COGNITIVE "EXAM WRAPPER" TEMPLATE

What is an exam wrapper?

Exam wrappers is an assignment. Also called test or assignment wrappers, these are brief, low-stakes assignments for students to submit after a test. It helps them review the test in the context of their learning and study own habits. In conjunction, this assignment can be used by you, as the instructor, to point out to students what are the *best practices* in your discipline and according to learning sciences for student academic success in your course.

"Wrappers" ask students to self-reflect and are an extremely important part of learning. Assigning these is one of the top evidence-based strategies you can adopt in your teaching because it encourages student metacognition and growth as they analyze their test strategies and work to improve. Adapt the template as you see fit and use them for other types of assignments as helpful. You can also assign a version of the wrapper pre-test as well as post-test by asking students what they plan to do to prepare for a test. See examples of the exam wrapper format below.

Review with students

Once you review the submitted wrappers, you can create an overview for students to show trends in the class and how student practices align with grades. This practice of reporting back also helps students understand where they are at in relation to their peers as well as in relation to what you, as the expert, advise.

Low points just to encourage completion

Remember that these wrappers are not worth many points (treat them as a homework assignment) but emphasize the value of doing the assignment as greater than the simple point value. Assess on

completion and on completeness, not on the content of student answers. Just remember, keep any discussion with students on their study habits neutral and non-judgmental of as people (just critique a study or test-taking practice's efficacy for the student) and avoid "shaming" any students by emphasizing positive practices that they can adopt.

Create your own wrapper

To create a wrapper, you can edit the one below, using this structure:

A. begin with a rationale,
B. follow with reflective, analysis questions,
C. end with questions and prompts designed to help students improve.

As the instructor, state the rationale or learning goals for the exam, such as:

> This exam was designed to help you/give you practice to improve your… (recall of information; ability to explain processes, ability to describe events etc.).

In this rationale you can use Bloom's taxonomy of verbs to describe what you wanted from students on the test. [To check on how you construct your exam, you can create a test blueprint using the OTEI guide in assessment resources.] Build in these learning statements in your tests and restate in these wrappers.

This exam wrapper can be given to students on paper or electronically, so that they upload their answers. It can also be given as a survey.

Sample language for the rationale

This first exam was designed to help you recall correctly and explain information from chapters 1 and 2. This "wrapper" assignment will help you evaluate your own preparation and performance for this exam and allow you to adjust your study for the next test. Your responses are solely to help you improve and are not graded—you simply get credit for completion. However, thoughtful, honest answers are useful to you and an important part of self-examination and mental growth. This also helps me suggest strategies for you to use with learning this material.

Sample questions

Read over your graded exam then answer the following questions:

1. How much time did you spend preparing for this exam? Total:

2. When and where did you do this preparation? Describe:

3. What did you do during your preparation time? Describe:

4. What answers did you do best on? Why?

5. What kinds of mistakes did you make on the exam?   Estimate the points you lost due to:

- Trouble understanding a concept (or list specific concepts)   ___
- Trouble remembering lines/formulas/structures   ___
- Trouble with definitions   ___
- Trouble with technique   ___
- Not concentrating/focused enough   ___
- Careless mistakes   ___
- Lack of preparation ___
- Not being able to formulate an approach to the problem   ___
- Arithmetic/grammatical errors   ___
- Unclear expectations   ___
- Reviewed the wrong material   ___
- Not practicing enough   ___
- Anxiety (and specifically over what?)   ___

Questions to help students reflect

6. What study /practice strategy did you use and what worked best and/or worst?

7. What aspect(s) of your preparation for this exam seemed or were different from your other exam preparations? Did these changes have any effect?

8. Name at least three things you will do differently next time in preparing. Be specific. For example, will you spend more time, start your preparation earlier, change a specific study habit, try a new one (if so, try to name it), sharpen some other skill (if so, name it), participate in more review opportunities or something else?

Adapted from: José Antonio Bowen's webpage on the concept and process:
http://teachingnaked.com/cognitive-wrappers-using-metacognition-and-reflection-to-improve-learning/.
See http://teachingnaked.com

The Eberly Center at Carnegie Mellon University has exam wrapper examples for math, biology, physics, and chemistry: https://www.cmu.edu/teaching/designteach/teach/examwrappers/

References

Marsha C. Lovett, (2013), "Make exams worth more than grades: Using exam wrappers to promote metacognition" in *Using reflection and metacognition to improve student learning*, Kaplan, m, Silver, N, Lavaque-Manty, D., Meizlish, D., ed. San Francisco: Sterling, VA: Stylus
(with more math and science templates at www.learningwrappers.org)

Mary-Ann Winkelmes (2013), "Transparency in teaching: Faculty share data and improve students' learning" Liberal Education 99/2 (Spring 2013), 48-55.

Illinois Initiative on Transparency in Learning and Teaching, for http://go.illinois.edu/transparentmethods

Brown, P. C., Roediger, H. L. & McDaniel, M. A (2014) *Make it Stick: The Science of Successful Learning.* Belknap Press.