

2023-2024 Animal Science Student Help Room Usage Report

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Summary and Implications

The Department of Animal Science (ANS) at Iowa State University strives to support students throughout their academic careers in and outside of the classroom. Therefore, at the start of the Fall 2023 semester, the Department of Animal Science created an Animal Science Student Help Room to give students a space in Kildee Hall to receive free drop-in assistance with their classes. The space is staffed by current students serving as tutors, teaching assistants, and peer mentors. This report summarizes data collected from Help Room sign-in sheets during the Fall 2023 and Spring 2024 semesters, along with informal feedback from the students working in the room. Based on this information, ANS 3310 (Domestic Animal Reproduction) and ANS 2140 (Domestic Animal Physiology) were the most commonly requested courses for assistance. While still in its early stages, the Help Room has shown promising engagement and offered useful insight into student needs. These findings will guide improvements and help shape future support strategies. The data has provided insight into the Help Room's first-year impact and will support continued development of its resources.

Introduction

The need for a student help room in the Department of Animal Science was identified during the Spring 2023 (S23) semester while evaluating tutoring availability for Animal Science (ANS) courses through the University's Academic Success Center. At that time, the Academic Success Center offered tutoring for only four ANS classes: ANS 2140 (Domestic Animal Physiology), ANS 3190 (Animal Nutrition), ANS 3310 (Domestic Animal Reproduction), and ANS 3520 (Genetics). Supplemental Instruction (SI) sessions were available for just three of these courses (ANS 2140, 3190, and 3310). Despite these offerings, only 22 students were assigned to a tutor group—representing less than 2% of students majoring or minoring in Animal Science. This highlighted a significant gap in academic support for most ANS students. Additionally, feedback from a recent student survey revealed strong interest in a designated space in Kildee Hall where students could study together and receive academic help. The Department of Animal Science—which includes Animal Science, Dairy Science majors, and the General Pre-Veterinary Medicine option—is the second-largest department on campus, serving around 1,400 students in ANS courses each

semester. These factors emphasized the need for a centralized support space, leading to the creation of the Animal Science Student Help Room.

Materials and Methods

In the Fall 2023 (F23) semester, students who visited the Help Room were asked to fill out a check-in sheet on their own. Based on feedback from the student staff, many students either forgot to complete the sheet or chose not to. Because of this, in the S24 semester and asked the student staff members to fill out the check-in sheets themselves in hopes of getting more accurate records. In both semesters, the check-in sheets collected the following information: the type of service used (TA, Tutor, or Peer Mentor), date, time, number of students supported during that shift, the name of the student receiving help, the name of the staff member, and the class or topic they worked on (Table 3).

Data from the check-in sheets were tallied, and the average GPA of students who used the Help Room was calculated (Table 1). That GPA was then compared to the average GPA of Animal Science and Dairy Science students who didn't use the Help Room. The GPA data came from institutional records. If a student visited the Help Room more than once, they were only counted once in the GPA analysis to avoid duplication. A limitation to the number of times students sign-in on the check-in sheets is that not all students use the sign-in sheets, according to the student staff in the Help Room.

An analysis of variance (ANOVA) was done to compare GPA between those that used the Help Room and those that did not. A t-test was used to compare previous GPA to the current semester GPA. There are significant differences between the F23 semester GPA of students that used the help room in F23 and those that did not ($p = 0.02$). However, those differences existed prior to use of the Help room (S23 $p = 0.03$ and F22 $p = 0.05$). There were no significant differences between prior GPA and the F23 GPA ($P = 0.41$) (Table 1). These results suggest that use of the Help Room does not improve a student's GPA. Additionally, academically stronger students appear to be more drawn to the services offered of the Help Room. Efforts should be made to encourage or require less academically talented students to use the Help Room.

An analysis of variance (ANOVA) was done to compare GPA between those that used the Help Room in S24 and those that did not. A t-test was used to compare

previous GPA to the current semester GPA. Interestingly, there were no significant differences between semester GPA of those that used the help room in S24 and those that did not when compared in S24, F23, or S23. These results are different than what was observed within the F23 cohort that used the help room. Additionally, the difference between S23 GPA of students who used the help room in S24 and the GPA in S24 approached significance ($P = 0.06$) (Table 2). Although some improvement in GPA was observed from S23 to F23 in the cohort that used the Help Room in S24, no significance was detected ($p = 0.21$). There was not a large amount of overlap between students that used the help room in F23 and S24.

When looking at the repeat usage of the help room, we can see that in the F23 semester, we had 38 individual students use the Help Room. Some of these students used the space one time, while one student used it 10 times. In the S24 semester, 73 individual students use the Help Room. On average, these students used the Help Room 1.89 times. 61 of the 73 students who used this space in the Spring semester only used it once. Meanwhile, one student used it as many as 21 times based on the sign-in sheets.

Results and Discussion

Overall, sign-in sheets from the Animal Science Student Help Room indicated increased student usage during its second semester (Table 3). This suggests growing awareness of the resource among students in the Department of Animal Science. Additionally, the average GPA of students who used the Help Room during F23 and S24 was higher than the average GPA of their departmental peers.

For F23, differences were observed between the semester GPA of Help Room users and non-users. However, these differences were already present in prior semesters, suggesting academically stronger students were more likely to use the Help Room rather than the Help Room causing their higher performance. An analysis of GPA trends among users also did not show clear improvement over time, reinforcing the idea that the Help Room may not directly influence GPA increases (Table 1 and 2).

In contrast, S24 data showed a different trend. GPA differences between users and non-users were not observed across recent semesters. While there was a slight GPA improvement among S24 Help Room users compared to earlier semesters, the change was modest (Table 2).

Interestingly, there was minimal overlap between students who used the Help Room in F23 and those in S24, which may have contributed to the variation in trends across semesters.

Overall, findings suggest that while the Help Room is used and tends to attract higher-performing students, it does not appear to significantly improve GPA. These outcomes highlight the need for targeted outreach to underperforming students who might benefit more from academic support. Implementing structured interventions, such as faculty and staff referrals or integrating Help Room visits into academic improvement plans (e.g., Smart Steps programs), may help broaden its impact.

A limitation of the current data is the inaccuracy of the sign-in sheets. Tutors have reported that many students either forget to sign in, choose not to, or stop by the Help Room for a quick question and don't see the need to fill out the form. Additionally, many students who did sign in left out important details such as their name or the class they were seeking help for. To improve data accuracy, several tracking methods have been tried. In F24, QR codes linking to a Qualtrics survey were placed on each table, encouraging students to complete the survey after using Help Room services. Due to minimal reporting, this approach was replaced in S25 with a staff-led tracking system. Student staff members now complete a survey after each shift, summarizing how many students they met with and what course the student had questions about. While this method does not document each individual student's information, it allows for a more accurate estimate of overall usage. QR codes linking to the survey remain posted at each table.

Moving forward, a key focus must be finding ways to engage students with lower GPAs or those struggling academically. Current data suggest that higher-performing students are more likely to use the Help Room, limiting the resource's potential impact. Strategies such as targeted outreach, instructor referrals, or incorporating Help Room usage into academic support plans for students on warning or probation could help connect underachieving students with needed assistance.

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Table 1. Grade point averages of students that used the Help Room in Fall 2023

| Used Help Room in F23 | Semester GPA F23 | | Semester GPA S23 | | Semester GPA F22 | |
|-----------------------|------------------|-----------|------------------|-----------|------------------|-----------|
| | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. |
| No | 3.06 | 0.93 | 3.09 | 0.82 | 3.13 | 0.79 |
| Yes | 3.44 | 0.59 | 3.47 | 0.54 | 3.46 | 0.67 |

Table 2. Grade point averages of students that used the Help Room in Spring 2024

| Used Help Room in S24 | Semester GPA S24 | | Semester GPA F23 | | Semester GPA S23 | |
|-----------------------|------------------|-----------|------------------|-----------|------------------|-----------|
| | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. |
| No | 3.18 | 0.82 | 3.07 | 0.92 | 3.11 | 0.82 |
| Yes | 3.27 | 0.79 | 3.21 | 0.77 | 2.96 | 0.81 |

Table 3. Help room usage results

| Semester | TA usage | Tutor usage | Peer mentor usage | Unknown service usage | Total usage |
|-------------|----------|-------------|-------------------|-----------------------|-------------|
| Fall 2023 | 23 | 30 | 8 | 3 | 64 |
| Spring 2024 | 49 | 84 | n/a | unknown | 133 |