Mission / Purpose

The Central University Libraries supports and enriches SMU's academic mission and heritage. CUL serves students, faculty, staff and the general public by building collections, organizing information, providing high quality research assistance, and preserving, digitizing and showcasing library materials. CUL staff will provide outstanding professional assistance in the access of diverse resources, and create an environment that respects academic freedom, encourages open enquiry and excites the mind.

Goals and Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

Goal 5: Establish Metric for measuring student learning outcomes from CUL information literacy instruction

Establish Metric for measuring student learning outcomes from CUL information literacy instruction.

SLO 5: First-Year Student GPA and Credit Hours Earned

Academic performance indicators for First-Time First-Year undergraduate students enrolled at SMU, as defined by IPEDS Fall incoming first-year cohort, will be compared between students that were enrolled in a course with library instruction, and students that were not enrolled in any course with library instruction.

Relevant Associations:

Strategic Plan Associations:

UNIVERSITY PRESIDENT
1.5 Strengthening of the University Library System as the heart of academic excellence
2.1 Enhancement of teaching & learning through curricula,… informed by research & advanced technologies

Related Measures:

M 9: Statistical association between library instruction and increased GPA

Across the entire first-year first time fall cohort of 2014-2015, calculate a statistical measure that tests whether there is a positive association between being enrolled in a course with library instruction and increased first-year GPA.

Source of Evidence: Academic indirect indicator of learning - other
**Target:**
Average GPA for students enrolled in courses with library instruction is higher than average GPA of students not enrolled in any course with library instruction.

**Findings (2014-15) - Target: Met**
End-of-year GPA of students taking courses which had associated library instruction sessions was on-average 0.045 grade points higher than those of students without library instruction. However, the variation in student-to-student GPA outcomes across the two groups was broad enough, that this average increase could not be claimed as a statistically significant result.

**M 10: Statistical association between library instruction and increased Credit Hours Earned**
Across the entire first-year first time fall cohort of 2014-2015, calculate a statistical measure that tests whether there is a positive association between being enrolled in a course with library instruction and increased first-year Credit Hours Earned.

**Source of Evidence:** Academic indirect indicator of learning - other

**Target:**
Average Credit Hours Earned for students enrolled in courses with library instruction is higher than average Credit Hours Earned of students not enrolled in any course with library instruction.

**Findings (2014-15) - Target: Met**
Number of First-Year Credit Hours Earned of students taking courses which had associated library instruction sessions was on-average 1 credit hour higher than that of students without library instruction. This increase was consistent enough throughout the data, from student-to-student, that this average increase was found to be statistically significant at a high degree, with a p-value of 0.002. This means that there is less than a 0.2% chance that the disparity in credit hours earned was simply due to chance, that there is a 99.8% chance that a true underlying difference between the two groups exists.
Source of Evidence: Statistical Analysis of SMU Library Instruction Program

2014-2015 First-Time First-Year Student Cohort Results

1320 students were included in this assessment of SMU Library Instruction and associated measures of academic performance. Of the 1320 students, 533 students were enrolled in one or more courses with library instruction, and 787 students were not enrolled in any courses with library instruction. Some students had courses with multiple library instruction sessions, or were enrolled in multiple courses with library instruction, so that the 533 students collectively represented 603 participations in course-related library instruction sessions spanning 60 different courses across the curriculum.

<table>
<thead>
<tr>
<th># University Courses (*)</th>
<th>Library Instruction Sessions Attended (**)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
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</table>

The statistical analysis of course-related library instruction enrollment is conducted using all library instruction sessions associated with students in the study, which serves to weight the results to account for the effect of multiple library instruction sessions on student success outcomes.

End-of-year GPA of students taking courses which had associated library instruction sessions was on-average 0.045 grade points higher than those of students without library instruction. However, the variation in student-to-student GPA outcomes across the two groups was broad enough, that this average increase could not be claimed as a statistically significant result.

School First-Year GPA: Independent Samples t-test for Equality of Means

<table>
<thead>
<tr>
<th>School</th>
<th>Equal variances assumed</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. Diff (p&lt;=0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMU</td>
<td>Y</td>
<td>1.437</td>
<td>1832</td>
<td>.151</td>
<td>0.045</td>
<td>0.031</td>
<td>-0.016 - 0.105</td>
<td>N</td>
</tr>
</tbody>
</table>

Number of First-Year Credit Hours Earned of students taking courses which had associated library instruction sessions was on-average 1 credit hour higher than that of students without library instruction. This increase was consistent enough throughout the data, from student-to-student, that this average increase was found to be statistically significant at a high degree, with a p-value of 0.002. This means that there is less than a 0.2% chance that the disparity in credit hours earned was simply due to chance, that there is a 99.8% chance that a true underlying difference between the two groups exists.

School First-Year Earned Hours: Independent Samples t-test for Equality of Means

<table>
<thead>
<tr>
<th>School</th>
<th>Equal variances assumed</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
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<th>95% Confidence Interval of the Difference</th>
<th>Sig. Diff (p&lt;=0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMU</td>
<td>N</td>
<td>3.178</td>
<td>1380.437</td>
<td>.002</td>
<td>0.99580</td>
<td>.31332</td>
<td>0.38116 - 1.61044</td>
<td>Y</td>
</tr>
</tbody>
</table>
Goals and Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

Goal 4: Implement new resources and programs to enable increased effectiveness of information literacy instruction.
Establish library-wide programs that support library staff in developing their information literacy instruction, and support university instructors in assessing the student learning outcomes of information literacy competencies as set forth in the University Curriculum.

O/O 4: Development and Assessment of Information Literacy Instruction Program
Implement Online Tutorial and Flipped Classroom Instruction approach with support of the AiA program. Assess this new approach by comparing citations from student papers from old method and new method of instruction. Further assess on a more comprehensive scale all aspects of the library instruction program with support from the GWLA Task Force on Student Learning research design and project. Both AiA and GWLA projects to be carried out during 2014-2015.

Relevant Associations:
Associated to University Strategic Goal 1.5 Strengthening of the University Library System as the heart of academic excellence. This association is self-evident.
Associated to University Strategic Goal 2.1 Enhancement of teaching and learning through curricula, pedagogies, programs, and methodologies informed by research, along with utilization of advanced technologies. This association is self-evident.

Strategic Plan Associations:
UNIVERSITY PRESIDENT
1.5 Strengthening of the University Library System as the heart of academic excellence
2.1 Enhancement of teaching & learning through curricula,… informed by research & advanced technologies

Related Measures:

M 7: Activity and Initiatives toward Student Learning of Information Literacy
Library activities, preparations and initiatives toward furthering and promoting the Information Literacy proficiency of SMU students.

Source of Evidence: Activity volume

Target:
Invoke new ideas and take active steps toward dynamically improving Information Literacy instruction. Seek to quantify the value of Information Literacy instruction.

Goal 6: Establish Librarian Support Metric for assisting Faculty with Grant Support
Establish Librarian Support Metric for assisting Faculty with Grant Support.
O/O 6: Support for Faculty Research and Grant Writing

Develop and implement comprehensive approach for librarians' efforts in assisting faculty with their research and grant proposals. Introduce new tools for faculty in documenting and measuring their scholarly publication activity. Investigate the viability of new metrics for scholarly publication activity, which are being introduced in the community, such as "altmetrics" and other.

Relevant Associations:

Strategic Plan Associations:

UNIVERSITY PRESIDENT

1.5 Strengthening of the University Library System as the heart of academic excellence
3.4 Encouragement of interdisciplinary teaching & research, especially at the doctoral level
3.6 Support of doctoral programs resulting in increases in research productivity & creative achievement

Related Measures:

M 8: Activity and Initiatives toward Support for Faculty Research and Grant Writing

Activity and Initiatives toward Support for Faculty Research and Grant Writing

Source of Evidence: Activity volume

Target:
Take steps toward increasing Central University Libraries' support for Faculty Research and Grant Writing.