SELF-TESTING

STUDENTS WHO SUCCESSFULLY **SELF-TEST** THEMSELVES **CHECK THEIR UNDERSTANDING** OF WHAT THEY ARE **LEARNING**.







THINK ABOUT THESE QUESTIONS:

- Have I ever had trouble on a test because I didn't understand the information as well as I thought I did?
- Do I have trouble recalling information that I thought I had learned?
- When learning something new, do I relate the new information to things I already know?
- As I study new information, do I ask myself questions about the material?
- Do I have trouble keeping up with the material in class?

WHY SHOULD I SELF-TEST MYSELF?

STUDENTS WHO SELF-TEST THEMSELVES . . .

- >... are more likely to identify and correct misunderstandings.
- >... tend to use more effective and efficient learning strategies/skills.
- >... have an easier time keeping up with the material in class.
- easier time achieving their goals.

STUDENTS WHO DO NOT SELF-TEST THEMSELVES . . .

- >... assume they understand the information without checking to make sure they really do.
- >... discover their misunderstandings when it is too late (e.g., during a test).
- >... have trouble keeping up in class and completing assignments on time.
- >... feel more anxious.

POINTS TO REMEMBER ABOUT SELF-TESTING:

Improving your ability to check your understanding is one of the best ways to enhance your performance in college.



Monitoring your learning and recognizing when you are having difficulty allows you to take control and do something to fix the problem.



You may need to experiment and try out new methods of self-testing to develop a set of strategies that work for you.



PREVENT THE ILLUSION OF KNOWING!

Many times we look at material in our textbooks or in our notes and we say, "Yeah, I understand that . . ."



But, if we never test it, we don't really know if we understand it.



It is too late for self-testing when we are taking a test or turning in an assignment!

THE FOUR SELF-TESTING PROCESSES:

Using the following four processes will help you monitor your understanding and prevent the illusion of knowing.

- 1. Setting Goals
- 2. Developing Awareness
- 3. Reflecting
- 4. Exercising Control



1. SETTING GOALS

Everything starts with your goals! If you have a goal that requires you to check your understanding, then you will have more motivation to monitor yourself. Goals also help inform you of your progress.

Consider these two goals:

Goal 1 – I will make an A in my chemistry class.

Goal 2 – I will make a C on my Spanish test.

Which one will better motivate you to strive to learn the information more deeply and accurately and require you to more frequently check your understanding?

The higher the goal, the more important it is to monitor understanding and detect errors before being evaluated!

2. DEVELOPING AWARENESS

Once your goal is set, it is important to monitor your progress by asking yourself questions such as the following:

- ? "When do I understand or not understand new material?"
 - ? "What do I understand and what don't I understand?"
- ? "Why is it that I do not understand parts of the material I am trying to learn?"

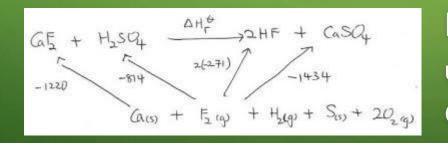
Think about the types of learning situations that tend to cause problems for you (ex: lectures, a certain author's writing style, etc.).

Once you identify the situations that can be more challenging for you, Pyou can target your self-testing efforts to meet your individual needs.

3. REFLECTING

As you become more aware of your understanding, reflect not only on challenging situations, but also on what works for you.

Reflecting on and keeping track of methods you've tried that helped you in one situation will build your toolkit of useful strategies that can be applied in future situations.



Did creating diagrams help you understand information in your Chemistry class?

Maybe you could use this same strategy in your history class!

4. EXERCISING CONTROL

This process involves taking charge of your actions!

It is important to manage your thoughts and actions toward staying focused and attaining your self-testing goal.

For instance, you could take action by setting smaller goals that will help you achieve your larger goal, such as . . .

- ... checking your understanding at the end of each paragraph or section you read for an assignment.
- ... checking your understanding every 5 to 10 minutes as you watch a video assigned by your professor.

If you find yourself struggling, make a plan for success!

SELF-TESTING STRATEGIES

Now we get to the good stuff!

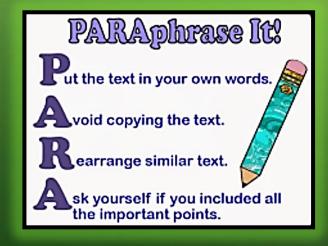
The following are some general self-testing strategies that can be used in different learning situations to remember new information and check your understanding:

- Paraphrasing
- Self-Questioning
- Applying Ideas To Your Own Life
- Using Pre-Questions or Objectives
- Establishing Sub-Goals
- Teaching Someone Else The Material
- Modifying Strategies
- Using Multiple Strategies

PARAPHRASING

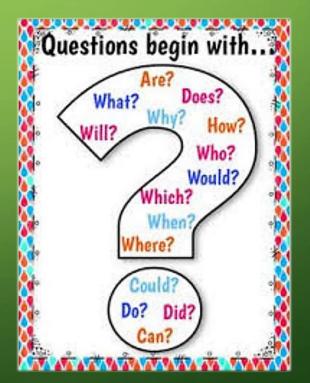
Paraphrasing involves translating the information you are learning into your own words.

If paraphrasing something is difficult, this is a sign that you probably do not understand the information as well as needed.



SELF-QUESTIONING

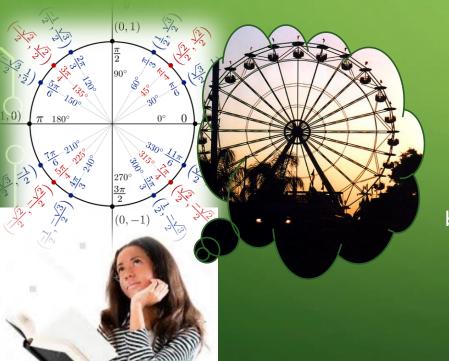
Self-questioning means asking yourself questions as you are learning new material.



Be honest. Don't just say, "Oh, yeah. I know that..." Really answer your questions and avoid the illusion of knowing!

APPLYING IDEAS TO YOUR OWN LIFE

When you really understand something, then you can see how it fits with previous knowledge and experiences that you've had.



It is easier to remember new information when you are able to make connections between what you are learning and what you have already lived.

USING PRE-QUESTIONS OR OBJECTIVES

Writing down critical questions or learning objectives before you begin studying will set goals for your understanding and give you a way to measure your progress.



<u>Specific</u> – What do I want to learn or accomplish by the end?



Measurable – How will I know when I have achieved



<u>Attainable</u> – Do I have everything I need for success?



Realistic – Is my objective reasonable? Am I trying to do too much at once?



<u>Timely</u> – Do I have enough time to reach my goal? How long will it take?

ESTABLISHING SUB-GOALS

If you set a goal that is too large, you may miss problems with understanding until you are out of time to fix them.

Pass my algebra exam.

Add/subtract and multiply/divide positive and negative numbers.

Use order of operations (PEMDAS).

F.O.V.L. method.

To identify
misunderstandings
earlier, establish subgoals as steppingstones
to your main goal so
that you will have
opportunities to check
your understanding
more frequently.

TEACHING SOMEONE ELSE THE MATERIAL

This technique involves all of the previously described methods.

For instance, you must be able to paraphrase the information and relate the concepts to real-life examples so that the person you are teaching will understand.



MODIFYING STRATEGIES

If you try a strategy and it doesn't seem to be working for you, replace it with a different strategy instead.









USING MULTIPLE STRATEGIES

Sometimes, especially with particularly difficult material, more than one self-testing strategy may be needed to reach your learning goal.

For instance, you may need to establish subgoals, paraphrase a difficult concept, and apply it to real-life examples to make sure that you thoroughly understand.



CHOOSING STRATEGIES THAT WORK FOR YOU

Many self-testing strategies have been presented in the previous slides. Think about your own learning experiences. Select some of the strategies that you think would work for you, and try filling out the chart below on some scratch paper!

Name a strategy that you think would work for you.	Describe the context in which you could use the strategy.	Explain why the strategy would be helpful in these situations.
Example: Paraphrasing	I can paraphrase while I am quietly reading my history textbook alone in the library before I go to class.	Putting the information in my own words helps me remember it better and make sure that I don't space out as I am reading.
1.		
2.		
3.		

TRIGGERING EVENTS

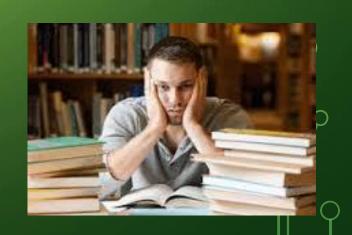
A triggering event is a red flag, or a cue, that tells you: "I'm not understanding!"

It is a sign that you need to stop and try something different to fix the problem. Ignoring these signals will not fix the issue, but rather allow it to become worse.



Two common triggering events are:

- Unfamiliar Information
- Unconfirmed expectations



UNFAMILIAR INFORMATION

Unfamiliar information is information for which you have no prior experience, such as: (1) an unknown word or term, or (2) an unfamiliar idea or a new principle.

STRATEGIES FOR DEALING WITH UNFAMILIAR INFORMATION:

Re-read the Selection – Looking over the sentence and/or the surrounding text might provide enough context clues to figure out the meaning of the word or concept.

Adjust Your Reading Speed – If unfamiliar information is causing problems, try reading slower so that you will have more time to process and look for clues.

Form a Tentative Hypothesis Regarding the Meaning — This may work if the exact meaning of a word or phrase is not really necessary to understand the overall concept.

Go to an Expert Source — If you must know what the word/idea means and the context does not make it clear, find the meaning using a dictionary, glossary, website, your professor, etc.

UNCONFIRMED EXPECTATIONS

Unconfirmed expectations are experienced when the material you are learning:
(1) contradicts what you thought you already knew about the concept,
(2) is surprising or does not turn out as expected, or (3) is not yet fully developed.

STRATEGIES FOR DEALING WITH UNCONFIRMED EXPECTATIONS:

<u>Check for Internal Consistency</u> – Compare the questionable information with other information from the <u>same</u> source to see if it agrees or conflicts with the other facts.

<u>Check for External Consistency</u> — Compare the questionable information with information from <u>different</u> sources to see if it agrees or conflicts with what other experts report.

SUGGESTIONS FOR IMPROVING YOUR SELF-TESTING

Remember that self-testing is a way to self-regulate your learning.

Below are some additional tips for improving your self-testing abilities:

- Become more aware of your understanding by continuously monitoring yourself as you are learning new information.
- Use self-testing strategies to take control of your understanding!
- Use different types of self-testing strategies depending on the types of situations and problems you encounter.
- Your goals and the particular material you are studying and learning will also influence which self-testing strategies you use.
- Self-testing is one of the best ways to improve your performance in college!

SUGGESTIONS FROM OTHER STUDENTS

Here are some suggestions from students who have learned to use self-testing to help improve their performance in college:

- When reading class materials, stop periodically to summarize the content in your own words. Check to see if you are correct! Review your class notes to see if they are complete and understandable. Answer the review questions at the end of the chapter/section in your textbook. Make and answer your own questions before, during, and after reading class material, studying, or going to class. The ease or difficulty with which you are able to answer these questions will help determine the areas you most need to focus on. To see if you really understand a principle or method, try to apply it. Check out some of the books, self-help materials, or programs available to help develop your skill at using self-testing.
- Consult a learning assistance counselor or staff person for more help.

HELPFUL WEBSITES

The following is a list of online resources that may be helpful as you develop your self-testing skills:

QuizMEOnline – This website can help with <u>self-questioning</u> or developing <u>pre-questions</u>. It offers tools for creating your own quizzes, flashcards, and outlines.

http://www.quizmeonline.net/

"Take Note: Five Lessons for Note-Taking Fun" — This article from Education World offers five lessons to help develop <u>paraphrasing</u> and note-taking skills.

http://www.educationworld.com/a lesson/lesson/lesson322.shtml

"Tips for Writing Goals and Objectives" — This handout from Tulane University provides more information about how to write effective goals and objectives.

http://tulane.edu/publichealth/mchltp/upload/Tips-for-writing-goalsand-objectives.pdf