Use of information technology in physical education

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Abstract

Computer applications are becoming common in sports since the development of the low-cost technology. Teaching and learning is faced with a new dimension i.e by elearning. Sports teams and other related organizations use IT to maintain records, create virtual playing fields, track scores and implement new techniques and methods. Even the manufacturers of equipments use IT to design and develop new sports equipments. The use of information technology for teaching and learning process has been summarized, needs for technology, video analysis, internet, discussions and challenges. This article highlights and concluded that the effective use of information technology (IT) improves and impacts greatly on the teaching and learning of physical education and sports and on its results.

Keywords: IT, physical education

Introduction

Computers are everywhere, and useful in making multitasks and wide tasks including in finance, teaching, learning, health sector and in homes. Using computers not only enhances the quality of work, but also saves time with efficient manner. Earlier, this machine was doing calculations and solves the various mathematical calculations. Now it is more than a machine. Computers now helpful in every sector of the society or industry because of its efficiency, adaptability, multitasking feature, speed and reliability. Role of Computers in physical education and sports field has its goal in combining the both theoretical as well as practical approach. With the help of internet one can easily fetch the recent technological improvement in sports training, changes in rules, techniques, to do research & implementation and so on. Computer –assisted instruction provides students with an option to classroom alternative. Students and sportsperson can observe and learn effectively to the bio- mechanics of movements in slow motion with the help of animations.

Various components of IT

Software

A variety of software programs are available to provide improved support to classroom instructions including to track grading, athletic performance, and fitness; conduct health assessments; and monitor research projects. A lot of commercial and free-ware’s are available in the market which guide college students through the process of internship development and placement. Such software’s allows students to enter the information at a variety of points, rather than be forced to follow a predetermined path. This approach allows students to determine what they think is important, reinforcing students’ ability to control the learning process. A reduction in the amount of learning and analyzing time.

Multimedia

Images, texts, video and animations are included in multimedia. Traditional encyclopaedias and reference books have been replaced by compact discs (CD-ROM or CD), now these are also replaced by the internet. Availability is there on the internet; you just need to search that content including pictures, sound, and video, as well as the standard text. In the classroom, students can observe and listen to the mechanics of movement in slow motion and learn the effects on the body.
Computer assisted instructions

Computer-assisted instruction (CAI) focuses more on self-paced learning than traditional lecture method provided by the instructor in the classroom that are better replaced by the computer. CAI provides students with the “what”, “why” & “how” behind the health-related fitness; it provides practice, review, and remedy; students stay actively involved to meet a variety of needs that students counter during learning. CAI, normally compensated for by increased learning time available in the classroom. Using CAI, an instructor or learner can develop or access a series of supportive and effective software’s or applications.

Internet

With the expansion of the Internet supporting graphics, audio, video, and hypertext links, as well as standard text. Access to the Internet, has allowed individuals, schools, and organizations to communicate with each other and to share information through this mechanisms.

Online application software has become available the Internet to a new and diverse market place. By this technology convenience of the classroom a student or teacher can, using a computer can log into a variety of sites throughout the world by a single click. Students can take copy the notes, pictures to a notebook that is built into the program and, can download, save and print the notes. A number of web applications are available related to sports, fitness, health, and recreation.

Practical support

Technologies like websites, mobile applications, sensors which gather data from the sport person analyse the data and provide the going on information about its physical activity which boosts the performance of any sports person by self analysing to compare with its historical data stored in the devices. Various home and gym fitness equipment make it possible to stay active.

Importance of IT in physical education & sports

IT plays a crucial role in the teaching styles. It enhances the teaching and learning concepts with the help of different graphics, diagrams, attractive texts, sounds, animations and motions. Improves the learner focused on the topic. It improves the particular lesson by the use of data or data sensors to collect information as a direct input, stores it and analyzes it with powerful processors. This whole process completes with effective management and great accuracy. It helps the students to concentrate better on both practical and theoretical work. It helps students to develop a better understanding of correlation between body parts and sports activity. Throughout various IT tools, it can benefit from immediate feedback to improve their observational and analytical skills. It can be used to as a demonstration or model to teach. Therefore it acts as a great teaching tool for learning and teaching new skills and enabling the person from novice to "mastery phase" of skill development. Using various technologies e.g.: video recording, motions and animations allows for immediate feedback about their performance.

Conclusion

It’s hard to believe we ever managed without computers in any field in this world. At last, it is to be said that the computer has become a part of sports and physical education. Application of computers in the field of research, development, learning, practices, Fitness prescription, Body composition, Bio-mechanics, and psychology which helps in research and development of this field. Computer application in sports produces results and also saves time. So, there is a need to adapt and develop more correlation with computers and sports & physical education. Computers are indeed invaluable to sports for the improvements they’ve made in players’ sports medicine, performance, training, and equipment.

References