WASHINGTON STATE UNIVERSITY HEALTH SCIENCES SPOKANE

Metacognitive Learning Strategies

*Move from simply studying to actually learning with metacognitive strategies. Metacognition refers to your **awareness of your own cognitive processes**. Using metacognitive learning strategies will help you to move from simply remembering concepts to **applying, analyzing, and evaluating** what you have learned.*

Active Reading (PQ3R)

Previewing

We know the brain is more efficient at learning when it can access related prior knowledge. To prime your brain for the reading ahead, preview the chapter by **looking at headings, bolded terms, and any charts or graphs.**

Question

Next, give yourself a reason to maintain focus while reading. Based on what you observed during your preview, **what do you want to learn** from the reading? Write these questions down.

Read/Recite/Review

Now it's time to start reading. Read a section, then **put the information in your own words**. Don't just copy the text, process and transform the information in a way that is meaningful to you. Continue this process, and make connections between different sections on the reading. Return to the questions you posed above. Respond. Make new connections within and among ideas and concepts.

Engaging in Lecture

Note-taking

Recent studies have shown that **taking notes by hand** results in more learning than taking notes on a laptop. This metacognitive process forces you to **evaluate and paraphrase** new information. Just be sure you are using your own words in your notes and not just copying what is on the slide or said in lecture. If you are concerned you will miss important information, consider recording the lecture.

Inquire

Actively engage in class time by **reviewing materials and writing questions** you would like answered during the lecture. If you questions are not answered, you can pose your questions to the professor during class or bring them to his/her office hours.

Metacognitive Studying

Dual Coding

Dual coding is about connecting images with words. Look over your course materials and find visuals. Compare the visuals to the words. Explain the visuals in your own words. Draw your own images/diagrams/charts. Come up with different ways to represent the information visually. **Mindmaps, infographics, diagrams, cartoon strips, timelines, etc.** Work your way to drawing what you know from memory.

Elaboration

Explain and describe concepts with many details. Ask yourself questions about how things work and how they relate to other concepts. Take two concepts and explain how they are **similar and different**. Relate ideas to your **own experiences.** As you go through your day, **make connections** between what you are experiencing and what you are learning in class. **Work your way up to explaining concepts and ideas without looking at your course materials.** Trying teaching the materials to someone.

Retrieval Practice

There is a great divide between being able to *recognize* information and being able to *retrieve* information. You must practice retrieval skills in order to really learn a concept. Studies have shown that **practice testing is the most powerful method** to increase test scores. You can use practice tests in your textbook, write your own, or have each member of a study group create a set number of practice test questions. **Flash cards are helpful.** Just be sure you practice recalling information and go beyond only definitions.

Teach It

Have you ever been in a situation where you thought you knew something, only when you tried to explain it to someone else, you found out that you didn't know it as well as you thought? As part of your metacognitive study plan, **practice teaching topics** to others. If you can teach it, then you know it.