

Chapter 4

Instruction Process and Learning Issues in Computer-Assisted Learning: A Detailed Review

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ABSTRACT

Computer assisted learning (CAL) has grown in popularity over the past and is also known as computer based instruction (CBI), computer aided learning (CAL), or computer aided instruction (CAI). For the purpose of this study, we might tell exactly CAL as computer-assisted learning techniques and settings. However, collaboration is the key to comprehending CAL. On numerous levels, computers can help with engagement during the learning process. This chapter looks at CAI in general because CALL and CAI share many aspects. It also goes over broad learning topics like learning styles and tactics, personalized knowledge, as well as the elements that determine the consequences of gaining knowledge. Where necessary, the education learning setting is mentioned, as well as how contemporary CAI knowledge can be applied to the education learning circumstance.

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INTRODUCTION

This chapter looks at CAI in common because CALL and CAI share many aspects. It also goes over broad learning topics like educational psychology and tactics, personalized knowledge, as well as the elements that determine the consequences of gaining knowledge (Benson, 2001). Wherever necessary, the EL ecosystem is mentioned, as well as how existing CAI learning can be applied to the EL circumstances. The term “computer-assisted learning” has been bandied around a lot in the creation and implementation of instructional technology for a diverse range of students in a wide range of circumstances. The term “CAL” was frequently used in the 1990s to allude to the establishment of a new software application or a group of related algorithms (Beatty, 2003). Traditional instructional approaches, in especially, have a long history of success have been superseded. The presentation Learning or teaching disciplines such as mathematics, science, geography, and others through software programs or e-books with subject-specific learning packages or materials is known as Computer Aided Learning (CAL). It could be of any kind.

- Technology-Enhanced Learning (TEL) is a type of learning in which technology is employed to aid the learning process. It is supposed to be as follows: “Pedagogical theory: Digital technology has enabled me”. It could be, in a general context.
- E-learning is regarded to be an aspect of it. Learning with a Computer

A computer program or file created expressly for educational purposes can be characterized as the approach is employed in a number of settings around the world, from primary school to university. The learner’s route across a topic area is optimized by the CAL based on his personality, cognitive qualities, and identified state of preparedness (Fotos, 2004). One of the most crucial characteristics of CALL materials is participation. It is a different communication process that stored on servers’ students’ engagement, machine involvement with educators, educator involvement with students, and student interaction with students (Underwood, 1984). Integration is essential in CALL because that increases participants’ commitment, develops their abilities and talents, improves their linguistic competence, and encourages language development. Unfortunately, the present CALL lacks interaction and has other usability flaws (Levy, 1997). Several of the potential dangers include

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