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Applying information technology in the age of 4.0 industry to innovate teaching methods in physical education

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Abstract

Application of information technology in physical education is one of innovating methods as well as the policy of the Ministry of Education and Training, Vietnam, the application of information technology through a number of teaching activities in Physical education, which has the effect of activating learners, is the most effective support tool to renew methods towards positive for students.

Keywords: information technology, applications, physical education

Introduction

In the period of 4.0 Industry, it is determined that today's modern Teaching Methods (T.M) are implemented in the direction of promoting positivity, as one of the proactive and creative factors of learners, positive teaching methods targeting learning activities, activating human activities, through which, they actively explore the truth, acquire knowledge. Therefore, we have applied information technology (I.T) to teaching in Physical Education (FE) through a number of teaching activities that have positive effects on learners, positive interpretation, seminars, group discussion, self-study of students, performing difficult movements in a series of movements, the application of I.T in teaching has contributed to improve the quality of this subject.

Benefits of Information Technology Application

The development of I.T and the wide Information Technology Application (I.T.A) in teaching and education, improving the quality of teaching to meet the requirements of innovating teaching methods is more and more necessary. The exploitation of teaching materials, sharing resources between domestic and foreign lecturers (teachers), creates a rich database, providing feedback from teachers with professionals, with students, creating a forum to exchange experiences, for searching, sharing expertise and other information online is becoming increasingly common.

The Ministry of Education and Training issued Directive 29/2001/CT-BGDĐT dated 30/7/2001 on enhancing teaching and I.T application in the Education sector: "Promoting IT application in education at all levels and degrees, branches tends to use IT as the most effective supporting tool for innovation in teaching and learning methods in all subjects". The Ministry of Education and Training has set a target for the school year of 2014 - 2015 is the year of the IT application.

In the trend of diversifying teaching means, innovating teaching methods, computers increasingly showed their competitive advantage over other devices. Computers create multi-dimensional human-computer-human communication, in addition to the traditional human-human communication. This opens up many advantages, many applications of the computer in life. Computers also create new possibilities: Access - Communication - Demonstration - Coaching. These abilities make people become more proactive, and get things done better. People use computers and software to create and edit documents, calculate parameters of expertise, design drawings, simulate experiments which have the ability to present animations, sounds and their capabilities of interactions enable to depict modeled objects close to

reality. The objects are simulated close to the reality. Simulation is not a copy of the original of an objective reality, it is a copy that is simple, so that reality becomes easy to understand. Simulation is always a special form of all interactive programs, it is used as a pre-used tool for analysis, discovery, and experimentation. The central feature of the simulation is the computation of the current state of the model and these parameters can be manipulated through variables. The objects that have been simulated by the computer will be an effective means for students to learn.

- Computers inspire and help students be responsible for learning, can define goals, plans for individual or group learning activities, can self-evaluate the results of the steps in the learning process. .
- Computers help students develop the abilities to search, organize and analyze information; help students train their thinking ability and scientific working style.

Thanks to computers and the Internet, it has created an expanding learning environment outside of classrooms and subjects as well as combining with many different educational forces.

Some solutions for I.T.A in teaching in the faculty of physical education of Hong Duc University

Currently, IT provides quite a lot of software tools to help teachers create personal products. These software tools are very easy to use, do not require a highly qualified IT teacher, but only basic knowledge of IT can create quality products, products created by the parts. These tool softwares are compatible with the system softwares such as generations of Windows operating systems, which can be classified into the following groups:

- Used for text editing, publishing design, calculation
- Create slide shows (picture channel, text channel, audio channel ..)
- Creation of simulated products.

Using IT to perform lesson presentations in the whole class only. However, based on this demonstration design, teachers can organize teaching activities designed step-by-step in a tight structure, in which multimedia tools include texts, images, audio, and video illustrations to share knowledge and control of learners. When going to class with "electronic lesson plans", the teacher will perform the lecture with the entire teaching activities that have been programmed in a flexible and lively way thanks to the support of the media tools designed in teaching period with I.T support.

Providing the lectures with the support of IT, the teachers are able to reduce the time of delivering lectures, have conditions to include the text channel, the voice channel, the video channel, and enhance dialogue and discussion with learners; Learners are attracted, stimulated to discover knowledge, have conditions to deepen the problem, so the learning process becomes more exciting and deeper. IT-aided lectures do not completely replace teachers, but IT only plays a supporting role in classroom activities, at a low level, teachers deliver lectures under the support of demonstrations to group organize teaching activities to meet the lesson objectives. At the highest level of the lecture, the teacher's entire teaching scenario is digitized. create a complete interactive teaching software. In particular, it can replace the role of the teacher at certain times. The contents of the lessons are multimediarized. In multimedia environment, information is transmitted in the form of: texts, graphics, animations, images, audios and video

clips.

For the subject of P.E, there are some forms of application such as preparing lesson plans, use some technical presentation software (still images and animations, sounds) or some teachers have used digital cameras to take pictures of illegal situations (teaching the rules of competition), some lessons of movement techniques, teachers used a digital camera to record that documentary images, using specialized software to cut the files according to each topic for teaching. A lot of initiatives on I.T.A in the teaching of P.E in many subdivisions have been implemented in practical teaching periods (teaching and learning movement techniques), teaching theories and describing professional experiments, searching for materials on the Internet through search engines (google) and keywords to exploit knowledge about sports in the world's common archives.

Conclusion

The basic feature of the teaching of P.E is to be carried out mainly in various places such as training grounds, multi-purposed halls, swimming pools, schoolyards ... mainly in movement activities. Without active practice, it is impossible to achieve the teaching goal of grasping knowledge, forming movement skills and developing physical strength. Therefore, in order to apply I.T in the school day, it is necessary to ensure a number of requirements: IT creates favorable conditions and a favorable learning environment to improve the quality of teaching and learning; - IT does not make it more complicated and difficult for teachers and learners to manipulate computers with audio files and presentation equipment; - Do not abuse IT or use a forceful way; When putting into teaching period for presentation, it is necessary to calculate very carefully the effectiveness, duration if necessary, it is necessary to build up a scenario to apply in a specific lesson; The user must have complete mastery in the use of technical equipment and manipulations.

In fact, the I.T.A in the teaching vocational education have contributed to improving the quality of subjects and need to be done constantly to renovate teaching methods, improve the quality of training.

References

1. Tearle P, Golder G. The use of ICT in the teaching and learning of physical education in compulsory education: how do we prepare the workforce of the future? *European Journal of Teacher Education*. Routledge 2008;31(1):55-57.
2. Zhang Baowei. The Role of Information Technology Application Research. *International Conference on Computer Science and Electronic Technology* 2014.
3. Okposio O Collins. The use of ICT in teaching and learning of physical education. *Continental J. Education Research* 2011;4(2):29-32.
4. Zhou YJ. Application of Information Technology in Physical Education and Training. *Advanced Materials Research*, 2014;926-930, 4465-4468.
5. Zhang DS, Zhang HH, Yang JL. PE Information Technology and College Physical Education. In: Jin D., Lin S. (eds) *Advances in Future Computer and Control Systems*. *Advances in Intelligent and Soft Computing*, Springer, Berlin, Heidelberg 2012, 159.
6. Gogoi, Hemantajit. The use of ICT in Sports and Physical Education 2019. 10.22271/ed.book.445.
7. Ministry of Education and Training No: 29/2001 / CT-BGDĐT Hanoi.

8. Ministry of Education and Training, Official Letter No. 4116 / BGDDT dated 8/9/2017 on guiding the implementation of information technology tasks for the 2017-2018 school year, Hanoi 2017.
9. Ministry of Education and Training, Circular 25/2015 / TT-BGDDT dated October 14, 2015 Regulation on the subject curriculum of Physical Education under the training programs at university level, Hanoi 2015.
10. Faculty of Physical Education - Hong Duc University Summary report of the school year 2017 - 2018 section "Facilities for training" 2019.
11. Robert Marand J Effective Teaching Methods, Education Publishing House, Hanoi 2011.