“[To] challenge students to excel in the liberal arts, examine faith and values, and explore meaningful vocation in an inclusive, globally engaged community nourished by Lutheran tradition” [[1]](#footnote-1) is the Mission statement of St. Olaf College as approved by the Board of Regents in May of 2016. Student body and faculty diversity can only go so far in building an “inclusive and globally engaged community.” Without a large number of classes focusing on multiculturalism, racial and ethnic issues, and Western colonialism/neocolonialism, as well as a strong initiative by the college to include this within the St. Olaf liberal arts ethos. The purpose of this data analytic study is to gain empirical data by which to judge St. Olaf’s institutional efforts to include these critical topics outlined above in the college curriculum.

This study specifically looks at the relationship between the critical classes by the number of offered classes as well enrollment and all other classes taught at St. Olaf College. As published statements as early as 2000 confirm, “St. Olaf College…, through its curriculum,…, stimulates student’s critical thinking and heightens their moral sensitivity.”[[2]](#footnote-2) Hence, our hypothesis is that consistent with St. Olaf’s commitment for diversity in the classroom, the number of critical classes as well as enrollment in those classes would have improved in the past 2 decades.

The analytics was conducted in R, using standard class data as well as more specialized enrollment data which gets web scraped from the Student Information Systems every night by the StoDevX team. The raw data was in a 2-dimentional csv format, which was converted to a native 2-dimentional R data structure, the data frame. In order to get an accurate total course count, all classes were SPM based, or worth less than 1 credit were dropped from the original total classes data frame since multiculturalism topics would be difficult to address in these settings. Additionally, a new data frame holding all classes with Natural Science classes filtered out to add another perspective to the notion of total classes. It is with differing notions of total classes that broadly categorize the resulting data.

Next, a regular expression algorithm was employed to search for critical search terms to find the total number of classes that race, ethnicity, multiculturalism, and colonialism (A full list of the search terms can be accessed on Github[[3]](#footnote-3)). Classes with names or descriptions that matched or contained the search terms were added to new data frame.

Finally, the aggregate numbers for the total number of regular all courses, the number of all non-Natural Science classes, the number of all classes that matched the search parameters were calculated for the all three terms for a given year in addition to the enrollment data. The resulting data frame containing the above data as well as the ratios of the number of critical classes divided by the number total classes (for both notions of total classes) and the ratio of the enrollment in critical classes divided by the enrollment in all classes.

\_\_\_\_\_INSERT CONCLUSION\_\_\_\_\_

In addition to the 9 types of data frames constructed for every year[[4]](#footnote-4), the resulting data of this study is available on Github[[5]](#footnote-5). The source code is also made available for public scrutiny[[6]](#footnote-6). Despite the great efforts that were taken to achieve accurate results, They are still preliminary and may over-count or under-count in certain circumstances. The Collective for Change on the Hill is dedicated to improving the accuracy of the results as well as pioneering new modalities to analyze St. Olaf’s progress in implementing their publically stated mission of diversity.

1. The Mission of St. Olaf College. (2016, May). Retrieved May 15, 2017, from http://catalog.stolaf.edu/curriculum/mission/ [↑](#footnote-ref-1)
2. St. Olaf College, SustainAbilities. (2000, June). Sustainability Report [Press release]. Retrieved May 15, 2017, from http://pages.stolaf.edu/sustainabilities/files/2014/08/1-StOlaf\_2000-excerpt-1.pdf [↑](#footnote-ref-2)
3. Lee, A., & Chakravarty, U. (n.d.). Search Terms. Retrieved May 15, 2017, from https://github.com/gilgameshskytrooper/DataAnalysisCollective/blob/master/searchterms.txt [↑](#footnote-ref-3)
4. Lee, A. (n.d.). Resulting Classes Data. Retrieved May 15, 2017, from https://github.com/gilgameshskytrooper/DataAnalysisCollective/tree/master/source/resultingClassesData [↑](#footnote-ref-4)
5. Lee, A. (n.d.). Results. Retrieved May 15, 2017, from https://github.com/gilgameshskytrooper/DataAnalysisCollective/blob/master/source/resultingData/results.csv [↑](#footnote-ref-5)
6. Lee, A. (n.d.). Source Code. Retrieved May 15, 2017, from https://github.com/gilgameshskytrooper/DataAnalysisCollective/blob/master/source/source.r [↑](#footnote-ref-6)