



Cobblestone Learning Center (CLC) Program Insight



Overview

01.

Mandate

02.

Student Education
Level

03.

Program Utilization
&
Student Trajectory

04.

Effectiveness of
Online Program

01. Mandate

The Cobblestone Learning Center proposed to utilize student mark data for comprehensive insights into student achievement, program outcomes, and the optimal utilization of educational programs. This data will be instrumental in understanding student trajectories and evaluating the effectiveness of our online learning modalities.

The student mark data can be used to analyze:

1. Student Base Score

- Average Student Base Score in 8 Districts
- Improvement on Student Base Score from 2016 to 2019;

2. Program Utilization

- Mark Increase of Population on each Subject after Taking Programs
- Mark Increase on each Subject in Different Districts after Taking Programs;

3. Student Trajectory

- Popularity of Current Program Order and Reasonable Order of Programs;

4. Effectiveness of Online Program

- Mark Increase of Same Program after Changing Location from Center to Online,

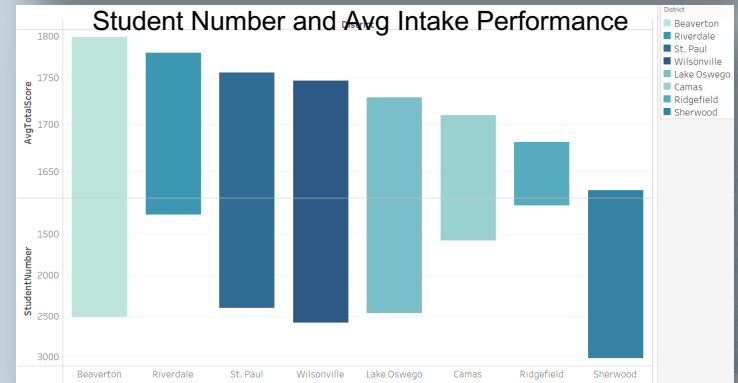
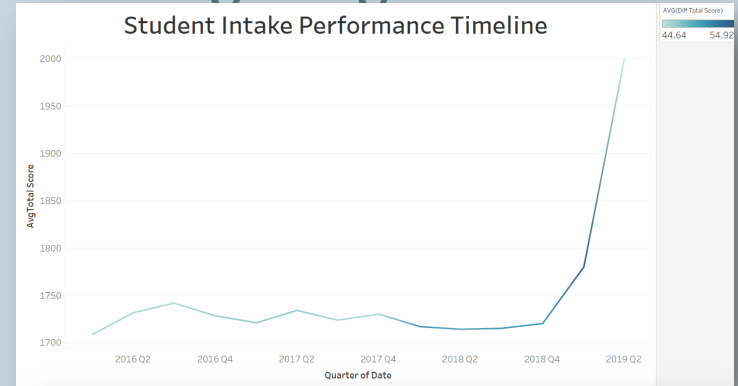
enabling optimized program effectiveness and infrastructure of learning resources

02. Student Education Level

Student Base Score before Taking Program

- The Student educational baseline scores showing an upward trend from 2016 to 2019

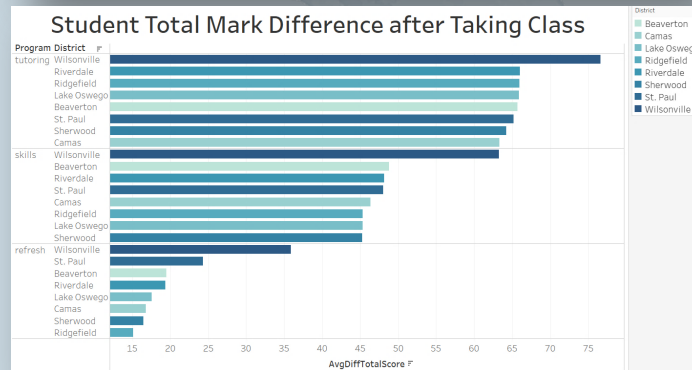
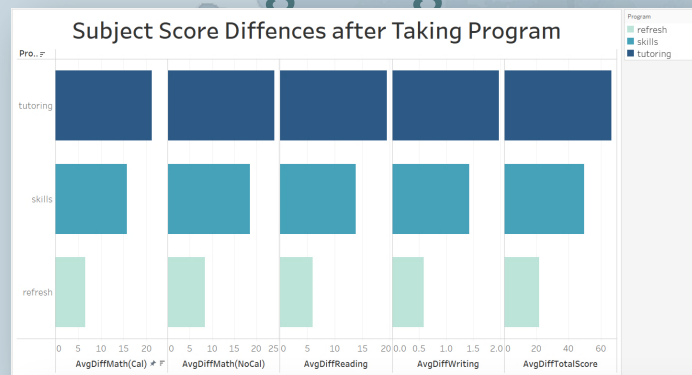
- Certain districts are more stabilized in the baseline scores relative to their local population sizes
- Beaverton, St. Paul, Wilsonville, and Lake Oswego exemplify this stability
- Sherwood emerges as an area for the future focus on baseline scores potential growth, given its combination of the lowest baseline scores and largest population



03. Program Utilization

Difference of Mark Increase after Taking Program

- Students' scores across four subjects have shown remarkable improvements after participating in all three programs: tutoring, skills, and refresh.
- The tutoring program stands out, contributing to the most remarkable score increases, consistently across all four subjects.
- However, the Refresh program, despite its benefits, has displayed the least improvement in scores across all eight districts. This trend highlights an opportunity to enhance the program's effectiveness and overall value, making it a key area for focused improvement.
- Students in Wilsonville has the highest score improvement in all three programs, and students' score improvement in other districts are consistent



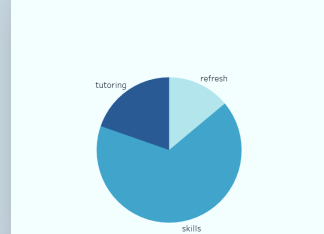
03. Student Trajectory

Current Popular Program Taking Order

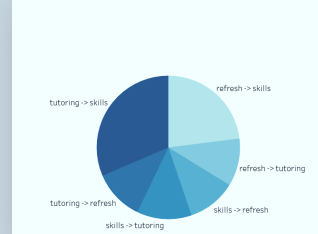
Analyzing the different program combinations and their impact on score improvement is instrumental in determining the pairings that offer the greatest benefits in terms of student achievement.

- Most student participants are enrolled in just one program: mostly skills or tutoring.
- Skills is the most popular one, far past the other two.

Pie Chart of Student Taking 1 Program



Pie Chart of Student Taking 2 Programs



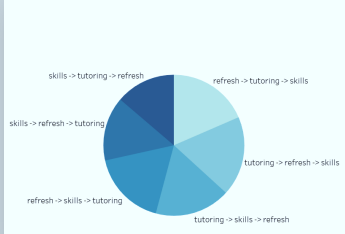
- The most common combinations for students joining only 2 programs are tutoring-refresh and refresh-skills, which weight higher distribution compared to the other four possible possibilities.

Student Number Taking Program in Different Order

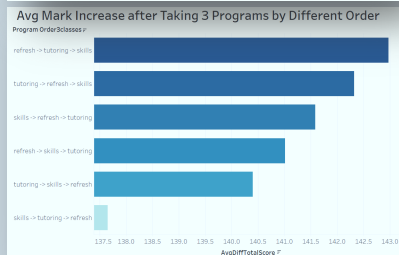
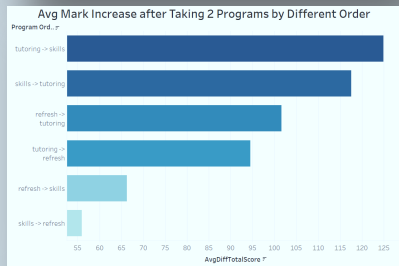
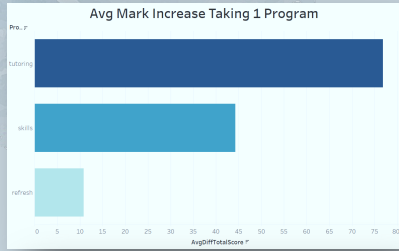
skills 2,245	tutoring 665	refresh -> skills 647	refresh 472
	skills -> tutoring 348	tutoring -> refresh 322	skills -> refresh 309
	refresh -> tutoring -> skills 332	refresh -> skills -> tutoring 312	refresh -> tutoring 303
tutoring -> skills 884	tutoring -> refresh -> skills 328	tutoring -> skills -> refresh 312	skills -> refresh -> tutoring 264
		skills -> tutoring -> refresh 247	

- The distribution is even across all possible combinations of three programs.

Pie Chart of Student Taking 3 Programs



03. Student Trajectory Reasonable Program Taking Order



- The average mark increase for students participating in just one program is the most significant in the tutoring program, substantially outperforming the other two programs.

- The order of taking two programs does not have significantly influence on mark increase rather than the combination of program.

- The combination of tutoring and skills emerges as the most effective.

- In these dual-program enrollments, the performance boost is less obvious when the refresh program is.

- In the case of students enrolled in combinations of three programs, those combinations that end with tutoring and skills are significantly more effective than those ending with refresh programs.

Cobblestone Refresh



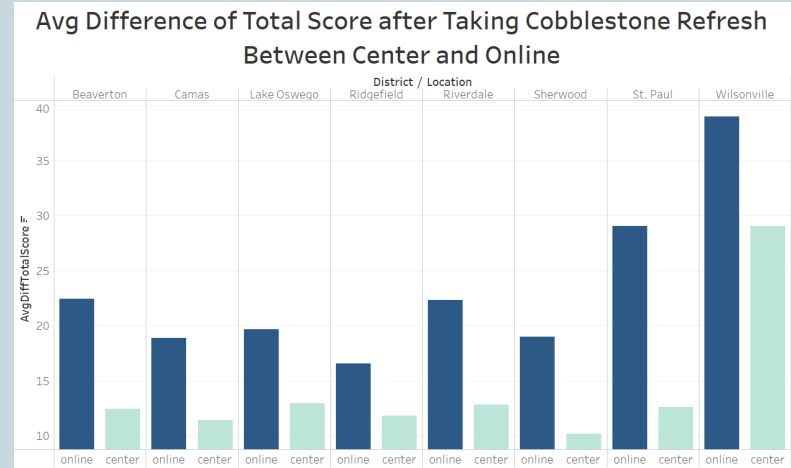
1:1 Tutoring



Skills Advantages

04. Effectiveness of Online Modality Analysis Cobblestone Refresh

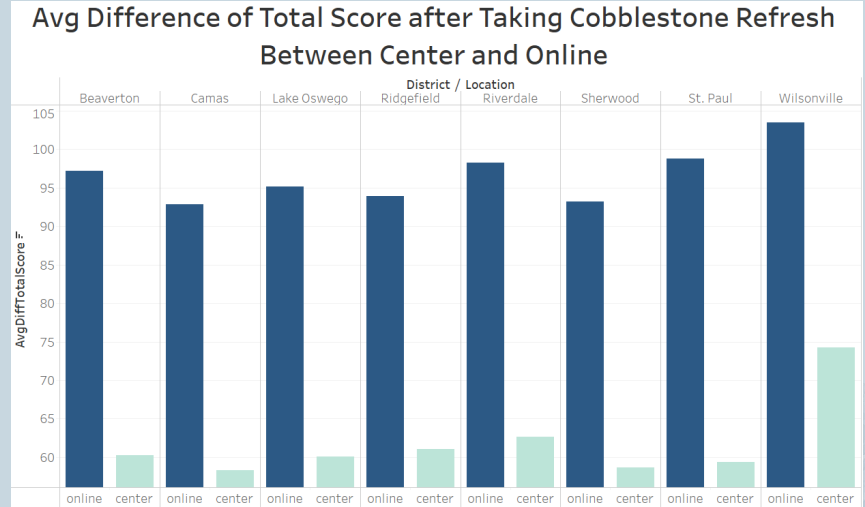
- Anticipating a 14-point increase, center-based teaching is poised to yield positive outcomes.
- Online-based instruction, on the other hand, is projected to significantly impact mark improvement, with an expected increase of 23 points.
- Except for St. Paul, where the increase hovers around 15 points, all other districts showcase an average 10-point upswing after participating in the online program.
- In summary, this highlights the widespread effectiveness of online education in fostering academic advancement across diverse districts.



04. Effectiveness of Online Modality Analysis

1:1 Tutoring

- The anticipated outcome for center-based teaching is a predicted mark increase of 70.
- Online-based teaching positively impacts the increase in marks, as evidenced by the forecasted value of a 105-point increase.
- With the exception of Wilsonville, where the increase is approximately 30 points, all other districts show an average increase of 35 points after participating in the online program.



04. Effectiveness of Online Modality Analysis

Differentiated Program Characteristics Analysis and Drawbacks of Data Limitation

- Introducing an online modality for 'Skills Advantage' seems to be a viable option, particularly when all programs cover identical content but differ in format, time, and location.
- Consistent time allocation proves effective in improving student performance. Although 'Cobblestone Refresh' and '1:1 Tutoring' both have a total duration of 4 hours, they vary in their time intervals. The greater effectiveness of '1:1 Tutoring' can be attributed to its consistent, regular class scheduling compared to a singular session

	Cobblestone Refresh	1:1 Tutoring
Time Interval	4 hours for 1 times	4 hours in 1- 4 weeks
Predicted Mark Increase	10	36

Additional Data	Future Analysis
Student Mark after taking Cobblestone refresh before 2015	Casual Effectiveness of online modality
student feedback peer and school evaluations social & behavioral information	Long-term Student Trajectory