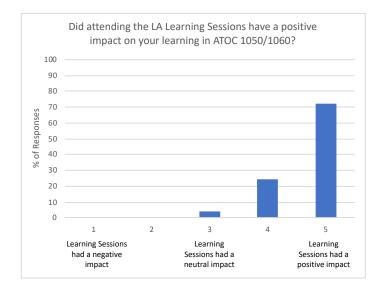
## Learning Assistants in ATOC

Learning Assistants (LAs) are undergraduate students who, through the guidance of weekly preparation sessions and a pedagogy course, facilitate discussions among groups of students in a variety of classroom settings that encourage active engagement. In ATOC, LAs facilitate learning in ATOC 1050 Introduction to Weather and the Atmosphere and ATOC 1060 Our Changing Environment. LAs contribute to these classes by leading active learning activities in lecture and by offering small group learning sessions that incorporate hands-on learning outside of lecture.

The ATOC LA Program is a successful program that was introduced in Fall 2012. Statistical analysis indicates that students who attend the LA-led learning sessions perform, on average, 5-7% higher on exams and final class grades than student who do not attend the LA-lead learning sessions. The results of a student reflection on the question, "Did attending the LA Learning Session have a positive impact on your learning in ATOC 1050/1060?" (shown in the figure below) indicate the use of LAs have a positive impact on student learning in these classes.



In addition to enhancing student learning, the LA Program provided opportunities for LAs to gain additional knowledge of the course content and experience leading small groups of students. ATOC LAs have reported that the experience of being an LAs has "given them the opportunity to deepen their understanding of material in ATOC 1050", "taught them public speaking, and a new sense of confidence relaying information to a larger group of people", and "pushed them to learn more and presented unique views on education."

The use of LAs in ATOC is a win-win-win. The students learn more, the LAs gain experience, and the teachers are able to incorporate additional teaching techniques in the classroom that would not be possible without the use of LAs in these large-lecture classes.