## Tutorial Services - Summary of Data - Fall 2013 to Present

<table>
<thead>
<tr>
<th>SLO/AIU/SA</th>
<th>Assessment Method</th>
<th>Criterion</th>
<th>Summary Date</th>
<th>Summary of Data</th>
<th>Use of Results</th>
</tr>
</thead>
</table>
| English tutors who go through training on the six most common ESL errors in writing will identify and explain sentence errors. | Assessment Method: Pre- and post-tests | Tutors will be given a pre-test prior to the training session and a post-test afterward to measure the impact of the training. The pre- and post-tests will consist of 16 sentences each. Sentences will be scored in two areas: Identification and explanation. A rating of 1 will be given to a sentence error either correctly identified or explained; a rating of 0 will be given to a sentence neither correctly identified nor explained. | 05/28/2014 | Identification Results: 18 pre- and post-surveys were collected. Pre-test results show that only 1 tutor (5.56%) scored at least 12 points; post-test results show a marked increase with 13 tutors (72.22%) scoring at least 12 points. The criterion was met in the area of identification. Also, the number of students who scored at least 12 points increased significantly on the post-test (13 times). The average pre-test identification score was 8.33 (52.08%) while the average post-test identification score was 12.56 (78.47%). The percent increase was 50.67%. The percent increase was 40.68%.

Explanation Results: 18 pre- and post-surveys were collected. Pre-test results show that 2 students (11.11%) scored at least 12 points. Post-test results show that 6 students (33.33%) scored at least 12 points. Criterion was not met, although the number of students who scored at least 12 points increased by 3 times in the post-test. The average pre-test explanation score was 6.56 (40.97%) while the average post-test explanation score was 9.22 (57.64%). The percent increase was 40.68%.

Overall, the criterion was not met since tutors only successfully identified errors but did not explain them sufficiently. However, a positive trend was seen in the consistent improvement in tutor performance from pre- to post-test. | This AUO was a follow-up to an ESL training conducted in Fall 2013 by the AANAPSI AmLa Specialist. Providing ESL training is imperative since Tutorial Services assists a large number of English language learners from different writing courses with varying grammar needs. Furthermore, a number of tutors have expressed concerns regarding gaps in their knowledge of grammar. Therefore, this assessment aimed to focus on the impact of tutor training on common ESL writing errors. The six error types presented at the initial ESL training served as the basis for the pre- and post-tests. | |
| Students attempting a Basic Skills class for the first time who participate in tutoring (90 minutes or more per semester) will persist (pass the first course and enroll in the next course) at a higher rate than those who don't participate in tutoring. | With help from Research and Institutional Effectiveness, comparative data will be gathered to assess whether tutoring participation makes it more likely for students to successfully pass their first Basic Skills course and enroll in the next course in the subject. | 10/07/2013 | Results showed a significant difference in the percentage of students who enrolled in the next or higher level course based on whether they participated in tutoring for at least 90 minutes. Tutored students were 14% more likely to enroll in the next or higher course in English, 6% more likely in MATH 50, and 12% more likely in MATH 51. | While this AUO originally aimed to look at success in the next course, the significant difference occurred in the rate of enrollment in the next course. Success rates were about the same in all categories. This research will be repeated next year to ensure consistency of results, but will be refined to better examine the success rates of tutored and non-tutored students, and whether the two populations are comparable. |

In addition, to contribute data that will support Activity 3 of the Basic Skills Plan (increase the number of students who successfully complete the basic skills sequence of English and math), assessment reports from the project will include the number of students, to be compared year-to-year and to determine whether the number is increasing. This assessment will be refined to better examine the success rates of tutored and non-tutored students, and whether the two populations are comparable. |

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TracDat May 14, 2015 KM | |

Page 1 of 3
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<td>Students who are repeating a Basic Skills class for the first or second time who receive 90 minutes or more of tutoring during a full semester (Fall 2014 and Spring 2015) will be less likely to have to repeat the class than repeating students who do not participate in tutoring.</td>
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<td>08/26/2014</td>
<td>ESL 2013-14: Combined Tutoring: Overall, students who were repeating ENG 67 or Math 50/51 courses in Fall 2013 and who received at least 90 minutes of tutoring had a success rate of 50%; non-tutored repeating students had a success rate of 35%. The gain for tutored students was most significant in ENG 67: the success rate for tutored students was 22% higher than for non-tutored students. This assessment will be repeated in the 2014-15 academic year to ensure that results are consistent. In addition, to contribute data that will support Activity 3 of the Basic Skills Plan (increase the number of students who successfully complete the basic skills sequence of English and math), assessment reports from the project will include the number of students participating in tutoring, to be compared year-to-year and to determine whether the number is increasing. Given tutoring's impact on student success and the number of students involved, it is a cost-effective intervention since tutoring increases success and progression and therefore increases access to entry-level courses for new students. As part of improving data collection, a more structured cost-effectiveness measurement will be proposed for 2014-15, to indicate a more exact amount that the college is saving through supporting tutoring efforts.</td>
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<td>Students who participate in SI sessions for at least 6 hours will show an increased success rate in the target classes.</td>
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<td></td>
<td>06/26/2014</td>
<td>Overall, in 2013-14, students in science classes who attended 6 or more hours of SI had a success rate of 86%; non-attenders had a success rate of 89%. Students who participate in tutoring. Students who receive English tutoring will identify sentence boundary errors.</td>
<td>The Pathways to Transfer program SI results will be more significant as the program expands; higher numbers will yield stronger data. The SI program will also expand into other areas of CTE programs to strengthen support for those students. Again, more courses and participants will help show the impact of SI.</td>
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<td>Students who receive English tutoring will identify sentence boundary errors.</td>
<td>Pre- and post-tests</td>
<td>40% of students will correctly identify 4 out of 5 (80%) sentence boundary errors. A percent increase of at least 10% will be seen.</td>
<td>06/23/2014</td>
<td>ESL pre- and post-tests with labeling responses in AmLA, Eng. 67, and Eng. 68 courses (N AmLA = 1; N Eng.67 = 14; N Eng. 68 = 18) were collected. The pre-test labeling results show that 11 students (32.33%) scored at least 4 points. In the post tests labeling results, 23 students received tutoring on sentence boundary issues. Consequently, we will brainstorm with tutors how to better clarify what a comma splice is so that students can identify and correct the error in their own writing. We will also brainstorm how to help students effectively use subordinating conjunctions and conjunctive adverbs in order to create sentence variety. Based on the results, we will explore extending our efforts into the related area of sentence-combining for our next student AUD.</td>
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**Limitation of Study:** Since the pre- and post-tests were anonymous, we were unable to track the progress of students who returned to complete the pre-test while waiting for a tutor.

**Comparison:** The counter to streamline the process. This allowed students time to ask students to complete the test when tutoring was busy. To address these concerns, the counter staff were instructed to distribute the pre-test at the counter to streamline the process. This allowed students time to complete the pre-test while waiting for a tutor. **Activity:** The form was revised to better capture the necessary student information. A line where students could indicate what class they were en was added as well as a label clearly marking pre-test sentences. Also, the instructions were rewritten to explicitly state that students were required to both identify and correct the errors. A sample sentence was included to accompany the written instructions. We also attempted to address concerns of the tutors, which included: (1) the assessment curtailed tutoring session time; (2) it was difficult to address student needs and implement the assessment simultaneously; and (3) it was easy to forget to ask students to complete the test when tutoring was busy. To address these concerns, the counter staff were instructed to distribute the pre-test at the counter to streamline the process. This allowed students time to complete the pre-test while waiting for a tutor.

**Context:** Based on the results, we will explore extending our efforts into the related area of sentence-combining for our next student AUD.

**Summary:** The study provided important insights on where students struggle in regard to sentence boundary errors. Several changes were made to improve data collection. The form was revised to better capture the necessary student information. A line where students could indicate what class they were in was added as well as a label clearly marking pre-test sentences. Also, the instructions were rewritten to explicitly state that students were required to both identify and correct the errors. A sample sentence was included to accompany the written instructions. We also attempted to address concerns of the tutors, which included: (1) the assessment curtailed tutoring session time; (2) it was difficult to address student needs and implement the assessment simultaneously; and (3) it was easy to forget to ask students to complete the test when tutoring was busy. To address these concerns, the counter staff were instructed to distribute the pre-test at the counter to streamline the process. This allowed students time to complete the pre-test while waiting for a tutor.
Wait time measurements (in seconds, n=105 observations) were collected on four separate days in the Fall 2013 semester. A sample of 36 surveys was collected during the last four weeks of the Fall 2013 semester. (Sampling bias may have been introduced due to students no longer using the Transfer MARC prior to data collection. Possible reasons may include the Transfer MARC not meeting their service expectations (not necessarily waiting time related), dropping their math course, or no longer needing tutoring help.)

Students who receive help from a tutor. Acceptable waiting time is between three and six minutes. Students who receive help from a tutor. Acceptable waiting time is between three and six minutes. At least 80% of students who receive help from a tutor will wait less than six minutes before receiving help from a tutor. According to the model, the probability that a student waits under six minutes is 0.809. In other words, 80.9% of students will wait less than six minutes before receiving help from a tutor during moderately busy times. Thus, our goal of at least 80% of students waiting less than six minutes before receiving help from a tutor was met. A similar assessment on students waiting less than six minutes before receiving help from a tutor during moderately busy times will be made at least 77.9% of students. According to the model, the probability that a student waits under six minutes is 0.779. In other words, 77.9% of students will wait less than six minutes before receiving help from a tutor during moderately busy times. Thus, our goal of at least 80% of students waiting less than six minutes before receiving help from a tutor was met. A similar assessment on students waiting less than six minutes before receiving help from a tutor during moderately busy times will be made.

A random sample of actual wait time measurements will be collected at different points during the Fall 2013 semester. A random sample of actual wait time measurements will be collected at different points during the Fall 2013 semester. At least 80% of students who receive tutoring at the Transfer MARC will wait less than six minutes before receiving help from a tutor. The six minute benchmark is based on student survey results as to acceptable wait times collected during the last four weeks of the Fall 2013 semester. Students were asked to indicate their level of satisfaction with the wait time based on a 5-point scale. At least 80% of students who receive tutoring at the Transfer MARC will report perceived waiting times as the same as or less than their acceptable waiting time.

Methodology: Wait time measurements (in seconds, n=105 observations) were collected during the last four weeks of the Fall 2013 semester. Sampling bias may have been introduced due to students no longer using the Transfer MARC prior to data collection. Possible reasons may include the Transfer MARC not meeting their service expectations (not necessarily waiting time related), dropping their math course, or no longer needing tutoring help.)

- Students who receive tutoring at the Transfer MARC will report perceived waiting times as the same or less than acceptable waiting times.
- Students who receive tutoring at the Transfer MARC will wait less than six minutes before receiving help from a tutor. Acceptable waiting time is between three and six minutes.
- At least 80% of students who receive tutoring at the Transfer MARC will wait less than six minutes before receiving help from a tutor. According to the model, the probability that a student waits under six minutes is 0.809. In other words, 80.9% of students will wait less than six minutes before receiving help from a tutor during moderately busy times. Thus, our goal of at least 80% of students waiting less than six minutes before receiving help from a tutor was met. A similar assessment on students waiting less than six minutes before receiving help from a tutor during moderately busy times will be made.

Survey Results:
The following is the distribution of acceptable waiting time ranges (in minutes) as reported on the survey. The highest percentage of students, 41.7%, indicated that an acceptable waiting time is between three and six minutes.

- Time Range
  - Percentage
  - 00:00 - 02:59: 41.9%
  - 03:00 - 05:59: 41.7%
  - 06:00 - 08:59: 8.3%
  - 09:00 - 11:59: 8.3%
  - 12:00 - 14:59: 3.2%

The table below shows the distribution of perceived waiting time ranges (in minutes) as reported on the survey.

- Time Range
  - Percentage
  - 00:00 - 02:59: 35.5%
  - 03:00 - 05:59: 80.8%
  - 06:00 - 08:59: 12.0%
  - 09:00 - 11:59: 12.0%
  - 12:00 - 14:59: 12.0%

Based on survey results, 78.8% of perceived waiting times were the same or less than the acceptable waiting times, which is shy of our 80% goal as defined in our criteria for success. Although we did not meet our criteria for success, 91.2% of students surveyed reported being satisfied or very satisfied when asked to indicate their level of satisfaction on a 5-point scale even though we did not meet their acceptable waiting time, which was based on their perception of how long they actually waited.

Data Summary: The median waiting time during moderately busy times is 132 seconds or 2.2 minutes. During slow times the median waiting time is 20 seconds. That is, on slow days most students can expect to receive help in under a minute. The median waiting time provides a better estimate than the mean waiting time since a small number of wait time measurements with exceptionally long or short waiting times will cause the mean waiting time to be disproportionately large or small.

Goodness of Fit tests and probability plots revealed the Weibull distribution as the model that provides the best fit for the waiting time data. This model can be used to find the probability that a student will wait under a certain amount of time before receiving help from a tutor. According to the model, the probability that a student waits under six minutes is 0.809. In other words, 80.9% of students will wait less than six minutes before receiving help from a tutor during moderately busy times. Thus, our goal of at least 80% of students waiting less than six minutes before receiving help from a tutor was met. A similar assessment on students waiting less than six minutes before receiving help from a tutor during moderately busy times will be made.

While the criterion was met, some actions should be implemented to ensure wait times remain consistent. 1) Tutorial Services has established 15-20 minutes as the maximum amount of time a tutor can spend with a student per session. Enforcing this policy on tutoring session lengths will help reduce waiting times. 2) Hiring experienced tutors, particularly student workers from four-year universities, may greatly reduce the waiting times since they appear to be more knowledgeable and efficient than Mt. SAC student workers. Data on service rates and diagnostic exams will be gathered to support this hypothesis in future assessments.

- Time Range
  - Percentage
  - 00:00 - 02:59: 41.7%
  - 03:00 - 05:59: 80.8%
  - 06:00 - 08:59: 12.0%
  - 09:00 - 11:59: 12.0%
  - 12:00 - 14:59: 12.0%