

White Papers in Math

Educator: Debby Casson, Faculty, Mathematics

Context: In-class; Pre-calculus

Keywords: written reflection, mathematics, educator feedback

Student Activity Time: 10 minutes

After the first exam, students complete a white paper to reflect on three prompts given by the educator.

Introducing the Reflection Activity

Thinking about the course content and the format of teaching can be a valuable exercise for both students and educators. In a mathematics course, an educator facilitated a white paper activity after returning the first exam. The purpose of this activity was for students to anonymously verbalize their feedback about the course so that the educator can inform adjustments that will support student success.

The educator returned the first graded exam in the course as scheduled. In a subsequent class session, the educator paused in the middle of the class to conduct the white paper reflection activity. The educator asked students to anonymously respond to three questions about the course on a plain sheet of paper.

The three prompts (written on the board) were:

1. What is working for you in this course? Possible topics include: lectures, PowerPoints, homework on course tool, general teaching, and any other topic relevant to the class.
2. What is not working for you in this course? What would you like for the instructor to change?
3. If you are not getting the grade that you want, what can you change in order to get the grade you want?

After the educator gave students 5-10 minutes to complete the white paper, had students turn them in face down, and continued with the remainder of class. After class, the educator read and grouped the students' responses then responded to the comments in the next class meeting with how the students' feedback would be used in the remainder of the course.

Recreating the Reflection Activity

	Description
1	Administer, grade, and return the first class exam.
2	Wait until the next class session and ask students to take out a sheet of paper and respond to the verbal prompts.
3	Collect and analyze students' responses.
4	Respond to student comments in the next class session.

In the words of the Educator: Tips and Inspiration

Don't do this if you aren't planning to make a change. There's always stuff that can be changed and the best people to critique me are the students who are there every day. They know what is working for them and what isn't. I always respond to it the next day and I intersperse their feedback in the class. When the feedback comes in split about a particular aspect of the course, I make sure that I address it both ways to maintain a balance. If it's a really interesting suggestion, I'll read it verbatim and answer in class. Sometimes doing the white paper motivates me too. One student wrote specifically about other students talking in class, and I addressed it during the next class session by reminding students to be quiet and told them that I would look their way if they were talking and being a distraction to others.

Timing of the activity matters. I do this after the first exam because that's enough time for students to get the rhythm and cadence of the class. On the day that I give the assignment, I ask students to respond in the middle of class. At the beginning of class it feels too structured, and sometimes people are late so it becomes more formal. At the end of class, people are in a hurry to get to their next class and at the end they just aren't going to give you anything very thoughtful.

What was the inspiration for the reflection activity? I got this idea from a colleague and one of the motivators was being proactive on student feedback. We rely a lot on student end of course evaluations about the course in general, but getting the feedback early gives me a chance to make changes to support their learning. It was a surprise how much better the class goes, and the final evaluations are generally better because I took the time to get their feedback along the way. Students have really good ideas that can be implemented and it's just a matter of asking them in time to do something about it. When I first started doing the white papers, it was much more formal in that I gave them a handout and have the students complete it at the beginning of the class. This is much more easy-going and I feel like I get better feedback in this format.