Analysis of the Data Science Interest Survey

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Introduction

In Spring 2016 the Data Science Initative Group administered an internet survey[1] to assess the level of knowledge and interest in Data Science in the CSUC campus community. This report contains a brief exploratory analysis of the results of this survey.

Participants

The majority of participants were undergraduate students, near one quarter faculty, with the remaining responses from staff, graduate students, and administrators were all less than 10% each (Figure 1).

The College of Natural Science had the highest response rate with (78, 54.9%) responses. The College of Business and College of Engineering, Computer Science and Construction Management were similar at (22, 15.5%) each (Figure 2). Common campus affiliations for the "Other" category include the Library, Institutional Research, the College of BSS, and Schools and Departments of Education.
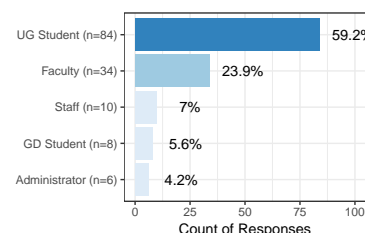

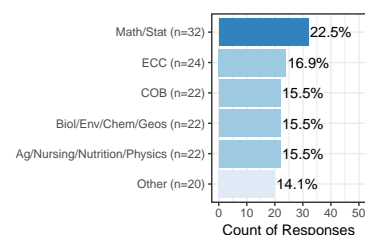Figure 1: Campus Roles of Respondents

Figure 2: Department/College Affiliation

Awareness

As of Mar 24, 2017, 142 people have responded to the DS Interest survey. Of these, the majority 100 (70.4%) reported prior awareness of Data Science, Business Analytics, Bioinformatics and/or Big Data prior to this survey. All Administration and Faculty who responded were aware of the Data Science field. Undergraduates were the most likely to have never heard of it before (Figure 3).
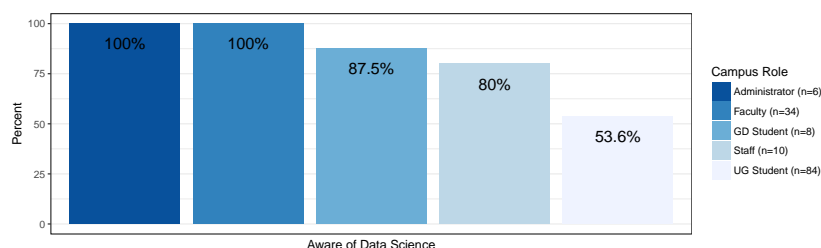
Figure 3: Awareness of Data Science at CSUC by Campus Role

The common pathways of knowledge were from reading technical news on the Internet, through discussions at school with their professors and/or classmates, and from their own research.

Figure 4: Source of Prior Awareness

Course level interest

The survey asked the respondents the following question: "If available at Chico State, I would consider pursuing (check all that apply)". The allowed responses were:

- Not Interested: *I am not interested in Data Science or any of it's related fields*
- More Rigerous: *More computationally or statistically rigorous courses in my current field of study*
- 1-2 more classes: *1 or 2 additional classes in Data Science*
- Minor: *A minor in Data Science*
- Major: *A major in Data Science*
- UG Cert: *An Undergraduate certificate in Data Science*
- GD Cert: *A 1 year post undergraduate certificate in Data Science*
- Masters: *A Masters Degree in Data Science*
- Teach: *I would consider teaching a class in Data Science Related topics in my expertise area*
- Other: *Other* (Free text response was captured)

Interest level by Campus Role.

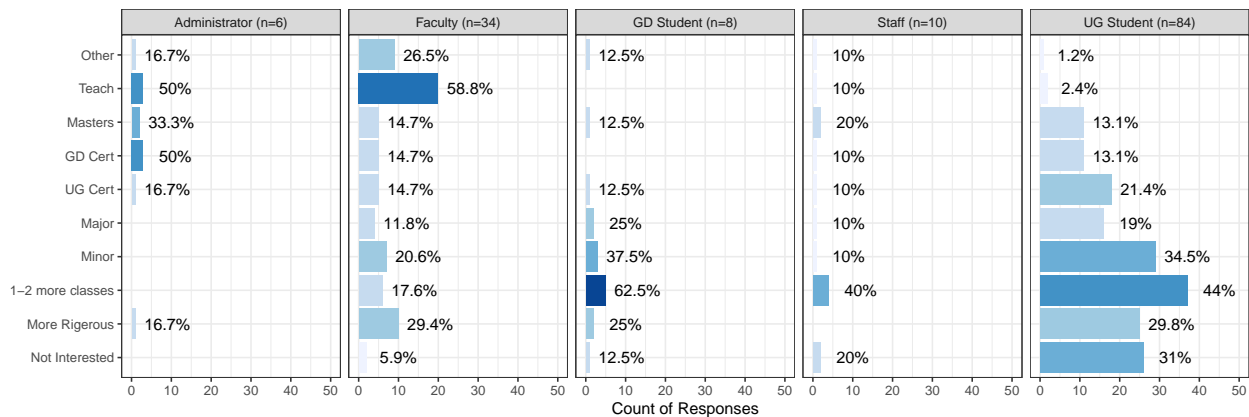These responses are first examined by the type of role the respondent holds on campus (Figure 5).

Figure 5: Future Interest by Campus Role

- Faculty, staff and both graduate and undergraduate students said they would be interested in taking 1-2 courses.
- Support for more computationally and statistically rigerous courses was seen from Faculty and undergraduate students.
- A third of Administrators responded said they would be interested in a Masters Program; half reported interest in a Graduate level certificate.

- Further support for a Data Science program at Chico State can be seen by the fact that more than half of the Administrators and faculty reported being willing to teach Data Science topics.

Student Interest level by Department.

Looking at students who had some level of interest, the majority of respondents would take a few more courses to a minor. Those from the COllege of Business are in favor of some more rigerous courses, while half of the student respondents from the college of ECC and the Math & Statistics department would also consider getting a minor in Data Science.
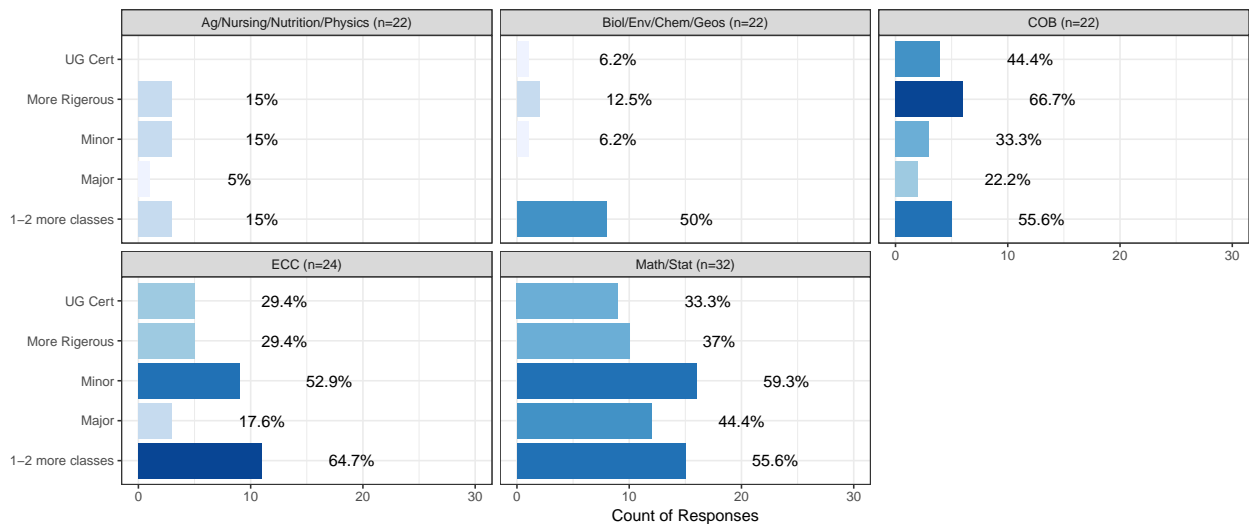

Figure 6: Student Interest by Department

Career

Lastly, respondents were asked *If applicable, explain your interest in pursuing a career in Data Science or it's related fields.*. Responses from the students only were examined and it appears as if there is a general trend in that they understand Data Science is an important addition to their research field.

Figure 7: Career Interest