AULAP

AUBURN
Office of the Provost
Academic Assessment

AUBURN UNIVERSITY LEARNING ASSISTANT PROGRAM (AULAP) REVIEW
(SPRING 2023)

Overview

Auburn University Learning Assistant Program (AULAP) implemented the annual program assessment in spring 2023, with the primary goals to understand how our LA-supported classes in different disciplines utilized LAs and the relationship between the interactive time with LAs and student's satisfaction and sense of belongs in specific classes. In this research, the data was collected from 764 student responses in multiple large classes which were LA-supported, across 4 departments – Biology, Chemistry, Physics and Math/Statistics.

The discipline and class distributions of the student participants are shown in the Figure 1, with the following findings indicated by the data.

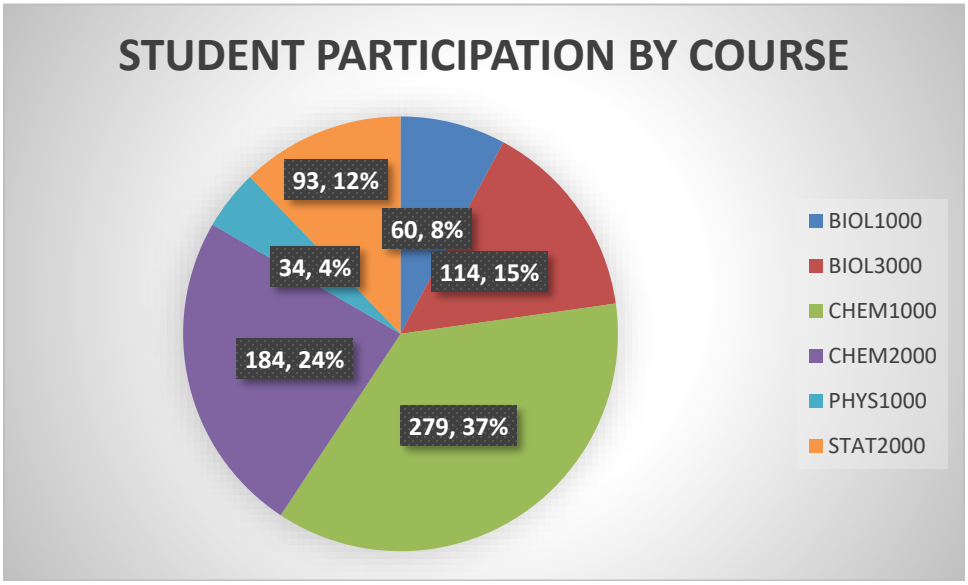

Figure 1. Distribution of student participants across various courses in the AULAP Assessment during the spring semester of 2023. The total number of participants is 764 (N = 764). Different colors represent different levels of classes across different disciplines, which had one or multiple classes participated.

(1) Importance of Interactive Time with LAs.

Students were asked to report how much time they interacted with LAs **In-Class** during the whole semester (in hours) and **Out-of-class** during the whole semester (in hours), respectively. Students also reported the average time they interacted with LAs per-class in minutes. The Table 1 below about the descriptive results show that students in BIOL1000 courses spent significantly more time with LAs than students enrolled in other courses ($F(df=5) = 26.36$, $p < .001$).

Table 1 Student's interactive time with LAs in-class and out-of-class in different levels of LA-supported courses.

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Course Level and Disciplines	N	In-class interaction during the whole semester (in hours)				Out-of-class interaction during the whole semester (in hours)				N	Average in-class interaction per class (in minutes)	N	Average interaction per week (in-and out-class in minutes)
		<5	5-10	10-15	>15	<1	1-5	5-10	>10				
BIOL1000-level	60	12%	10%	10%	68%	27%	25%	33%	15%	50	**33.00**	55	**85.00**
BIOL3000-level	110	76%	13%	6%	6%	36%	41%	18%	5%	95	**9.54**	98	**40.63**
CHEM1000-level	277	58%	19%	9%	14%	72%	22%	5%	2%	248	**12.61**	257	**30.49**
CHEM2000-level	181	50%	24%	8%	18%	66%	25%	7%	1%	155	**13.50**	158	**35.69**
PHYS1000-level	32	84%	6%	0%	9%	59%	25%	16%	0%	30	**7.67**	29	**19.97**
STAT2000-level	91	58%	18%	7%	18%	50%	46%	4%	0%	84	**12.64**	84	**32.82**

In-class data showed that more students in BIOL1000 courses spend more than 15 hours per semester in interacting with LAs in class; however, in the other courses, more students spent about less than 5 hours in interacting with LAs in class (Figure 2a). In addition, the average interactive time between LAs and students varied across different classes, with a range of 7 to 33 minutes per class (Figure 2b). Weekly average data, on the other hand, indicated that the average interactive time between LAs and students varied across different classes, with a range of 19 to 85 minutes per week (Figure 2c). This suggests that the extent of interaction between LAs and students differed based on the discipline and class. The variation in average interactive time with LAs across different classes suggests that the level of engagement between LAs and students is influenced by various factors. Identifying these factors can help inform strategies to optimize LA-student interactions, ensuring that students have adequate opportunities to benefit from their interactions with LAs.

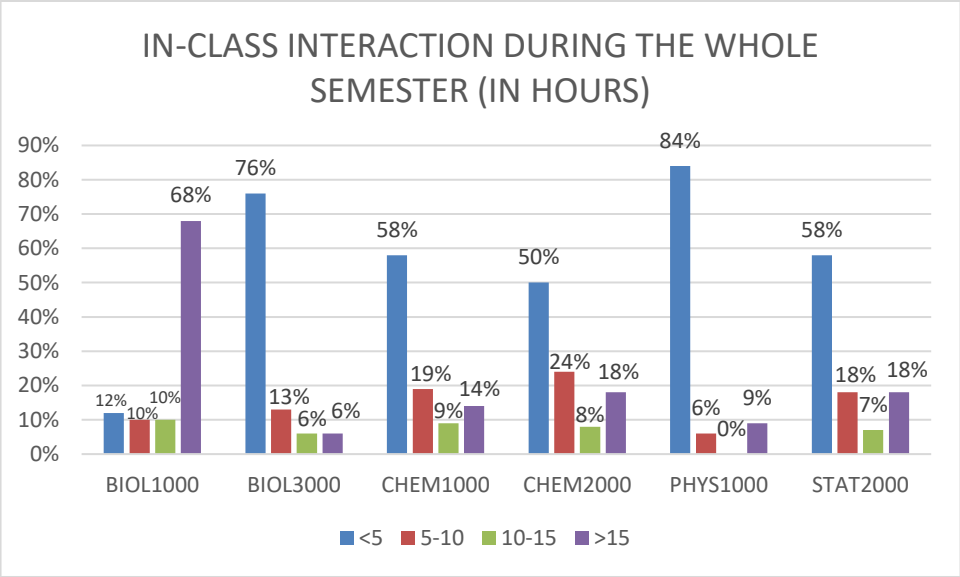

Figure 2a: In-class Interaction During the Whole Semester (in Hours)

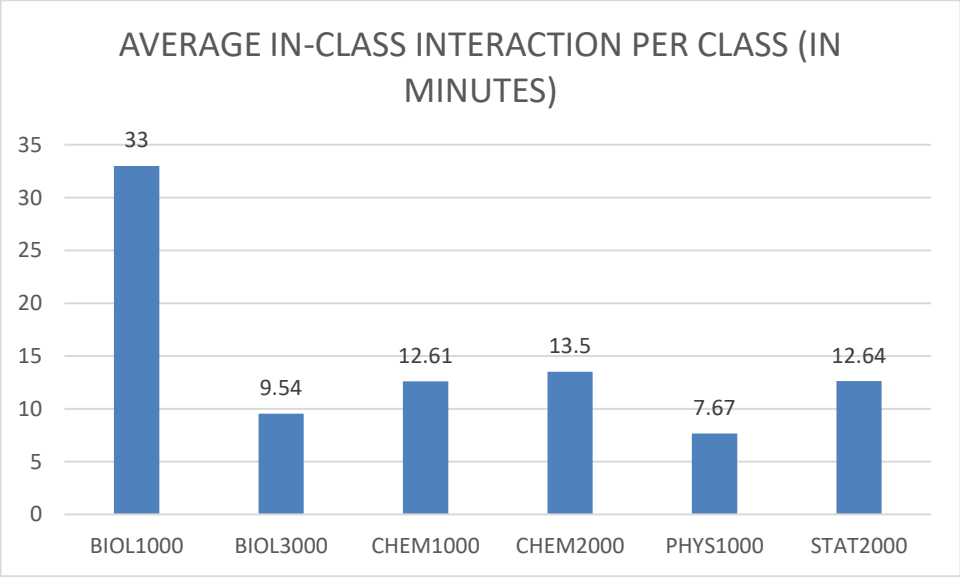

Figure 2b: Average In-class Interaction Per Class (in Minutes)

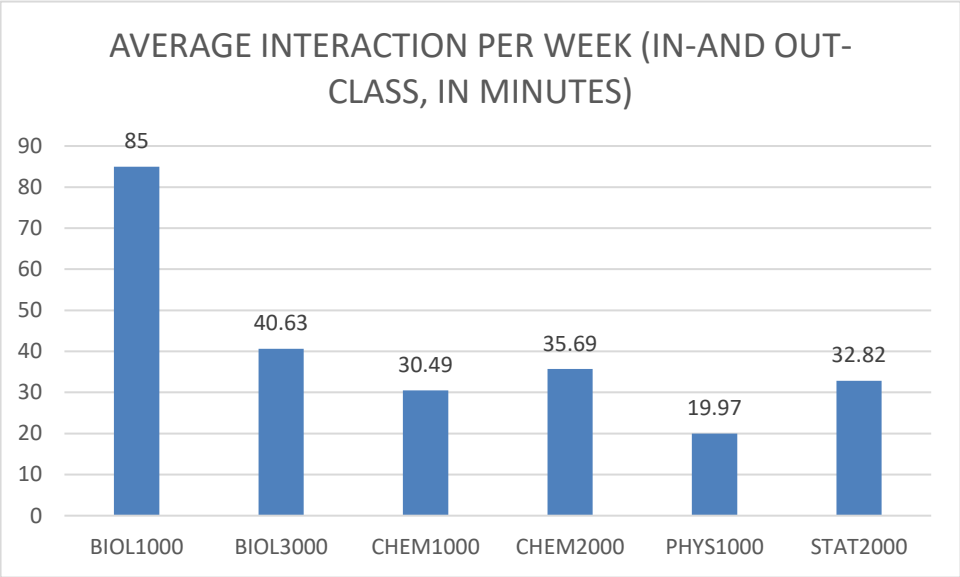

Figure 2c: Average Interaction Per Week (In-and Out-class, in Minutes)

From the data of out-of-class interaction (Figure 3), we found a significant portion of students reported spending several hours interacting with LAs outside of class highlights the value students place on these interactions. This suggests that LAs play a key role in supporting students beyond the classroom, contributing to their understanding of course material and overall learning experience. Encouraging and promoting effective out-of-class interactions with LAs can further enhance student outcomes. The LA instructor can leverage this as an opportunity to enhance out-of-class interactions. This can be achieved through structured study sessions led by LAs, virtual office hours, providing online resources and materials, or promoting effective communication channels between LAs and students.

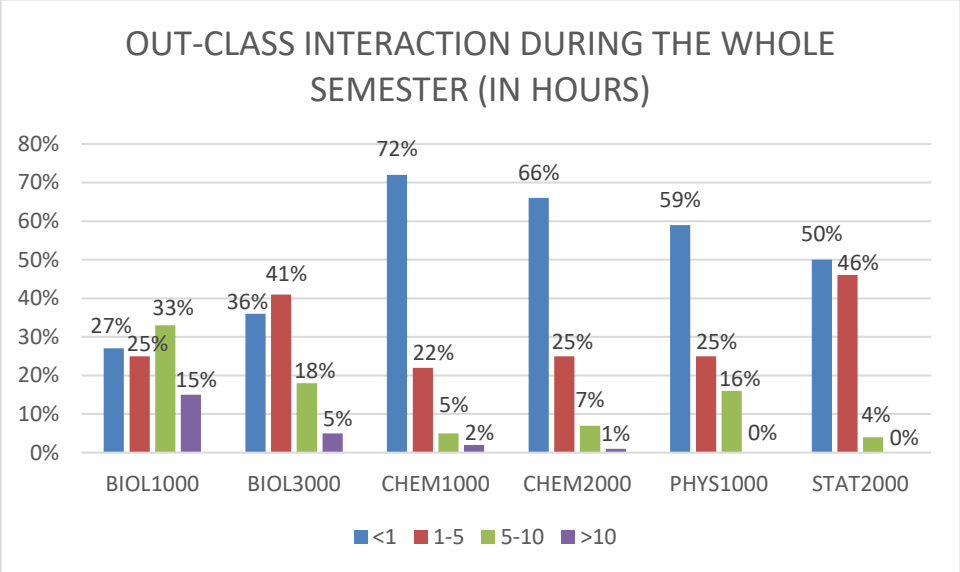

Figure 3: Out-of-class Interaction During the Whole Semester (in Hours). Except for BIOL1000 courses, a relatively large percentage (i.e., 36% in BIOL3000 courses, 72% in CHEM1000 courses, 59% in PHYS1000

courses and 50% in STAT2000 courses) of students enrolled in the other courses spent less time (i.e., <1 hour) interacting with LAs out of class. That is, most students reported that they either spent less than 1 hour or spent 1-5 hours in total in the out-of-class interaction with LAs during the whole semester. However, in BIOL 1000 classes, about 33% percent of students reported that they spent 5-10 hours interacting with LAs out-of-class during the whole semester, more than those who reported that they spent either less than 1 hour (27%) or about 1-5 hours (25%)

(2) STUDENT SATISFACTION and SENSE of BELONGING IN LA-SUPPORTED COURSES

Students were asked to report the extent to which they were satisfied with the LA-supported class and their sense of belonging to the class. Data shows that students' satisfaction to the BIOL1000 and BIOL3000 courses is relatively higher than the other course ($F(df=5) = 6.67$, $p < .001$). Furthermore, students enrolled in the PHYS1000 courses have lower levels of both satisfaction and sense of belonging than students enrolled in the other courses ($F(df=5) = 6.85$, $p < .001$) (Figure 4).

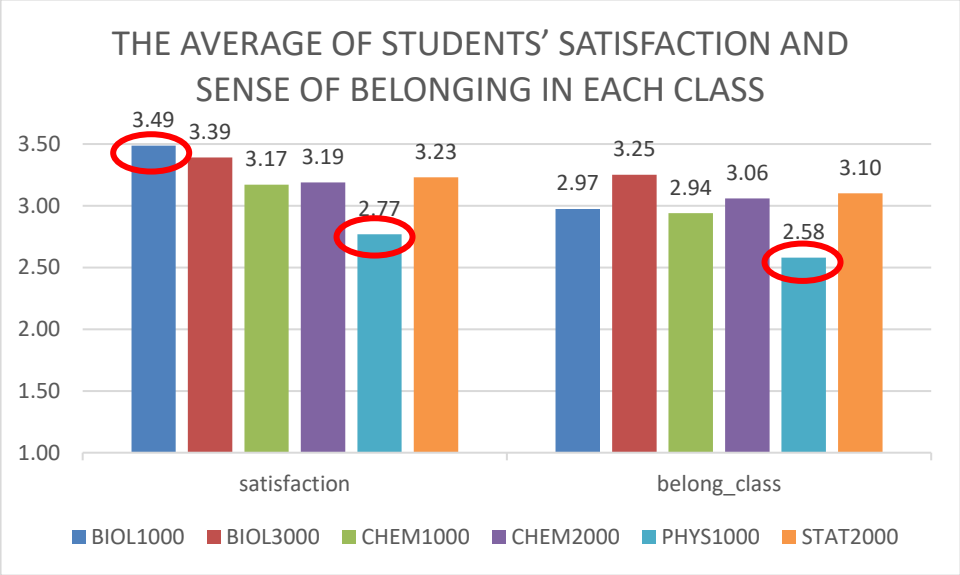

Figure 4: The Average of Students' Satisfaction and Sense of Belonging in Each Class.

(3) INTERACTION WITH LAs AND RELATED OUTCOMES

The scatter plot analyses were conducted to show significant correlations between the average in-class interaction time with LAs (in minutes) and students' satisfaction with the class ($r = 0.21$, $p < 0.01$) (Figure 5) as well as students' sense of belonging to the class ($r = 0.12$, $p < 0.01$) (Figure 6). This indicates the positive correlations between the average in-class interaction time with LAs and student satisfaction with the class, as well as their sense of belonging, signify the importance of LA involvement in fostering a positive classroom environment. Strengthening the connection between LAs and students can contribute to increased satisfaction with the learning experience and a greater sense of belonging, which are crucial for student retention and success.

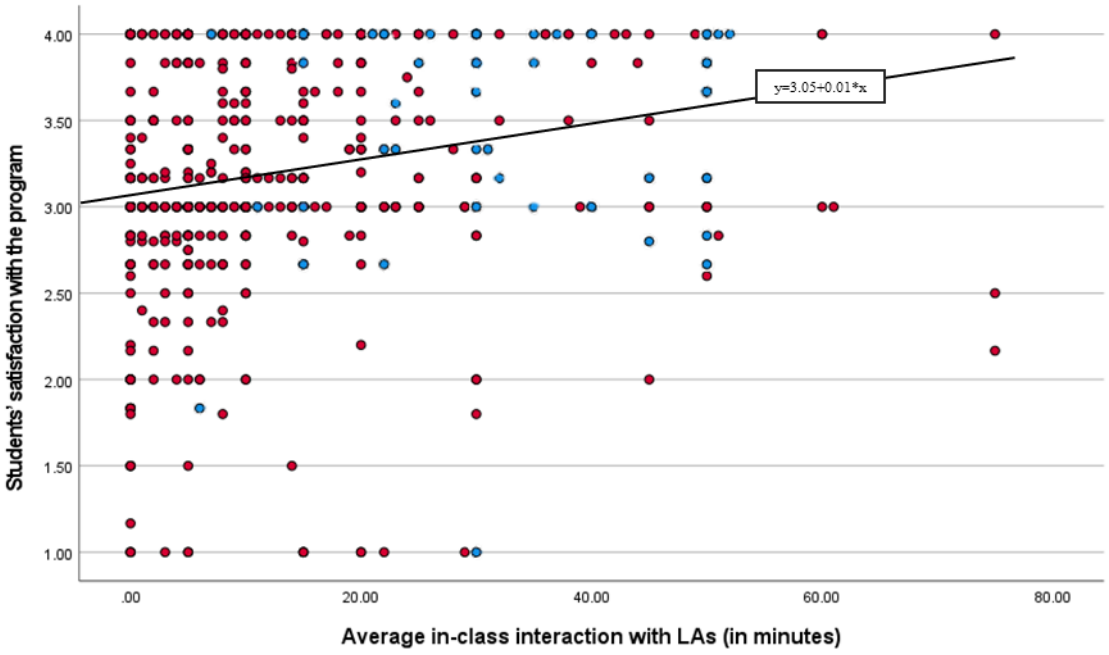

Figure 5: Scatter Plot of the Relationship between the Average Per-class Interaction with LA (in minutes) and Student Satisfaction with the program. Blue dots represent data for BIOL1000 classes and the red dots represent data for other classes.

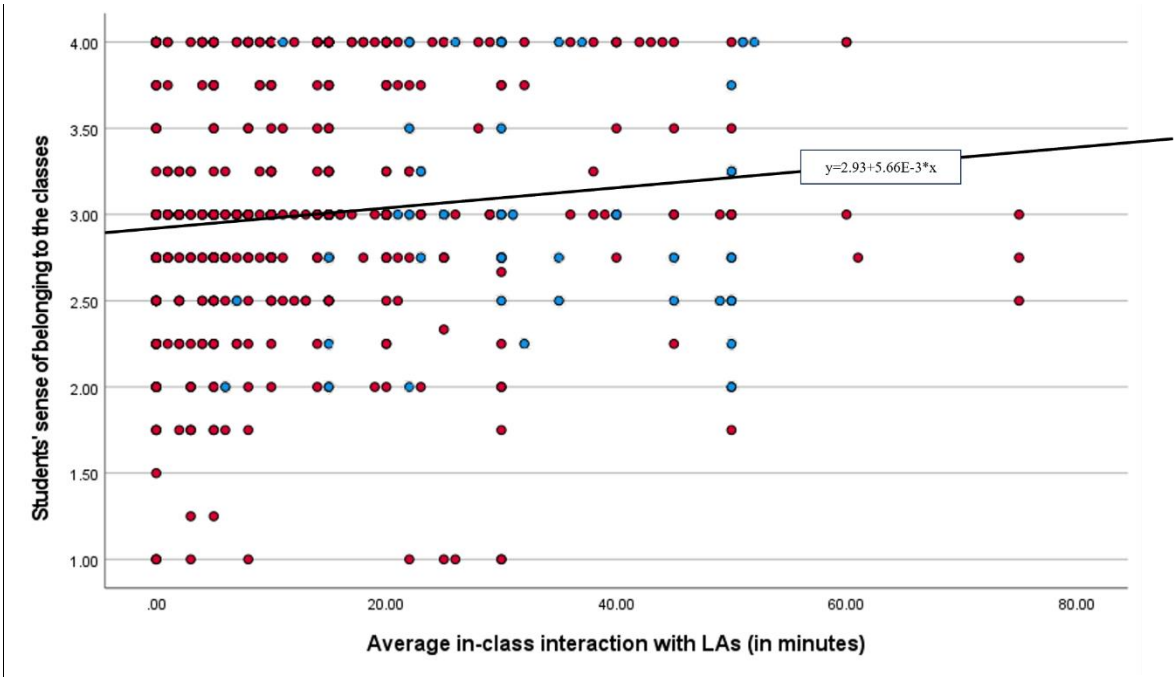

Figure 6: Scatter Plot of the Relationship between the Average in-class Interaction with LA (in minutes) and Sense of Belonging to the classes. Blue dots represent data for BIOL1000 classes and the red dots represent data for other classes.

SUMMARY

This assessment provides valuable insights into the effectiveness of the AULAP and can guide program improvements. Recognizing the variability in LA-student interaction and identifying ways to

enhance the program's impact on student satisfaction and sense of belonging can inform training, placement, and support strategies for LAs, ultimately leading to a more successful and impactful program. Specifically, it also highlights the significance of optimizing LA-student interactions, both in and out of class, to promote student satisfaction, increase their sense of belonging, and improve the overall effectiveness of the AULAP.

For the future plan of the program quality control, this data-informed evidence provides us insights by highlighting the need for standardization, monitoring, and evaluation of LA-student interactions, addressing disparities in LA utilization among different classes, incorporating student feedback, providing continuous professional development to LAs and LA instructors, and evaluating program outcomes. And implementing these insights with targeted interventions are expected to enhance further the impact of the program on student learning and success.