Academic Ability and Student Preference for Discussion Group Activities

Student-led discussion groups have become a popular method of personalizing large lecture courses. A department utilizing this method usually requires students to attend a large group lecture two or three times per week and a small discussion group once a week. The main activity in these groups is to discuss important issues or aspects of the lecture, but many other activities are also conducted, such as demonstrations, group projects, discussions over outside readings, etc. Instructors having experience with discussion groups have probably noticed a large degree of variance in student preference for both discussions and other activities.

The success of studies by Carskadon (1978) and Aamodt and Keller (1981) suggests that students can be segmented into those who have a high probability of discussion group participation and those who have a low probability. Aamodt and Keller suggested that those students who have a low probability of discussion group participation be advised against discussion group enrollment, and instead, be advised to take a course with lecture only. Although this suggestion is reasonable, it overlooks the possibility that activities other than discussion can be conducted in small groups that will still serve the student by both personalizing the large lecture courses and also aiding the student's understanding of the course material. Thus, students who have been pretested and determined to have a low probability of discussion participation can still be placed in small groups and participate in other non-discussion activities.

To conduct small groups of this nature, it is important to determine the activities that are viewed by students as being most desirable. Moreover, it is equally important to investigate ways to further segment the groups in order to make them interesting for all types of students. One way to further segment the groups could be by academic ability.

It was the purpose of this study to investigate student preferences for small group activities and also the relationship between these preferences and the student's academic ability. It was expected that, because of their presumably greater "thirst for knowledge," students with higher academic ability would prefer activities involving new material more than would students low in academic ability, and the students low in academic ability would prefer activities that are directly related to information that will be covered on exams.

Subjects were 180 students enrolled in a large general psychology course. The course consisted each week of two days of lecture and one day of discussion in which the students attended one of twelve discussion groups led by one of four graduate student discussion leaders (2 male, 2 female).

During the last discussion session of the semester, the students were asked to fill out a questionnaire in which they were to rank order the following list of eleven activities as to their preference for these activities to be conducted in the small discussion groups: (a) discussions over controversial issues from Rubinstein and Slife (1980), (b) discussions over class lectures, (c) discussions over material that is interesting but that will not be tested, (d) demonstrations to clarify lecture material, (e) demonstrations on new material that will not be tested, (f) lecture over book material, (g) group projects over lecture and test material, (j) group projects over new material that will not be tested, and (k) asking questions over unclear material and then leaving.

Mean ranks were then computed for each activity, and groups of similar activities were combined to also provide an understanding of the student preferences for: (a) new material both not covered in lecture and not appearing on the tests (activities a, c, e, j), (b) discussions (activities a, b, c), (c) demonstrations (activities d and e), (d) lectures (activities f and g), and (e) group projects (activities i and j). Students were then assigned, according to their final percentage based upon four tests scores, into one of four grade categories: A, B, C, or D/F.

The data were analyzed using the Friedman Two-Way Analysis of Variance (Seigel, 1956) for ranked data. Table 1,

Table 1. Ranks of Student Preferences

Item	Grade				
	A	В	C	D/F	Total
A. Activity					
Lecture Discussions	1	- 1	1	1	4
Lecture Demonstrations	2	2	2	2	2
Text Lectures	2	3	3	4	3.5
Reviews of Major Test Concepts	3	4	4	3	3.5
New Material Lectures	5.5	7	5	6	5
Group Projects Over Lecture Material	8	6	6	5	6
Issue Discussions	5.5	5	8	9	7
New Material Discussions	7	8	7	11	8
Ask Questions Only	9	9.5	9	7	9
New Material Demonstrations	10	9.5	10	10	10
Group Projects Over New Material	11	11	11	8	11
B. Categor	у	-21			
Discussions	1	- 1	2	3	1
Lectures	2	3	1	1	2
Demonstrations	3	2 4	3	2	3
New Material	4	4	4	5	4
Group Projects	5	5	5	4	5

Section A, shows the ranks for the eleven activities and Section B shows the ranks for the five categories. The Friedman analysis of variance revealed that there were rank differences across academic ability for both the activities $[Xr^2 (4.11) = 36.13, p < .001]$ and the categories $[Xr^2 (4.5) = 12.80, p < .001]$.

As indicated in the table the most preferred activities were discussions over material covered in the text and in lecture, followed by demonstrations over lecture material, additional lectures based upon the text, and reviewing the major concepts that will appear on the tests. The first four choices for all four groups share the same dimension; they prepare the student for the test. Section B further depicts this situation. It appears, not too surprisingly, that the main goal of the students is to prepare themselves for the tests. There were, however, academic ability differences in preference for some of the other non-test-preparing activities.

Even though all four academic levels ranked lecture discussions first, the A and B students were more tolerant of issue discussions than were the C and D/F students. This difference was amplified by the greater dislike of the D/F students for new material discussions. The D/F students tolerated group projects over the new material to a greater degree than the other students and the A students disliked group projects over lecture material to a greater extent than the other students. The D/F students preferred only asking questions to a greater degree than did the others. Overall, the D/F students preferred additional lectures whereas the A and B students preferred discussions.

As far as improving teaching services is concerned, the present study suggests that students prefer discussion leaders to present activities that are closely related to the test content. Discussions over controversial issues in psychology appear not to be popular, nor do group projects. This lack of preference for group projects was one of the major surprises in this study and is contrary to previous responses to the author's post-discussion-group questionnaires over the last two years. During follow-up questioning, students indicated that they did enjoy some group projects, but disliked others. More specifically, group projects that involved time outside of class were not seen as desirable, nor were some in-class projects.

The data indicate that even though there are some differences in activity preference based upon academic ability, the differences are not great enough to warrant further group segmentation based upon the students' test scores. They are, however, great enough to suggest caution in the planning of group activities.

One final comment that should be made is that the present article concerns student preference for discussion or small group activities and the suggestions made have been based upon these preferences. It is possible that even though the students do not like some of the activities, especially when it involves new material, these disliked activities may contribute greatly to increased knowledge on the part of the student. Further research on the relationships among these variables is essential before the optimal combination of usefulness and desirability can be reached.

Teaching of Psychology

References

Aamodt, M. G., & Keller, R. J. Using the Self-Consciousness Scale to predict discussion group participation. *Teaching of Psychology*, 1981, 8, 176-177.

Carskadon, T. G. Use of the Myers-Briggs Type Indicator in psychology courses and discussion groups. *Teaching of Psy*chology, 1978, 5, 140-142.

Rubinstein, J., & Silfe, B. D. Taking Sides: Clashing views on controversial psychological issues: Guilford, CT: Dushkin Publishing Group, 1980.

Seigel, S. Nonparametric statistics for the behavioral sciences New York: McGraw-Hill, 1956.

> Michael G. Aamodt Department of Psychology University of Arkansas Fayetteville, AR 72701