Dear Dr. Olivares,

We are hereby submitting a revised version of manuscript # 3152-9984-1-RV entitled *Improving Student Performance in Organic Chemistry: Help Seeking Behaviors and Prior Chemistry Aptitude.*

We are grateful to the reviewers for their suggestions and feedback. We thank them for their input. We have made a number of modifications to the manuscript based on their feedback and truly feel that the reviewer suggestions have greatly improved the quality, clarity and effectiveness of the manuscript. Below we describe the modifications that we made and how we addressed the specific suggestions of the reviewers.

1. Both reviewers felt that the narrative approach made the paper confusing and hard to follow. Both suggested reorganizing the paper and adopting a more traditional structure.

*We have rewritten and restructured the paper so that it is presented in a more traditional manner with the purpose, theoretical framework and literature review preceding the methods section. The methods section is followed by results and discussion.*

2. Both reviewers suggested improving the clarity of the findings, namely that it was easy to get lost among the different data and findings presented.

*We have added a description and explanation of each analysis conducted so that it will be clearer to the reader what the 4 analyses were and how they differed one from another. We also numbered the analyses 1 through 4 so that it will be easier for the reader to link between the methods and findings sections.*

*We have added a table (see Table 1) in which we have listed for each analysis the student population, the population size, and the number of students included in each analysis. We have also included notes at the bottom of this table in order to provide the reader with a clear explanation as to why students were excluded from each analysis.*

3. Reviewer 1 asked for clarification regarding the statistical methods utilized including the provision of citations for methods used.

When you say ordinal regression what do you mean? *An ordinal regression is used to predict categorization of an ordinal dependent variable (i.e., a variable whose value exists on a ranked scale where only the relative ordering between different values is meaningful). We have provided a reference in the text to clarify.*

Proportional odds model? *It is a cumulative odds model. This has been noted in the text.*

What is a Nagelkerke pseudo R2 value? Is it like an Akaike Information Criterion (AIC)?

*We now provide a brief explanation in the text as to interpretation of Nagelkerke pseudo-R2.*

How did you choose to the particular transformations you used? *Transformation is the replacement of a variable by a function of that variable (e.g., replacing variable x by the square root or logarithm of x) that changes the shape of a distribution so that data more closely meet the assumptions of a chosen statistical inference procedure. We chose a square root transformation (commonly used for positive data in the behavioral and social sciences) because it worked well with our data.*

Emerson, J.D. 1983. Mathematical aspects of transformation. In Hoaglin, D.C., F. Mosteller and J.W. Tukey (Eds.) *Understanding Robust and Exploratory Data Analysis.* New York: John Wiley, 247-282.

Emerson, J.D. & M.A. Stoto. 1983. Transforming data. In Hoaglin, D.C., F. Mosteller and J.W. Tukey (Eds.) *Understanding Robust and Exploratory Data Analysis.* New York: John Wiley, 97-128.

Please be specific about your model testing. Did you use a step up method/step down null hypothesis testing. Information theoretic approach? *We now indicate that we carried out the analysis utilizing simultaneous entry of predictors.*

Please also address the SE in your text. *We now include SE in each table of findings.*

I would suggest including a graph or chart with each of the tables associated with inferential analyses. *Could the reviewers provide more detail about the type of graph or chart they feel would be the most useful?*

4. I appreciate your caution at not comparing results from different versions of the survey but it would be helpful to go into further detail.

*Our discussion has been reorganized and expanded, and we are now able to briefly address comparison of results from different versions of the survey.*

5. Some of your most compelling observations are not represented in the conclusions. I loved that you offered session at alternative times of day and recruited peers who had recently taken organic chemistry. Be sure the pull out the gems from your narrative and ensure they are well represented in your conclusion.

*We have done so.*

6. Include/incorporate discussion of Annette Lareau’s work re cultural capital.

*We have done so.*