Role of technology in sports and physical education for coaches and physical educators

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Abstract

The purpose of this study was to determine how technology affects the teaching-learning process in sports and physical education. From the last two decades, it has been noticed that the use of electronic and internet technology have made the teaching-learning process more efficient and effective in physical and sports education. With the help of various electronic gadgets and applications like accelerometer, pedometer, digital camera, heart-rate monitor, projector, smart phone, internet, video-conferencing etc. a physical educator or a coach can provide efficient and interesting teaching or coaching to their students.

Keywords: Sports, technology, training, computer, mobile phones, internet, electronics

Introduction

Technology is the application of scientific knowledge to make life easier and simpler. Technology is a creative ways for a person to do their work easily and efficiently. We are surrounded by technology and it is all around us from writing with a pen to printing a paper, making a cloth from the machine to explore many things from internet. In this modern era, with the development of electronic technology, many sports organization and physical education association aims to explore new physical activities. Physical educators and coaches use technology like other equipments that are needed for teaching. Various health and fitness related applications are offered by the software companies which are easily available and accessible. To present instructional material in modern education system; technology is highly used like projectors, slides, computers, GPS (Global positioning system), internet, video conferencing etc. Technology helps us to learn new and advance techniques of sports and physical activities. In simple words, we can say that technology ease the way of teaching-learning and develops the intrinsic motivation.

Role of technology in sports and physical education

The primary focus of a physical education teacher or a coach is on learner’s attitude towards learning. Teachers provide different methods and teaching styles according to different levels of variability and difficulties to their individually different students and technology plays an important role in doing so. Coaches and teachers become more aware about styles and teaching strategies and always support the use of technology in their profession. If the learner and the instructor use the tools and technologies in giving instructions then the learning will be more effective.

There are lots of benefits for involving technology with teaching and training plans in sports and physical education. Computers, mobile phones, internet, projector, photos, videos, recordings and other necessary tools help in building a communication bridge between instructor and learner and help in getting the required feedback. Technology helps in creating a fair environment in sports as one can replay the exact scene. Technology helps in teaching physical activities more precisely and accurately as one can review the body postures and movements and can spot the error easily and efficiently. Technology increases the level of safety among sportsperson and coaches and physical education instructors can easily create a strong platform for the upcoming athletes. Following are some technologies that help in making the teaching-learning process effective:
Computer
It is an information processing machine. We can store lots of information in the memory present in computer. Physical education teachers use computer to present instructional material effectively, to prepare lesson plan, to prepare their physical activities record and to make their training schedule. Instructor can also connect other technological devices such as GPS, accelerometer, video recorder, camera and heart rate monitor for analyzing different movements of their students. Instructor can store important match videos, sounds, images of execution of skills and techniques, match fixtures etc in the computer.

Mobile phone
Today’s mobile phone provides much more than phone calls. Even a basic one provides lots of feature such as camera for video recording, audio recording, clock, calendar and many more application related to health, fitness, eating plans etc. A physical instructor can use mobile phones to prepare training plans and can easily communicate with their students because it is easily available and in today’s world maximum student own their personal mobile phones.
In a country like India where there are lots of schools and the school budget is very low, it is impossible to provide high definition cameras, computer and other high cost technologies; mobile phones play a very essential role. We can easily get all these facilities in mobile phone in very low cost. Mobile phone consists of a stop-watch feature which can be used by trainee to perform a particular task with exact time. In this way school management does not have to purchase a separate stop-watch. Instructor can download the pictures of particular technique and can easily teach to their student even by demonstrating them. Trainee can record the lecture and can revise it anytime.

Internet
Internet is a network of computers that promotes free flow of information and exchange of ideas through local area network. Most of the developed countries depend upon internet for their business and industrial purposes, for education, for health and fitness and for games and sports. Most of the schools have direct internet facilities which can be used by students and faculty. Internet provides lots of information related to games and sports. It offers various functions like online chatting, video conferencing, online videos, and applications related to sports and physical activities. Instructor can use these functions for effective teaching and training such as instructor can use online videos to demonstrate the technique used by the experts, instructor can also use video conferencing and online chatting for communicating with other instructor and sharing their views and techniques. Technology such as GPS is used by the instructor and coaches for preparing the training plan such as fartlek training for their trainee. In this type of training a trainee has to explore an area with activated GPS device. The instructor or coach can easily track their trainee in real time. Technologies ease the workload of the coaches and instructors.

Conclusion
Technological materials used by physical education teachers and coaches in their training plan develop a significant contribution in order to maximize the quality of teaching-learning. It has been seen that the teachers have a positive attitude towards technology but still there is a limited use of technology. This may be because of school’s budget, huge class strength, lack of awareness about new technologies and lack of knowledge about the usage of these technologies. It is important for physical education teachers and coaches to learn and understand new technologies before using them in class or on ground. As we know technological devices are affordable, easily accessible, easily available and easily portable; school administration should include this in their budget. It will create an intrinsic motivation for both teacher and learner.

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