Introduction
One of the most common areas where classroom practices of individual faculty members differ is attendance policy. Some faculty require attendance. Some faculty count attendance positively in grade determination while others count the lack of attendance against the student's grade. Even most faculty who don't require attendance by their students encourage attendance in a variety of ways. Inherently most faculty probably believe that attendance is important in student success but most of us can provide only anecdotal evidence to support our belief. This newsletter contains summaries of some of the most recent research on the role of class attendance on student performance. Some recent research will also be explored that demonstrates the impact of class attendance on other variables that affect the overall academic success of an institution.

Student Performance
The first study in this survey of the impact of attendance on student classroom success is by Robert M. Schmidt ("Who Maximizes What? A Study in Student Time Allocation ", AMERICAN ECONOMIC REVIEW, May, 1983, pp. 23-28). In this study, the author measured the impact of time commitments by students to various course activities on the students' performance in the given class. The results were revealing. By far, the most valuable and important time commitment in a course was the time actually spent in the classroom. That time was the most important determinant of student success and each unit of time in the class itself provided, among all the class related activities, the greatest improvement in student performance. The next most important time spent on a class was any time spent in discussion sections that accompanied the lectures. Third in importance was any time spent studying outside of class preparing for the class session itself. Perhaps most surprising was the result that the least significant time commitment in improving student performance in a particular class was the time spent studying for the final exam. Thus the study concludes that the most productive time in any course is the time actually spent in the classroom. That time has the greatest positive impact on overall student performance. The hour or two spent in class each day (for a particular course) does the most to improve the student's grade.

In another version of the same statistical test, Schmidt also found that the time spent over the entire term on the ongoing activities of the class (class lectures and classroom discussions, any discussion sections, and study outside of class to prepare for class) was most significant in explaining student performance in a given course. Time spent studying for any and all exams was not a statistically significant determinant in affecting student performance in that class. The results of this test reinforce the idea that the most important learning in a course takes place in the classroom and that students who do a conscientious job on a daily basis preparing for and participating in class outperform those students who skip class and try to cram for exams.

A second study is by Kang H. Park and Peter M. Kerr ("Determinants of Academic Performance: A Multinomial Logit Approach", THE JOURNAL OF ECONOMIC EDUCATION, Spring, 1990, pp. 101-111). In this research (conducted
with classes where attendance did not enter directly into student grade determination), the role of class attendance was statistically significant in explaining student grades in those classes.

Specifically, this research demonstrated that the lack of attendance was statistically significant in explaining why a student received a D rather than an A, a B, or a C grade in a specific class. The statistical tests employed in this article found that regular class attendance was a significant determinant in minimizing a student's chance of receiving a D or an F. This study strongly suggests that regular class attendance can aid significantly by acting as an insurance policy in avoiding a D or an F grade in a given class.

The same data were also used to determine the relative impact of each absence in the student's final letter grade for a particular course. The empirical results showed that absence from class was statistically significant in lowering the letter grade of the typical student. Specifically, each absence from class lowered a student's grade by 0.06 in a 4.00 grading system. Thus, a student with 10 absences in a given term would lower his/her grade by 0.6, which would be the difference between a C plus and a B for example.

Another research article that dealt with the impact of class attendance on student performance in a course is by David Romer ("Do Students Go to Class? Should They?" THE JOURNAL OF ECONOMIC PERSPECTIVES, Summer, 1993, pp. 167-174). The author found what he described as an alarming amount of absenteeism from the typical class in small, medium, and large schools (that were further described as elite and/or highly competitive).

Small schools averaged 25% absenteeism in a typical class on a typical day. Medium sized institutions had 34% absenteeism on average while large universities had 40% absenteeism on a typical day. When absenteeism was linked to characteristics of the classes, the following patterns emerged:

1. Smaller classes had less absenteeism.
2. The more significant the mathematical component of the course, the less the absenteeism.
3. There was more absenteeism in the principles courses than in the upper level courses.
4. The better the quality of the instructor, the less the absenteeism.
5. Absenteeism was mainly concentrated in a few students who missed many classes while most students missed only a few.

When the author regressed the student's course grade against attendance (while holding constant all other explanatory variables for the grade), the mean GPA for students with strong attendance was, on average, one entire letter grade higher than that of students with poorer attendance.

Why Students Don't Attend Class

Another part of the discussion about attendance is the exploration of why students choose to miss classes in spite of the clear benefits of attendance. An article by Gary Wyatt ("Skipping Class: An Analysis of Absenteeism Among First-Year College Students" TEACHING SOCIOLOGY, July, 1992, pp. 201-207) explores some of this territory. By using correlations and regression analysis, he was able to clarify some of the issues. [In one telling phrase, he says that students often view tuition as an "expensive cover charge that allowed them entrance into an exciting social world – a world that was often apart from learning and class attendance". (p.201)] When he looked at the reasons students gave for missing classes that they liked, the three strongest correlations were parents' income (the greater that income, the more they missed class), time studying (the more time they studied, the less they missed class), and their GPA (the higher the GPA, the less they missed class). For missing classes that they disliked, the following were the significant correlations: time studying (the more time they studied for the class, the less they missed), their GPA (the greater their GPA, the less they missed of classes they didn't like), their parents' income (the greater the parents' income, the more they missed class) and the frequency of alcohol consumption (the more frequently students consumed alcohol, the more they missed these classes).
From his research, Wyatt made the following observations and recommendations:

1. Since students who study miss fewer classes (both classes they like and dislike), an increased emphasis by the faculty member and the institution on scholarship and study will help overall attendance. Classroom discussion about homework expectations and proper study habits for a particular course would also help.
2. Since females missed more frequently than males, the author suggests that professors examine their classroom environment to see if it is somehow less hospitable to females.
3. If academic life can be made more appealing and exciting, Wyatt believes that students with lower grades will attend more frequently.

Impact of Attendance Policies
Judith Levine's article "The Effect of Different Attendance Policies on Student Attendance and Achievement" presented at the Annual Meeting of the Eastern Psychological Association in 1992 (in ERIC Microfiche ED 348 762) discusses how students respond to a variety of attendance policies. In general, she distinguishes three types of attendance policy: Required Explicit where attendance is required and absence does adversely affect the student's final grade; Not Required Implicit where there is no requirement for attendance, attendance does not affect the grade and there is no announcement of the attendance policy to the students; and Not Required Explicit where there is an announcement that attendance is not required or counted in the final grade but attendance was otherwise encouraged by the professor. Her conclusion reaffirmed what one would suspect would be the common sense view of the impact of course policies on attendance. The more students were required and/or encouraged to attend, the better was class attendance and, if a student missed frequently, that student was less likely to do well in that particular course. The impact of attendance policy was significant. When attendance was explicitly required, 80% of the students missed 4 times or less and less than 1% missed 8 times or more. When the attendance policy was non-required and implicit, 73% of the students missed 4 times or less and almost 7% missed 8 times or more. When the attendance policy was explicitly non-required, only 52% of the students missed 4 or fewer times while 18% missed 8 times or more. The conclusion seems to be that professors do get the type of attendance that they encourage by the policy that they adopt.

Attendance and the Evaluation of Faculty
There also has been research which suggests that the student evaluation of faculty is clearly affected by the pattern of student attendance. An article by Dale E. Schlenker and Norma Coles McKinnon in 1994 ("Assessing Faculty Performance Using the Student Evaluation of Instruction " in ERIC Microfiche ED 371 667) reports on a variety of factors that affect student evaluation of teaching. The particular evaluation instrument employed in this study surveyed students' opinions about the faculty member's method of presentation, classroom management, professional skills, relationship to the students, and preparation and planning. In every one of these dimensions, the fewer absences that the student had, the more favorably they rated the instructor and the differences were always statistically significant. Their conclusion was that, "Consistently, our findings have exhibited that as absenteeism increases, student evaluations of instructor becomes less favourable (sic) on all dimensions". (p. 20)

Conclusion and Recommendations
1. Research indicates that attendance is statistically significant in explaining class grade and overall performance of students.
2. Students who miss class frequently significantly increase their odds of a poor grade in a given course.
3. At a minimum, the research supports the idea that faculty should strongly encourage attendance with both moral suasion and quality teaching.

4. Certain course practices can be used to encourage attendance. Testing extensively from material presented in class rather than material from the text can encourage better attendance. The use of in-class quizzes and other exercises will reward attendance.

5. Encouraging a greater commitment to the course by requiring more homework and reading will make students more likely to attend the class.

6. A case can be made that requiring attendance can be a successful means of improving the value added of any course.

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Bibliography


4. Dale E. Schlenker and Norma Coles McKinnon, "Assessing Faculty Performance Using Student Evaluation of Instruction" (ERIC Microfiche ED 371 667)


Many of these articles also have their own bibliographies that may be employed to discover more about the impact of attendance on the success of the student and the class.

NOTE: If you have any comments, questions, or suggestions pertaining to this newsletter, please contact Dick Schiming, Center for Faculty Development, Box 14, or via e-mail, phone (5323), or voice mail (5855) Please pass along any experiences that you may wish to share about the impact of attendance policy on your classes or how you deal with the topic of attendance in general.