

Notecards: Reflecting on Quiz Preparedness and Performance

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Context: In-class; Statics, Mechanics of Materials

Keywords: study skills, quizzes

Student Activity Time: 3-5 minutes in class

After receiving their graded quiz back, students reflected on their study process and understanding of the course material.

Introducing the Reflection Activity

As an integral part of a sophomore level Statics and Mechanics of Materials courses, students took weekly quizzes that were based on the previous week's homework. After students received their graded quiz and the instructor debriefed the class about the quiz statistics, students reflected on their study process and understanding of the course material. The purpose of this reflection activity was to incentivize students in completing their own homework by asking them to reflect on what they did over the last week with respect to learning the course content.

After engaging in weekly homework problems, students took a weekly quiz related to homework topics. When students received their graded quiz back, the educator displayed the grade statistics on the board and engaged the class in a conversation about the grade statistics. Then the educator invited students to anonymously respond to one of these questions on notecards:

1. If you did well on the quiz, what are a couple of things you did well to prepare for the quiz?
2. If there is room for improvement on your quiz, what are a couple of things you could improve in preparing for the quiz?

After students submitted these anonymous notecard responses, the educator read these responses and shared highlights back with students as an opportunity for students' responses to be validated and for students to learn strategies from one another.

In terms of outcomes, from this reflection activity students may actually engage in doing their own homework instead of simply finding the problem solutions on the Internet. Second, students may think about their preparedness for this course and actually change their behavior for the remainder of the course. Finally, such behavior change may influence how students engage in future learning experiences.

Recreating the Reflection Activity

	Description
1	Engage students in weekly quizzes about content related to their homework.
2	Grade the quizzes.
3	Hand back quizzes, display grade statistics on the board, and discuss the grade statistics.
4	Ask students to write 1-2 things they either did well to prepare for the quiz or 1-2 things they would do differently to prepare for the quiz.
5	Collect and read notecard responses.
6	Engage students in a short, summary discussion of notecard responses.

In the words of the Educator: Tips and Inspiration

Think about other ways to incorporate reflection into already implemented reflection activities. Another way to support reflection is to place follow up questions on the next quiz that focus on common problems or misconceptions from the previous quiz.

What was the inspiration for the reflection activity? In previous offerings of the course, I structured the course with three exams and a cumulative final exam. However, I had become concerned about students not actually doing their own homework. I thought there must be better ways to support students in truly engaging with and learning the course content. The weekly quiz and a final exam format provide an opportunity to continuously check-in with students about their learning. The notecard reflections ask students to actually think about their learning and examine their own engagement in learning the course content.

A few things inspired this reflection activity—my concern with students using Internet homework solutions and my participation in a workshop facilitated by Karl Smith that emphasized the importance of more frequent assessment.