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# The Learning Center (TLC) Retention and Success Analysis: 2014/15—2017/18

## **College of the Canyons**

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Institutional Research, Planning, and  
Institutional Effectiveness

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## Research Results

At the request of The Learning Center (TLC), the Office of Institutional Research, Planning, and Institutional Effectiveness provided updated analyses examining the growth and impact of tutoring services on students since the previous study in 2012. From Fall 2003 to Fall 2014, TLC grew tremendously. In Fall 2004, the total number of tutoring contacts reported was 13,227 (Meuschke & Gribbons, 2005). In Fall 2012, 64,946 duplicated tutoring contacts were reported (Parker, Meuschke, & Gribbons, 2012). This was almost a 400% increase of total tutoring contacts. To examine usage and determine the impact that TLC services had on student performance, the analysis included services related to tutoring, computer use, studying, and Supplemental Learning (SL). Since students pursue a variety of different amounts of tutoring and the impact will likely vary by amount of services received, retention and success rates of students were assessed for amount of tutoring as well as whether or not they received any tutoring services.

Upon review of the results, the following observations were made:

### Research Question #1

*How many students did TLC Serve during the 2014/15, 2015/16, 2016/17, and 2017/18 Academic Years?*

As seen in Table 1, the number of tutoring contacts were at their highest in 2014/15, but decreased in 2015/16, 2016/17, and 2017/18. By 2017/18, the percent change from 2014/15 was -31 percent for the duplicated count and -18 percent for the unduplicated count.

*Note: Data show decreases in tutor contacts at the Valencia and Canyon Country campuses.*

*Table 1. Number of Tutor Contacts and Unduplicated Number of Students Served by Tutors: 2014/15, 2015/16, 2016/17, and 2017/18*

|   | 2014/15 | 2015/16 | 2016/17 | 2017/18 | % Change |
|---|---------|---------|---------|---------|----------|
| <b>Duplicated Count of Tutor Contacts*</b>              | 129,254 | 124,128 | 103,328 | 89,007  | -31%     |
| <b>Unduplicated Number of Students Served by Tutors</b> | 9,891   | 10,080  | 9,378   | 8,145   | -18%     |

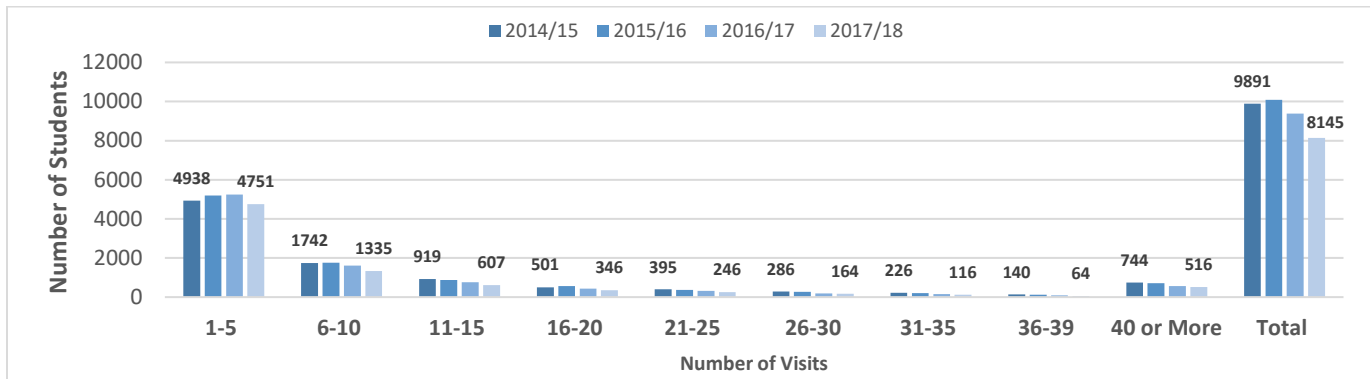
*\*Duplicated count refers to counting every visit a student makes to TLC for services*

While TLC provided tutoring resources to approximately 10,000 students during in 2014/15, 2015/16, and 2016/17, in 2017/18, the number of student who received tutoring resources decreased to approximately 8,000. As seen in Table 2 and Figure 1, the majority attended 10 or fewer times in all academic years included in the analysis.

Table 2. Number of Visits per Student: 2014/15, 2015/16, 2016/17, and 2017/18

| Number of Visits         | 2014/15<br>(N) | 2014/15<br>(%) | 2015/16<br>(N) | 2015/16<br>(%) | 2016/17<br>(N) | 2016/17<br>(%) | 2017/18<br>(N) | 2017/18<br>(%) |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>1-5 Visits</b>        | 4938           | 50%            | 5194           | 52%            | 5243           | 56%            | 4751           | 58%            |
| <b>6-10 Visits</b>       | 1742           | 18%            | 1764           | 18%            | 1615           | 17%            | 1335           | 16%            |
| <b>11-15 Visits</b>      | 919            | 9%             | 874            | 9%             | 753            | 8%             | 607            | 7%             |
| <b>16-20 Visits</b>      | 501            | 5%             | 560            | 6%             | 433            | 5%             | 346            | 4%             |
| <b>21-25 Visits</b>      | 395            | 4%             | 371            | 4%             | 324            | 3%             | 246            | 3%             |
| <b>26-30 Visits</b>      | 286            | 3%             | 273            | 3%             | 193            | 2%             | 164            | 2%             |
| <b>31-35 Visits</b>      | 226            | 2%             | 205            | 2%             | 163            | 2%             | 116            | 1%             |
| <b>36-39 Visits</b>      | 140            | 1%             | 120            | 1%             | 93             | 1%             | 64             | 1%             |
| <b>40 or More Visits</b> | 744            | 8%             | 719            | 7%             | 561            | 6%             | 516            | 6%             |
| <b>Total Visits</b>      | 9,891          |                | 10,080         |                | 9,378          |                | 8,145          |                |

Figure 1. Number of Visits per Student: 2014/15, 2015/16, 2016/17, and 2017/18



## Research Question #2

*How Many Students Received Each Type of Service Offered by TLC During the 2014/15, 2015/16, 2016/17, and 2017/18 Academic Years?*

As seen in Table 3, TLC provided services in a variety of areas. During the 2014/15, 2015/16, 2016/17, and 2017/18 academic years, students most frequently utilized tutoring services (duplicated count), however, there was a decrease in tutoring services between 2014/15 and 2017/18 (-9 percent change). Between the 2014/15 and 2017/18 academic years, computer services had the greatest percent change (-72 percent), followed by study services (-70 percent), and Supplemental Learning services (-42 percent).

*Note: Data show decreases in tutor contacts at the Valencia and Canyon Country campuses.*

Table 3. Type of Service in TLC: 2014/15, 2015/16, 2016/17, and 2017/18

| Type of Service              | 2014/15 | 2015/16 | 2016/17 | 2017/18 | % Change |
|------------------------------|---------|---------|---------|---------|----------|
| <b>Tutor</b>                 | 73,561  | 74,692  | 67,609  | 66,666  | -9%      |
| <b>Computer</b>              | 19,899  | 14,924  | 10,078  | 5,562   | -72%     |
| <b>Supplemental Learning</b> | 21,223  | 21,194  | 16,419  | 12,385  | -42%     |
| <b>Study</b>                 | 14,571  | 13,318  | 9,222   | 4,394   | -70%     |

### Research Question #3

#### *Which Courses Did Students Most Frequently Receive Tutoring In?*

There were over 600 courses in which students sought tutoring for in each of the 2014/15, 2015/16, 2016/17, and 2017/18 academic years. The top courses (unduplicated) in which students sought tutoring for in each academic year is seen below in Table 4. The course in which students most frequently sought tutoring was English-101.

*\*Notes: Table shows representation within the total number of contacts and “—” indicates that a course was not amongst the top five of that particular academic year.*

*Table 4. Top Courses Most Frequently Tutored for Each Academic Year (Number and Percentage)*

| <b>Courses</b>     | <b>2014/15<br/>(N)</b> | <b>2014/15<br/>(%)</b> | <b>2015/16<br/>(N)</b> | <b>2015/16<br/>(N)</b> | <b>2016/17<br/>(N)</b> | <b>2016/17<br/>(%)</b> | <b>2017/18<br/>(N)</b> | <b>2017/18<br/>(%)</b> |
|--------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>English-103</b> | —                      | —                      | 852                    | 8%                     | 867                    | 11%                    | 836                    | 10%                    |
| <b>English-101</b> | 1616                   | 16%                    | 1585                   | 16%                    | 1564                   | 19%                    | 1394                   | 17%                    |
| <b>English-096</b> | —                      | —                      | 891                    | 9%                     | —                      | —                      | —                      | —                      |
| <b>English-091</b> | 1127                   | 11%                    | —                      | —                      | 844                    | 10%                    | 620                    | 8%                     |
| <b>Math-070</b>    | 1079                   | 11%                    | 982                    | 10%                    | 864                    | 11%                    | 731                    | 9%                     |
| <b>Math-140</b>    | 830                    | 8%                     | —                      | —                      | 75                     | 1%                     | 577                    | 7%                     |
| <b>Math-060</b>    | 740                    | 7%                     | 828                    | 8%                     | —                      | —                      | —                      | —                      |

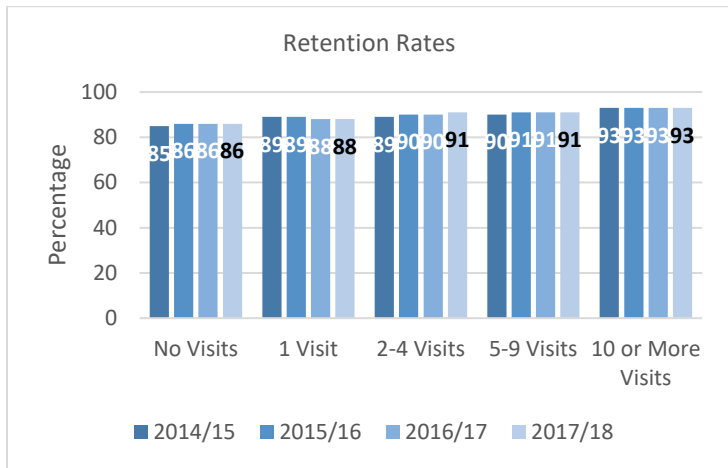
### Research Question #4

#### *Compared to Students Enrolled in Similar Courses, But Did Not Utilize TLC, What Are Retention and Success Rates of Students Who Utilized TLC?*

##### *By Number of Visits*

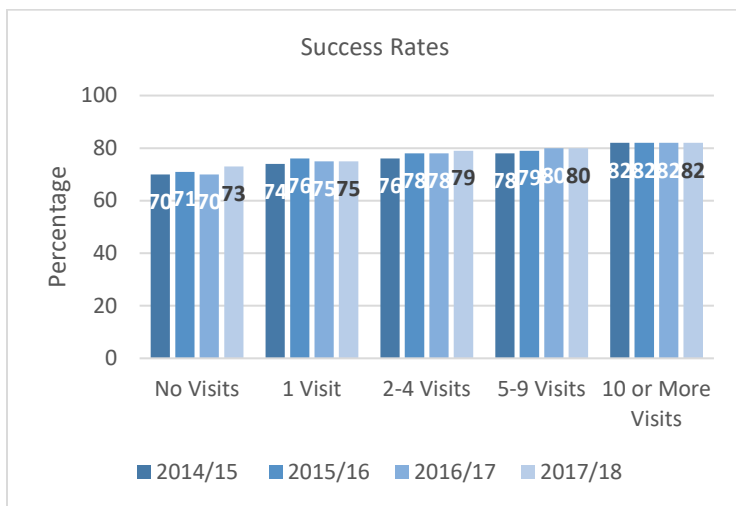
As seen in Figure 2, retention rates are slightly higher for students who visited TLC and received services compared to students who did not visit TLC, but were enrolled in the same courses across all academic years included in the analysis. The differences were greatest for students who utilized TLC 10 times or more compared to students who did not utilize TLC across all academic years. For example, the retention rate was 93 percent for students who attended 10 or more times in 2017/18 compared to 86 percent of students who did not utilize TLC.

Figure 2. Retention Rates by Number of Visits to TLC: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)



As seen in Figure 3, success rates were also slightly higher for students who visited TLC and received services compared to students who did not visit TLC, but were enrolled in the same courses across all academic years included in the analysis. The differences were greatest for students who utilized TLC 10 times or more compared to students who did not utilize TLC. The differences ranged from nine percentage points to as much as 12 percentage points across the years.

Figure 3. Success Rates by Number of Visits to TLC: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)



**By Number of Hours in Which Tutoring Was Received**

As seen in Figure 4, retention rates were highest for students who received 10 or more hours of tutoring compared to students who did not visit TLC, but were enrolled in the same courses across all academic years included in the analysis. As seen in Figure 5, the differences in success rates were greatest for students who received 20 or more hours of tutoring compared to students who did not visit TLC, but were enrolled in the same courses across all academic years included in the analysis. These results mirror results for the number of visits to TLC.

Figure 4. Retention Rates by Number of Hours in Which Tutoring was Received: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)

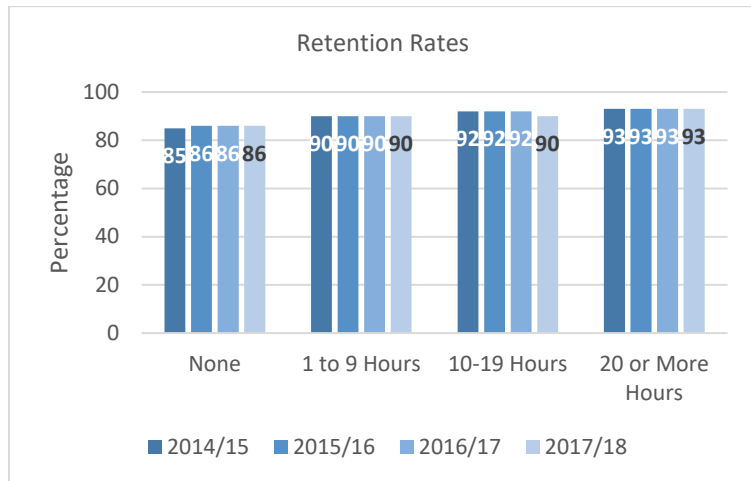
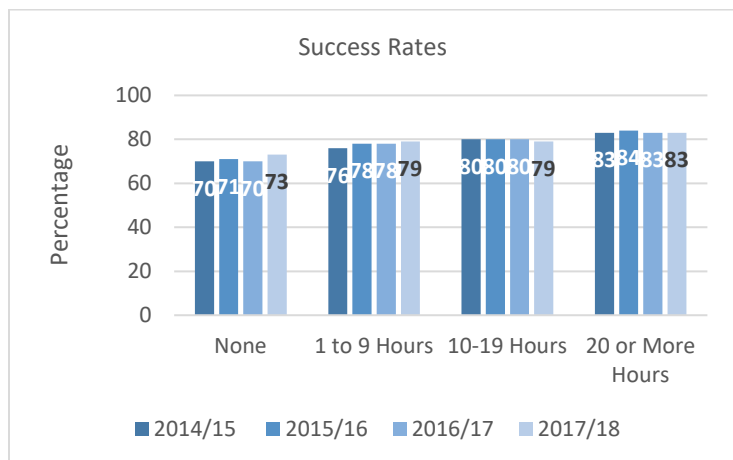


Figure 5. Success Rates by Number of Hours in Which Tutoring was Received: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)



### Research Question #5

What Are The Demographics of Students Who Utilized TLC Compared to Students Who Did Not (Sex, Age, Ethnicity, and Student Types)?

#### Sex

As seen in Table 5, the percentage of female and male students who utilized TLC compared those who did not in each academic year is relatively the same. The distribution of sex in Table 5 is consistent with the distribution for the college as a whole (California Community Chancellor’s Office Data Mart).

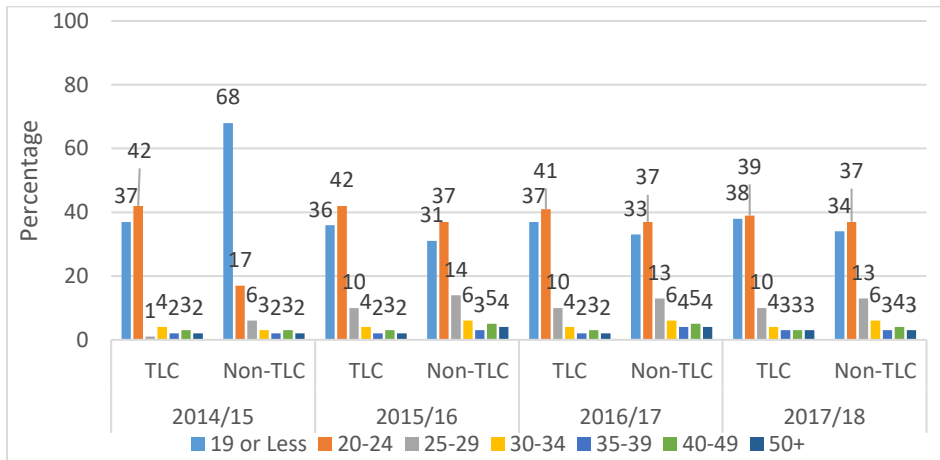
Table 5. Comparison of Sex: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)

| Sex    | TLC 2014/15 | Non-TLC 2014/15 | TLC 2015/16 | Non-TLC 2015/16 | TLC 2016/17 | Non-TLC 2016/17 | TLC 2017/18 | Non-TLC 2017/18 |
|--------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| Female | 53%         | 53%             | 53%         | 53%             | 55%         | 53%             | 54%         | 55%             |
| Male   | 46%         | 47%             | 47%         | 47%             | 45%         | 47%             | 46%         | 45%             |

## Age

With the exception of the 2014/15 academic year, the proportion of students utilizing TLC by age is similar to those who did not. Examining the age group that utilized TLC the most, the highest percentage was students aged 24 or younger, while the lowest was students aged 25 or less (see Figure 6).

Figure 6. Age Comparison: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)



## Student Types

For the most part, the distribution of students identified as enrolling in California Work Opportunity and Responsibility for Kids (CalWORKs), Disabled Students Programs and Services (DSPS), Extended Opportunity Programs & Services (EOPS), Foster Youth, Veterans, and Board of Governor Fee Waiver (BOG, now California College Promise Grant) was similar for those who utilized TLC compared to those who did not. The one exception was students who enrolled in DSPS. Five percent more students enrolled in DSPS and utilized TLC compared to those who did not utilize TLC, but were enrolled in DSPS in 2015/16, 2016/17, and 2017/18. Specifically, in 2014/15, 11 percent of students who utilized TLC enrolled in DSPS, while 10 percent who did not utilize TLC enrolled in DSPS. However, in 2015/16, 2016/17, and 2017/18, 11 percent of students who utilized TLC enrolled in DSPS, while six percent who did not utilize TLC enrolled in DSPS.

Table 6. Comparison of Student Types: 2014/15, 2015/16, 2016/17, and 2017/18 (Percentage)

| Student Type        | TLC     | Non-TLC | TLC     | Non-TLC | TLC     | Non-TLC | TLC     | Non-TLC |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                     | 2014/15 | 2014/15 | 2015/16 | 2015/16 | 2016/17 | 2016/17 | 2017/18 | 2017/18 |
| <b>CalWORKs</b>     | 2%      | 1%      | 2%      | 1%      | 1%      | 1%      | 1%      | 1%      |
| <b>DSPS</b>         | 11%     | 10%     | 11%     | 6%      | 11%     | 6%      | 11%     | 6%      |
| <b>EOPS</b>         | 7%      | 8%      | 8%      | 3%      | 8%      | 3%      | 8%      | 3%      |
| <b>Foster Youth</b> | <1%     | <1%     | <1%     | <1%     | <1%     | <1%     | <1%     | <1%     |
| <b>Veteran</b>      | 4%      | 3%      | 4%      | 2%      | 3%      | 2%      | 3%      | 2%      |
| <b>BOG</b>          | 2%      | 4%      | 3%      | 2%      | 4%      | 3%      | 4%      | 4%      |



## Discussion

This study assessed the relationship between the amount of tutoring received and student retention and success for 2014/15, 2015/16, 2016/17, and 2017/18 academic years. Results were similar to the Fall 2012 retention and success analyses. In all analyses, students who participated in tutoring outperformed students who did not, regardless of the amount of tutoring they received and the measure of success (retention and success rates). These differences could be attributable to several factors, including motivational differences in students and instructor grading practices. However, the results are necessary to support conclusions that tutoring services may improve success. Furthermore, as indicated in Research Brief #193, Adult Learners (students aged 25 and older) have lower retention and success rates, compared to Traditional Students (aged 24 and younger) (Parker & Meuschke, Research Brief #193: Profile of Adult Learners: Fall 2017, 2019). The present study showed that more Traditional Students are utilizing TLC compared to Adult Learners.

## Recommendations

- Encourage instructors, especially English, math, and instructors of courses that are among the top 20 courses with historically low success rates (Parker, Meuschke, & Gribbons, Research Brief #190: Top Twenty Courses with Historically Low Success Rates: Fall 2016, 2017, and 2018, 2019), to incorporate TLC services into the curriculum and require participation as part of the course
- Explore ways to communicate findings to students and instructors.
- Examine reasons for decrease in tutoring contacts at both campuses
- Examine hours of operation of TLC and modes of tutoring to make it more accessible to Adult Learners, who are more likely to be part-time students (Parker & Meuschke, Research Brief #193: Profile of Adult Learners: Fall 2017, 2019)

## References

- Meuschke, D. M., & Gribbons, B. C. (2005). *Numbered Report #165: Tutoring/Learning/Computer Center Retention and Success Fall 2013 and Fall 2014*. Santa Clarita: College of the Canyons.
- Parker, C. A., & Meuschke, D. M. (2019). *Research Brief #193: Profile of Adult Learners: Fall 2017*. Santa Clarita: College of the Canyons.
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- Parker, C. M., Meuschke, D. M., & Gribbons, B. C. (2012). *Research Brief #64: The Learning Center (TLC) Retention and Success Analysis--Fall 2012*. Santa Clarita: College of the Canyons.

## Methods

To conduct the analysis, 2014/15, 2015/16, 2016/17, and 2017/18 TLC attendance data were obtained from TLC. Student ID's from the database were matched with the MIS ID file. Data were then merged with the College's grade files (USX referential files) from those academic years. To perform the analysis, data were analyzed using the Statistical Package for the Social Science (SPSS, 2019) and Microsoft Excel (2016).

## Notes

- 1.) **Course Success** is defined as the percent of students successful in courses out of total enrolled in courses: Numerator = Number of students (duplicated) with A, B, C, CR/P; Denominator = Number of students (duplicated) with A, B, C, D, F, FW, CR/P, NC/NP, W, I. (This analysis uses the RP Group definition, which facilitates statewide comparisons.)
- 2.) **Course Retention** is defined as the percent of students retained in courses out of total enrolled in courses: Numerator = Number of students (duplicated) with A, B, C, D, F, I, CR/P, FW, NC/NP; Denominator = Number of students (duplicated) with A, B, C, D, F, I, W, CR/P, FW, NC/NP. (This report uses the RP Group definition, which facilitates statewide comparisons.).

For more detailed information on this research brief, stop by the Institutional Research office located in BONH-224, or call Catherine Parker, Research Analyst at 661.362.5879 or Daylene Meuschke, AVP of Institutional Research, Planning, and Institutional Effectiveness at 661.362.5329.