

<h1>Time for a Workout with the Muscle Study Strategy</h1>		<b>Student/Class Goal</b> Students need tools for reading at the college or postsecondary level. The Muscle Study Strategy is a one tool they can experiment with and learn to adapt for many types of text.
<b>Outcome</b> <i>(lesson objective)</i> Students implement and evaluate the steps of the Muscle Study Strategy in order to comprehend and review dense text material.		<b>Time Frame</b> Three 1 hours sessions (1 <sup>st</sup> two sessions may be longer; 3 <sup>rd</sup> session may be shorter)
<b>Standard</b> <i>Read with Understanding</i>		<b>NRS EFL 6</b>
<b>COPS</b> Determine the reading purpose.	<b>Activity Addresses Components of Performance</b> To implement the steps of the muscle study strategy using dense text.	
Select reading strategies appropriate to the purpose.	Practice the phase of the muscle study strategy – pry out questions, root up answers, recite, review, and review again.	
Monitor comprehension and adjust reading strategies.	Students are given the muscle study strategy – how it works step-by-step guide and PPT to support strategy instruction.	
Analyze the information and reflect on its underlying meaning.	Students use dense text (college textbook) to practice the strategy.	
Integrate it (i.e. new information) with prior knowledge to address the reading purpose.	When students are reading dense text in other assignments, the muscle study strategy would be one of the ways they would choose to scaffold their reading.	
<b>Materials</b> <b>SESSION 1</b> <i>Muscle Study Strategy-How It Works</i> Handout Computer with projection system <i>Master Student Muscle Strategy</i> PowerPoint <i>Master Student Muscle Strategy</i> PowerPoint Handout <i>True or False or Not Sure</i> Handout Multiple copies of a level-appropriate textbook  <b>Teacher Note</b> I would highly recommend <i>Becoming a Master Student</i> by Dave Ellis which connects directly to the online resources I’ve referenced - 10 <sup>th</sup> , 11 <sup>th</sup> , and 12 <sup>th</sup> editions are circulating in most online bookstores, libraries, and college campuses – this is a great college success text and can be used for so many lessons and ideas!  <b>SESSION 2</b> <i>Muscle Study Strategy</i> Handout (Session 1) Computers with Internet access for student use or computer with projection system to access <i>Use Muscle Reading</i> link (see Technology Integration section of this lesson for link). Textbook chapter for each student to use (as chosen in Session 1) – Students need to be able to mark up the selection to fully experience the strategy so keep this in mind when selecting!  <b>SESSION 3</b> <i>Next Steps with Muscle Study Strategy</i> Handout <i>Exit Slip</i> Handout		
<b>Learner Prior Knowledge</b> Determine if students have any prior experience with Muscle Reading or Muscle Study Strategy. Prior to this lesson, students would benefit from instruction and practice in the basics of outlining and taking notes from text and from lecture-style presentations.		
<b>Instructional Activities</b> <b>SESSION 1 ACTIVITY – Understanding the Muscle Study Strategy</b>		

Step 1 - Set the stage by talking about assembling tools for reading. For any challenging task, you need the right tools for the job. This lesson will help to stock your toolkit for reading with a tool that can be adapted to many jobs. Today's tool is called the Muscle Study Strategy. As with any muscle activity, you must work out with this strategy to make your technique strong and polished (might have a tool in your box but are you proficient with it – be willing to experiment and practice with it). As we learn this strategy and practice with it, consider if you have any faulty/broken/bad tools in your reading toolkit (get rid of them – nothing is as frustrating as trying to use these!).

Step 2 - Pass out *Muscle Study Strategy-How It Works* for students to use as a note-taking template. Explain the strategy using the PowerPoint handout on Muscle Strategy. Ask questions and give examples throughout the explanation/presentation to keep them actively involved in the content and making notes as needed.

Step 3 - Have students work in small groups to complete the *True/False/Not Sure* Handout to check their current understanding of Muscle Study Strategy. Encourage them to use their notes and information gained from the PowerPoint and explanation. Record correct T/F answers on board. Discuss any questions/clarify understandings as needed. For extension, have them change any false/not sure statement to make each clearly true.

Step 4 - Provide students with opportunity to select the text chapter to be utilized in next class session's Muscle Study Strategy practice activity. They should try to select something appropriate to a 1-hour reading workout and something that they think will prepare them for college-level reading. Have students work together to reach consensus on the one chapter that everyone will utilize. Guide students toward level-appropriate selection as needed. Encourage students to review their notes and prepare for a 1 hour work out in Session 2!

### **SESSION 2 ACTIVITY – Applying the Muscle Study Strategy**

Step 1 - Review the Steps of the Muscle Study Strategy by providing students with a blank outline of the note-taking page from Session 1. See if they can fill in the missing words in the 9 steps. Remind students that these steps can be varied or adapted to different types of text. Today, we will implement all 9 to get practice with the full version.

Step 2 - Have students access (or put on projection system) [Use Muscle Study Strategy](#). Give students time to preview the online article/directions. Identify any questions they have about the directions and clarify as needed. Guide the group in Steps 1 through 3 of the strategy. (Note that the heading examples in these directions relate to Master Student, Chapter 4). Provide about 30 minutes for students to complete Steps 4 through 6 (this is too short a time for close reading; students should be focused on their purpose and reading for key ideas that answer their questions). Complete/discuss plans for completion of Steps 7 through 9 of the Strategy.

Step 3 - Encourage students to practice, practice, practice this strategy. Talk about how they might incorporate this technique in their current and future studies. In Session 3, we will review what has been learned about this strategy and how we might personally apply it.

### **SESSION 3 ACTIVITY – Planning Next Steps with the Muscle Study Strategy**

Step 1 - Review Sessions 1 and 2 as needed. Explain that the purpose of the Session 3 activity is to consider how each student might apply the Muscle Study Strategy to their own reading tasks. Give examples of how you might personally utilize this strategy in various ways for different types of reading (use all 9 steps to get really dense text material with lots of details, but maybe go leaner with a 3 step approach for shorter articles and less dense text: Preview and Question, Read to Answer those Questions, Recite and Review)

Step 2 - Pass out *Next Steps with Muscle Study Strategy* to each student. Guide discussion on 1 or 2 questions to get them started, then allow them to complete on own. In small groups, have students share their answers and reflect on their first impressions of the strategy (which may vary and that's OK!).

Step 3 - Have students complete an *Exit Slip* that will help you as the teacher to connect with what the students learned, how they learned it, and what they still want to know about the Muscle Study Strategy.

### **Assessment/Evidence** *(based on outcome)*

Student will evaluate their understanding of the Muscle Study Strategy with a short objective (T/F) quiz. They will also complete a more subjective assessment that reflects on the MS strategy with questions that require personal application, evaluation, and

planning for implementation of reading strategies in future text assignments.

**Teacher Reflection/Lesson Evaluation**

*This lesson has not yet been field tested.*

**Next Steps**

In textbook chapter assignments, students will likely Pry out Questions that will require additional resources in order to answer. Follow this lesson with instruction on using and connecting with resources that can facilitate understanding of the text material (dictionaries, other texts, tutors, instructors, online help support, etc). The PowerPoint presentation in this lesson has additional slides that could be used in this next step.

This Muscle Strategy, though highly popularized through the Master Student text, may not have the research track record that is enjoyed by other reading/study strategies. Remember this is just one of many tools students could utilize for reading and study strategies. A good strategy that could be taught along with Muscle or immediately following would be KWL as the three parts of KWL partner nicely with the three main phases of Muscle. In KWL, students use a three-column chart to identify what they know – what they want to know – what they have learned.

**Technology Integration**

PowerPoint Presentation for Muscle Study Strategy (select *Chapter 4: Reading* to download then use slides 5-22 on Muscle Study Strategy for this lesson)

[http://college.cengage.com/collegesurvival/ellis/master\\_student/10e/students/powerpoints.html](http://college.cengage.com/collegesurvival/ellis/master_student/10e/students/powerpoints.html)

Use Muscle Study Strategy (succinct directions for implementing the Study Strategy with a textbook)

[http://college.cengage.com/collegesurvival/ellis/master\\_student/10e/students/articles/ch04\\_muscle\\_reading.html](http://college.cengage.com/collegesurvival/ellis/master_student/10e/students/articles/ch04_muscle_reading.html)

**Purposeful/Transparent**

Students are introduced to a new study strategy and the teacher is very explicit in how she presents the strategy and allows them an opportunity to practice the strategy using dense text.

**Contextual**

Students are using college text to practice and hone the muscle study strategy.

**Building Expertise**

Students are building their toolkit of study strategies as they prepare for postsecondary – outlining, taking notes and muscle study strategy.

## Muscle Study Strategy – How It Works



PHASE ONE: Before you read **PRY OUT QUESTIONS**

Step 1: **P**\_\_\_\_\_

Step 2: **O**\_\_\_\_\_

Step 3: **Q**\_\_\_\_\_

PHASE TWO: While you read **ROOT UP ANSWERS**

Step 4: **R**\_\_\_\_\_

Step 5: **U**\_\_\_\_\_

Step 6: **A**\_\_\_\_\_

PHASE THREE: After you read **RECITE, REVIEW, and REVIEW AGAIN**

Step 7: **R**\_\_\_\_\_

Step 8: **R**\_\_\_\_\_

Step 9: **R**\_\_\_\_\_

## TRUE or FALSE or NOT SURE

1. You must complete all nine steps of the Muscle Study Strategy to get the most out of any reading assignment.
2. You should preview the entire selection before you begin to read.
3. To get the most benefit out of marking a book, underline or highlight about 30 percent of the text.
4. You should make up random questions to answer while you read.
5. When you finish reading the material assigned, you should review it again within 2 hours.
6. If you are reading a work of fiction or poetry, you might decide to skip the outline step.
7. It's a good idea to write down the questions you want answered by your reading.
8. You should continue reading until you finish the assigned selection; don't take breaks.
9. It's not a good idea to make notes in your textbook.
10. Research shows that you can get a lot of benefit from actively talking to yourself or another person about the material you are learning.
11. Review the material at least once a month to keep the information pathway in your brain open and clearly connected to what you have learned.

## **Next Steps with Muscle Study Strategy**

1. I think that this strategy includes the term “Muscle” because ...
2. What can I do before I read that will prepare me to use my time effectively?
3. What does it mean to “pry out questions”?
4. How will previewing my assignments be of any benefit?
5. What can I do while I read order to grasp the important ideas?
6. What does to mean to “root up answers”?
7. How will I decide what sections of my book are important enough to underline or highlight?
8. What can I do after I read in order to retain and remember the information?
9. How will I benefit from so much reviewing?
10. How will I know when to adjust the steps of the Muscle Study Strategy to match the text I am working with?

**Pry Out Questions – Root Up Answers – Recite, Review, and Review Again**

## EXIT SLIP



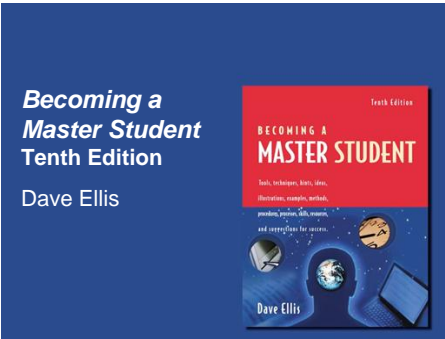
One very important thing I learned from this lesson on the Muscle Study Strategy was...

The most helpful activity for me in this lesson was...

Something I still don't understand about the Muscle Study Strategy is...

Other study strategies I'd like to learn about might include...

Slide 1



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Slide 2

### Muscle Reading

- Decrease effort and struggle
- Increase energy and skill
- Spend less time on your reading and get more out of it

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Slide 3

### How Muscle Reading Works

3 Phases

Before  
you read...

While  
you read...

After  
you read...

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## Slide 4

How Muscle Reading Works

Before you read...

- Preview
- Outline
- Question

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## Slide 5

Phase One: Before You Read

- Step 1: Preview
  - Survey the entire assignment
  - Look at table of contents
  - Flip through the pages of the text
  - Keep preview short
  - Read summary statements

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## Slide 6

Phase One: Before You Read

- Step 1: Preview (*continued*)
  - Read chapter headings
  - Look for familiar concepts
  - Inspect drawings, charts, tables, and photographs

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Slide 7

Phase One: Before You Read

- Step 2: Outline
  - Study textbook chapter outlines or sketch your own
  - Section titles/headings can serve as major/minor topics
  - Outlining time will vary

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Slide 8

Phase One: Before You Read

- Step 2: Outline
  - Sample outline

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Chapter Title

I. Major topic

- A.Minor topic
- B.Minor topic

II. Major topic

- A.Minor topic
- B.Minor topic
- C.Minor topic

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Slide 9

Phase One: Before You Read

- Step 3: Question
  - Ask what you want from the assignment
  - Write down a list of questions
  - Turn chapter headings into questions
  - Make questions playful and creative

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## Slide 10

### How Muscle Reading Works

- Before you read...
  - Preview
  - Outline
  - Question



- Read
- Underline
- Answer

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## Slide 11

### Phase Two: While You Read

- Step 4: Read
  - Reflect on what you already know
  - Be here now!
  - Avoid marathon reading sessions
  - Set shorter goals for difficult reading

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## Slide 12

### Phase Two: While You Read

- Step 4: Read
  - Stay focused
    - Visualize the material
    - Read it out loud
    - Get a "feel" for the subject
    - Remember your questions

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Slide 13

Phase Two: While You Read

- Step 5: Underline
  - Deface your books
  - Create signals for reviewing
  - Avoid underlining too soon
  - Underline less than 10% of the text
  - Write in the margins

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Slide 14

Phase Two: While You Read

- Step 6: Answer
  - Write down the answers to your questions
  - Fill in your outline
  - Write new questions to ask your instructor in class
  - Be a detective

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Slide 15

How Muscle Reading Works

Before you read...

Preview

Outline

Question

While you read...

Read

Underline

Answer

After you read

Recite

Review

Review again

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## Slide 16

### Phase Three: After You Read

- Step 7: Recite
  - Talk about what you have just read, to yourself or someone else
  - Test your recall of underlined information
  - Tell friends and family about your learning whenever you can

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## Slide 17

### Phase Three: After You Read

- Step 8: Review
  - Review within **24 hours**
  - Use your notes to fill in missing pieces
  - Recite main points again
  - This review can be short

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## Slide 18

### Phase Three: After You Read

- Step 9: Review again
  - Review weekly or monthly
  - Look over your notes
  - Read highlighted parts of your text
  - Recite complicated points
  - Be prepared and you can review anytime, anywhere
  - Consider re-reading difficult material

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## Slide 19

### Remembering the 9 Steps

- Phase One: Before you read  
Pry out questions
- Phase Two: While you read  
Root up answers
- Phase Three: After you read  
Recite, review, and review again

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