Correlation Between Workshop Goals and Desired Length of Workshop in General Chemistry

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Introduction

The Workshop setting is essential for developing problem-solving skills that are helpful for success in General Chemistry. Often placing a time limit on a Workshop causes two types of stress. Students may feel pressured to finish the Workshop in time with a good understanding of the material. On the contrary, students may desire to finish Workshop as quickly as possible, to free up time in their day. These behaviors may be due to students having different goals for Workshop.

Objective

The study was conducted to determine whether students who desired to fully understand the Workshop material wanted a longer Workshop time than the students who desired only to get basic knowledge out of Workshop. We also tested to see if students found value in reviewing the Workshop prior to their exams.

Methods

A survey was distributed to 70 students who were enrolled in General Chemistry 132 with Professor Farrar and Professor Hafensteiner. The survey was composed of seven questions:

1. Question 1: What is your gender?
2. Question 2: What is your class year?
3. Question 3: Which of the following best describes your goal of Workshop?
   a. No goal
   b. To get the basic equations and facts; I’ll figure the rest out later
   c. To learn how to solve the problems
   d. To have a full understanding of the material; I’m almost exam ready
4. Question 4: Select the optimal length of the Workshop, if you were in charge of scheduling. Workshops are currently scheduled for 75 minutes. The response choices ranged from less than 15 minutes through greater than 120 minutes, in 15 minute increments.
5. Question 5: Do you think Workshop should be optional?
6. Question 6: What is your class year?
7. Question 7: Do you think Workshop should be optional?

Response choices included textbook, class notes, workshop, online resources and other.

Data analysis was performed in Microsoft Excel, and included compiling a correlation between the students’ responses to Question 3 regarding their workshop goal, and to Question 4 regarding their optimal length of workshop. Additionally, the modes of studying for an exam were observed to ensure that the students found Workshop valuable.

Results

Data and Results

The study was conducted to determine whether students who desired to fully understand the Workshop material wanted a longer Workshop time than the students who desired only to get basic knowledge out of Workshop. Additionally, the modes of studying for an exam were observed to ensure that the students found Workshop valuable.

Conclusion and Future Work

These findings indicate that 86% of students in General Chemistry use Workshop as study tool (Fig. 1). Thus, we know that students place value on Workshop, and the other data analysis is valid.

• Overall, students are satisfied with the allotted Workshop time.
• Students seeking to simply get basic knowledge primarily selected an optimal Workshop time that is shorter than the current time.
• Students seeking to learn how to solve the problems were divided among a shorter desired Workshop time and the current Workshop time. Further, there was a very small number of students in this category who would prefer a longer workshop time.
• Students seeking to gain a full understanding of Workshop material were generally satisfied with the current Workshop time.
• In conclusion, our hypothesis that students desiring to fully understand Workshop would prefer a longer optimal Workshop time was partially supported by the data. Students only seeking to get basic knowledge desired to be in Workshop for a shorter period of time.
• Future work includes distributing the survey to a group of Organic Chemistry (203) students in the fall, and see how the correlation between Workshop goal and desired time differs than the data here.

References


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