

Simple Data Analysis Report

Student Performance in Hybrid vs. Online Courses

Submitted to

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January 21, 2018

By

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This report provides a simple and preliminary compare of student's performance in Hybrid vs. Online Computer Information System (CIS) courses at De Anza College. The main objective of the comparison is to make recommendation to future students whether their chance of success is higher in Hybrid or Online courses.

I . Data

We used data provided from the three spreadsheets file: data1.xls, data2.csv, data3.csv. The format is uniform in all three files. There are 35 variables with the first one indicates whether a record in Hybrid (H) or Online (O). The next eight variables show the assignment scores. All other variables are exams, extra credit.

II. Analysis

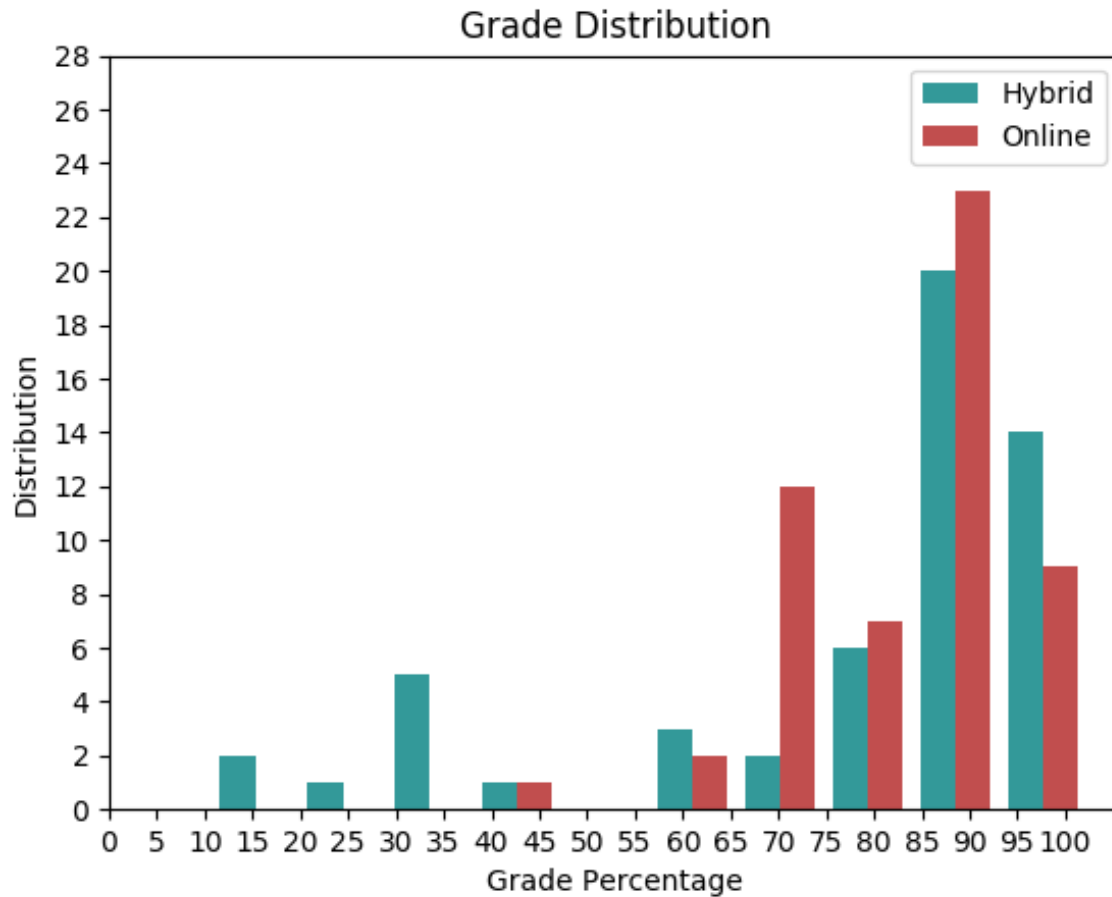
We computed the success rate of all students, categorized by H and O.

The success rate of a category is determined by the ratio of number of students who scored at least 70 percent of the 519 total points possible vs. the total number of students in that corresponding category.

- The success rate for Hybrid section is 75.93%
- The success rate for Online section is 85.19%

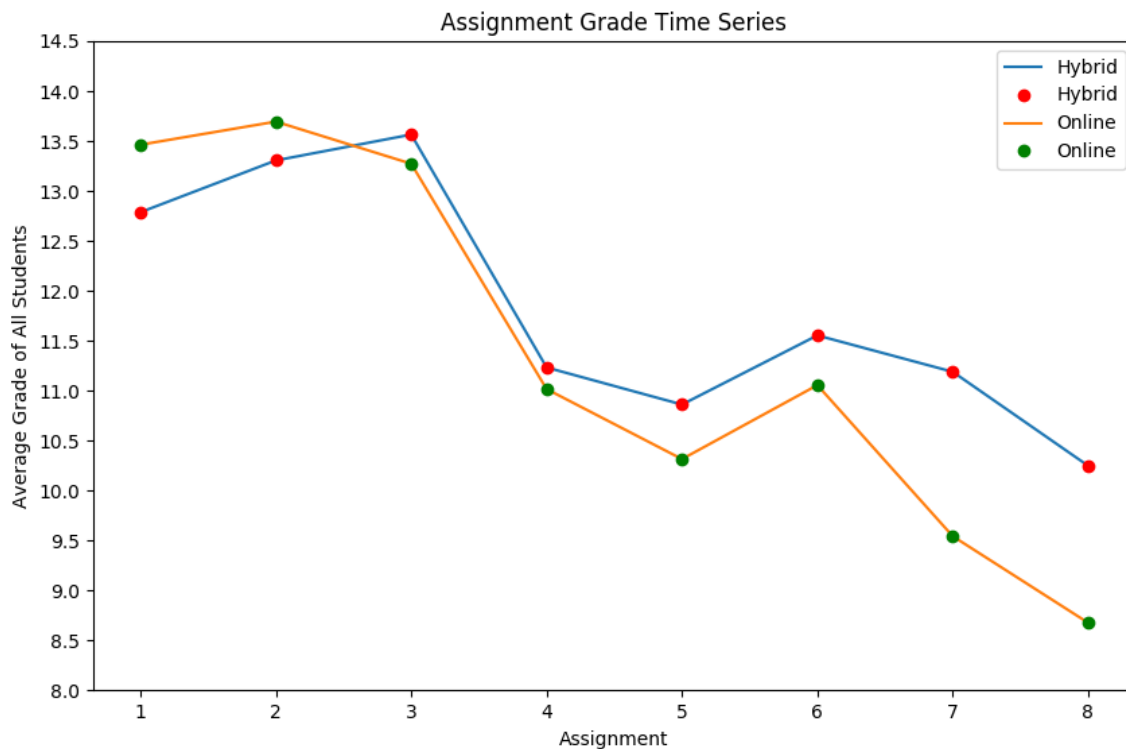
We also examined the grade distribution of Hybrid vs. online courses. The visualization **Grade Distribution** backed up the success rate above with failing grades comes heavily on Hybrid sections. The Online sections show a strong percentage of passing grades. However, it is worth noticing that Hybrid grades

claimed top spots. i.e. the A+ range.



The last analysis is assignment score timeline. Since assignment is used to measure students' ability in the long run. We hoped that it could help draw a conclusion. However, the time series showed that

Hybrid student score noticeably higher than online students starting from the third assignment. The gap wider until the end.



III. Recommendation

As for now, we concluded that there is a grey area between the Hybrid and Online Performance. In order to draw a firm recommendation of whether online students are more likely to

perform better than hybrid (or vice versa), there must be a hypothesis test that results in a statistical significance. More importantly, some major factors also need to be taken into consideration. For instance, the background of the students who take the class, how many classes were they taking. Given that many online students are, in facts, working individual who only enroll in that one classes to enhance their job performance, and that they have already had the knowledge of the material, the result of the analysis could be affected.