

# Ensure Students Are Learning: Faculty Descriptions of Innovative Teaching Practices

## Differentiation: Meeting the Needs of Different Learning Styles

### Innovative Teaching Practice Description:

“Differentiation” in the classroom requires that the instructor adapt teaching techniques and lessons to the learning style of each student. This may be especially helpful for community college classes where students are diverse in their experiences and educational backgrounds. This may not be possible in larger classes, but the practice works well in classes of up to 10 students.

Two of the most important aspects of differentiation are feedback and revision. When students submit any assignment, the instructor provides written feedback to students and allows them the opportunity to correct their errors before submitting the assignment again. Students are permitted to revise their work up to two times and receive their official grade on the final version of the assignment. For major assignments such as mid-terms, the instructor meets with students one-on-one to discuss errors and works to identify different ways to convey the information to students that may be more helpful. This feedback can look vastly different for each student, but it can include things like online tutorials, more practice problems, more examples, reviewing homework with a partner, or whatever method the student and instructor agree upon.

One of the most popular methods of feedback and revision is partner or group revisions, during which students discuss their assignments with one another,

help each other identify errors, and then come up with ways to fix them. Depending on the number of students who feel comfortable with a particular math concept, students will either work with partners or in a group. If at least half of the class has a firm grasp of the concept, students will work in pairs (one student with a stronger grasp than the other). If only a few students have a firm grasp of the concept, then the instructor will break them into groups where one student serves as a helper for the group. If there are one or two students who demonstrate an especially strong grasp of a topic (as demonstrated through their grades on a homework assignment), the instructor will ask the student to teach the topic to the class. Students do this by working through problems on the board and providing a step-by-step explanation about their approach to solving the problem. Because of the individualized nature of this practice, it is difficult to outline a specific type of teaching style or intervention that is the most effective. The one aspect that is consistent is that no matter what approach is used, students receive positive affirmation along the way and are consistently praised for their effort and learning.

Another central component of differentiation is to bring fun into the classroom in various ways. For example, on each quiz or test, the instructor offers an opportunity to earn extra points by including fun, off-topic questions. The instructor might ask: “What is the name of the school mascot?” or “Who is your favorite teacher?” The instructor also brings a little fun into the

homework by including students' names in the word problems. When the instructor drafts word problems on homework assignments, she makes it a point to use each student's name at least once. To break up the monotony of working through consecutive problems in class, the instructor will call for a break and ask students random questions that open the floor to a brief, fun, and off-topic conversation. For example, she may ask: "Will I be seeing any of you at Fall Fest this year?"

### How to Ensure Participation in This Innovative Teaching Practice:

The instructor makes it a point to call on each student during every class. Even if the student does not know the correct answer, the instructor asks the student to try. When there are not enough practice problems to call on each student, the instructor will still ask each student a question even if it is: "What did you think was the easiest/ hardest part of the problem?"

### Notes From the Instructor About This Innovative Teaching Practice:

"Teachers need to adapt to student learning; students should not need to adapt to the teacher."