Activity

Dual Survey Exam Wrappers

Educator: Natalie Bjorge – Faculty, Physical Sciences Context: out of class; General Chemistry Keywords: exam wrapper, study skills Student Activity Time: 15-20 minutes

After a chemistry exam, an educator offered students a chance to earn points on their exam by completing a 2-part exam wrapper.

Introducing the Reflection Activity

The way and amount of time that students spend preparing for exams varies greatly and often is directly correlated to their exam performance. One educator used two time opportunities to prompt students to reflect on their exam performance and make their own correlations and realizations about the link to their exam performance in order to prepare for future exams. The purpose of this activity was to prompt students to reflect on their exam preparation and make reasonable inferences about how preparation is linked to performance.

After students completed their regularly scheduled exam, the educator used the course management tool to send students a brief survey about their exam preparation. The questions were:

- 1. How frequently did you do the online homework?
- 2. How frequently did you go to the tutoring center?
- 3. How frequently did you study in a group?
- 4. How frequently did you read the sections in the book before class?

Once the educator graded and returned the students' exams, another survey was posted to the course management tool. The questions were:

- 1. The score I expected to earn on the exam before taking the exam was:
- 2. I did not earn the maximum points on the exam because I made careless mistakes. (6-point Likert scale)
- 3. I did not earn the maximum points on the exam because I did not understand the concept. (6-point Likert scale)
- 4. How could your instructor help you improve your performance on the next exam?

After students completed the second portion of the exam wrapper, the educator analyzed and created a report to share with students in class. In the next class meeting, the educator discussed the responses to both surveys with the students. As a result of the activity, students became more aware of the impact of various forms of preparation for exams on exam performance. Students were then prepared to do much better in their preparation and performance on subsequent exams.

Recreating the Reflection Activity

	Description
1	Administer the regularly scheduled course exam.
2	Post the first exam wrapper to the course management website.
3	Grade and return the exam.
4	Post the second exam wrapper to the course management website.
5	Facilitate a class discussion about the exam, preparation, and how their preparation is connected to their performance.
6	Administer the regularly scheduled course exam.

In the words of the Educator: Tips and Inspiration

On the first survey, ask very concrete questions. On the second survey ask why. The first survey is very specifically focused on what exactly they did—there is an answer. It makes the questions quick to answer and it's only about facts. For the second survey, I think that's where the activity becomes reflective. Most of the questions in the second survey focus on why and helps them identify changes to make in the future.

Use an even number of Likert questions. I either use 4 or 6 for the Likert questions so that students have to pick one answer. There's not a middle ground so they either do a certain thing or they don't. Those who did well did most of the items on the list regularly, and those who did not do as well didn't do most of the activities I listed. As someone coming from Chemistry, I probably wouldn't put a line through it, but generally those who did all of the kinds of studying regularly did well and those who did not, didn't do well on the exam. It also makes the responses very straightforward when I return the answers.

What was the inspiration for the reflection activity? Some of this came from the original things I was doing with journals in chemistry. I was already adding different components to the course to get students to think about what they were doing, how they were preparing, and what they were learning. The first time I did this, it was spur-of the moment and on the day of the exam. I was mostly curious, so I typed it up and added it to the exam. As I started talking to more people I found out that exam wrappers were a thing and there was a term for it. I talked to several faculty here and got some ideas and feedback from them. It really morphed into this version of an exam wrapper.