The Impact of Attendance and Participation on Undergraduate Student Performance in Face-to-Face and Online Courses

Liugen Zhu

Human-Centered Computing, Indiana University School of Informatics and Computing Joseph Defazio

Human-Centered Computing, Indiana University School of Informatics and Computing Edgar Huang

Human-Centered Computing, Indiana University School of Informatics and Computing
Sara Hook

Human-Centered Computing, Indiana University School of Informatics and Computing

This presentation reports the results of a comprehensive study of policies on attendance and participation in face-to-face and online courses, with policies that range from strict to flexible, and correlates these policies with final course grades. The intent was to demonstrate the impact that these policies have on student motivation and success. Participants will self-identify which category their attendance/participation policies fall into and reflect on how revising these policies can influence their own courses.

Outcomes:

Describe Cognitive Evaluation Theory and how it impacts both extrinsic and intrinsic motivation.

Analyze several attendance and participation policies used in face-to- face and online courses.

Identify important factors affecting student perception of attendance and participation in face-to-face and online courses.

Identify elements of attendance policies that might apply to the participant's course.

Evaluate how a more stringent or more lenient attendance/participation policy might impact student motivation and final course grades in their courses.

Suggest other ways that attendance and participation policies can motivate students.

Category: Application

Describe the theory, approach, and revision that you applied in your course, curriculum, or program. Describe what you saw in your students', colleagues', or institution's behavior that you wanted to change. Describe the learning objectives you wanted students or colleagues to better achieve as a result of your application.

The theory for this study is Cognitive Evaluation Theory. Cognitive Evaluation Theory postulates that the presence of powerful extrinsic motivators can actually reduce a student's intrinsic motivation, particularly if the extrinsic motivators are perceived by the person to be controlled by the instructor or teacher. Cognitive Evaluation Theory is a motivation theory suggesting that both intrinsic and extrinsic values are present in the an academic classroom or online learning environment. Students who are intrinsically motivated perform for their own achievement and satisfaction. If students believe that they are working toward a better grade in a course, they begin to lose motivation (Brookhart, 1994). According to Moore (2005), attendance rates improve through repeated emphasis on the proven relationship between attendance and success (Barlow & Fleischer, 2011). However, the presenters acknowledge that students do miss class often and for a variety of reasons. Van Blerkom (1992) found that the reasons cited most frequently by students for missing class were boredom, illness, and interference with other coursework or social life (Chenneville & Jordan, 1992).

Attendance and participation are two of the many variables that affect students' final grades (Gump, 2010). Based on attendance and participation policies presented in this proposal, the presenters provide present data from four academic courses that correlate policies with student achievement in a course. Attendance policies used in this presentation are labeled: SAP (Stringent), MAP (Moderate), and GAP (Gentle). A student's attendance score and final course grade are statistically correlated and analyzed to determine which, if any, of the three policies demonstrates effective use of intrinsic and extrinsic motivation. The behavior that the presenters would like to change focuses on how attendance and participation policies might be improved in order to motivate and actively involve students in the learning process.

Describe the project's related course(s) or curriculum, its students, and its place in the curriculum or program.

The four presenters teach in two of the major programs in their school, providing an excellent comparison for looking at the motivational impact of attendance and participation policies and course grades. Drawing on the results of their research, this presentation will examine courses from the two largest undergraduate degree programs and will include face-to-face and online courses as well as elective and core required courses from each degree program. Their students are a mixture of traditional-age and returning/adult students and are diverse in terms of gender, race, and nationality. Their campus is part of a large and vibrant urban setting.

How is your application different from ones that others have tried?

In this study, course delivery method (face-to-face vs. online) and attendance policy stringency (SAP, MAP, and GAP) have served as two main independent variables to see how they affect students' absences in class and how they affect their course grades. The absence variable also serves as an independent variable to see how it affects students' course grades. Through this study, the presenters expect to find a reasonable combination of attendance policy stringency and course delivery method so that data-driven recommendations can be made to conference participants. The presenters wanted to determine how course attendance and participation policies might impact student motivation and how a student's overall performance may be impacted by attendance and participation. To answer this question, the presenters collected data in 12 different undergraduate courses taught in their respective degree programs between Fall 2010 and Spring 2015. Two courses were taught online (ONL), and other 10 courses were taught face-to-face (FTF). All of the courses had clear attendance and participation policies defined in course syllabi. Based on how much a student's grade is impacted by attendance and participation, all courses were divided into three groups: Stringency Attendance Policy (SAP), Moderate Attendance Policy (MAP), and Gentle Attendance Policy (GAP). For each course, the presenters collected attendance and participation scores and final grades. Several studies have shown the impact of attendance on student's performance. This study further examined how each attendance/participation policy and course delivery methods (face-to-face versus online) impact a student's attendance and overall success. In terms of the online courses examined as part of the research, one of the hallmarks of that presenter's courses is a highly interactive weekly discussion forum where students review and provide feedback to each other (Salter & Conneely, 2015; Dalelio, 2013; Ekahitanond, 2013).

Assessment and baseline: Indicate how you determined the success and effectiveness of your application.

As might be expected from other reports in the literature, there is a strong correlation between attendance and participation policies, final course grades, and student engagement. However, the results of this study allowed for even more granularity in the results. This study compared course attendance/participation policies versus actual student attendance and participation, course delivery method versus attendance/participation, and attendance/participation versus final course grades. The preliminary findings are that:

- 1. SAP significantly results in better attendance and participation than GAP and MAP; however, the impact on student's attendance by GAP and SAP shows no significant difference.
- 2. Student's attendance and participation are significantly correlated with grades. The more class sessions a student attends, the better grade the student will get.

- 3. In terms online courses, preliminary data suggest that the more discussion forums that a student participates in, the more likely it is that the student is fully engaged in a course, making it less likely that he/she will miss other assignments. Because students in the online courses are responsible for giving feedback to other students as well as receiving feedback, the more motivated they are to provide robust responses to the discussion questions on a consistent basis.
- 3. Even though the average attendance/participation is not significantly different for course delivery methods, more students tend to miss 0 class/assignment in online courses (46.4%) than face-to-face courses (32.0%), and more students tend to miss 1 or 2 classes/assignments in face-to-face courses (44.8%) than in online courses (31.1%).

Additional data will be analyzed over the next few months, and the presenters are interested to examine the extent to which the results change whether the course is a core required course or an elective course, wherein the intrinsic motivation for student engagement might be greater.

References:

Barlow, J., & Fleischer, S. (2011). Student absenteeism: Whose responsibility? *Innovations in Education and Teaching International, 48*, 227-237.

Brookhart, M. (1994). Teachers' grading: Practice and theory. *Applied Measurement in Education*, 7 (4), 279-301.

Chenneville, T., & Jordan, C. (2008). Impact of attendance polices on course attendance among college students. *Journal of the Scholarship of Teaching and Learning*, 8, (3), 29-35.

Dalelio, C. (2013). Student participation in online discussion boards in a higher education setting. *International Journal on E-Learning*, *12*, 249-271.

Ekahitanond, V. (2013). Promoting university students' critical thinking skills through peer feedback activity in an online discussion forum. *Alberta Journal of Educational Research*, *59*, 247-265.

Gump, S. E. (2010). The cost of cutting class: Attendance as a predictor of success. *College Teaching*, 53, (1), 21-26.

Moore, R. (2005). Attendance. Are penalties more effective than rewards? Journal of

Developmental Education, 29 (2), 26-32.

Salter, N. P., & Conneely, M. R. (2015). Structured and unstructured discussion forums as tools for student engagement. *Computers in Human Behavior*, *46*, 18-25.

Van Blerkom, M. L. (1992). Class attendance in undergraduate courses. *Journal of Psychology*, 126, 487-494.

Organization:

The four presenters will give a short presentation of their attendance/participation policy and the findings from their respective policy. A rubric will be distributed containing pertinent elements needed for each individual attendance/participation policy. A chart with specific findings will also be provided. A quick, initial survey will be taken at the start of the session to see whether participants consider their attendance/participation policies to be stringent or more lenient. Then, using the SAP, MAP, and GAP rubrics, participants will be asked to identify which category their attendance/participation policy would be placed in. At the end of the session, participants will reflect on how their classification as SAP, MAP, or GAP has influenced actual attendance and participation in their courses as well as student motivation and final course grades.

Keywords:

Academic Success
Atttendance/Participation
Classroom Assessment Techniques
Cognition
Cognition Evaluation Theory
Course Policies
Engagement
Motivation