of a particular event. Sports inventories plays an important role in game

and spots.

- Statistical Data Analysis : Statistics is an of the major thrust area of computer application. I t is because of the multi-step calculation involved in computer techniques like ANCOVA, ANOVA and etc.
- Bio-mechanical Analysis : Today is recent time the above mentioned analysis done with the helps of computer aided graphics packages movements. At every stage of performance can be known with the helps of Bio-mechanical analysis .

The Procedure and methods for using the information and computer technology to improve the standard of Sports in India in the following process :-

- To Update the health status of the students in the School | college .
- Video Feed back for student Practices.
- Using the computer aided technologies for assessment of physical activity.
- Using Technology during typical learning context.
- To analysis the team performance at the time of competition.
- The teacher can have the self appraisal through the technology and computer.

CONCLUSION

There have been impressive developments in the field of information technology and computer application in sports, Sports sciences and Physical Education throughout the last decade. Information Technology in Sports Sciences and Physical Education has established scientific discipline , Research activities such as Statistical data analysis, Computerized test and Evaluation, improve Learning and coaching, Bio-mechanical analysis and field research have evolved. In future very soon the way computer with be applicable in sports with good quality and best results.

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