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The Learning Center (TLC) Retention and Success Analysis: Fall 2020 (COVID-19 Edition)

College of the Canyons

Santa Clarita Community College District

26455 Rockwell Canyon

Santa Clarita, CA 91355

Institutional Research, Planning, and

Institutional Effectiveness

Catherine Parker, M.A.
Preeta Saxena, Ph.D.
Daylene M. Meuschke, Ed.D.

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COLLEGE OF THE CANYONS

Introduction

At the request of The Learning Center (TLC), the Office of Institutional Research, Planning, and Institutional Effectiveness conducted an analysis to compare retention and success rates for students who used and did not use online tutoring services offered by the TLC (overall, by number of hours, and by demographics) and were enrolled in similar classes during the Fall 2020 semester. Due to COVID-19 stay at home orders, TLC services were offered 100 percent online (live over Zoom).

Methods

To conduct the analysis, Fall 2020 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 file (USX referential files).

A total of 38,593 enrollment records were included in this analysis, of which 4,244 records were for students who used the TLC, and the remaining 34, 349 records were for students who did not use the TLC in Fall 2020.

Research Results

In Fall 2020, 1,233 individual students received a total of 4,345.86 hours of online tutoring (includes GLAs/Workshops). Of those 4345.86 hours:

- 1184.90 hours were Writing & Humanities tutoring,
- 1761.23 hours were Math and Science tutoring,
- 205.90 hours were CAWT & COMP SCI tutoring, and
- 1,193.83 hours were English GLAs/Workshops and Math workshops

Research Question #1

What Are the Overall Retention and Success Rates for Students Who Used and Did Not Use the TLC?

Overall, students enrolled in similar courses who used the TLC during the Fall 2020 semester had higher retention (94% v. 91%) and success rates (87% v.77%) compared with students who did not use the TLC. See Figure 1.

Figure 1. Overall Retention and Success Rates by TLC Usage: Fall 2020
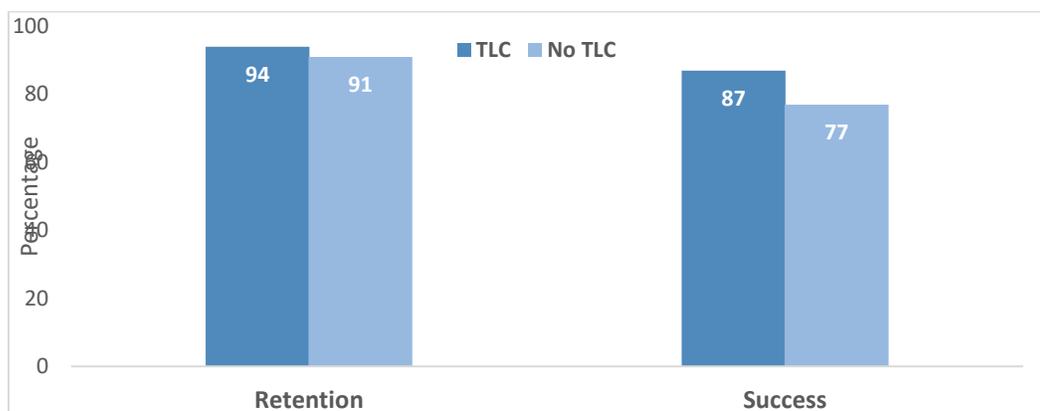
Research Question #2

What Are Retention and Success Rates for Students by total Number of Hours of Tutoring?

For students using the TLC tutoring services, retention rates ranged from 93% to 97%, while success rates ranged from 86% to 93%, with the highest rates both being in the *11-15 Hours* of online tutoring. Retention and success rates increased slightly or stayed the same between one to 15 hours of tutoring; both rates dipped slightly with *More than 15 Hours* of tutoring. See Figure 2.

Figure 2. Retention and Success Rates by Number of Tutoring Hours: Fall 2020
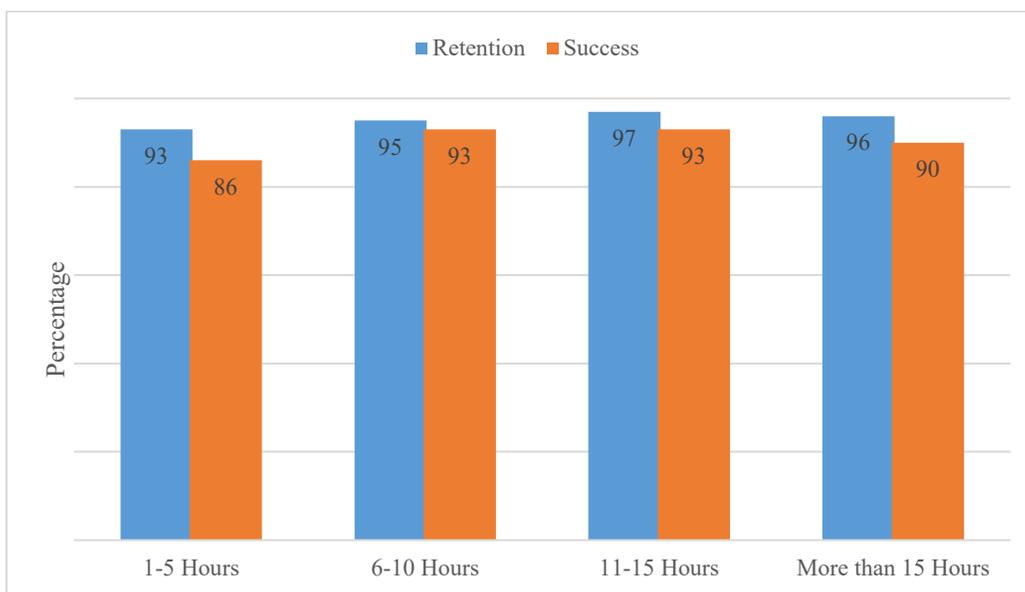
Research Question #3

*What Are the Demographics of Students Who Utilized TLC Compared to Students Who Did Not?*

Gender: When the group of students enrolled in the same courses and accessed the TLC, is compared with the with those who did not use the TLC, a slightly higher percent of females (60% v. 56%) were in the former group as compared with the females who did not utilize the TLC. Results showed the opposite for male students: of the group that used the TLC, males were slightly less likely (40% v. 44%) to be in the group in this group. See Figure 3.

Figure 3. TLC Usage by Gender: Fall 2020
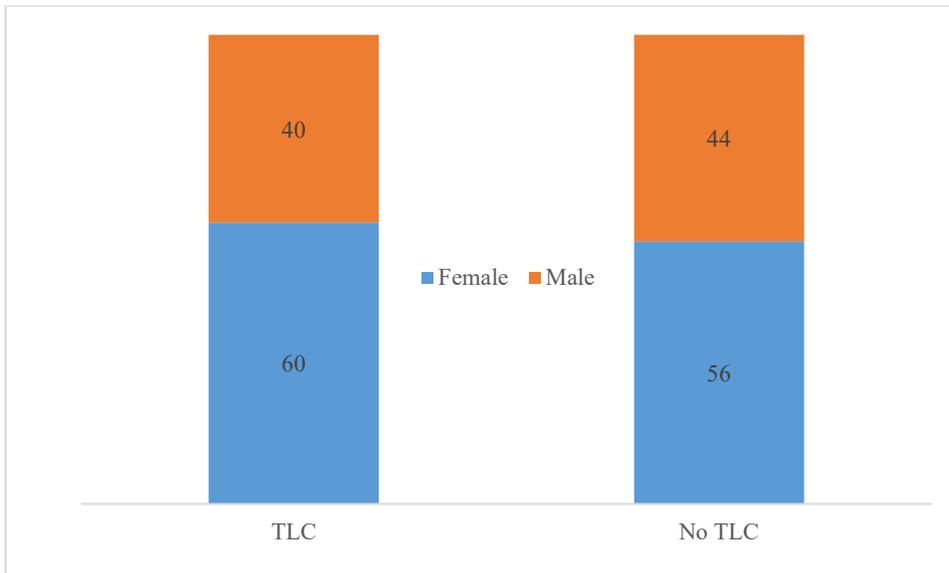
Age: For students enrolled in similar courses and used the TLC, a higher percentage of students (46% v. 34%) were in the *18 or less* group and a lower percentage (37% v. 48%) in the *19-24 group* as compared to those who did not access the TLC. For students who used TLC, the percentage who were *25 years or older* was similar to those who did not use the TLC. See Figure 4.

Figure 4. TLC Usage by Age: Fall 2020
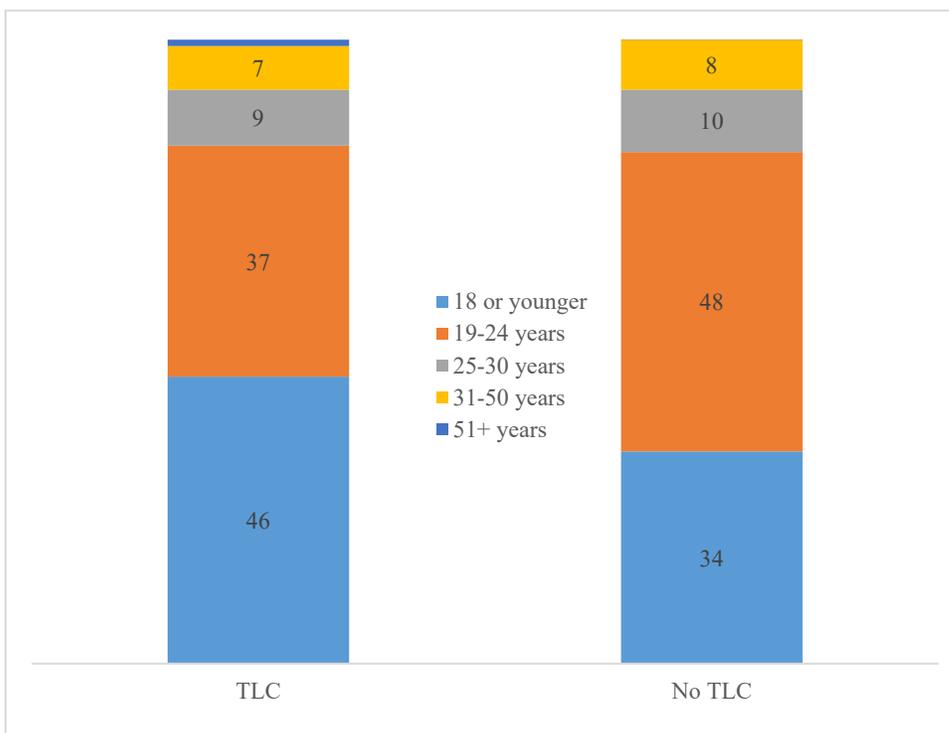
Ethnicity: As seen in Figure 5, the ethnicity of the students who used the TLC and were enrolled in similar classes was similar to the representation of each ethnic group for student who did not access the TLC. Hispanic/*Latinx* students had the highest percentage of TLC usage (38/41%), followed by *White* (27%). Note: usage for Hawaiian/Pacific Islander and Native American/Alaskan Native were less than one percent. See Figure 5.

Figure 5. TLC Usage by Ethnicity: Fall 2020*
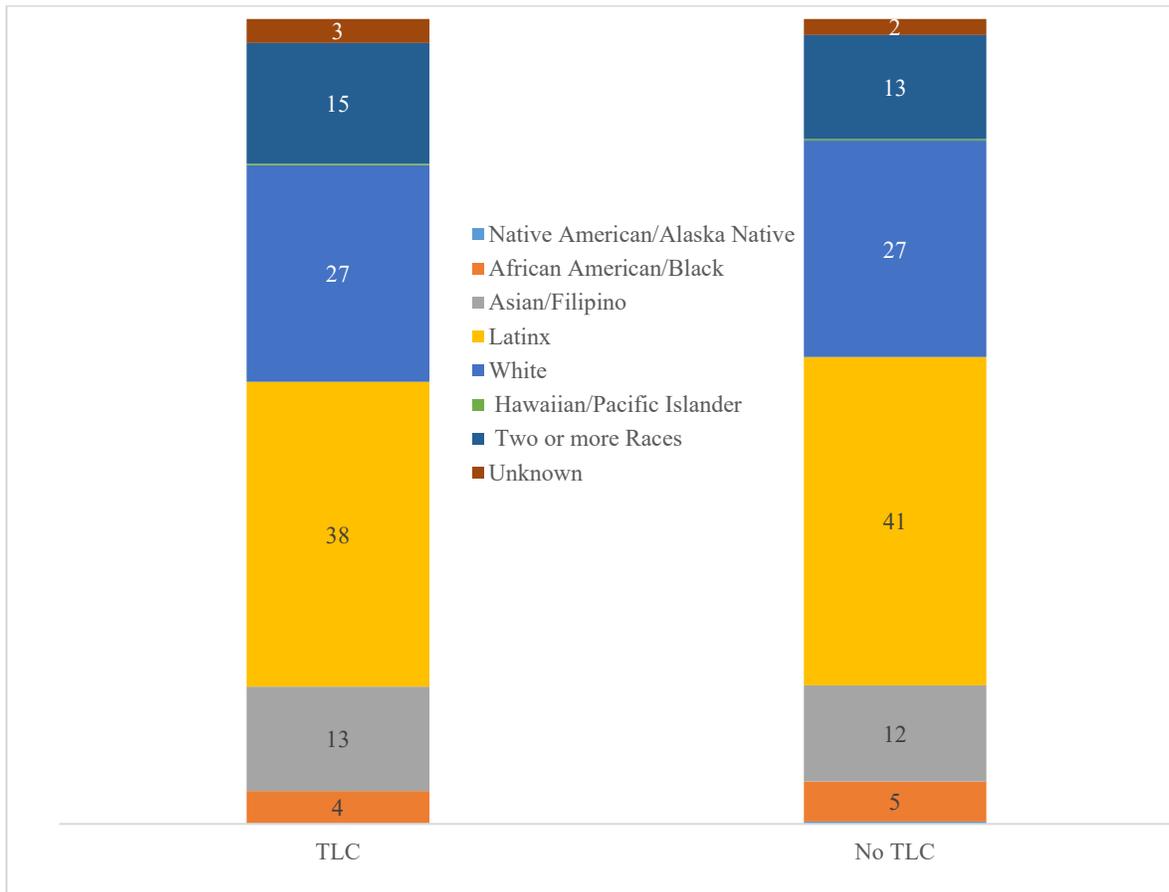
*excludes Group sizes that were <10 students (e.g. Native American, Hawaiian Pac. Islander)

Research Question #4

What Are the Success Rates of Students Who Used the TLC Compared to Students Who Did Not by Demographics?

Ethnicity: Overall, students who were enrolled in similar classes and used the TLC had a 10% higher success rates compared to those who did not (87% v.77%, Figure 1). When looking at ethnicity, the largest within group differences were seen in students who are Hispanic/Latinx (84% v. 72%). While African American/Black students did experience smaller success rate gap (75% v. 67%), they did have the lowest success rates in this analysis, regardless of whether they used or did not use the TLC. See Figure 6.

Figure 6. Success Rate by Ethnicity and TLC Usage: Fall 2020
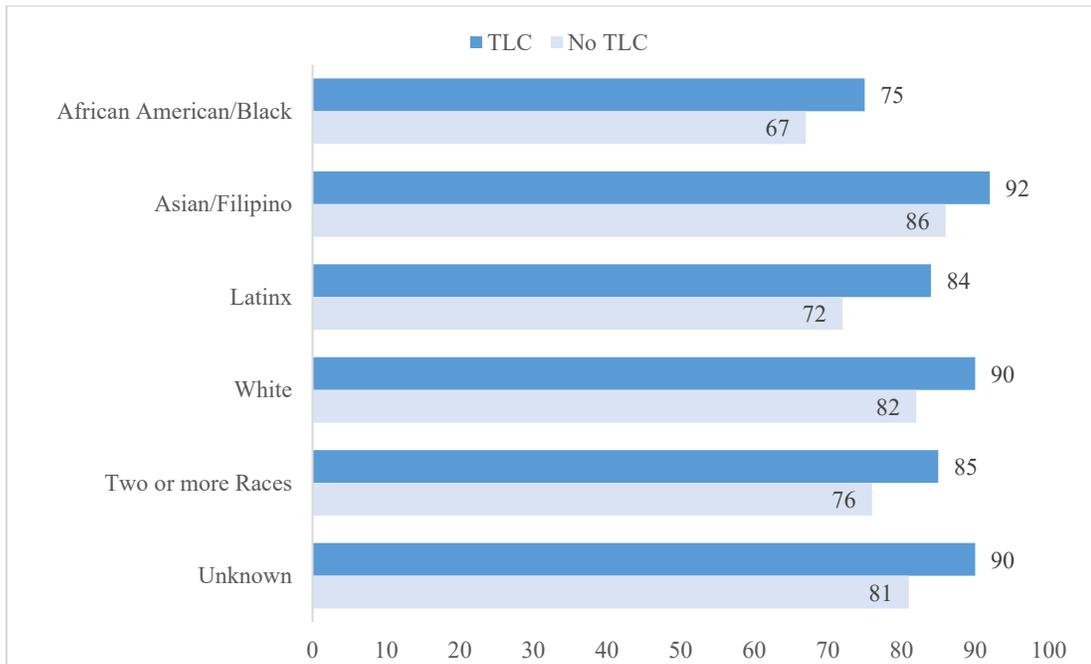
*excludes Group sizes that were <10 students (e.g. Native American, Hawaiian Pac. Islander)

Age: Age categories were collapsed into two groups: *18 to 24 years* and *25 years plus years*. Success rates within Usage were similar for both TLC users (86% v. 87%) and No TLC (78% v.76%). Interestingly, this appears to support the hypothesis that success to be a function of using TLC, but not of the students' age. See Figure 7.

Figure 7. Success by Age & Usage: Fall 2020

Tables 1, provides a breakdown by number of the students for each demographic category included in the analysis for Gender, Age and Ethnicity (Figures 3, 4 and 5).

Table 1. Group Sizes within each Demographic category

	TLC (N=4,244)	No TLC (N=34,349)
Gender		
Female	2,532	19,090
Male	1,672	15,068
Age		
18 or Less	1,957	11,748
19-24	1,589	16,352
25-30	369	3,299
31-50	281	2,575
51+	48	375
Ethnicity		
Native American/Alaska Native	5	102
African American/Black	188	1,617
Asian/Filipino	567	3980
Latinx	1,614	14,152
White	1,158	9,360
Hawaiian/Pacific Islander	8	68
Two or more Races	573	4,354
Unknown	131	716

Discussion

The TLC transitioned to online tutoring in the middle of the Spring 2020 semester in response to the pandemic closing most in-person activities on campus. This study assessed the differences in success and retention for students who used and did not use the TLC in the first full semester of only online tutoring. The results are comparable to previous TLC analyses; students who participated in tutoring outperformed students who did not.

This result was consistent across each category, whether it be age or ethnicity. For example, with ethnicity, the success rates were approximately 10% higher for students who used the TLC (where the group size was at least 10). And age, at least how categories are constructed, appears to have no impact on the outcomes, with students who accessed tutoring had a 10% higher success rate.

As this was an observational study, the variances could be attributable to other factors, including motivational differences in students, access to other resources, and instructor grading practices. However, we do note that these results are consistent with the hypothesis that tutoring services improve retention and success.

A final note, the total 4345.86 hours (or 8.28 FTES) represents a small fraction of the number of hours typically collected in a non-pandemic impacted semester of on-campus tutoring.

Recommendations

- Explore ways to communicate findings to students and instructors that accessing tutoring correlates with higher course completion (by approximately 10% higher success rates).

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. 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.

Parker, C. A. & Meuschke, D. M. (2019). *Research Brief #191: The Learning Center (TLC) Retention and Success Analysis: 2014/15, 2015/16, 2016/17 and 2017/18.* Santa Clarita: College of the Canyons

Notes

1.) ***Course Success*** is defined as the percent of students <u>successful</u> 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 <u>retained</u> 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 contact Preeta Saxena, Director or Daylene Meuschke, AVP of Institutional Research, Planning, and Institutional Effectiveness at 661.362.5329.