

CUSTOMER STORY

Top Hat Was Essential to Student Success in This Massive Class

10

Minute intervals between Top Hat learning checks

\$140

Savings to students after switching to Top Hat textbook

3.4%

Decrease in DFWs with transition to Top Hat end-to-end course



THE CHALLENGE

Professor Ricardo Nogueira was having trouble with student engagement in his large class

The senior lecturer in Geosciences at Georgia State University (GSU) was responsible for teaching massive classes of non-science majors, including Introduction to Weather and Climate with an enrollment of upwards of 500 students. "In classes that big, it's easy for students to get distracted," he said. "They can sit at the back, talk to their friends or just be on their phones." Grade distribution was too heavy on the low end and the professor knew he needed to make class more interactive to get students performing better.

Nogueira first introduced iClicker in an attempt to improve student engagement, but encountered some issues: students chronically forgetting the clickers, bringing their friends' clickers—resulting in cheating and grade inflation—and, ultimately, students remaining distracted by their smartphones and laptops.

The breakthrough for Nogueira came when he asked successful students how they did well in class: "To my surprise, they just said: 'I pay attention.'" He started using Top Hat in order to get all students as engaged as his most successful ones.

SCHOOL BACKGROUND

Founded in 1785, Georgia State University (GSU) is one of the oldest public research institutions in the United States. Although centrally located in Atlanta, Georgia, the university spans across seven campuses with more than 51,000 students enrolled annually.

ABOUT THE PROFESSOR

Ricardo Nogueira is a Senior Lecturer in the Department of Geosciences at GSU. He oversees and teaches Introduction to Weather and Climate. Currently, he teaches more than 500 students in the fall and winter semesters. With such large classes—and with the majority of students as non-science majors—Nogueira needs to be creative in his lectures in order to teach effectively and drive learner outcomes.



RICARDO NOGUEIRA

Senior Lecturer, Department of Geosciences, Georgia State University

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THE SOLUTION

Nogueira started using Top Hat for every part of his course—even authoring a textbook on the platform—in order to improve engagement in learning and student success

Nogueira's approach with Top Hat was to make information retention a priority in the classroom: every 4–6 slides (or, about every 5–10 minutes) he would pose questions to the class to ensure they were keeping up with the material.

"There's no curving in my class—students earn their grades," he said. "So the difference between a B- and an A is paying attention and answering the questions correctly." Nogueira used attendance in Top Hat to ensure students were showing up to class and the tournaments feature to let students compete with each other—and review the material at the same time—in a fun and engaging way. He also opted to use Top Hat to run secure tests and quizzes, streamlining the assessment process. "It cut down on a ton of paper, students could take the test in class using a secure code and they got their grades almost immediately," he said.

Finally, the professor used Top Hat to author an interactive textbook—*Weather, Climate and Beyond: An Introduction to Physical Geography*—in order to make his class content more relevant and to save his students much-needed money. "There are so many textbooks out there and I didn't want to reinvent the wheel," he said. "But when I realized I could customize the textbook to make it more specific to my classroom, I was able to make the textbook an extension of my lecture."



Ricardo Nogueira teaching using Top Hat

THE RESULTS

Student grades improved and Nogueira won an instructional innovation award at GSU

After using Top Hat, the grade distribution in Nogueira's class improved. He noticed that students who previously got Ds started getting Cs and students who had earned Cs started getting Bs. The drop, failure and withdrawal rate (DFW) also fell by over 3% once the whole course was facilitated on the Top Hat platform, from the time the professor began using digital tools. Nogueira's use of the Top Hat gradebook, which houses all student assessment and attendance data, and Top Hat's Weekly Course Report, which sends professors a summary of insights into student progress, helped him track and reach out to struggling students to ensure they got extra attention on material they were finding difficult to comprehend.

The textbook he authored through Top Hat was also a big hit: it helped align lecture material and course content more closely, *and* it saved his students \$140 compared to the previous textbook. In fact, his integrated use of Top Hat—for formative assessment in class and reading assignments at home—was so successful he was awarded a prestigious instructional innovation prize from GSU for embracing new technologies. "I thank Top Hat for doing a great job helping professors engage with their students faster and more easily," he said.

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