
This article discusses powerful technology incorporated with a powerful learning environment. The authors believe that a constructivist approach to learning is necessary to develop a powerful leaning environment, but they also believe that this must be incorporated with cognitive learning strategies. The content within this article will back up the effectiveness of cognitive learning strategies as these strategies are critical for developing and updating information throughout the learning process.


Since learning from the internet whether through individual research or selected topics is becoming a media tool for learners, this study seeks to determine if the effectiveness of implementing cognitive strategies into internet learning produces a higher quality product. The metacognitive process of learning has been deemed successful, especially when dealing with new information. By understanding the cognitive learning processes, learners can organize new information into the brain and sort its relevancy. This study demonstrates that technology does not simply advance the rate at which one learns unless it is implemented with certain strategies, guidelines, or objectives.

Cognitive load theory is the main focal point in this article. Only a limited amount of information can be worked with at a time. This article explains design patterns in instruction to counter this limitation. By developing larger schema, the learner will be able to process more information in larger chunks. As technology is integrated into the learning process, understanding how to implement patterns will ultimately make technology more effective.


Continuing with the theory of cognitive load, this article demonstrates how technology is a cognitive extension when used appropriately. Technology effectively integrated into the learning process allows the learner to extend the working memory. This article demonstrates the importance of understanding a technological tool before dumping it into a cognitive process. The literacy of technology is necessary to provide more room in the working memory.


Emphasizing cognitive load theory and its application to e-learning, this article critiques presented research and offers further analysis. The use of this article will provide many different scenarios applying technology under the magnifying glass of cognitive load theory. The critiques and analysis provide further information as well as how to continue research on the study.

This case study presents factual information regarding distance learning where, often times, the learner is presented with the information and resources and is expected to learn due to technology being a tool. The learners demonstrate different cognitive learning strategies as they sift through relevant information and use technological tools available to them.


The brain develops pathways as learning takes place. These pathways extend to different areas of the brain when the information is processed in each of those areas. This article refers to information-processing theory as part of the learning process. The more ways that information is processed, the more access the person will have to that information in the future. The use of technology can incorporate several different ways to process information.