

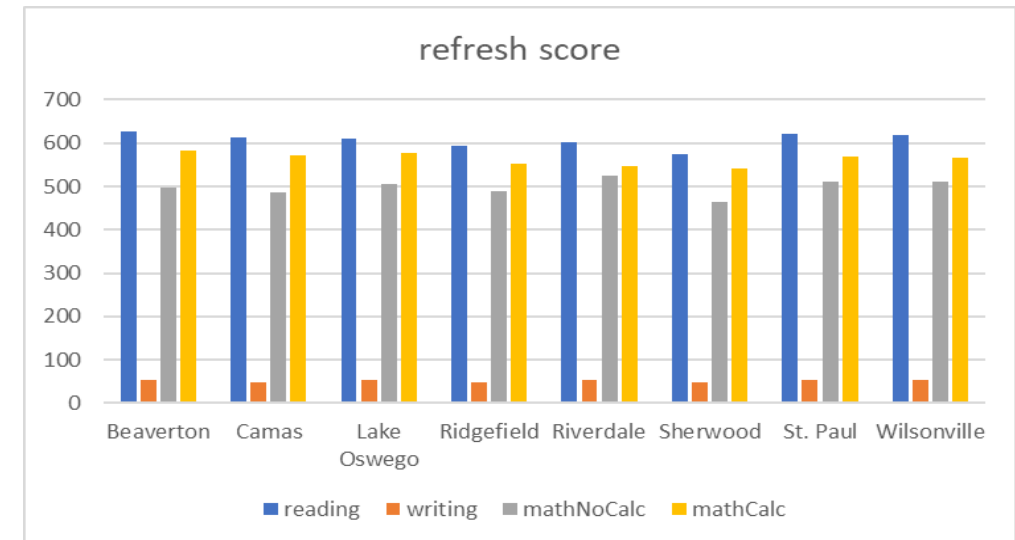
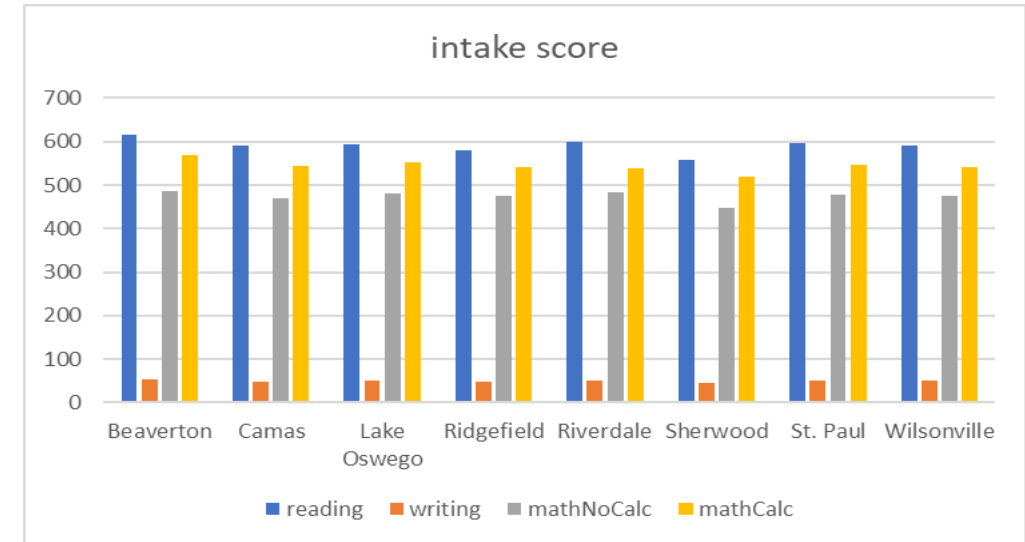
Cobblestone Learning Center Analytics

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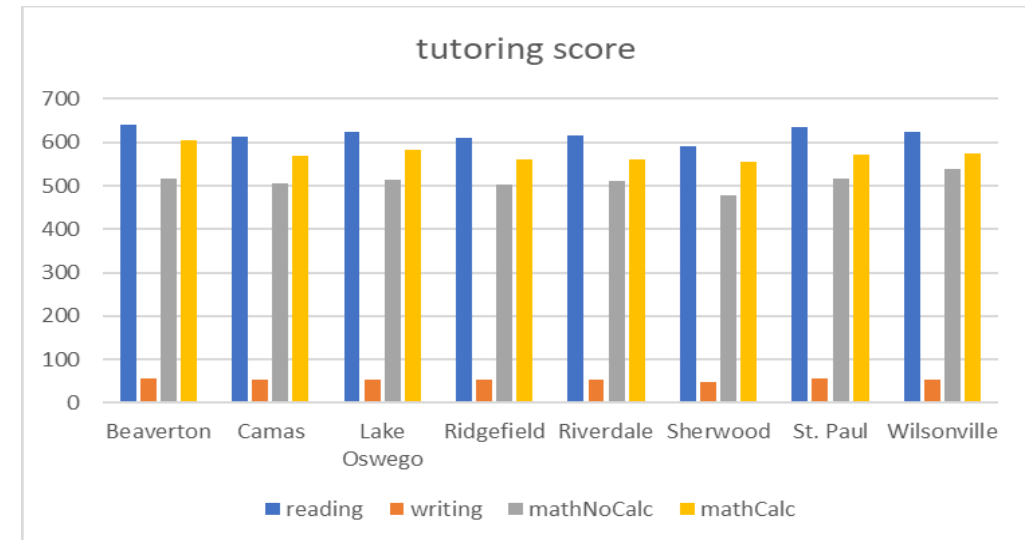
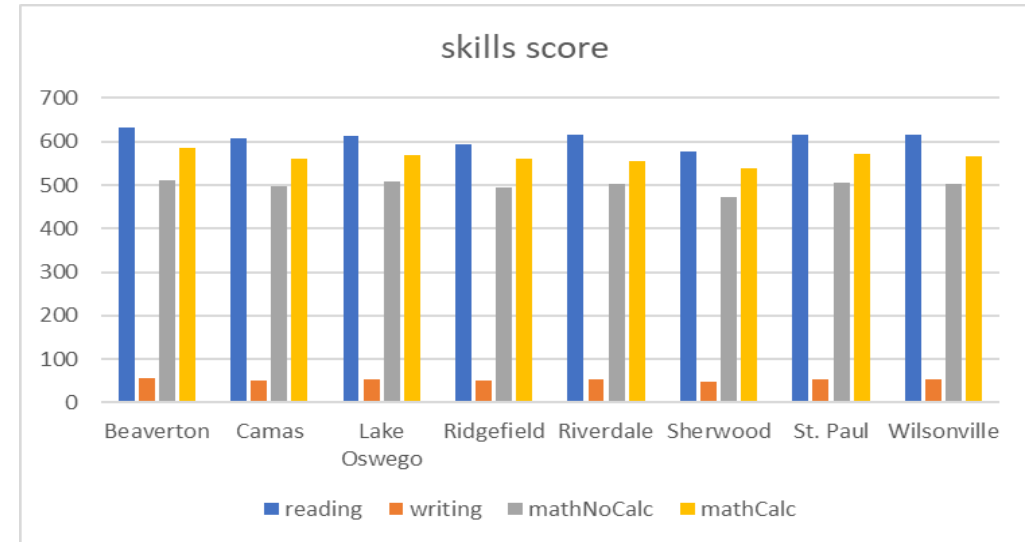
How the scores changed for districts after taking different programs

- On comparing the average **refresh score** with average intake score, district **Camas** and **Ridgefield** showed **no improvement** in their **writing score**.
- Riverdale, St. Paul and Wilsonville** showed the **highest** in average **refresh program** score for **mathNoCalc**.



How the scores changed for districts after taking different programs

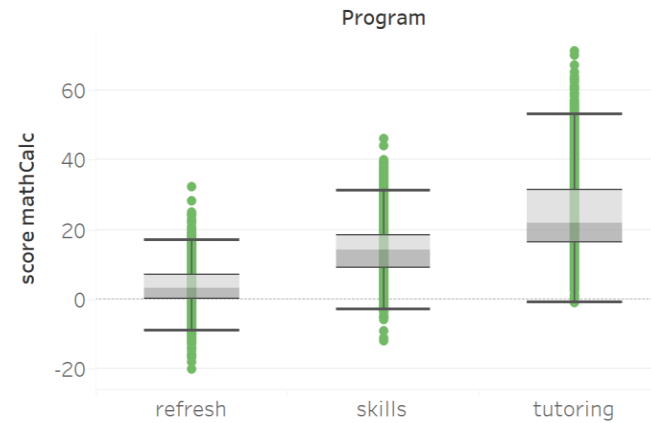
- St. Paul and Wilsonville showed the **highest improvement** and Lake Oswego, Riverdale and Sherwood showed **equal improvement** for reading from average intake score for **skills program**.
- Wilsonville and Sherwood showed **maximum improvement** for **tutoring program** and Beaverton the **least** for **mathCalc**.



What program should complete first

- We recommend to **take tutoring first**. the effect is the best. The second recommendation is skills, students also improved significantly, the general increase in grades are slightly lesser than tutoring. The refresh will not be recommended to take at first.

Score increase in mathCalc when take the program first



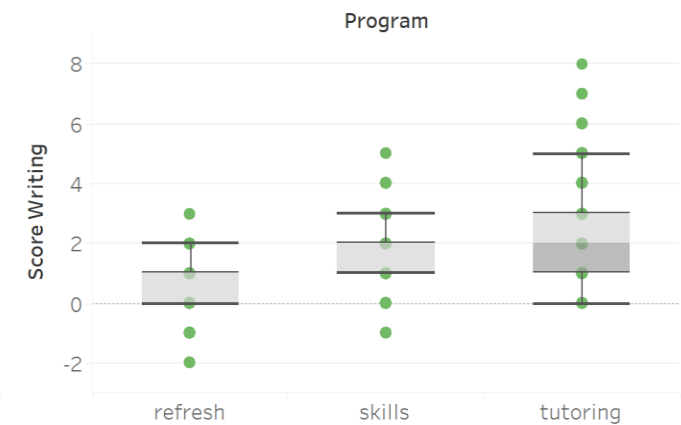
Score increase in reading when take the program first



Score increase in mathNoCalc when take the program first

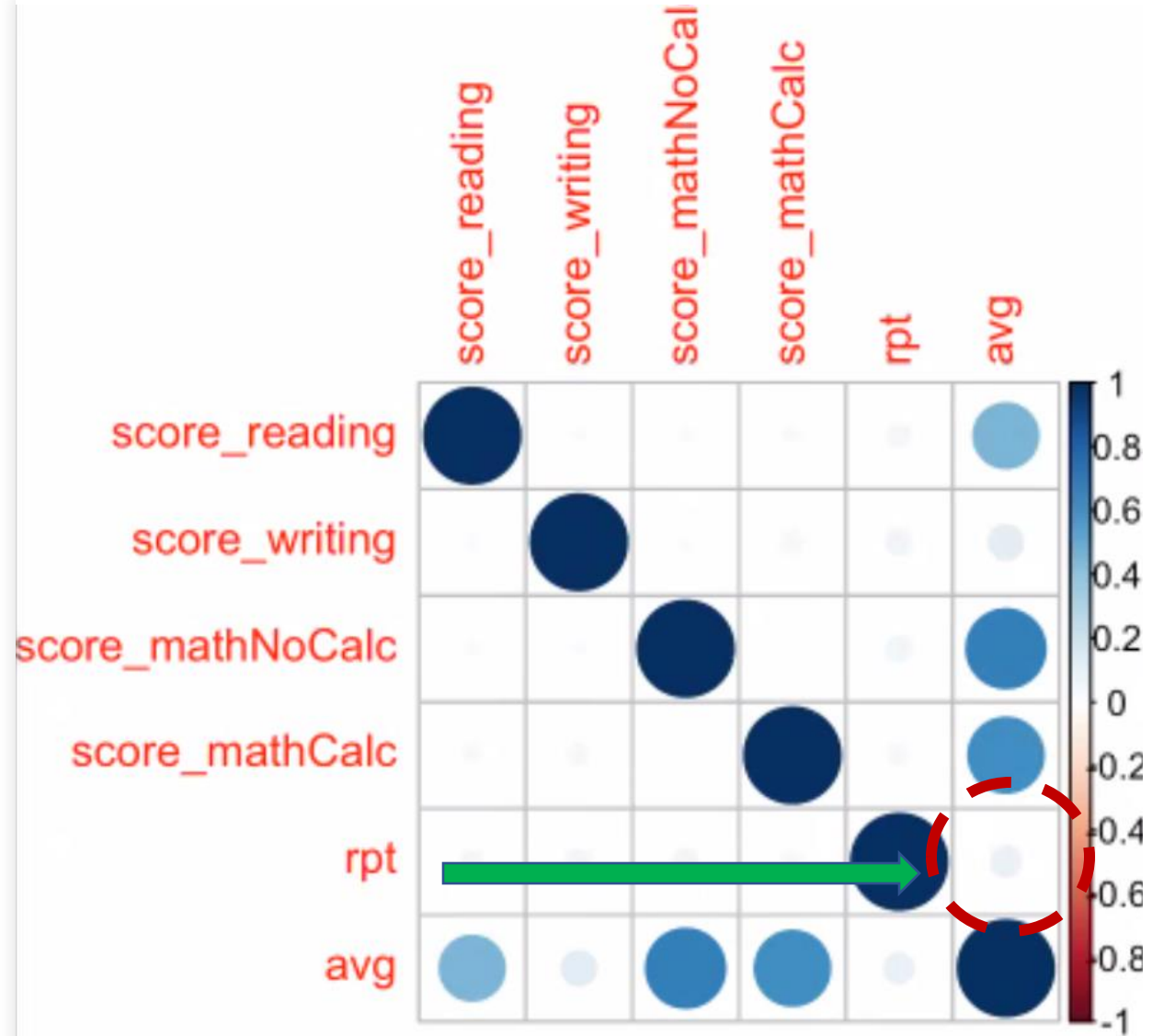


Score increase in writing when take the program first



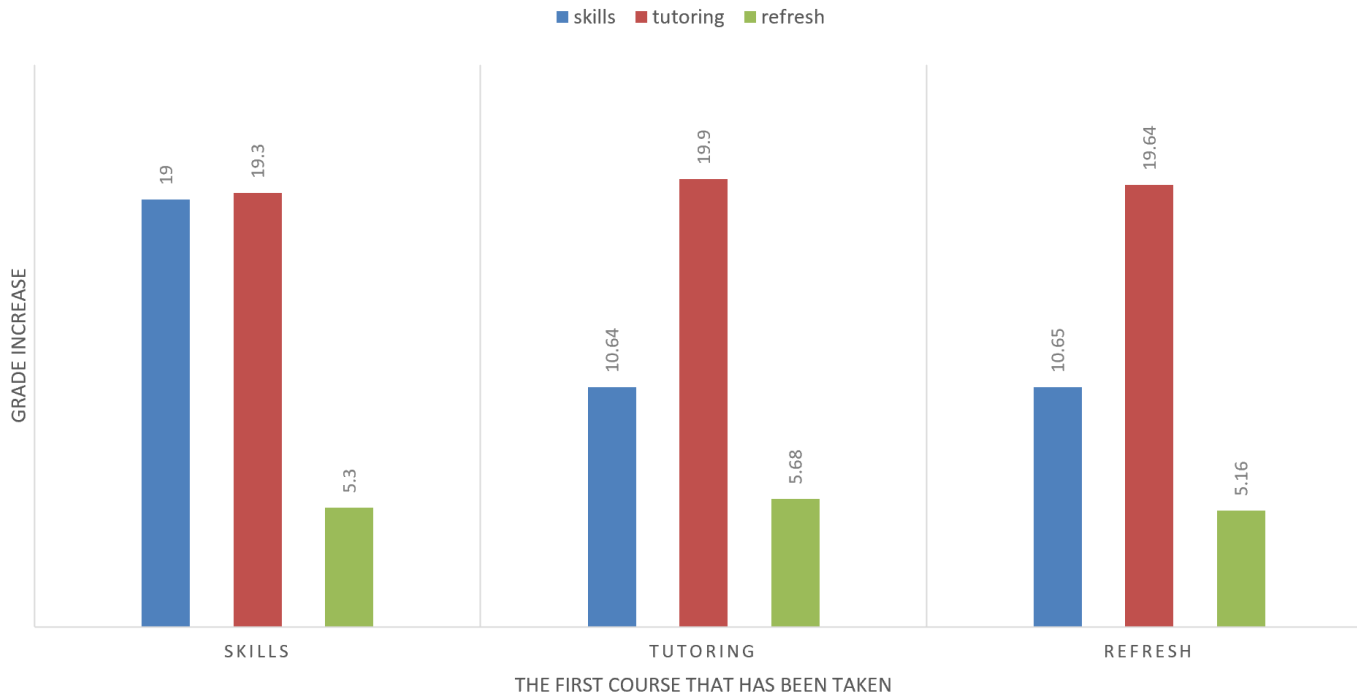
Should students take course repeatedly?

- The grades of those who took one class repeatedly were not much different from the grades of those who take the three classes.
- Repetition of the same class does not correlate much with improvement in student achievement.
- The dot shows the relationship between repeat times and the average increase score. Due to the linear regression, there are little relationship between (about 0.2).



What will be your next course?

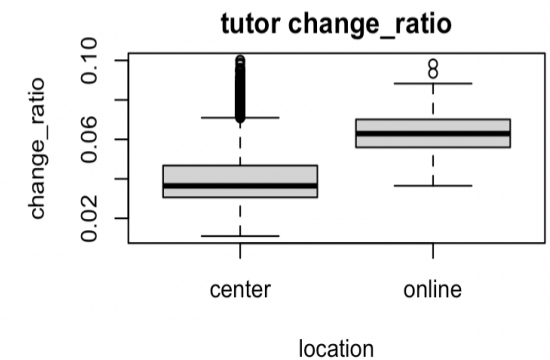
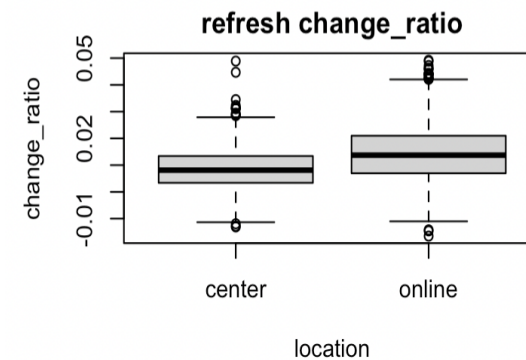
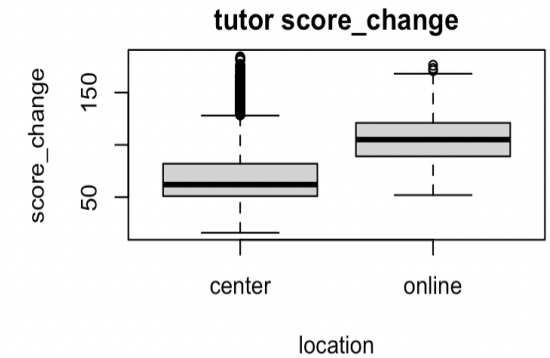
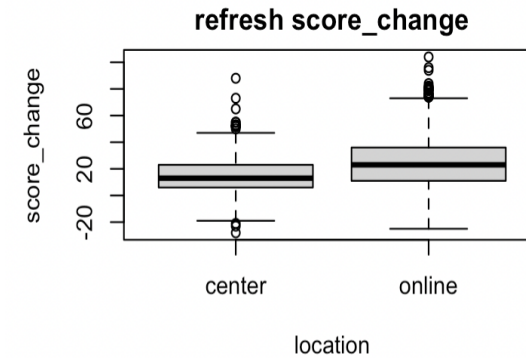
WHAT WILL BE YOUR NEXT CHOICE



For students who have already taken a class, tutoring is still the best choice for improvement. The second option is skills. If students take skills for their first class, the second class of skills will have better improvement than students who taking tutoring or refresh for the first course.

Center based VS Online based

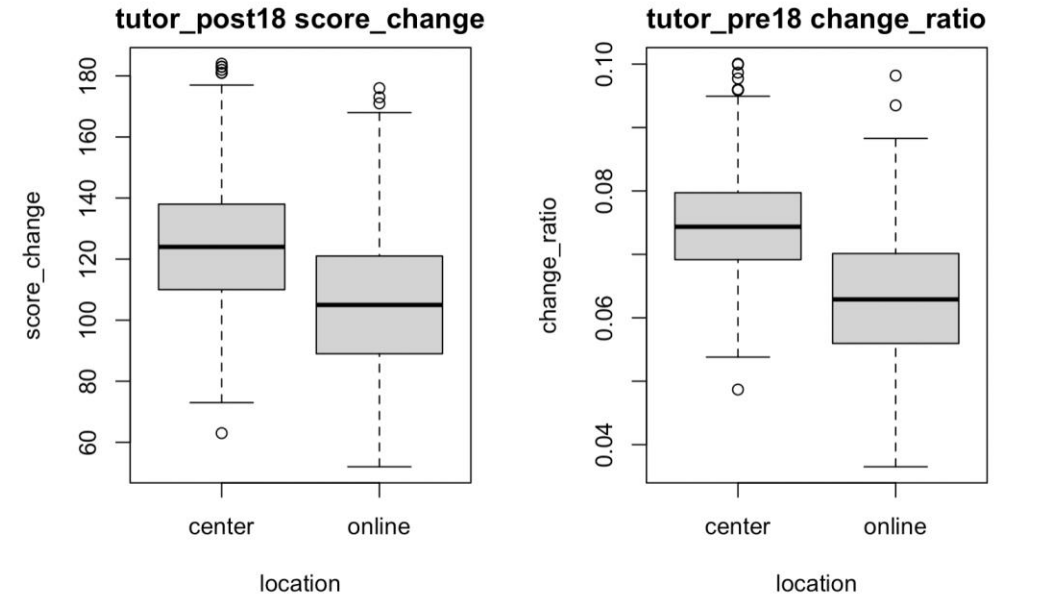
- For both programs, Cobblestone Refresh & One-on-One Tutoring, the average score change for students online are higher than those taking classes in center;
- Indicates that online learning might have better effects than taking course in center;
- According to this, you should consider add in online format for SkillsAdvantage.



Center based VS Online based

(tutoring program after 2018)

- However, we also noticed that, after 2018, the average score change/change ratio for online are lower than center;
- But compared to the average score change before 2018, online score change after 2018 is still much higher;
- Considering of the fact that, more experienced tutors are hired after 2018, we don't have enough data to analyze how much performance improvement was caused by adding online format, how much was because hiring change.



| Average score_change before 2018 | Average score_change after 2018 | Average score_change for online after 2018 |
|--|---------------------------------------|--|
| 58.33368 | 115.19946 | 106.15226 |

Thank you

