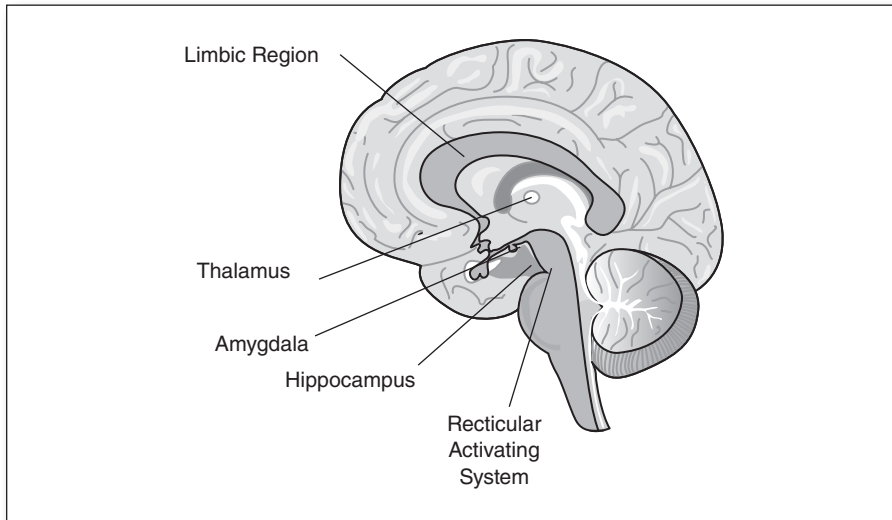


Figure 3.1 Cross Section of Brain with Labels



primary function is to keep our body alive. It controls automatic functions, such as breathing, heartbeat, body temperature, digestion, blood pressure, and balance. It is able to increase heartbeat, blood flow, and other automatic body functions if it gets signals that danger is near, or it can slow down responses if we are just chilling out with friends. It also houses the **reticular activating system** (RAS), a critical brain feature that's responsible for alertness and attention. Using the RAS, the brain scans our surroundings 24/7 for any *novelty* that signals important changes in the environment, any *relevant* event or information connected to one's social status, physical survival, or strong *emotions* that might signal a potential threat or reward. Getting the RAS to pay attention is critical in culturally responsive teaching. It directs the learner's attention at the beginning of a task.

The Limbic Region

Stacked right on top of the reptilian region is the limbic layer. This layer is only present in mammals. It is also called the emotional brain. This region links emotions, behavior, and cognition together (Zull, 2002). Its primary roles are to help us learn from experience, manage our emotions, and remember. The limbic brain records memories of experiences and behaviors that produced positive and negative results in the past, so a person knows what threats to avoid or what rewards to pursue. It creates our internal schema that acts as our background knowledge.