

Computer aided learning essay



A. Presentation of the Issue The applications of computers are growing rapidly, and expectations of this technology are growing at the same rate. One of the newest branches of computer application is Computer Aided Learning or CAL. Although computers and educational packages are generally in use today, Computer Aided Learning in the future will be even more essential and important. Today computers are used as a big, fast encyclopedia or data book, a tape recorder, type writer or video, but in the future CAL systems will contain smart adaptive trainers that will adapt themselves to learners' features and propose the best method of teaching. Again, we will have more remote learning and video conferencing instead of today's traditional classes.

CAL now is a new idea, but as time goes by, it will become very important and wide-spread. B. The IT Background of the Issue In this part we shall look at the various types of CALL and where they might be employed in a typical lesson, turn to look at the major types of CALL software and how they might best be used in the class. Most class lessons in language learning follow a pattern on the lines of: 1. Introduction – outline of lesson and indication of the points to be learned. 2.

Presentation – presentation of the learning material. 3. Practice – firstly controlled practice with a teacher, then free practice without the leading of the teacher. 4. Summary – review of main points and pointer to next lesson. There are four main types of CALL: tutorial, drill, simulation/micro-world, tool.

These, once again constitute a spectrum of possible systems. The first type, tutorial systems, are generally closed in their teaching and learning

approach and tend to present and practice material. The second type, Drill systems, are systems which teach by repeatedly presenting an item of knowledge and waiting for a particular response (e. g., for vocabulary learning).

Simulations and micro-worlds are programs in which real world scenarios are re-created in a computer environment in a convincing, life-like way the simulation program behaves exactly as the real thing. A micro-world is a simplified simulation in which some of the real world complexity has been removed to make it easier for the students to learn particular skills. The final category, of types of CALL programs is tool. Tool are computer programs which are not normally intended for teaching languages but can be used to do so.

Examples would include word processors (e. g. texts in which paragraphs have to be placed in the correct order), databases (e. g.

the collection and analysis and report writing about the foreign country in the foreign language) and the world wide web (e. g. the use of train company website in role plays for ordering tickets). Also read the description of computer C. The Impact of the Issue What advantages and disadvantages of computer-aided learning (CAL)? Here are the key advantages and disadvantages: Advantages* non-fatiguing: the computer does not tire or need a break.* non-judgmental and non-threatening: does not make any personal judgments about the student and does not get annoyed.* cheap: computer are less expensive than staff.* flexible: can be used at any time of day or night and even provide instruction “ just in time”, shortly before the

learner needs to learn a new skill.* encourages exploration: as students do not feel “observed” by a teacher they tend to be more willing to take risks, make mistakes and learn more freely.

Disadvantages* no understanding: most CAL systems do not understand the subject they are teaching and can not explain the material to students having problems.* inflexible teaching: the teaching strategy is generally fixed and the does not have much ability to offer alternative examples or change its teaching approach - many systems embody a form of rote learning.* preparation: much time needs to be invested in the development of CAL for it to be effective (anywhere from 200 hours to 800 hours development time is quoted by developers to produce 1 hour of student learning time)* un-editable content: few CAL systems provide tools for teachers to easily change content (e. g., change text fragments, audio clips, exercises and answers) which means that most packages can only be used once with any group of learners. D.

Solution to the Problems Arising from the IssueDuring the 70's, CAL systems were developed but the development rate was still low, because of some technical and also economical limitations, especially concerning hardware that was still expensive, massive and mainly without adequate sound and graphic facilities. Around the beginning of the 70's, Atkinson and Wilson (Atkinson-Wilson, 1969) suggested that the main problems of CAL systems were:- Low quality of graphic displays (e. g. monochrome monitors).- Handling problems of random access audio tapes.

- Cost of terminal per hour, it was higher than an adequate level for general use. During the 80's and 90's CAL faced many problems such as: (Low quality of graphic displays (e. g. monochrome monitors), Handling problems of random access audio tapes, and Cost of terminal per hour, it was higher than an adequate level for general use), were eliminated by the Digital Revolution. Digital technology development, upgraded hardware facilities and performance and lower prices solved these problems. Low quality, monochrome graphics displays were substituted by video quality and 16 million color displays.

Nowadays computing and processing speeds of a typical computer are tens of times higher than the most advanced computer of the 70's. Compact discs (CDs and DVDs) and real sound/video peripherals brought multi-media facilities into the personal computer world. Now, everybody can have a real studio on his table. Therefore, as time went by, CAL system designers could develop their ideas and implement them. The results are current CAL systems that have the following features:- Easy to Access: Nowadays, everybody can get an educational package, which is normally a CD, or uses educational WEB sites.

The total costs of a PC computer and educational software are cheap enough for most average wage earners people and more important, are as cheap as educational centers all around the world can bear.