



# Brain-based considerations for the classroom

The announcement area of the course is a space for you to have creative and instructional freedom to explore and build on course concepts that students are exposed to each week. This is also an opportunity for you to communicate out to all of your students at once to make the biggest impact. Review the following brain-based considerations and reflect on how you might utilize a combination of these strategies in your classroom to support your students' learning.

## CLASSROOM CLIMATE

The neocortex is the largest portion of the human brain where the majority of complex thought and memory storage occurs. Our knowledge of the brain tells us that the neocortex doesn't function properly when humans are stressed or afraid. Building a climate that is warm and receptive to missteps, fosters comfort to learn and make mistakes.

## ACCESSING PRIOR KNOWLEDGE

Whenever possible, make what you teach relevant to the lives of your students and what they might already know. We learn better when we perceive information as useful and relevant. When information is tethered to other memories from a prior week, or from a prior course, that knowledge is activated by new information coming in. This information builds and connects, known as scaffolding.

Our brains are like filing cabinets. As we take in new information, we want to ensure that it fits into the correct folder. The first step is to think about the information coming in while asking, "What do I already know about it?" If you already have a "file" on this information, you can add the new information to it. If you do not, you will need to create a new "file" and correctly label it reference at a later date.

## OFFER CONCEPTUAL AND PROCEDURAL KNOWLEDGE

*Conceptual knowledge* provides big picture understanding and lets a person apply techniques to solve a problem. *Procedural knowledge* focuses on the specific actions required to solve the problem. Both are needed to provide context and support retention of information and should be considered when introducing content in an announcement.

## PRIMACY AND REGENCY

This theory states that when you are learning a great deal of information at one, oc time, you tend to most effectively remember what is read or presented first and last. A positive teaching strategy to activate long-term memory is to summarize relevant pieces of information. Consider these strategies of summarization and reflection in your announcements:

1. **"3-2-1"** List: 3 main points (or 3 "somethings"), 2 controversial ideas, and 1 question related to the key concept or learning.
2. **"Square, Triangle, Circle"** List 4 things that 'square with your thinking', 3 'angles that you disagree with' or 3 details to support XXX, or 3 different ways to look at the idea, etc. and 1 questions 'circling in your head.'



# Brain-based considerations for the classroom

## 2. "Dear student" letter

Imagine writing a letter as an announcement to an 'absent' student telling them what they may have missed in the module. This helps you consider how to best summarize the week's main topics and points of interest.

## 3. Sequence or Timeline

List in order of importance or in chronological order (or steps) the concepts discussed in the module and how they tie with past and future concepts.

### CHUNKING INFORMATION

Breaking complex content into smaller chunks and allowing the learner to control the speed of the learning lets them process the information more effectively. Concepts can be broken up and presented in a visually organized way to increase the likelihood of retention and decrease mental strain.

Groceries		Produce	Dairy	Meat	Dry Goods
Milk	Yogurt	Lettuce	Milk	Chicken	Soda
Eggs	Chips	Squash	Eggs	Sausage	Pasta
Soda	Squash	Cilantro	Yogurt		Chips
Pasta	cheese		Cheese		Rice
Lettuce	Chips				
Chicken	Cilantro				
Sausage	Rice				

### THINK ABOUT RELATIONSHIPS

When you relate information to other information, you create a chain of memories which lead to one another. When you label an information chain, you create a kind of file or schema that makes it easy to locate and use the information. People tend to remember context over content so consider employing the following strategies to reinforce ideas in the classroom.

1. Acronyms- A word or name that is an abbreviation from the initial letter or sound of a set phrase. (Ex. NATO- National Atlantic Treaty Organization)
2. Acrostics- A series of lines or verses where the first, last, or other specific letters, when taken in order, spell out a word or phrase. (Ex. Bones of the skull: **O**dd **P**eople **F**rom **T**exas **E**at **S**piders = occipital, parietal, frontal, temporal, ethmoid, sphenoid)
3. Associations- Making mental connections that link items together will aid in retention and further understanding of how concepts relate to one another. Helping students to identify meaningful connections that link people, dates, and facts, will aid in building knowledge and assisting in recall.