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# COMPUTER TECHNOLOGY IN THE GEOGRAPHICAL STUDIES

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***ABSTRACT***

***Today's generation are growing up in a digital world. The computer technology has dramatically changed both the world of geography as an academic discipline and the geography of the world in which we live. This is influencing every area of our lives. Education is the backbone of every economy. Society need well and organize educational infrastructures so that they can learn how to interpret information. Computer, Mobile, ipad, World Wide Web are being used in class room. Visual education is becoming more effective method of learning geography. This article I have tried to provide a general pictureuses of computer technology in geographical studies. But I have not tried to list every application of a computer technology which is used in geographical studies.***

***KEYWORDS:*** ***Computer technology, Geographical Studies, GIS, Digital Earth***

## INTRODUCTION

The computer has been identified as the most efficient 'stand-alone' technology that is able to make teaching and learning situations more meaningful and fruitful than it has ever been before (Wabuyele, 2006; Osodo, 1999; Amory, 1997).Nowadays, children grow up in the digital environment where usage of computer technology, the World Wide Web and mobile and other electronic devices is part of everyday life. The use of technology dramatically increases the range of techniques available to support quality teaching and learning, evaluation, guidance process. Computer technology has opened new arenas of research, and allowed previously unthinkable computations. "Highly effective teachers don't just teach in one way—they have a repertoire of instructional techniques, teaching behaviors, and essential skills on which to draw, depending on the needs of their students, the nature of the subject, and the complexity of the learning outcomes." (McEwan, 2002, p. 81)

## OBJECTIVE

Computer technology in geographical studies.

## METHODOLOGY

Literature review based secondary data analysis.

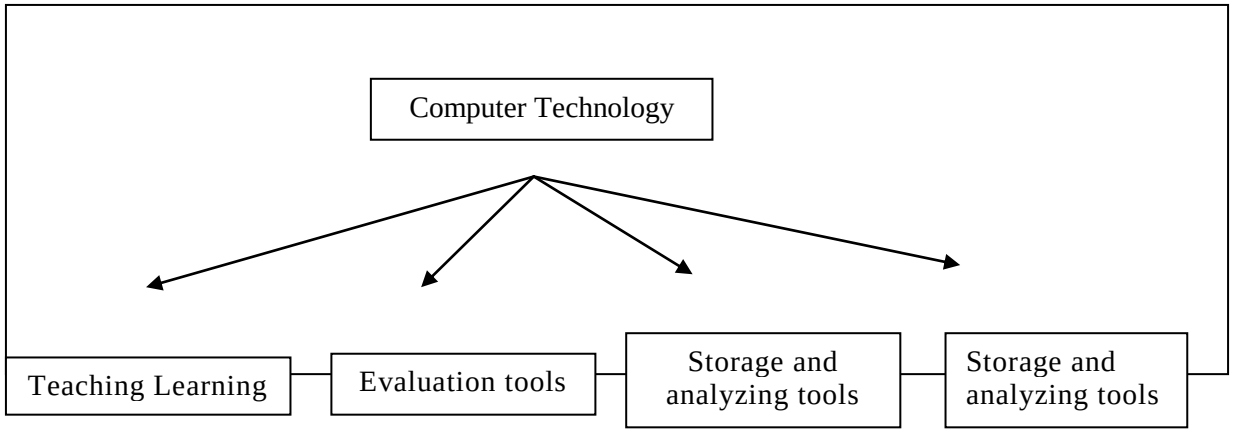
## RESULT & DISCUSSION

**History**

In early day people used to learn which are easier, faster, or less expensive tools. Such as paintings on cave walls, different types of abacus have been used. Writing slates and blackboards have been used for at least a millennium. From the early twentieth century, duplicating machines such as the mimeograph and Gestetner stencil devices were used to produce copy for classroom use. The use of media for instructional purposes is generally traced back to the first decade of the 20th century with the introduction of educational films (1900s) and Sidney Pressey's mechanical teaching machines (1920s). Slide projectors, Cuisenaire rods were widely used during the 1950s in educational purpose. In 1960, the University of Illinois initiated a classroom system based in linked computer terminals where students could access informational resources on a particular course while listening to the lectures that were recorded via some form of remotely linked device like a television or audio device. In the mid 1960s Stanford University psychology professors Patrick Suppes and Richard C. Atkinson experimented with using computers to teach arithmetic and spelling via Teletypes to elementary school students in the Palo Alto Unified School District in California. By the mid-1980s, accessing course content became possible at many college libraries.

E-learning systems i.e. computerize communication and networking in Education started in the mid-1980s.

**Uses of Computers technology in Geographical Studies**



**Teaching Learning tools**

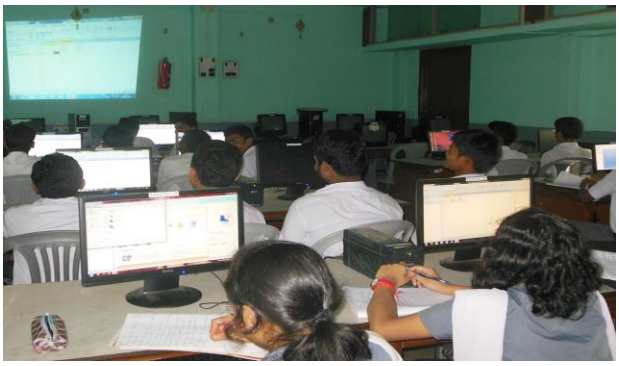
- Teaching the students using slid show, word processor software, Web pages to develop a better understanding of the topics being taught.
- The use of multimedia computer in geography education has made it possible for teacher to teach student much more effective and easy.
- Easy available readymade software could give practice material to the students.
- Inspiring students to express their imagination using different types of Painting tools.
- World Wide Web access allows students and teachers to communicate with other students and teachers and to expand their use of teaching and learning resources.
- Online discussion forums, students can share knowledge, participate in intellectual debates and learn from one another.
- Publication of project paper, research article, new idea or innovation with the world.

**Evaluation tools**

- Creating question bank for students
- Using computers for testing by asking questions from question bank
- Online Evaluation
- Analysis and interpretation of the data

**Storage and analyzing tools**

- It is possible to keep records in a more systematic and secure manner using technology and retrieving of information has therefore become much easier. Using GIS application user can capture, store, analyze and manage spatially geo-referenced data.
- Documents stored as soft copy for students, teacher for further use.
- Online magazines, journals, brochures, research articles, previous year question paper and solved papers, project paper.
- Records of the books maintained using library software.




Use to Computer Technology in Geography Class Room

**Software uses in Geography Education**

Using GIS tools users can search information about specific geographical areas, analyze spatial information, edit the data and create maps, charts and create reports.

Few examples of GIS tools are

GRASS GIS, QGIS, gvSIG, MapWindow GIS, SAGA GIS, ESRI Arc, Intergraph, MapInfo, Clark Labs IDRISI, Google Earth, Capaware, FalconView, TerraView, Whitebox GAT, GeoServer, Mapnik, MapServer, SpatiaLite, TerraLib

## CONCLUSION

The technology must be used to benefit from knowledge effectively. Information should be stored in a systematic way and used for the aim. Teaching methods can be enhanced by the use of computer technology when addressing syllabus requirements for Geography. Various tools listed in this paper to provide a general picture for the tutor and learner to designed and created multimedia presentations, collected and interpreted a variety of electronic information using information technology, all of which are enhanced the quality of Geography education.

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