



Co-Curricular Assessment of Student Learning Reporting Form

Contact Person: Keli Tucker	Date of Report Submission: 05/03/2019
Department: Success Programs	Semester Assessment Conducted: Fall 2017 & Spring 2018

Identify if assessment is:
 First time *Repeat/ trend analysis*

Report Title:
 Biology Learning Tools Assessment – Fall 2017 to Spring 2018

Type of assessment: (Check all that apply.)
 Departmental Student Learning goal
 Core Competency

Identify if this assessment was completed in collaboration with a specific:
 co-curricular dept. *course* *discipline* *program* *degree* *grant* *other*

1. Describe what you wanted to know about student knowledge, skills or attitudes/behaviors. (Explain why you conducted this assessment.) OR if this is a repeat assessment to “close the loop” – describe what was initially assessed and what changes were implemented.

The Success Centers provide numerous types of resources and learning tools to SWIC students, including models, handouts, computers, course software, textbooks, study rooms, and tutoring in various disciplines from both Specialists and peer tutors. These resources are available six days a week at the Belleville campus, five days a week at the Granite City campus, and four days a week at the Red Bud campus. In this assessment, the Success Centers sought to discover whether students who take advantage of its resources and learning tools would feel more equipped to meet their course requirements.

To assess this goal, the Success Centers developed a survey to assess students’ use of its biology models. Each SWIC Success Center offers a wide range of anatomical models, which are used by students taking biology courses to better understand biological concepts and structures in a visual and kinesthetic way. The courses BIOL 105: Human Biology and BIOL 157: Human Anatomy & Physiology I were chosen for assessment because the Success Centers reserves its conference room prior to each of the exams in these courses, and devotes this space to helping students study for these exams by providing dedicated access to biology models and biology tutoring. The Success Centers also added questions using language from the department-wide course objectives stated on the syllabi for each BIOL 105 and 157 courses to assess students’ perception of whether or not using Success Center learning tools helped them meet these objectives. By making biology models available to students and setting aside time and space devoted to helping students study for their exams, the Success Centers hoped that most students would agree that they were better able to meet their course objectives.

1a. State the department SL goal(s) or core competency linked to this assessment.

- Success Programs Goal 6: The student shall be able to apply appropriate learning tools to meet their course requirements.
- SWIC Quantitative Literacy Core Competency 2: Identify, extract, and use quantitative information from tables, charts, graphs, and/or other relevant visual data.

1 b. Identify which students were assessed.

The Success Center assessed BIOL 157 students who visited the Belleville, Granite City, and Red Bud Success Centers to study for Exam 2 and Exam 3 during the fall 2017 and spring 2018 semesters, and BIOL 105 students who visited the Belleville, Granite City, and Red Bud Success Centers to study for Exam 2 and Exam 3 during the fall 2017 semester.

Note: None of the BIOL 105 students who visited the Success Center in Spring 2018 to study for Exam 2 or Exam 3 chose to take the assessment.

1c. What was the sample size of the group assessed/the number of possible students?

In Fall 2017, 62 students visited the Success Center to study for BIOL 157 within the Exam 2 assessment period; of that number, 19 students took the assessment. 82 students visited the Success Center to study for BIOL 157 within the Exam 3 assessment period; of that number, 10 students took the assessment.

In Fall 2017, 13 students visited the Success Center to study for BIOL 105 within the Exam 2 assessment period; of that number, 3 students took the assessment. 17 students visited the Success Center to study for BIOL 105 within the Exam 3 assessment period; of that number, 4 students took the assessment.

In Spring 2018, 70 students visited the Success Center to study for BIOL 157 within the Exam 2 assessment period; of that number, 12 students took the assessment. 57 students visited the Success Center to study for BIOL 157 within the Exam 3 assessment period; of that number, 8 students took the assessment.

2. Describe when and how the assessment was conducted/completed. (Attach the tool(s) that was used to collect performance measures.)

Students completed the assessment and practice test on paper during the following assessment periods:

Fall 2017

- BIOL 157 Exam 2 - October 2nd – October 9th
- BIOL 105 Exam 2 - October 11th – October 12th
- BIOL 157 Exam 3 - October 26th – November 7th
- BIOL 105 Exam 3 - November 6th – November 9th

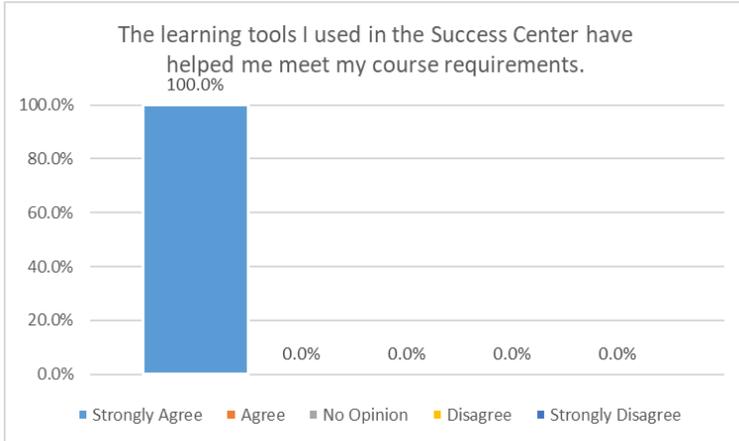
Spring 2018

- BIOL 157 Exam 2 - February 27th – March 5th
- BIOL 157 Exam 3 - April 2nd – April 10th

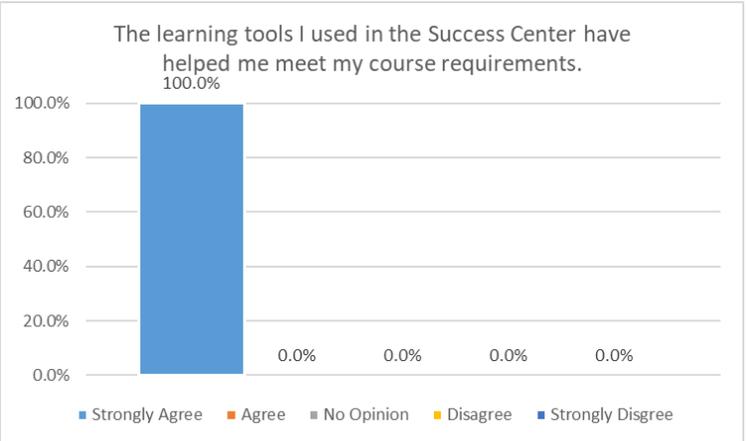
3. What were the results of this assessment? (Organize data in a chart – no interpretation needed here.) If this is a repeat assessment, also share the previous assessment results.

Question 1: The learning tools I used in the Success Center have helped me meet my course requirements.

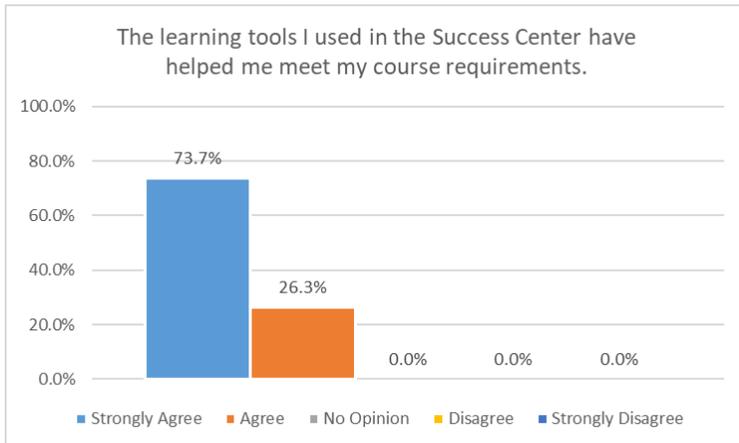
BIOL 105 Exam 2 Fall 2017



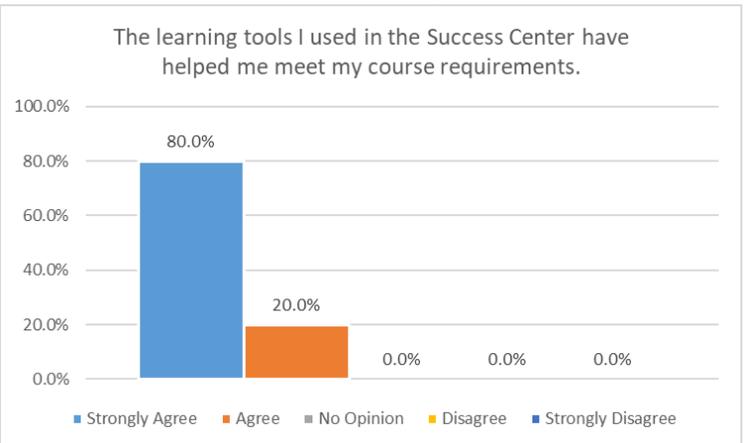
BIOL 105 Exam 3 Fall 2017



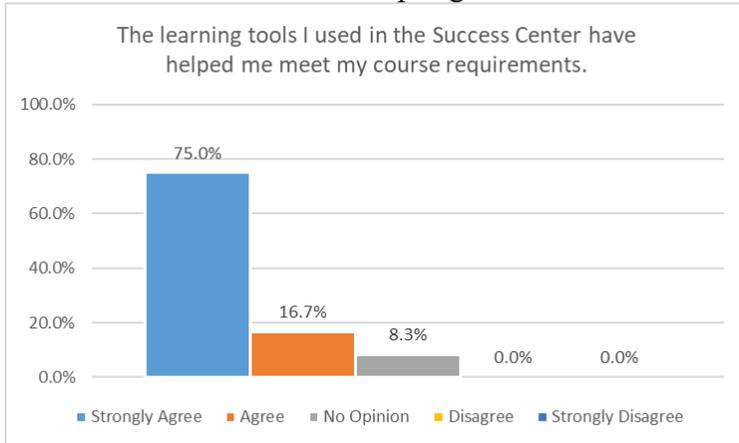
BIOL 157 Exam 2 Fall 2017



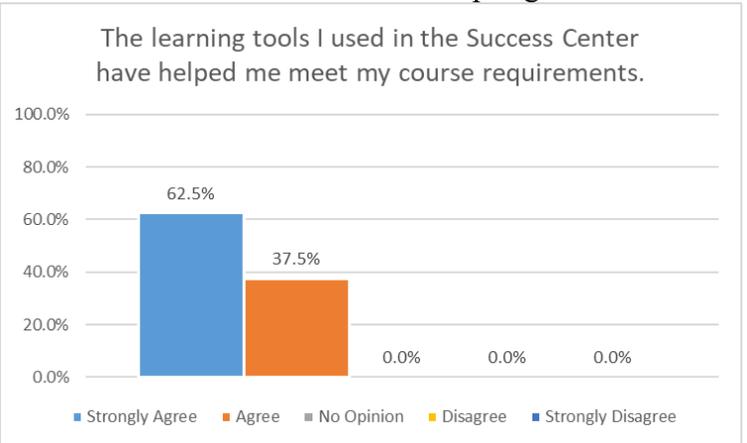
BIOL 157 Exam 3 Fall 2017



BIOL 157 Exam 2 Spring 2018

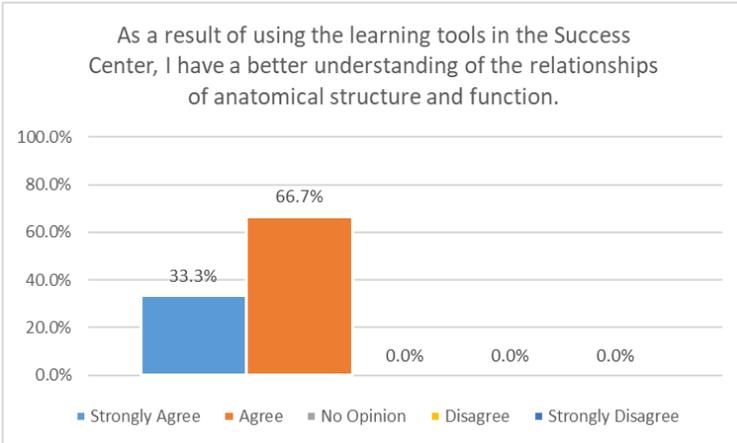


BIOL 157 Exam 3 Spring 2018

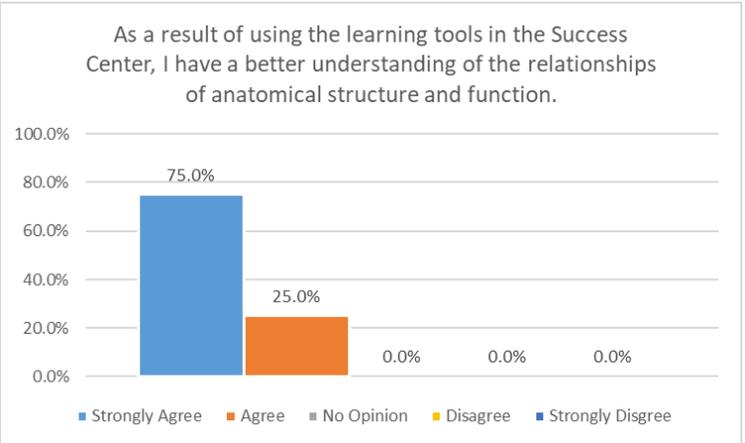


Question 2a (BIOL 105): As a result of using the learning tools in the Success Center, I have a better understanding of the relationships of anatomical structure and function.

BIOL 105 Exam 2 Fall 2017

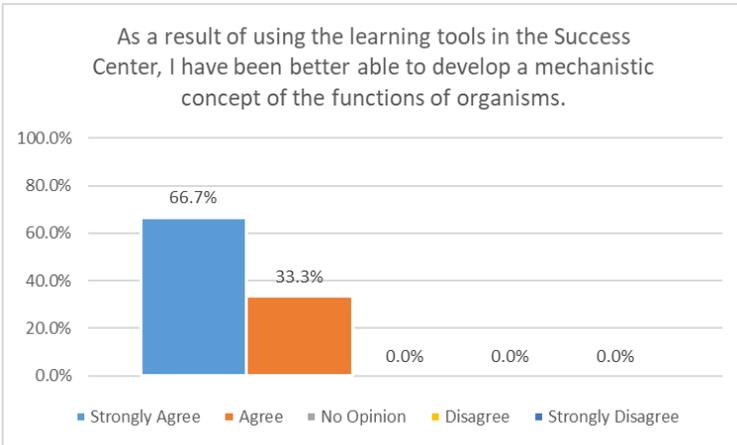


BIOL 105 Exam 3 Fall 2017

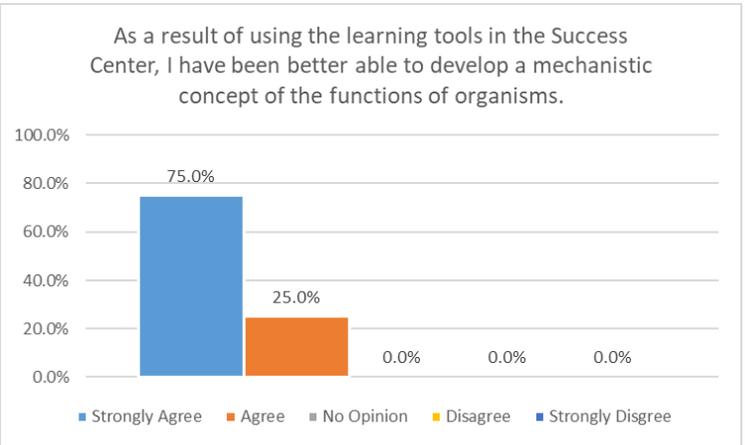


Question 3a (BIOL 105): As a result of using the learning tools in the Success Center, I have been better able to develop a mechanistic concept of the functions of organs.

BIOL 105 Exam 2 Fall 2017

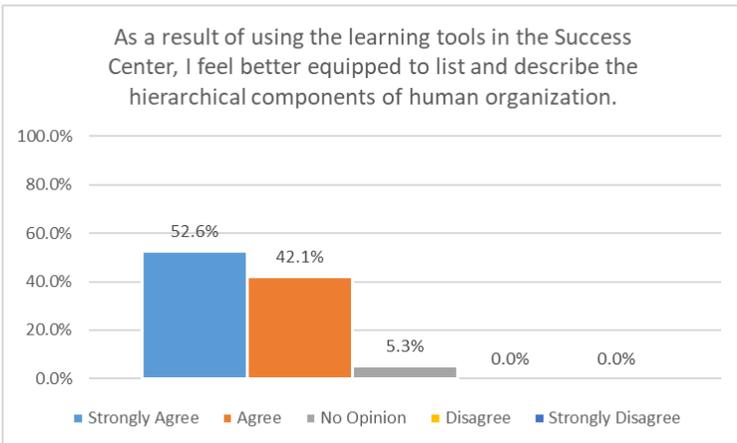


BIOL 105 Exam 3 Fall 2017

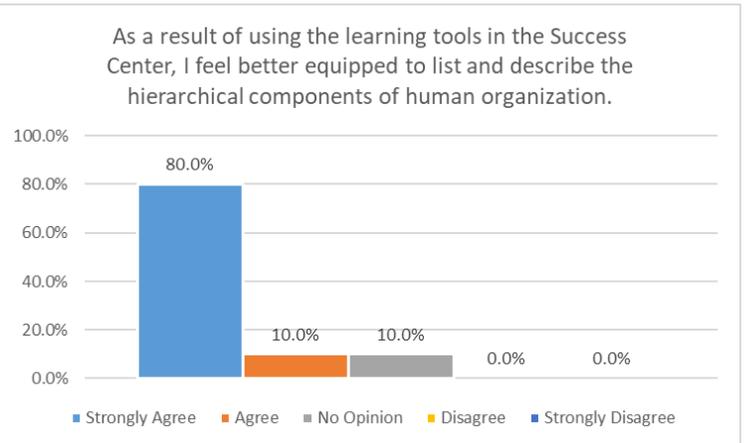


Question 2b (BIOL 157): As a result of using the learning tools in the Success Center, I feel better equipped to list and describe the hierarchical components of human organization.

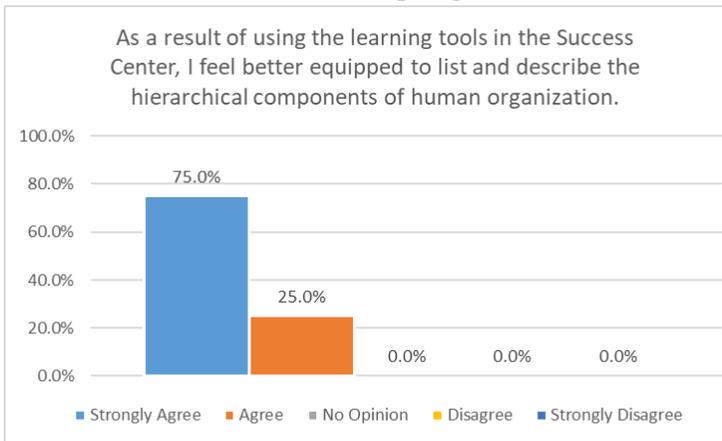
BIOL 157 Exam 2 Fall 2017



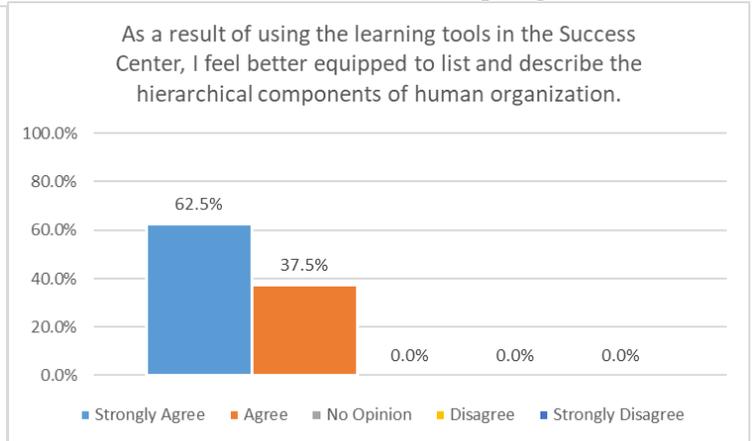
BIOL 157 Exam 3 Fall 2017



BIOL 157 Exam 2 Spring 2018

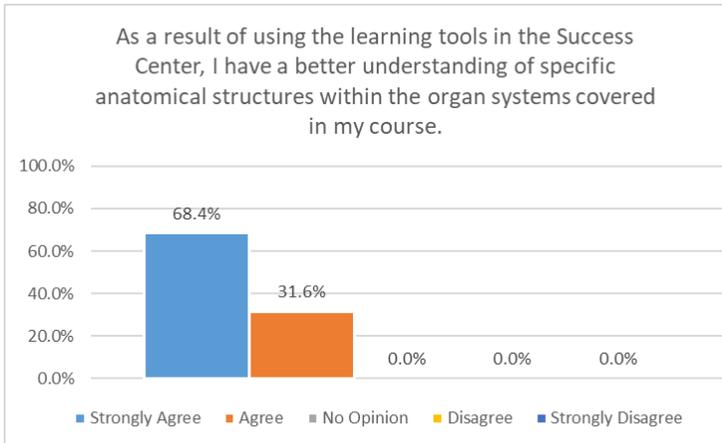


BIOL 157 Exam 3 Spring 2018

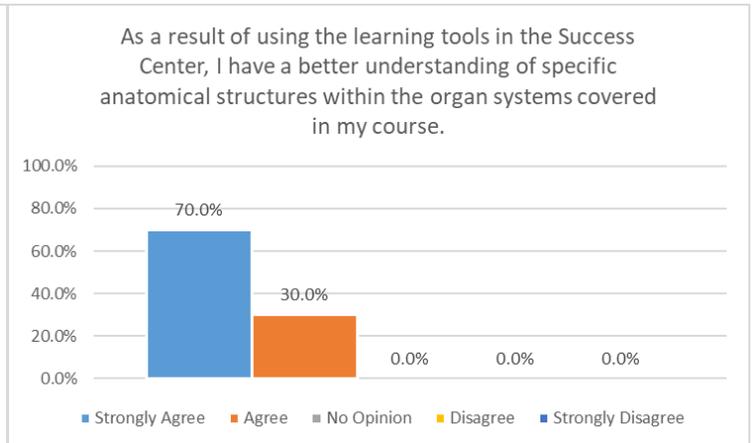


Question 3b (BIOL 157): As a result of using the learning tools in the Success Center, I have a better understanding of specific anatomical structures within the organ systems covered in my course.

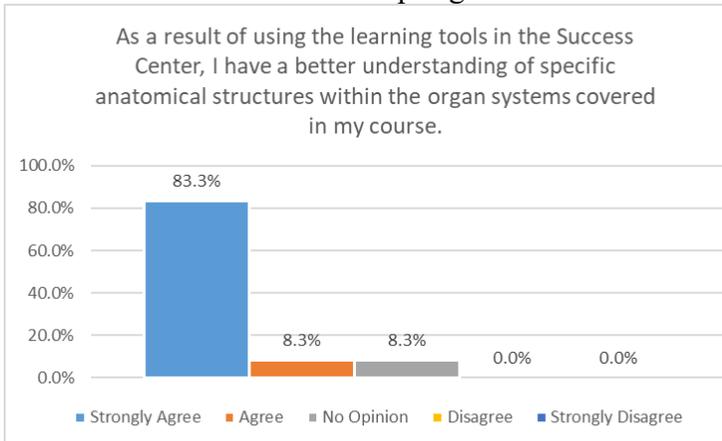
BIOL 157 Exam 2 Fall 2017



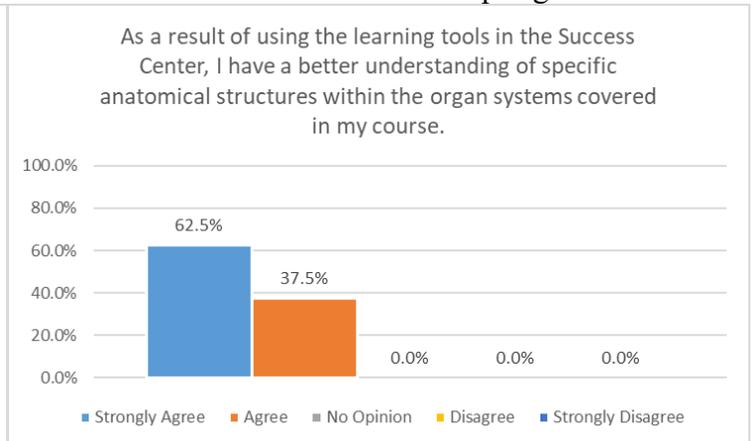
BIOL 157 Exam 3 Fall 2017



BIOL 157 Exam 2 Spring 2018



BIOL 157 Exam 3 Spring 2018



3a. What was the cutoff point (benchmark) using this tool which would indicate satisfactory performance on the goal/objective or core competency skill assessed?

The Success Centers set the goal that 80% of students assessed would agree or strongly agree that using Success Center learning tools helped them meet their course requirements.

4a. What is the analysis/interpretation of these results/trend results?

The Success Centers met the benchmark set for this assessment that 80% of students would agree or strongly agree that using Success Center learning tools such as biology models helped them meet their course requirements. An average of 98.61% agreed or strongly agreed with Question 1: The learning tools I used in the Success Center have helped me meet my course requirements.

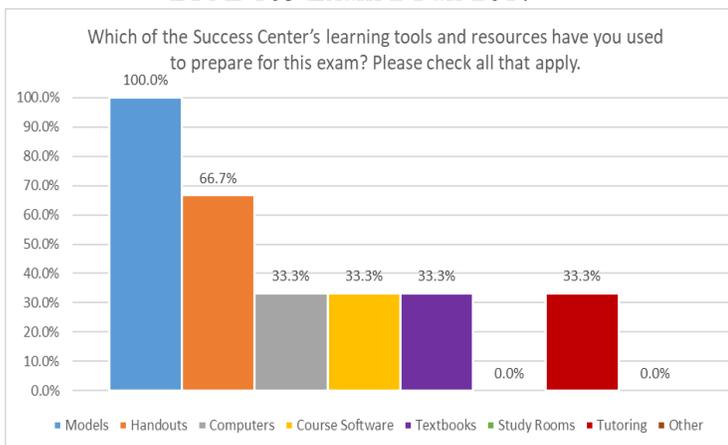
The Success Centers also asked questions related to the department-wide course objectives as listed on the syllabi for each BIOL 105 and 157 courses in order to assess students' perception of whether or not using Success Center learning tools helped them succeed in their course. Since these objective are different for BIOL 105 and 157, different questions were asked of the students for each.

- BIOL 105 students were asked Question 2a: As a result of using the learning tools in the Success Center, I have a better understanding of the relationships of anatomical structure and function. In response, an average of 100% agreed or strongly agreed.
- BIOL 105 students were then asked Question 3a: As a result of using the learning tools in the Success Center, I have been better able to develop a mechanistic concept of the functions of organs. In response, an average of 100% agreed or strongly agreed.
- BIOL 157 students were asked Question 2b: As a result of using the learning tools in the Success Center, I feel better equipped to list and describe the hierarchical components of human organization. In response, an average of 96.18% agreed or strongly agreed.
- BIOL 157 students were then asked Question 3b: As a result of using the learning tools in the Success Center, I have a better understanding of specific anatomical structures within the organ systems covered in my course. In response, an average of 97.9% agreed or strongly agreed.

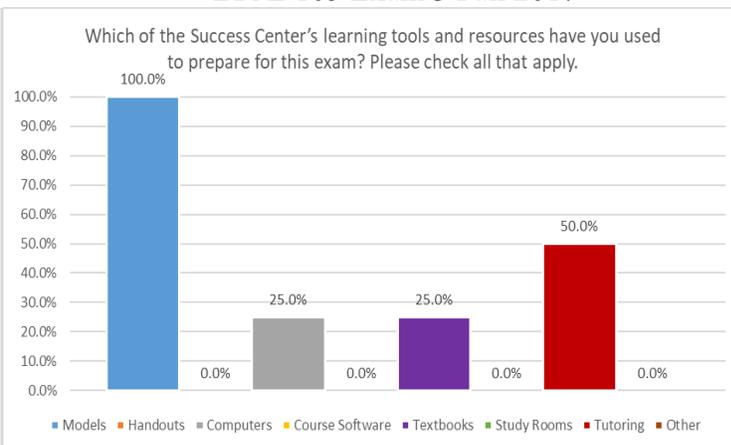
These overwhelmingly positive results strongly indicate that the availability of learning tools and resources is key to student success at SWIC.

To augment these questions, the Success Centers also assessed the type of resources students used to prepare for their exam. Their responses show that in addition to the biology models, students used multiple types of learning tools and resources to prepare, indicating that providing access to a wide array of learning tools and resources is also important to student success.

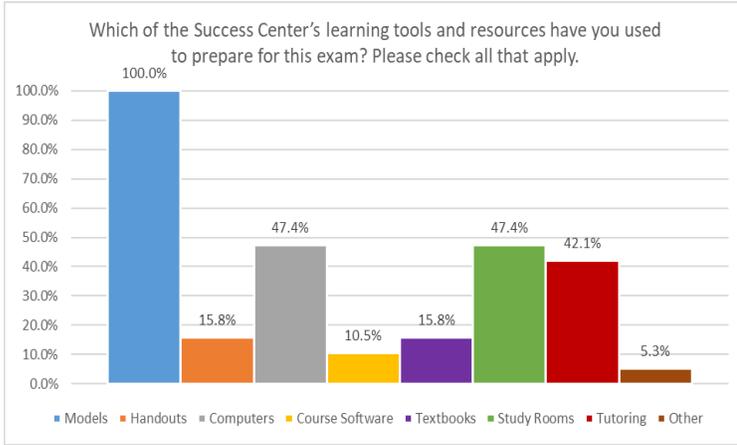
BIOL 105 Exam 2 Fall 2017



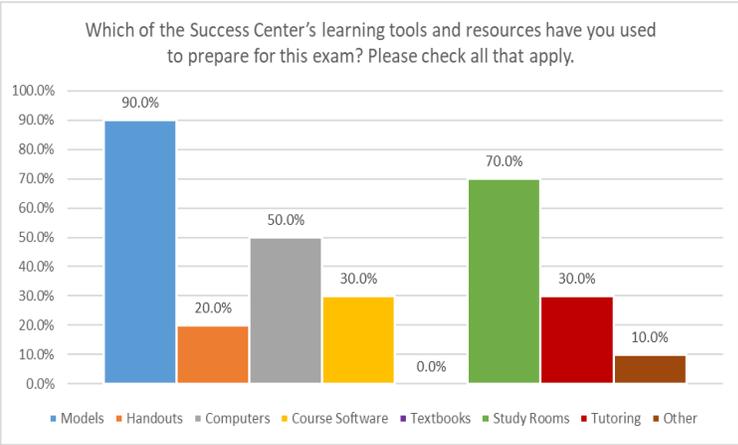
BIOL 105 Exam 3 Fall 2017



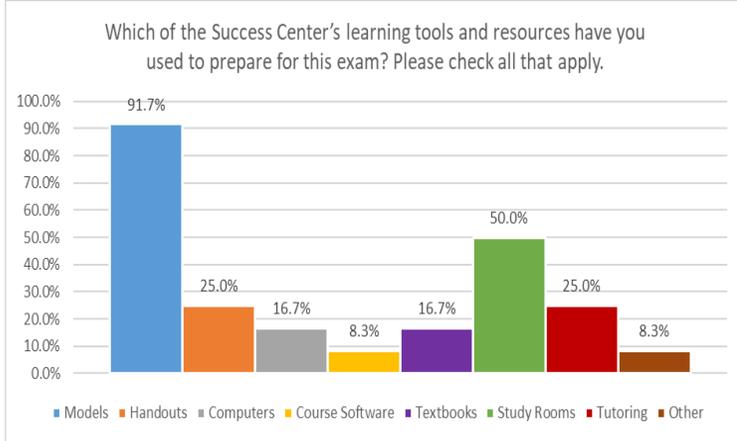
BIOL 157 Exam 2 Fall 2017



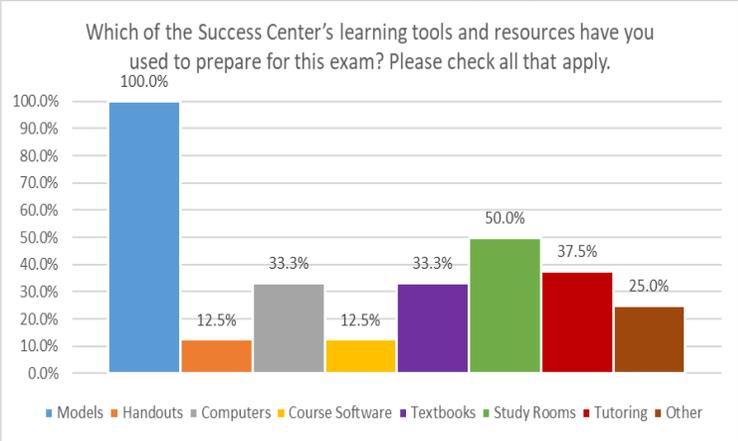
BIOL 157 Exam 3 Fall 2017



BIOL 157 Exam 2 Spring 2018

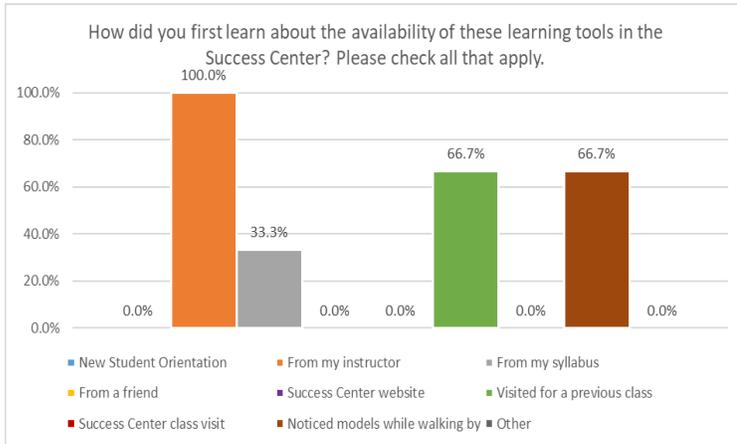


BIOL 157 Exam 3 Spring 2018

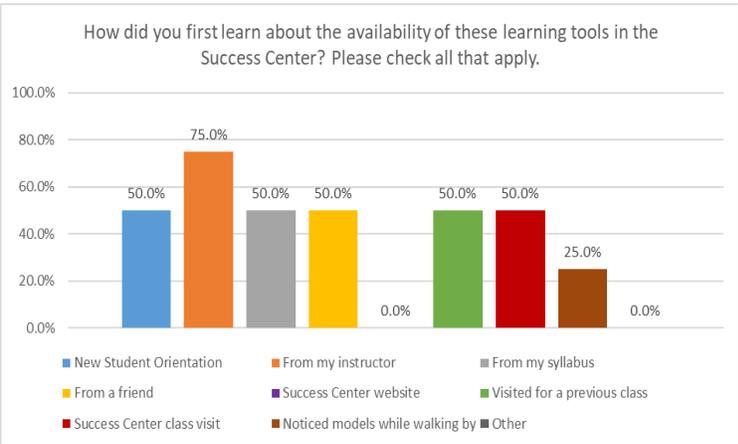


The Success Centers also asked students how they were introduced to the resources in the Success Centers. Over 70% of students learned about the Success Centers' resources through their instructor, indicating that instructor referral is the most important avenue for introducing students to the Success Centers and the many resources and learning tools the Centers provide. Many students also responded that they visited the Success Centers after having visited for a previous class, which demonstrates that introducing students to the Success Centers has a cumulative effect: if students visit the Success Centers for one course, they will frequently return for another course. In addition, the fact that students learned about the Success Centers' resources and learning tools through many avenues shows the importance of conveying this information to students in a variety of ways, including through New Student Orientation and in course syllabi.

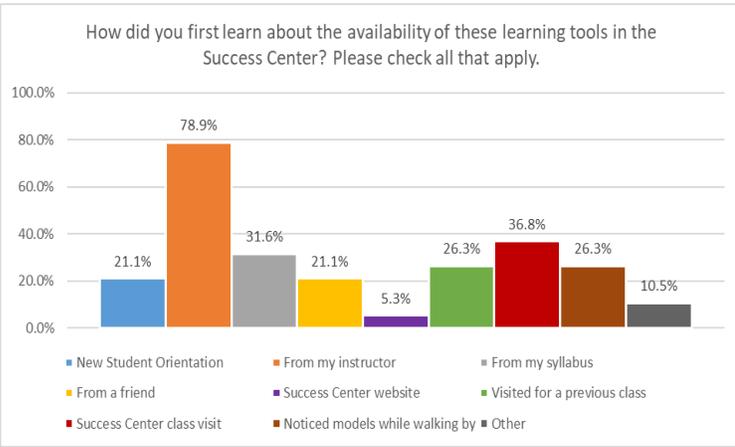
BIOL 105 Exam 2 Fall 2017



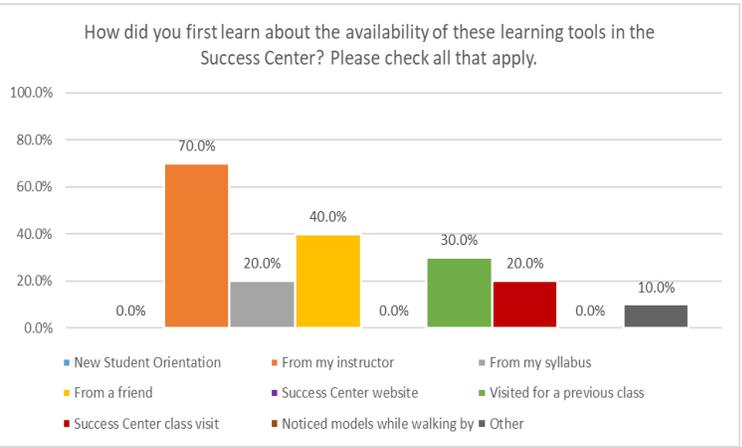
BIOL 105 Exam 3 Fall 2017



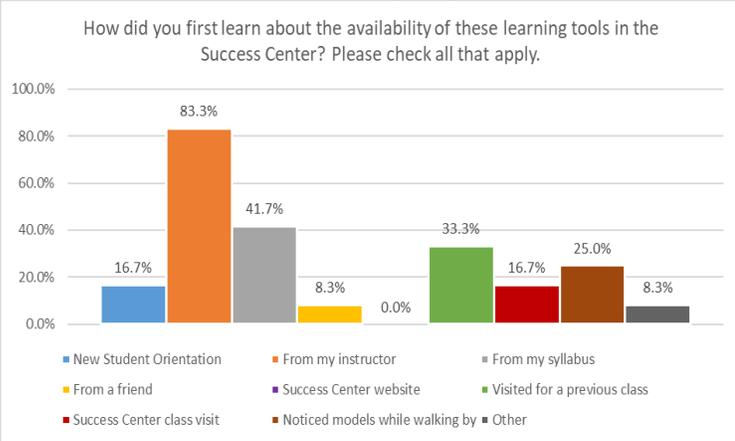
BIOL 157 Exam 2 Fall 2017



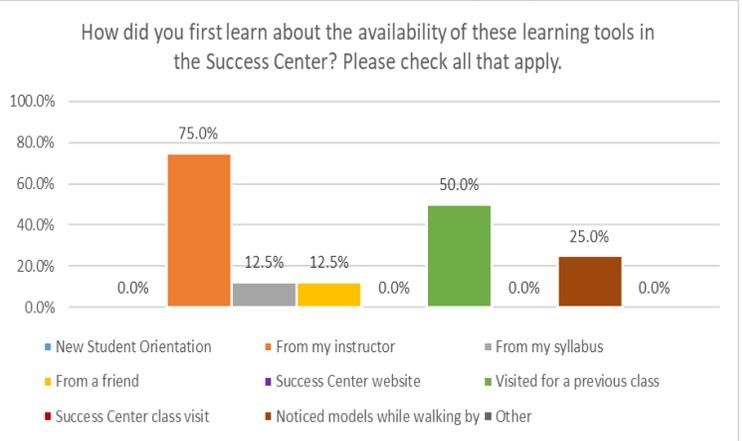
BIOL 157 Exam 3 Fall 2017



BIOL 157 Exam 2 Spring 2018



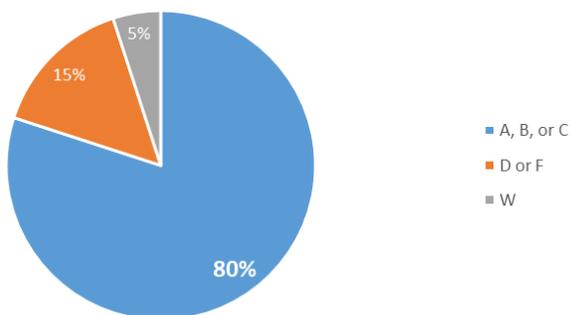
BIOL 157 Exam 3 Spring 2018



Finally, the Success Centers compared the final grades of BIOL 157 and BIOL 105 students who visited the Success Center during the assessment period in fall 2017 and spring 2018 against the final grades of BIOL 157 and BIOL 105 students who did not visit the Success Center. Of the students who visited the Success Centers to study for their exams, 23% more students earned a grade of A, B, or C in BIOL 105 in fall 2017; 43% more students earned a grade of A, B, or C in BIOL 157 in fall 2017; and 24% more students earned a grade of A, B, or C in BIOL 157 in spring 2018. The wide variety of learning tools and resources available is likely partly responsible for these high numbers. However, a distinguishing factor of the Success Centers is that students also have access to Specialists and peer tutors who can further explain terms and concepts. These interventions likely worked in conjunction to help students be more successful in their course.

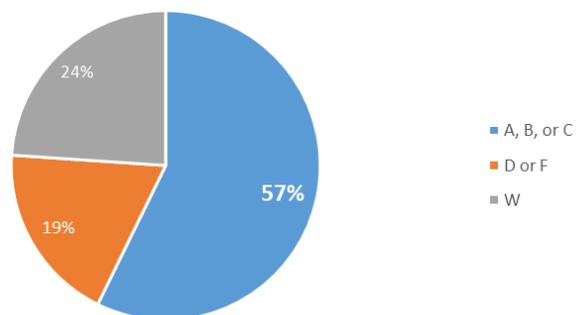
BIOL 105 Fall 2017

Final Grades for Students Who Visited the Success Center for BIOL 105 in Fall 2017



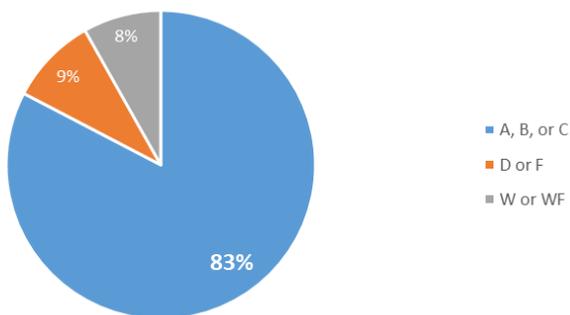
BIOL 105 Fall 2017

Final Grades for Students Who Did **Not** Visit the Success Center for BIOL 105 in Fall 2017



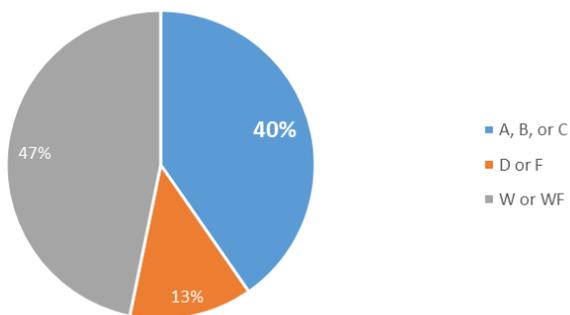
BIOL 157 Fall 2017

Final Grades for Students Who Visited the Success Center for BIOL 157 in Fall 2017



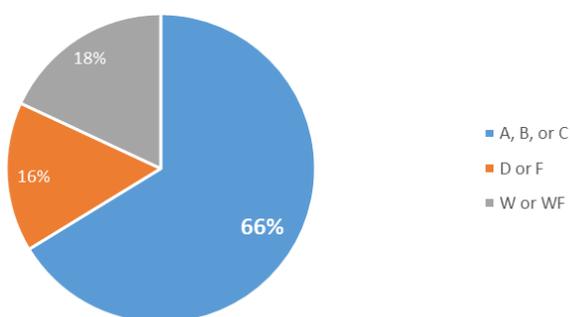
BIOL 157 Fall 2017

Final Grades for Students Who Did **Not** Visit the Success Center for BIOL 157 in Fall 2017



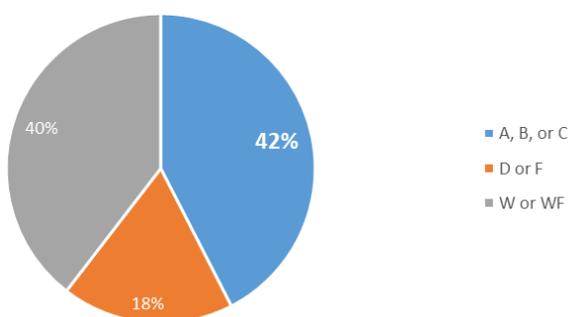
BIOL 157 Spring 2018

Final Grades for Students Who Visited the Success Center for BIOL 157 in Spring 2018



BIOL 157 Spring 2018

Final Grades for Students Who Did **Not** Visit the Success Center for BIOL 157 in Spring 2018



4b. Did the groups meet the benchmark?

Yes

4c. Were there differences in performance based on ethnicity, mode of delivery, GPA, participation in specific support activities, etc.?

N/A

5. What changes, if any, does the department plan to implement to improve student performance? (Note: The response to this question is printed in a public document, the OA Report, posted on www.swic.edu without the above information. Please write this response for summary stand-alone statement that the public will understand – what was assessed, analysis of results, and plans for action.)

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To assess this goal, the Success Centers developed a survey to assess students' use of its biology models. Each SWIC Success Center offers a wide range of anatomical models, which are used by students taking biology courses to better understand biological concepts and structures in a visual and kinesthetic way. The courses BIOL 105: Human Biology and BIOL 157: Human Anatomy & Physiology I were chosen for

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The departmental learning goal linked to this assessment was Success Programs Goal 6: The student shall be able to apply appropriate learning tools to meet their course requirements. The SWIC core competency linked to this assessment was Quantitative Literacy Core Competency 2: Identify, extract, and use quantitative information from tables, charts, graphs, and/or other relevant visual data.

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The Success Centers set the goal that 80% of students assessed would agree or strongly agree that using Success Center learning tools helped them meet their course requirements.

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As the results of this assessment went far beyond the benchmark set, the Success Centers intends to continue to provide access to a variety of learning tools and resources to SWIC students, and to ensure that our learning tools and resources are up to date and current with instructional objectives. To that end, in fall of 2018 and spring of 2019, Success Center Biology Specialists collaborated with faculty in the biology department to ensure that biology learning tools, such as labeled images, were more consistent with the tests administered in the biology department. To ensure that new and returning students are aware that they can access learning tools, resources, and free, walk-in tutoring in several subject areas, the Success Centers also plan to continue making class visits, participating in New Student Orientation, and reaching out to instructors to ensure they include information about the Success Centers in their syllabi and tell students directly during class.

Note: Attach relevant summary of data, rubric, or assessment tool.

Submitted by: Keli Tucker

Department: Success Center

Date Reviewed: 05/03/2019

Status: Accepted

For official use only.

Please submit this form electronically to: OA coordinator and Supervisor.