

Free cognitive psychology essay example

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Smith (2001) defines psychology as the study of the mind. One major subset within the broad study of psychology is popularly known as cognitive psychology. As highlighted by Aukrust (2011), cognitive psychology is a branch of psychology that deals with the study of mental processes that includes how people or individuals think, learn, perceive and remember. As a part of the larger cognitive science field, this psychology branch is by means related to other disciplines such as neuroscience, linguistics and philosophy. Processes included in cognition are judging, thinking, remembering, knowing and problem-solving.

Cognitive psychology began emerging in the 1950' s. According to Kreiger and Salas (1993), this was partially as a response to behaviorism. Some Critics in psychology claimed that behaviorism failed to explain in details how some internal development processes impacted behavior. Cognitive psychology focuses on how individuals acquire process and in the long run

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store information. Currently, cognitive psychology concentrates on few key human characteristics which include:

Perception

The foremost human characteristic is the ability to comprehend or perceive. Perception is an indispensable feature since it is the process by which an individual interprets his immediate environment as well as situations, changes, and interactions that are within it. Aukrust (2011) states that the perception involves the physical sense such as smell, sight, hearing, touch taste, and cognitive processes which are involved in interpreting the mentioned senses. The current outlook on cognitive psychology mainly focuses on ways in which the mind of a human interprets stimuli from senses and the ways that the interpretations affect behavior.

Memory

According to Ellis & Hunt (1989), Memory is defined as the capability to store information that can be used later. Memory is a very vital characteristic since without the capability to retain information to be used later; the learning process becomes almost impossible. Typically, modern conceptions of memory are broken down into three principal classes. These are; procedural memory which is the memory responsible for the performance of specific types of action, episodic memory which contains temporary memories and is responsible for autobiographical events and the semantic memory which is an encyclopedic knowledge possessed by an individual.

Attention

In psychology, attention is defined as a state of focused or concentrated awareness on a subset of perceptual information available. The core function of attention is to filter out insignificant data, enabling the selected data to be dispersed to other mental processes. At times, the human brain simultaneously receives input in the form of visual, auditory, tactile, and olfactory information. Without the capability to single out some of the simultaneous information and concentrate on two or one, the brain might end up becoming overloaded.

Meta-cognition

In a broad sense, meta-cognition is the thoughts that an individual has about his thoughts. It includes matters such as a person's capability to apply cognitive strategies, an individual understands of his own abilities on a particular mental task and how effective an individual is at monitoring his own performance on a selected task (self-regulation). In most cases, meta-cognition is applied the education field of study. Increasing a student's meta-cognitive skills has shown to cause a substantial impact on their study and learning habits. The key aspect of meta-cognition is to improve the student's ability to determine, set personal goals and self-regulate effectively in order to meet those goals.

Problem solving

It is a mental process that involves discovering, solving and analyzing of problems. The goal of problem-solving is to overcome obstacles and finding lasting solutions to resolve the issue.

Intelligence

It encompasses several mental abilities such as planning, and reasoning and problem-solving. There has been a considerable debate over the real nature of intelligence. No clear conceptualization has emerged and so it is still considered as an ongoing debate.

Application of cognitive psychology

The cognitive skills that are required for success in academic performance include self-regulatory functioning and the ability consciously to control thoughts, feelings, as well as action. At any one given time, all students in a learning environment are known to set out clear-cut goals towards the process of learning which are referred to as achievement goals or academic success.

Metacognition is also a vital aspect when it comes to attaining academic success in students as it has shown to cause a great impact on the learning habits of students. Metacognition is a higher order of mental processes learning including making learning plans, using the appropriate strategies and skills to solve problems, preparing estimates of performance and adjusting the extent of learning. Metacognition is vital in learning as it is a predictor of academic success (Coutinho, 2007). It enables students be more strategic during their learning by helping them learn new information rather than focus on studying information that has already been learnt.

According to Roediger (2013), One of the most powerful and effective techniques of cognitive psychology that can be used in studying and learning by students is distributing practices on tasks. This study habit or practice has over a long period been known as a powerful and compelling learning

enhancer. For example, looking at most of my textbooks, I have noticed that most related topics have been grouped together. Studies have shown that learning occurs quickly and instantaneous under massed practice conditions. Over time, many students have proved that massed practice eventually leads to more permanent and durable learning.

As observed by Karpicke and Blunt (2011), Retrieval testing or practice is another impressive and effective strategy for learning in students. Students who practice retrieving can keep the information in an accessible state. It means that they can keep the information in their mental fingertips as it is and can later be retrieved and used to answer direct questions as well as transfer the knowledge in related situations. Most students, me included when we have materials right in front of us, our minds trick us to think that we know better than we actually do but in the actual sense know so little. It is due to the confidence that we have to know that the materials are available for reference. But with time, I have realized that putting the learning material away and practicing retrieval is the best strategy for the study and achieving academic success.

Another impressive technique is the interleaved practice. Interleaving practice involves working on a number of skills in parallel (Karpicke & Blunt, 2011). I have over and over used interleaved practice in studying where I use elaborative interrogation in asking myself why the information that I am reading is true and also self-explanation where I explain some procedures to myself. This study habit helped me analyze what I have studied by asking myself questions and explaining the learned procedures to myself. It has been effective as it has helped me sink what I have learned deep in my

brain.

When all these practices are combined, performance has been shown to be exemplary (Karpicke & Blunt, 2011). Being a motivated learner, a student with a passion for learning and knowing more, the retrieval testing, distributed practice, and interleaved practice have greatly helped me improve my study habits. It has made education a journey of adventure and self-analysis.

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