https://studentsuccessjournal.org/
Volume **14** (1) 2023 https://doi.org/10.5204/ssj.2420

Attendance Matters! Supporting First Year Students' Success with a Structured Attendance Policy. *A Practice Report*

Lorrie Comeford
Salem State University, United States

Abstract

This work reports the effect of a revised attendance policy on attendance and course outcomes for two populations of students: introductory general chemistry students and upper-level chemistry majors. Initially, the attendance policy highlighted students' responsibility for the material covered in class. This was changed to a policy with a specified reduction in the course average for excessive absences. Attendance and final exam scores were tabulated for each group. Implementation of the new policy increased attendance and final exam scores for introductory students, but it had no effect on attendance and final exam scores for upper-level majors. This result suggests that introductory students would benefit from course policies with specific expectations for attendance.

Keywords: Attendance; course policies; first year students; course outcomes; student success.

Introduction

This work reports the effect of a revised attendance policy on attendance and course outcomes for students taking an introductory chemistry course and students taking an upper-level chemistry course.

Initially, my attendance policy reflected the University's policy which states, "each student is responsible for completing all course requirements and for keeping up with all that goes on in the course (whether or not the student is present)" (Salem State University, 2022). This policy is consistent with my own perspective that students are adults who are responsible for making their own choices and responsible for the consequences of those choices. The ethical argument for this point of view has been thoroughly explored by MacFarlane (2013).

My change of heart came gradually. The old attendance policy made sense when I began teaching three decades ago because the time marked "lecture" in students' schedules was primarily used for a lecture. Over the years, my teaching evolved to a more student-centered approach, and now, lecture comprises only a small part of what we in do in any class meeting. In a student-centered classroom, students' interactions with one another are a key method by which they learn, and a student who is absent does not contribute to the work of the class (Higbee & Fayon, 2006). Indeed, classmates' responsibility to one another was identified as significant by nursing students in a qualitative study by Ruth-Sahd and Schneider (2014).

Setting

Salem State University is a public university about 15 miles north of Boston in the United States. The University has an enrollment of approximately 5500 undergraduate students and 1500 graduate students. The University offers 25 majors in the Arts and Sciences, five majors in the fields of Health and Human Services, an Education major and a Business major. Biology is the largest natural science major with about a hundred graduates per year. Chemistry has a small, but strong, major with an American Chemical Society approved program, and it has 10-25 graduates per year. Most Biology and Chemistry graduates go on to work in local industry.

Method

Attendance data and final exam scores were gathered from two courses before and after a change to the attendance policy.

General Chemistry I

General Chemistry I is the first course in a two-semester sequence designed for Chemistry, Biology and Geology majors. It is typically taken by students in their first or second year. This course was taught using Team-Based Learning (TBL) (Michaelson et al., 2004; Sibley & Ostafichuck, 2014;). TBL is a flipped classroom method in which students work in assigned teams for the duration of the semester. At the beginning of each module, students complete a reading assignment that prepares them to work with the concepts in the module. Their understanding is assessed with a readiness test which they take individually and then with their team. Class time is used for problem solving with application exercises that require the teams to integrate and use what they are learning. This method uses very little lecture, and students must be present to contribute to the work of their teams.

The old attendance policy reminded students that they were responsible for the material presented during class. Their course grade included a peer evaluation by their team members, and the policy reminded students that team members would weigh their attendance and participation as part of the peer evaluation.

The new policy continued to encourage attendance, and it added a penalty for excessive absences. The number of class meetings in a semester varies from semester to semester, particularly because of cancellations due to weather, but in general, three absences represent more than 10% of the class meetings. In the new policy, all absences were equivalent, and there were no excused absences. This removed the need to receive and evaluate the reasons for students' absences, leaving students' privacy intact and respecting their freedom to miss a class for no particular reason. In the event of extenuating circumstances, there was no consequence for additional absences. Policy statements are shown in Table 1.

Table 1

Attendance Policy Statements for General Chemistry I

Policy	***Statement***
Old	You are responsible for everything we do in class. Your peer evaluation grade depends, in part, on regular attendance and participation
New	The work that you do with your team and the work that we do together as a class cannot be reproduced by copying missed notes. For this reason, all absences will factor into your grade in the following way. 3-4 absences → 2 % reduction in course grade > 4 absences → 4 % reduction in course grade

Data were collected from four sections using the old policy (Fall of 2015 – Spring of 2017) and four sections using the new policy (Fall of 2017 – Spring of 2019). I taught all the sections and took attendance at the beginning of each class. The number of absences and the final exam score were recorded for each student.

Physical Chemistry II

Physical Chemistry II is the second course in a two-semester sequence for Chemistry majors, and it is taken by juniors and seniors. The class meeting time was divided between brief lectures and group problem solving. Students were assigned to a group, and their course grade included a peer evaluation by their group members.

The attendance policy shifted from one which encouraged attendance to one which included a penalty for excessive absences (Table 2).

Table 2

Policy Statements for Physical Chemistry II

Policy	***Statement***
Old	You are responsible for all material that is presented in class. Attendance, preparation, and participation are particularly important for class discussion and problem-solving activities
New	The work that we do together as a class cannot be reproduced by copying missed notes. For this reason, all absences will factor into your grade in the following way. >3 absences → 2 % reduction in course grade >4 absences → 4 % reduction in course grade

Data were collected from two sections using the old policy (Spring of 2016 and Spring of 2017) and two sections using the new policy (Spring of 2018 and Spring of 2019).

Results

The proportion of classes attended (number of classes attended/total number of classes) was calculated for each student, and the mean proportion was calculated for each policy.

The results for General Chemistry I are shown in Table 3. With the change in policy, the mean number of classes attended shows a significant increase: 89.1 % to 94.4 % with a p-value = 5.13×10^{-6}. The final exam scores under each policy were also compared, and there was a significant increase in final exam scores: 72.6 % to 79.8 % with a p-value of 0.0107.

Table 3

Mean Proportion of Classes Attended and Mean Final Exam Scores for General Chemistry I

Policy	**Number of Students**	**Mean Proportion of Classes Attended**	**Mean Final Exam Score**
Old	98	89.1 %	72.6 %
New	133	94.4 %	79.8 %
		t statistic = 4.65 p-value= 5.13×10^{-6}	t statistic = 2.34 p-value= 0.0107

The results for Physical Chemistry II are shown in Table 4. With the change in policy, the mean number of classes attended was unchanged: 90.2 % and 90.7% with a p-value = 0.395. Final exam scores decreased slightly, but the difference was not significant: 81.9 % to 78.2 % with a p-value of 0.865.

Table 4

Mean Proportion of Classes Attended for Physical Chemistry II

Policy	Number of Students	Mean Proportion of Classes Attended	Mean Final Exam Score
Old	49	90.2 %	81.9 %
New	42	90.7 %	78.2 %
		t statistic = 0.268 p-value= 0.395	t statistic = -1.11 p-value= 0.865

Discussion

For the introductory class, a more specific attendance policy yielded measurably better attendance and a measurable increase in final exam scores, but no effect was found for upper-level students. Bruen et al. (2019) observed a similar outcome for their students in language learning modules. This result suggests that it may be wise to think about attendance policy in nuanced way, and just as we scaffold instruction, we may need to think about scaffolding our course policies. First year students, who are adjusting to the college environment, benefit from a course policy that provides more structure. Upper-level students are more experienced, and in this case, additional structure provided no value for them.

This data comes from the time before COVID-19. In the past two years, it would have been impractical and uncompassionate to require attendance, and student voices in favor of flexible attendance policies and hybrid attendance have become prominent (Supiano, 2022). I do not anticipate that my post-Covid attendance policy will be identical to the new policy presented here. I do, however, anticipate that the attendance policy will provide more structure for students in my introductory classes.

This intervention costs nothing to implement, and it is remarkable that something as simple as a course policy can make a measurable difference in our introductory students' success.

Acknowledgement
Funding for data analysis came from a Salem State University statistical support grant, and the data analysis was performed by Dr. Christopher Boucher in the Department of Mathematics at Salem State University.

References

Bruen, J., Kelly, N., & Loftus, M. (2020). Attendance policies on university language degrees: Exploring attitudes, and measuring relationships with performance and progression. *Journal of Further and Higher Education*, *44*(7), 984-997. https://doi.org/10.1080/0309877X.2019.1636212

Higbee, J. L., & Fayon, A. K. (2006). Attendance policies in developmental education courses: Promoting involvement or undermining students' autonomy? *Research & Teaching in Developmental Education*, *22*(2), 71-77. https://www.jstor.org/stable/42802264

Macfarlane, B. (2013). The surveillance of learning: A critical analysis of university attendance policies. *Higher Education Quarterly*, *67*(4), 358-373. https://doi.org/10.1111/hequ.12016

Michaelsen, L. K., Knight, A. B., & Fink, L. D. (2004). *Team-based learning: A transformative use of small groups in college teaching*. Stylus.

Ruth-Sahd, L. A., & Schneider, M. A. (2014). Faculty and student perceptions about attendance policies in baccalaureate nursing programs. *Nursing Education Perspectives*, *35*(3), 162-166. https://doi.org/10.5480/13-1105.1

Sibley, J., & Ostafichuck, P. (2014). *Getting started with team-based learning.* Stylus.

Supiano, B. (2022, March 4). The attendance conundrum. *Chronicle of Higher Education*, *68*(13). https://www.chronicle.com/article/the-attendance-conundrum

Salem State University. (2022) *2021-2022 Undergraduate catalog: Course information policy*. https://catalog.salemstate.edu/content.php?catoid=51&navoid=12567#Course_Information_Policy

Please cite this article as:

Comeford, L. (2023). Attendance matters! Supporting first year students' success with a structured attendance policy. A practice report. *Student Success*, *14*(1), 71-75. https://doi.org/10.5204/ssj.2420

This practice report has been accepted for publication in *Student Success.* Please see the Editorial Policies under the 'About' section of the Journal website for further information

Student Success: ***A journal exploring the experiences of students in tertiary education.***