

# Information Technology's Contribution to the Growth of School Sports

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**Abstract:** *This paper explores the roles and effects of information technology in the development of school sports, deepening either the theoretical or the practical basis for the information technology used in the school sports through analysis on the practical application of information technology in physical education, sports training, sports management, and other areas. Additionally, practical steps for fully utilising information technology in school sports were suggested. According to studies, information technology in physical education contributes to raising the standard of physical education and achieving an efficient method of scientific administration. Information technology; school athletics; physical education; exercise programme; sports administration.*

**Keywords:** Sports

## I. INTRODUCTION

Multimedia and network technologies, which make up the basis of information technology in the twenty-first century, have advanced beyond anyone's wildest dreams and are now heavily utilised throughout all spheres of society. The transition from an industrial to an information society is currently taking place throughout the whole society, and all spheres of existence are moving from being capital- and physically-intensive to being knowledge- and intellectually- and technologically-intensive. Technology is becoming a key driver of economic expansion, and information is now a prevalent theme in the evolution of the global economy and society. In this situation, education will see a significant shift in educational objectives, organisation, content, instruments, and instructional assessment due to the powerful effect of information technology. The globe is accelerating the process of basic education in information technology, with many industrialised nations focusing on the information quality of the future generation.

Due to its extensive coverage, focus on the integration of voice, data, and visuals, and relatively low cost, the cable network in Northern Europe, a tiny, autonomous country with a strong sense of distinct culture, is well known. With the full support of the government, people have excellent information communication skills and have fully used available resources. Britain, France, Spain, and Germany are very different from one another because they get less central government direction. The conventional educational approach often forbids the use of information and communication technologies, there is some innovative local growth, and economic investment fuels the network expansion, resulting in a growing divide between teenage experience and academic instruction. E-government is still in its infancy outside of the realm of education. due to the minimal government investment, it is also in an early stage of development. The importance of e-commerce and information services in the United States is reflected in the fact that more people use the Internet at home than in schools. Depending on the state of the network, they offer various services. The essence of education is the transmission of knowledge from fundamental skills to information technology, which is how education evolves from time to time. Information technology is now considered as teaching content rather than teaching techniques. The state's independence determines how it responds to information and communication technologies. A consumer- and market-oriented approach is evolving with the advancement of information and communication technologies.

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The following areas are where information technology is used in Indian education:

1. The resource server, Web server, database systems, and backbone switches made up the information centre, or network-centric, in general. It oversees the functioning of the network protection as well as the information exchange throughout the whole campus network.
2. A multi-purpose classroom is one that may be used by lecturers for presentations, research papers, general courseware presentations, and computer instruction in addition to being connected to the school network or a multi-projection system or a big colour television system.
3. The most beneficial usage of the local area network nowadays is the computer network classroom, which refers to a computer network classroom that is connected to the LAN. Direct network release of educational information is possible. These classrooms are mostly utilised for computer workouts, information technology instruction, and other supplemental learning activities.
4. Virtual libraries, which save a lot of books and other materials on a resource server in digital form or offer multimedia information sources via the server. Through the computer network, instructors and students may quickly access, retrieve, and use data.
5. Other applications, such as campus card system, which makes use of campus network and smart card (IC card) technology, may be utilised to implement electronic information management of the school by using an IC card as a student ID, computer card, library card, phone card, and dining card.

## **II. INFORMATION TECHNOLOGY AND SCHOOL SPORTS**

School sports: School sports are an essential component of education and are a purposeful, planned, and structured process of educational activities with the goals of improving abilities, developing moral character, and cultivating physical fitness. In India, school sports are a significant component of education. School sport is an educational process that strives to train qualified and have an influence on students via planning in the form of athletic activity, in accordance with the needs of India education policy, school sports are a method of instruction that affects students' bodies to develop competent pupils. In addition to improving students' physical condition, school sport promotes healthy living. Lifetime Fitness- Fitness is a profession and a field of play in sports. The primary focus of school sports is fitness, which seeks to develop students' skills as well as their physical appearance.

Technique of fitness via education, enabling students to practise fitness now or in the future or to coach others in fitness. Athletic is a component of athletic, cultural enjoyment; it differs from sport in education in that it serves primarily as a means of relaxation. Despite being a sport, it differs fundamentally from fitness due to its diverse objectives, strategies, equipment, loads, and physical demands. While fitness stresses the benefits and importance of exercise, athletics places more emphasis on the activity's form, technical complexity, and performance art. As a result, athletic cannot be utilised in place of school sport or be used to replace it.

Physical education is built on the abilities and competitions of sports, which has resulted in a number of athletic educational and management papers, including syllabi, teaching resources, textbooks, teaching programmes, training standards tests, and assessment systems. Physical education also forms the coach mode of professional athletics, where the teacher is in charge of imparting sport-specific knowledge to the students, the class is ranked according to the results of sporting events, and the school establishes objectives to win more gold medals and develop athletic potential. This philosophy and these ideas have been applied to school sports for decades, from generation to generation. People discussed whether or not to update the notions throughout this time, but the outcome was unsatisfactory due to the alienation and dislocation of understanding.

The primary goal of school sports is to build kids' physical fitness. Students should attempt to grasp a variety of fitness concepts and theoretical knowledge in order to learn a variety of fitness tools and approaches for their life. The goal of school sports is not to win gold medals at the risk of bodily harm. Instead of battling in the athletic cultural entertainment, PE instructors should establish their positions and develop their own performances in the field of physical education. They must also identify the suitable aim and direction in order to decide their destiny. In order to combat the effect of alienation, school sports should attempt to maintain the fundamental substance and direction of physical education.

Information technology in school sports; Information is the use of contemporary electronic information technology and other ways by people to advance economic and social development via increased development and wise use of

information resources. Information is the collective noun for computerization, rationality, and contemporary communication. Information about school sports is based on computer and other information technologies that are integrated into education at all levels (including the environment, resources, and activities), supporting teaching, administration, and campus life. Information technology used in school sports

Building resources for sports information and providing the fundamental information and facilities involves several functional divisions of the school's information management systems. The primary job at this point is to modernise the conventional management model, convert the information management work flow procedures to electrification, information and quantification, and to exercise effective control and efficiency in the sports information management process.

Both the growth of school athletics and the challenges for education presented by the information society and network society have been greatly facilitated by the fast development of information technology.

A managerial agreement has emerged over the use of information technology to teach physical education in schools. The complete national fitness competition is the only type of competition that can compete in the sports arena of today. Only when school physical education information is used to support school physical education modernization, school physical education speeds up the adoption of information technology, and school physical education supports overall management of school physical education reform and teaching staff quality improvement

In the information era, information on physical education is in demand, and it combines physical education with contemporary information technology. In the information era of today, when current information technology is widely used, conventional teaching models, teaching methodologies, and other fundamental changes will take place.

There is still much room for the development of school sports information, so the institution should make reasonable efforts to create a widely adopted physical education information technology programme, increase the development and application of physical education software, sports training supporting software, and sports management software, concentrate on the integration and use of information resources, fully exploit the benefits of Internet technology, and accelerate the development of these programmes.

### **III. THE POSITION AND ROLE OF INFORMATION TECHNOLOGY IN SCHOOL SPORTS**

School sports are the primary means of completing the physical education requirement. School sport is a process by which teachers instruct students in knowledge, technology, develop and enhance students' physiques, and educate students with communism and moral education. The main difference is that physical education is carried out through various physical exercises, the students repeated the exercise, activity, and me, in accordance with educational programmes and syllabus. The educational paradigm and the ways in which data are analysed are changing as a result of information technology in physical education. Efficacy of exercise instruction.

Information technology achieves high transmission efficiency in the teaching of educational information and will assist students in actively engaging in observation, experiment, conjecture, and create (model), validation, reasoning, communication, and other problem-solving and other learning activities. Information technology integrates text, images, sound, and animation together organically, without the constraints of time, space, micro, and macro, and directly access to the human sense organs. More crucially, this new effective method of campus network collation and storage enables effective resource and result sharing, increases the volume and speed of information interchange for innovative education, and ultimately creates a setting unlike any other for raising student quality.

The advancement of scientific training using information technology; School sports are tasked with developing and delivering the nation's finest athletes and sports talent; hence training is a crucial component of school sports.

Sports outcomes are getting closer to the physical limits of humans as sports technology advances, making it harder and harder to break records. The globe, especially wealthy nations, spares no effort to develop information technology and applications in sports, a sports research priority, in order to narrow the range near to another record outcome.

Utilizing information technology effectively allows for the management of school sports in a scientific manner. School sports management is the process of planning, implementing, examining, and assessing school sports while adhering to the fundamental school standards. It requires the least amount of people and material resources. The development of the nation's economy and social infrastructure depends increasingly on information technology. Implementing school sports information management in a number of areas, including managing physical education courses, sports information,

managing physical network resources, managing student performance information, and managing sports instructors of physical education, research, and event planning has a specific relation to resource management.

#### **IV. PREVIOUS RESEARCH**

Modern sports, sports psychology, and coaching are evolving due to technology. Sports as diverse as cycling, speed skating, swimming, golf, skiing, surfing, football/soccer ball, tennis racket and ball, jogging, facilities, and many more employ cutting-edge technologies to improve performance. There are innumerable ways in which technology is used in sports today, and each invention has the potential to be advantageous. Basic typology is used to categorise sport technology into six categories, albeit the categories are not mutually exclusive and the same technologies may occasionally fit into more than one category. Self-technologies, rehabilitative technologies, landscape technologies, movement technologies, implement technologies, and database technologies are some of the categories. Although some of the technologies have yet to affect sports.

#### **V. PROPOSED REASERCH**

**Analysis of Sports Performance:** Coaches may now identify even the smallest faults with the aid of cutting-edge cameras. Additionally, it has had a significant positive impact on the feedback intended for athletes.

**Accurate Time Measurement:** When it came to rendering the ultimate decision in sports, earlier judges had to navigate some really difficult situations. As a result, we saw a wide range of emotions brought on by poor judgement, including tense arguments, public outbursts, the angry faces of athletes, verbal altercations, and other things. With more measurement accuracy, it has become much simpler to decrease a variety of disputes in the wake of expanding technical breakthroughs. Accurate judgement is seen to be essential for sports performance, particularly in precision sports.

**Data gathering** It has been simpler to gather data and guarantee correctness with the aid of cutting-edge technological tools like software-driven spreadsheets. In the past, manual data collecting would result in a time-consuming and error-prone procedure.

Since the use of information technology in sports, data collecting on training, competition, strength, recovery, and other topics is much more dependable and accurate. It is impossible to increase the performance area without precise measurement. In the framework of repeatability and consistency, the reliability of measurement has been greatly improved. Measurement mistakes in data collecting are now insignificant because to the development of cutting-edge technology gadgets like accelerometers and GPS.

#### **VI. SUMMARY**

According to the research above, information technology encourages the modernisation of physical education, scientific training, and uniformity in sport administration. Information technology is playing an increasingly significant part in the growth of school athletics, and its impact is becoming more and more clear as society develops and advances. In an effort to make school sports beneficial in our sport system, we should further improve the uses of information technology in school sports.

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