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Division of Teaching & Learning
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Assignment & Exam Wrappers

"All too often when students receive back a graded exam, they focus on a single feature - the score they earned. Although this focus on 'the grade' is understandable, it can lead students to miss out on several learning opportunities that such an assessment can provide." (Ambrose, et al, 2010)

Metacognition, according to Dr. Peter Arthur, "is thinking about one's own thinking, and refers to the ability to reflect upon, understand, manipulate, and regulate how one is thinking during learning" (Arthur, 2017). Metacognitive practices have been shown to **promote student learning**: by identifying their strengths and weaknesses and then figuring out how to improve upon them, students who perform metacognitive practices are more likely to positively alter, monitor, and assess their learning strategies for future assignments and exams (Bransford, Brown, & Cocking, 2000; Tanner, 2012; Lovett, 2013).

Assignment or exam wrappers are metacognitive exercises that encourage student reflection on study habits and the learning process. A wrapper is a short form that students may complete prior to, in conjunction with, or after an assignment that focuses on *how* the student prepared for the assignment or examination rather than the content. Wrappers contain a set of guided questions that encourage students to reflect on how they could improve their studying and exam taking in the future.

Apart from fostering metacognition, wrappers provide professors with **data on the study habits of top-performing students**, data that can then be shared with the rest of the class. This data is useful for teaching students how to prepare for future assignments and exams.

To be **effective**, wrappers should be:

—Short enough to fill out rather quickly
—Non-graded
—Focused on the skills and habits the instructor wants to emphasize
—Explained to the students (e.g., "Expert learners assess assignment demands; evaluate their own knowledge/skills; plan approach; monitor one's progress; adjust strategies as needed; reflect on graded assignment; and adjust strategies for the next assignment. The following activity will assist

you with developing your metacognitive skills and becoming an expert learner.")
—Reported back to the students (e.g., "Students who received high marks studied 10 hours on average and re-read the text 2-3 times.")

Some examples are contained below.

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Physics Post-Exam Reflection[1]

Name: _____

As with the first exam, this activity is designed to give you a chance to reflect on your exam performance and, more importantly, on the effectiveness of your exam preparation. Again, please answer the questions sincerely. Your responses will be collected to inform the instructional team; they will have no impact on your grade.

1. Approximately how much time did you spend preparing for this exam? _____

2. What percentage of your test-preparation time was spent in each of these activities?
a. Reading textbook section(s) for the first time _____
b. Re-reading textbook section(s) _____
c. Reviewing homework solutions _____
d. Solving problems for practice _____
e. Reviewing your own notes _____
f. Reviewing materials from blackboard _____ (What materials? _____)
g. Other _____ (Please specify: _____)

3. What aspect(s) of your preparation for this exam seemed different from your exam 1 preparation? Did these changes have any effect?

4. Now that you have looked over your graded exam, estimate the percentage of points you lost due to each of the following (make sure the percentages add up to 100):
a. Trouble with vectors and vector notation _____
b. Algebra or arithmetic errors _____
c. Problem with force-body diagram _____
d. Lack of understanding of the concept _____
e. Not knowing how to approach the problem _____
f. Careless mistakes _____
g. Other _____ (Please specify: _____)

5. Students sometimes have difficulty drawing appropriate force-body diagrams and applying Newton's second law appropriately. Was either of these a difficulty for you (check question 2 on the exam)? If so, try to self-assess your understanding: Identify what aspect of these skills are causing you difficulty and what you can do to improve your ability to solve problems using these skills.

PLEASE CONTINUE ON THE BACK ON ANY QUESTION WHERE YOU NEED MORE ROOM.

[1] Eberly Center for Teaching Excellence:
https://www.cmu.edu/teaching/designteach/teach/examwrappers/examwrappers-docs/PhysicsExamWrapper.pdf

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Chemistry Self-Assessment & Reflection: Exam #1[2]

Name: _____

DUE: At the next class meeting, hand in this completed form at the beginning of lecture. This form will help you to analyze your exam performance and find strategies that work best for you in learning the material for this course. Self-assessing your progress and adjusting your study strategies accordingly is what effective learners tend to do. Please answer the questions below sincerely. Your responses will have no impact on your grade, but they will inform the instructional team about how we can best support your learning. We will return your completed form before the second exam so that you can use your own responses to guide your approach to studying next time.

1. Approximately how much time did you spend preparing for this exam? _____

2. What percentage of your test-preparation time was spent in each of these activities?
a. Skimming textbook chapters _____
b. Reading textbook chapters thoroughly _____
c. Reviewing your own notes _____
d. Working on practice exam questions
e. Reviewing materials from blackboard
f. Other _____ (Please specify: _____)

3. As you look over your graded exam, analyze where/how you lost points. Fill in the blanks below with the number of points you lost due to each of the following:
a. Trouble applying definitions _____
b. Trouble remembering structures _____
c. Lack of understanding of a concept _____
d. Not knowing how to begin a problem _____
e. Careless mistakes _____
f. Other _____ (Please specify: _____)

4. Based on your responses to the questions above, name 3 things you plan to do differently in preparing for the next exam. For instance, will you just spend more time, change a specific study habit (if so, name it), try to sharpen some other skill (if so, name it), use other resources more, or something else?

5. What can we do to help support your learning and your preparation for the next exam?

PLEASE CONTINUE ON THE BACK ON ANY QUESTION WHERE YOU NEED MORE ROOM

[2] Eberly Center for Teaching Excellence: https://www.cmu.edu/teaching/designteach/teach/examwrappers/examwrappers-docs/chemexamwrapper.pdf

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STUDY STRATEGIES SELF-EVALUATION[3]

The goal of Learning Assistance is to help you learn to "Study Smarter, Not Longer." Examine your current study strategies for one of your classes and evaluate them on a scale of 1 to 5, with 1 being "Hardly ever," to 5 being "Almost always."

PRIOR TO CLASS:

Survey the chapter. I read titles, headings, first and last paragraphs, pictures, charts, diagrams, summaries, key words, and end-of-unit questions. (2-3 min/10 pages).	1	2	3	4	5
Question: I think of questions from your survey; e.g. change headings into questions, look for cause and effect relationships, vocabulary meanings and examples.	1	2	3	4	5
Read: I read quickly to get the main ideas and find answers to my questions.	1	2	3	4	5
Recite: I ask myself "What have I read?" and answer out loud.	1	2	3	4	5

DURING CLASS:

Listen: I listen for "the story".	1	2	3	4	5
Sit: I sit where I can make eye contact with instructor, hear easily and see visual aids.	1	2	3	4	5
I **ask questions** during class.	1	2	3	4	5
My notes are well **organized**.	1	2	3	4	5

AS SOON AS POSSIBLE AFTER CLASS:

Edit: Asap after class, I edit my lecture notes.	1	2	3	4	5
• I write a ***summary*** of the lecture.	1	2	3	4	5
• I develop ***recall (cue) questions.***	1	2	3	4	5
• I check for ***completeness*** and ***fill in gaps*** by using ***text***.	1	2	3	4	5
• I check for ***accuracy.***	1	2	3	4	5
• I check to see if understand the ***meaning*** of the material.	1	2	3	4	5

[3] Loyola University Chicago: http://luc.edu/advising/academic_success_tools.shtml#time

• I ***improve the organization***; e.g. underline, add headings, or as a last resort, re-write my notes	1	2	3	4	5
• I write a ***summary*** of the lecture.	1	2	3	4	5

WEEKLY:

Review: I review all notes for class at least once a week.	1	2	3	4	5
• I ***recite*** questions and answers from my ***recall column***.	1	2	3	4	5
• I ***reflect*** on the relationship of the material to previous material.	1	2	3	4	5
• I ***test*** myself on the material using the text, CD, or website.	1	2	3	4	5
• I ***seek help*** from instructor, tutor, or classmate if I don't understand the material.	1	2	3	4	5

PREPARING FOR EXAM:

I start preparing at least **5 days** before the exam.	1	2	3	4	5
I **rehearse** the material using all of all of the above, and	1	2	3	4	5
• I **create** summary study sheets, concept maps or word cards.	1	2	3	4	5
• I form a **study group**.	1	2	3	4	5
• I **predict questions** that may be on the exam.	1	2	3	4	5
• I check my understanding by **telling the story** of all the figures in the book.	1	2	3	4	5

Now describe what you believe are the strengths and weaknesses of your study strategies. What three specific improvements would you like to make?

Strengths:

_____

_____

_____

Weaknesses:

_____

_____

_____

Improvements:

1. _____

2. _____
3. _____

Resources

Academic Advising and Support Services, Loyola University Chicago: http://luc.edu/advising/academic_success_tools.shtml#time

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