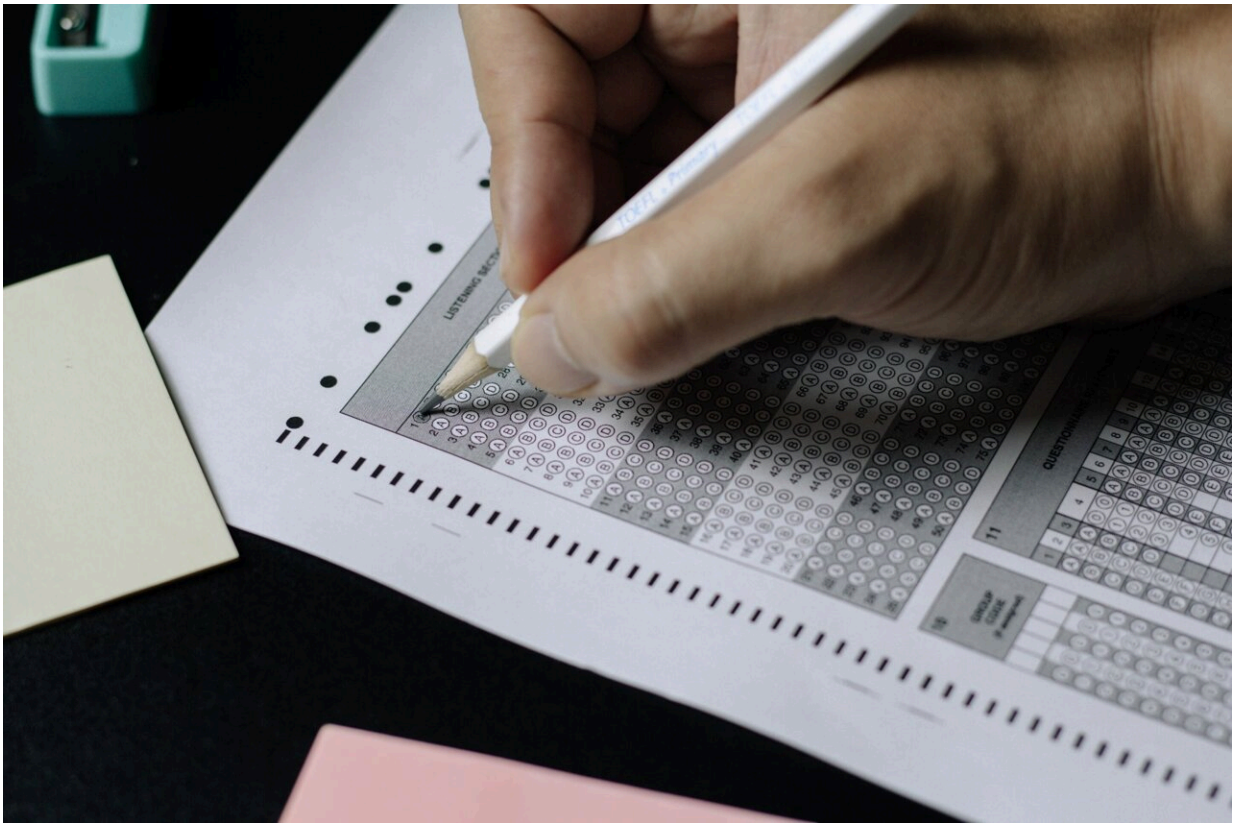


# Giving students frequent quizzes may help bridge achievement gap in physiology

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Frequent small stakes assessments may help marginalized students bridge an achievement gap in physiology education, according to research that will be presented this week at the American Physiological Society (APS)

[Institute on Teaching and Learning](#) in Madison, Wisconsin.

Small stakes assessments, sometimes also called low stakes assessments, are ways to evaluate student progress that do not have a large impact on final grades or outcomes. Quizzes, practice exams and other quick-response activities are types of small stakes assessments. Physiology educator-researchers from the University of Minnesota previously found that small stakes assessments contributed to improved [test scores](#) in a basic physiology class. In a new study, the research team looked at achievement gaps in a principles of physiology course relative to overall grade point average (GPA) in physiology majors over three years.

The educator-researchers examined identifying factors of the [students](#), including:

- race;
- gender;
- first-generation status (whether the student was the first in their family to go to college);
- class (sophomore, junior or senior); and
- indicated financial need.

Enrollment in the principles of physiology course tends to be predominantly [white women](#) who are first-generation college students. The nonwhite students enrolled in the course tended to be the ones who underperformed, with grades below 70%. However, small stakes assessments helped reduce the number of students who earned [lower grades](#) in the course. In addition, the nonwhite group's semester GPAs were between 3.0 and 3.5 on a 4.0 scale, which confirms that frequent testing opportunities helped bridge this [achievement gap](#).

"The female, nonwhite, first-generation [students] tended to have lower final scores initially, but they improved year over year," said first author

Steven C. Wu, Ph.D. "Giving students more opportunities to earn points helps narrow gaps and reduce deficiencies in [academic performance](#) and knowledge of physiology. However, there is still much to do for those that are underperforming relative to their GPA."

Provided by American Physiological Society

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