



Computer Assisted Instructions- 855 for M.Ed.

Habib Ullah Qamar

@theITeducation

Let enlist our objectives

- Understanding/sharing the basics of CAI
- Exploring the role/importance of CAI in education
- Types of CAI
- Explanation and examples of CAI
- Advantages
- Limitations
- Course book

Have you ever used CAI?

- Have you not used computer for learning?
- Have you not used computer for teaching?
- Have you learned typing using any software?
- Have you listened any lecture for English
- If yes
- Then this is all about CAI

CAI introduction

- CAI refers to the **use of the computer as a tool to facilitate and improve instruction.**
- An instruction is “detailed information about **how something should be done or operated**”, to teach or to train
- A CAI program can be used in following ways to improve instruction
- **drill and practice , Simulation**
- **problem solving** approaches to present topics
- They **test the student's understanding.**

Computer Assisted Instruction

- Use of computer in education is referred by many names such as
 - Computer Assisted Instruction (CAI)
 - Computer Aided Instruction (CAI)
 - Computer Assisted Learning (CAL)
 - Computer Based Education (CBE)
 - Computer Based Instruction (CBI)
 - Computer Managed Instruction (CMI)
- Web Based Training/Learning/Instruction

Computer Assisted Instruction

- Computer-based education (CBE) and computer-based instruction (CBI) **are the broadest terms** and can refer to **virtually any kind of computer use** in educational settings.
- Computer-assisted instruction (CAI)
Computer Aided Instruction (CAI) **is a narrower term** and most often refers to **drill-and-practice, tutorial, or simulation activities**.

Computer Assisted Instruction

- Computer-managed instruction (CMI) instruction is an **instructional strategy whereby the computer is used to provide learning objectives, learning resources, record keeping, progress tracking, and assessment of learner performance.**
- **Computer based tools and applications** are used to **assist the teacher or school administrator** in the management of the learner and instructional process.

Computer Assisted Instruction-Def

- **A self-learning technique, usually offline/online, involving interaction of the student with programmed instructional materials.**
- **Computer-assisted instruction (CAI) is an interactive instructional technique whereby a computer is used to present the instructional material and monitor the learning that takes place.**

Computer Assisted Instruction- Def

- CAI uses a **combination of text, graphics, sound and video** in enhancing the learning process.
- The computer has many purposes in the classroom, and it can be utilized to help a student in **all areas of the curriculum.**
 - Searching content
 - Homework assignments

Typical CAI provides

- text or multimedia content
- multiple-choice questions
- problems
- immediate feedback
- notes on incorrect responses
- summarizes students' performance
- exercises for practice
- Worksheets and tests.

Types of CAI

- **Drill-and-practice** Drill and practice provide opportunities for students to repeatedly practice the skills that have previously been presented and that further practice is necessary for mastery. **Online Exam and testing center**
- **Tutorial** Tutorial activity includes both the presentation of information and its extension into different forms of work, including drill and practice, games and simulation... **Typing Master, English GURU, Math Master**

Types of CAI

- **Discovery** approach provides a large database of information specific to a course or content area and challenges the learner to analyze, compare, infer and evaluate based on their explorations of the data.....

Research oriented software..

- **Problem Solving** This approach helps children develop specific problem solving skills and strategies..... **Logical games, strategy games**

Advantages of CAI

- one-to-one interaction
- great motivator
- freedom to experiment with different options
- instantaneous response/immediate feedback to the answers elicited
- Self pacing - allow students to proceed at their own pace
- Helps teacher can devote more time to individual students

Advantages of CAI

- Privacy helps the shy and slow learner to learn
- Individual attention
- learn more and more rapidly
- multimedia helps to understand difficult concepts through multi sensory approach
- self directed learning – students can decide when, where, and what to learn

Limitations

- Do you agree with me that “No system can replace teacher and classroom”?
- Yes
 - may feel overwhelmed by the information and resources available
 - over use of multimedia may divert the attention from the content
 - Teachers training required to use
 - non availability of good CAI packages
 - lack of infrastructure in Pakistan

Tools and packages

- Computer graphics (decade use, hand tools)
 - Computer Aided Design(CAD)
 - Computer Aided Manufacturing (CAM)
 - Digitizer, light Pen, Touch Screen, Scanner
 - Plotter (maps, bar charts, engineering drawings)
- Computer adopting to logical requirement (why and why not)
- Self learning (ignored individual learning at own pace with immediate feedback)

What we try to learn today?

- Understanding/sharing the basics of CAI
- Exploring the role/importance of CAI in education
- Types of CAI
- Explanation and examples of CAI
- Advantages
- Limitations
- Course book

Any Question please.....



**I HOPE YOU WOULD
HAVE ENJOYED
TODAY'S CLASS**



Thank you

Habib Ullah Qamar

For slides

www.Slideshare.net/habibullahqamar