

Zeno, Blair

Professor Asis

English 1

10 May 2021

Games and Learning

Modern pedagogy is progressively adding games to curriculums to rouse student motivation for learning. The thought process behind adding games to curriculum is that by doing so, it will lead to an increase in student engagement and rising test scores. There seems to be no absence of research when it comes to the subject of games and learning. There is an abundance of psychological studies that have sought to demonstrate correlation between games and cognition by conducting experiments on people of all ages. Remarkably, the findings of this

To begin, there are three types of encoding people use to get information into their brain: semantic, acoustic, and visual. Semantic encoding is the type of process our brain uses to associate words and their meaning. When compared to visual and acoustic encoding, semantic encoding contributes towards a deeper level of understanding. According to Rose Spielman licensed clinical psychologist and educator, “we tend to process verbal information best through semantic encoding, especially if we apply what is called the self-reference effect” (Spielman, et al. 8.1 How Memory Functions). The self-reference effect means that we are more inclined to remember something if it has personal meaning to us, rather than something that we view as insignificant to us. In theory, simulation games should take advantage of our natural process of semantic encoding. When describing simulation games, the Center for Educational Innovation (CEI) of University at Buffalo says, “experimentation and risk taking are encouraged by allowing learners to try out alternative courses of action and experience a range of different outcomes” (Simulations and Game-Based Learning). In short, the association of an action with an outcome in a simulation game makes it more meaningful to us, thereby taking advantage of semantic encoding and resulting in stronger memories. The other two processes we use to get information into our brain are visual and acoustic encoding.

Albeit not as strong in forming memories as semantic encoding, visual and acoustic encoding are still powerful ways to learn new subjects. Visual encoding is the process we use to get information into our brain using images. Traditionally, subjects such as human anatomy customarily involve rote memory, relying heavily on repetition to learn the subject matter; however, repetition alone is not the best way to commit things to long-term memory. On the other hand, a game such as “Pictionary” geared towards human anatomy can be a powerful study aid. Games such as Pictionary take advantage of visual encoding because players associate words

One of the first research studies to examine the effects video games have on older adults

grade is what motivates them to study, then their motivation is extrinsic. Often our motivation for learning in classroom environments is a mixture of both intrinsic and extrinsic factors.

According to Spielman, “in educational settings, students are more likely to experience intrinsic motivat

Works Cited

Gauthier, Andrea, et al. "Exploring the Influence of Game Design on Learning and Voluntary