

Chapter 3

The Influence of AI– Assisted Learning on CAL: A Blueprint

Karthik Ganesh R.

SCAD College of Engineering and Technology, India

ABSTRACT

Reading, creating, hearing, witnessing, analyzing, testing, and other activities are all part of a diverse, multilayered, and dynamic learning experience. These layers combine to make learning a unique and personal experience for each individual. Understanding the factors that influence how people learn has a lot of power. When that expertise is combined with artificial intelligence (AI), the authors can develop learning experiences that are beneficial to all students. AI-assisted learning is a learning experience that is adaptive and enhances our natural learning style with machine intelligence (AIAL). AI can recognize trends and make decisions that are beneficial to users. There are numerous different tendencies in memory as it relates to humans in this study. This chapter explains how AI-assisted learning takes into account aspects including a student's background, the subject, modalities, and environment to produce an integrating teachable moment.

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INTRODUCTION

Recognizing multiple learning strategies is crucial since it will aid in the development of Algorithms to support them, which is what AI-assisted learning aims to do. Behavioral disciplines research how people learn in a variety of settings, such as school or at home. It poses the questions, “How do we learn?” and “How do we teach?” And how do we put what we’ve learned into practice? (Bobrow, 1964). There are numerous approaches to learning new. A college student learning math theory, for illustration, may opt to read about it in a book. The issue is that there is usually an abundance of materials, making it difficult to choose the best ones. When a person can’t relate to or identify with the content, reading alone isn’t always enough (Wexler, 1970).

In this case, AI-powered programs can measure how the learner interacts with the content, including where they stopped on a page and how long they spend reading about specific topics (Simmons and Silberman, 1967). Over time, the machine will be able to make an assessment on their comprehension levels and match them with material that is more relevant and purposeful. Video knowledge can be approached in the same way (Kellogg, 1968). Similar algorithms can monitor a user’s clicks, likes, and comments in order to display them videos that are more appropriate for their educational experience. Hands-on practice problems will almost certainly be more beneficial than researching about algebra for a high school senior (Weizenbaum, 1966). Algebra is made up of components that stack on top of each other, therefore it’s crucial to grasp the basics before going on to the next. AI-assisted learning is ideal for material that must be taught in small chunks. (Potamianos et al. 2007).

LEARNING ASSISTED BY ARTIFICIAL INTELLIGENCE

Machine learning algorithms may take data like homework and exam outcomes and group individuals who did similarly, as well as offer supplemental material that has previously aided individuals with a similar profile, such as the relevant equations to employ and how to apply them. As the system learns, it will be able to generate the most relevant practice problems and coach students through them directly.

Adaptive gamified systems that keep students focused and engaged are another method AI-assisted learning systems might help students learn. These technologies also make it easier to learn dense content. Models that

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