INFORMATION AND COMMUNICATION TECHNOLOGY IN GAMES AND SPORTS

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Abstract -
21st century is revolutionary era of information communication technology in physical education and sports. Use of ICT has much more importance in coaching and training process. To face the challenges 21st century training colleges have to adopt new communication techniques and tools. The purpose of this paper is to enlighten on use of ICT in sports and how ICT is useful and utilized in teaching learning process. To improve critical thinking and to enhance teaching learning process how ICT in necessary is discussed and its impact on teaching learning process is studied exotically. Conceptualization of various skills and new innovative trends has core importance in the process of teaching, learning. Virtual learning challenges class room concepts are new emerging trends of 21st century. To face new challenges ICT plays an important role in training colleges.

Keyword – ICT, Physical Education, Sports, Training

Introduction

Information and Communication Technology (ICT) has become one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education,. There is a widespread belief that ICTs have an important role to playing changing and modernizing educational systems and ways of learning. Inventive use of ICT is defined as the use of ICT applications that hold up the learning objectives based on the requirements of the modern information society. Hence, there is a need to bring out the facts on the impact of ICT on educational trainers.

ICT and its Role in Education and games and sports in development literature, ICT has been characterized as having the potential to enable national development. However, ICT has been conceptualized mostly as a monolithic and homogeneous entity To a great extent, the ambiguous findings and diverse opinions on the role of ICT in national development can be attributed to this limited focus. From activities to operations, from research to development, from health services to amusement, from education to governance, ICT has become an essential component of basic life.

In many countries, ICT has helped in improving the quality of education, physical and games and sports. It has the ability to address illiteracy and improve the quality of education in all sectors through multimedia capabilities such as simulations and models. ICT can give learners access to concepts that they previously could not grasp .The acquisition of ICT skills in educational institutions helps knowledge sharing, thereby multiplying educational opportunities. Integrating ICT literacy will be crucial as it means harnessing technology to perform learning skills. It must encompass the use of ICT to manage complexity and solve problems by thinking critically, creatively, and systematically towards the goal of acquiring thinking and problem-solving skills.

Information communication technologies (ICT) at present are influencing every aspect of human life. They are playing salient roles in work places, business, education, Physical Education and entertainment. Moreover, many people recognize ICTs as catalysts for change; change in working conditions, handling and exchanging information, teaching methods, learning approaches, scientific research, and in accessing information.

Information and communication technology (ICT) is defined as the combination of informatics technology with other, related technologies, specifically communication technology. ICT refers to technologies that provide access to information through telecommunications. This includes the Internet, wireless networks, cell phones, and other communication mediums. In this ICT must play an important role, perhaps even more than in other subjects, which assumes that the use of computer or virtual platforms is "natural" and inherent for education? Technological progress, combined with a parallel evolution In addition increased usage of computers and educational software at schools is insufficient to overcome effectively the obstacles that ICT integration brings into the educational process. The result

of this effort relies heavily on relevant views and beliefs that teachers hold about the integration of ICT in their pedagogical approach. Taking into consideration the Ministry's focus on a horizontal, integrated approach of ICT in education, while ICT teachers' are oriented towards techno-centric or pragmatic approaches expressing severe oppositions against many of the axes of the current educational reform it is evident that the implementation of the directions prescribed in the Ministry's notifications is anything but easy. As a result, the delayed, forced and, generally, disorganized introduction of ICT in education appears to be repeated, once more, confirming previous research assertions about the Greek educational system's weakness to successfully integrate innovative learning approaches, thus conveying its problems and deadlocks to the "New School"

ICT in Physical Education and sports

The UNESCO (2002) documents Information and Communication Technologies in physical Education a planning guide states the importance of ICT in teacher education as follows

"With the emerging new technologies, the teaching and coaches profession is evolving from an emphasis on teacher – centered, lecture-based instruction to student-centered interactive learning environments. Designing and implementing successful ICT – enabled teacher education programmes is the key to fundamental wide- ranging educational reforms..." Teacher education and physical education institutions may either assume a leadership role in the transformation of education or be left behind in the swirl of rapid technological change. For education to reap the full benefits of ICT in learning, it is essential that pre-service and in-service teacher have basic ICT skills and competencies. Teacher education institutions and programmes must provide the leadership for pre-service and in-service teachers and must be model in the new of pedagogies and tools for learning. They must also provide leadership in determining how the new technologies can best be used in the context of cultural, needs and economic condition within their country.

Material and Method:-

How ICT is useful?

The information technology provides facilities for chat, e-mail, voice-mail, video-mail etc on internet. It can be used in physical education for improving the process of education as follows:

1] Updating information:

A lot of information is available on the different websites and which may be accessed through internet. Information relating different aspects such as curriculum development, ET, examination, innovations in physical education, new techniques for developing skills, thinking, performance, etc. may be accessed easily through internet. If physical educators can be given these facilities of surfing the websites then they can find the most useful information for updates their knowledge.

2] Developing coaching Competencies:

It is widely believed that coaching competencies once developed, continue to develop by themselves, however it does not happen by itself now days CD's are available, which demonstrate various coaching competencies in real field situation, these can be seen by any trainer or physical educator. The teacher can be used video mail and video recording for the performance.

3] Becoming acquainted with the latest techniques/ method of teaching

In these days innovative technique like model of teaching have not been introduced by the different universities in their teacher education curriculum. Advances in Information Technology have made it possible to use alternative means. Many video cassettes on models of teaching are easily available now.

4] Sharing Instructional Material:

Instructional material for teaching different topics is also available on the websites.

5] Developing Research Competencies:

Many teachers working in different colleges of the different universities are not involved in any research work activity and hence standard of research work conducted is declining day by day. This happens due to the poor research competencies of teachers. This may be one of the reasons of it. This can be improve by using e-mail and chat on internet.

6] Enriching Teacher Education Curriculum:

The UGC and NCTE have put the teacher education curriculum on their website. This agency seeks comments of practicing of teacher educators and subject specialist. Their comments may suggest modification of the curriculum before it is finalized. The good comments / points may be incorporated in new curriculum being drafted. This will go a long way in improving the quality of teacher education curriculum.

7] Research and Development:

Researchers working in education can also contribute their share by conducting the

needed type of research. The potential area of research and development are instructional materials, training programmes for developing, reasoning, thinking, creativity, reading and compression etc. The efforts can be enrich by using ICT.

- **Information Communication**

  Technologies (ICT) the computer and internet connections used to handle and communicate information for learning purpose.

- **E learning-**

  E learning is a learning program that makes use of an information network-such as the internet, an intranet (LAN) or extranet (WAN) whether wholly or in part, for course delivery, interaction and/or facilitation. Web-based learning is a subset of e learning and refers to learning using an internet browser such as the moodle, blackboard or internet explorer.

- **Blended Learning-**

  Models that combine the face-to-face classroom practice with e-learning solutions. For example, a teacher may facilitate student learning in class contact and uses the moodle, (modular object oriented dynamic learning environment) to facilitate out of class learning.

- **Constructivism-**

  Constructivism is a paradigm of learning that assumes learning as a process individuals "construct" meaning or new knowledge based on their prior knowledge and experience Educators also call it the emerging pedagogy in contrast to the long existing .behaviorism view of learning.

- **Learner- centered learning environment-**

  A learning environment that pays attention to knowledge, skills, attitudes, and beliefs that learners bring with them to the learning process where its impetus is derived from a paradigm of learning called constructivism. In the context of this article, it means students personal engagement to the learning task using the computer and or the internet connection. The use of fitness monitoring equipment, such as specific fitness machines monitoring blood pressure, heart rate, training zones.

Using ICT effectively in the teaching of Physical Education Sports

1. **Athletics** -

   Use of stopwatches, wristwatch heart rate monitors, computer programme for recording performances.

2. **Games -**

   Video analysis of individuals for assessment so that comparisons between individuals and groups can be made.

3. Gymnastics –

   Preparation of flash cards demonstrating correct technique and video performance etc.

4. **Outdoor pursuits –**

   use of video and cameras for presentations, storage or orienteering records on laptops for portable use, mobile phones and walkie talkie for emergencies.

5. **Dance** –

   Use of video and cameras for presentations and assessment.

6. Football -   football Players will be given access to the latest and greatest technologies to ensure they are able to perform to the very highest level on the pitch while fans will be more connected than ever.

Work sheets for the planning of fitness programmes.

- Use of Whiteboards for showing a whole class a particular technique from video demonstrations e.g. using a digital camera split the screen into 9 progressive frames. Useful for highlighting techniques in discus and long jump.
- The use of CD-ROMs for extending knowledge.
- Use of the internet for coursework.

  Sport Leaders
- Use of the Internet for pupils to research up to date information and statistics relevant to the topic being covered. Enables students to develop their research skills.
- The use of CD-ROMs, for example, Encarta – the Human Body and sport examined.
- Specialist PE web sites.
- Results analysis programs.
- Internet – pupils can compare and analyze statistics from different sources about health and diet.
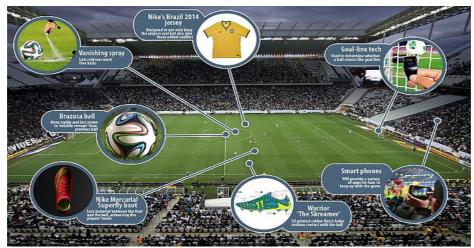- Pupils can bookmark favorite sites on the Internet.

Figure 1-World Cup 2014 in Brazil kicks off today, and it is set to be the most high-tech football tournament ever.

Conclusion-

The technologies offer vast opportunities for the development of contacts and exchanges with the rest of the world. Incorporating the technologies successful into schools requires careful advanced planning and preparation. Significant financially and human resources are required, with training as an essential component of the process. Redundant and robust systems must be put in place. Innovators have to be prepared to confront bureaucracy and conservative attitudes, including resistance by teachers and other educational staff. The following points must be kept in mind while designing the content as well as the process of education:

1) Training and orientation of teachers, administrators and students to the new learning technologies is an immediate requirement;

2) Teachers already in the profession should have the right to adequate time and resources for continual professional development to acquire and maintain ICT skills

3) Teachers should have adequate time to plan the introduction of ICT into their pedagogical practices to ensure high quality and appropriate learning.

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