## Teaching Notes

## Course Grades

In view of the increasing discussion over the pros and cons of the present grading system, I decided to experiment with my undergraduate class last semester. Accordingly, about six weeks after the semester began, I announced to my class that each student would receive an A and that all exams would be eliminated. I should comment that this was done in the context of a structured course with four texts and weekly reading assignments.'

This memo is being written to share the results of this experiment. The evaluation will consist of three parts: my personal evaluation and conclusions, to be discussed last; the students' evaluation (through a questionnaire); and the results of a factor analysis of the student evaluations. ${ }^{2}$

Before proceeding into the evaluations, let me provide an overview of the course structure. ${ }^{3}$ First, four books were required and readings from them were assigned for each class meeting. The books were assigned consecutively, without overlap. My announcement about the "free" A's was made after the first book was completed.

Second, the students were originally given the option to write a term paper or to be associated with the Dimensionality of Nations project (DON) in a sort of big brother relationship with one of the DON research assistants. ${ }^{4}$ These requirements were also eliminated when the grading scheme was changed. The students were told at this time that I would welcome interaction on any paper they might care to write and if they wished, they could continue their association with DON. I was careful to stress that I was eliminating the requirements and not their

1 I wish to express my appreciation for the considerable effort and great help of my teaching assistant, Phil King, in the survey and analysis upon which this memo is based.
2 This memo is not intended to be a research report. The small sample size and the lack of systematic comparison of the results with similar analyses would not support such a detailed exposition. Rather, this memo should be considered as an attempt to share informally some interesting results - to be suggestive and perhaps provocative without getting involved in a presentation of the research design, marginals, cross-tabulations, and factor matrices that would be required by a full treatment.
3 The course was titled "War and Peace" and except for some data collection, dealt with the subject in an historical and traditional manner. Methodology or quantitative methods played virtually no role in the course, nor was it assumed that students had any such background.
4 The Dimensionality of Nations project is attempting to delineate the major patterns of international relations, particularly international conflict, and to determine how these patterns relate to the differences and similarities between nations. By involving students in the project, it was hoped that they would gain some feel for the nature of a scientific research project on conflict.

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assignment options, that the greater flexibility they now had would enable them to explore those aspects of peace and war closer to their interests.

Third, the class meetings emphasized discussion and "mind stretching" rather than lectures or forced presentations by the students. Thus a seminar approach was applied throughout the semester, with the exception of the beginning lectures where I tried to present a conceptual framework.

Fourth, I tried to get the students involved in testing out a theory about peace and war by delineating the theory in class and then assigning data collection to the students. The course teaching assistant did the computer analysis and the card punching; I presented the results. As an activity, therefore, only data collection was required of the students. The data collection was assigned before the change in grading and the data were due about a month after the change.

In order to evaluate the course, all students registered in the course were mailed a questionnaire with a stamped self-addressed envelope after the last class meeting.

The questionnaire consisted of four parts (copies are available for those who wish to see them). First, the students were asked specific questions about their performance. For example, whether they read more (or less) after the course change, how carefully they read each book, whether they studied more for this course than for others, and so forth.

Second, students were asked to evaluate the course change along a number of dimensions, such as interest, motivation, application, knowledge, etc. They were given questions which asked them to evaluate the impact of the course on themselves and also to evaluate their assessment of the impact on other students.

Third, they were questioned about their grades, college rank, socio-economic background, and political views and activities.

Fourth, the students were asked to rate their instructor (me) along several dimensions, including organization, knowledge, clarity of lectures, style, and so on.

All questionnaire responses were anonymous.

## Student Evaluation

There were 28 students registered; 18 returned the

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questionnaire. Given the importance of the questionnaire, this response rate was disappointing.

From the student evaluations of themselves in the questionnaires, we may infer the following:
1 On the average, they did less reading for this course than for their other courses.
2 Even after I eliminated exams, they generally did not change their level of application.
3 On the average, they did little more than glance at the course texts. They definitely did not read the books carefully, nor study them as they would have had an exam been given.
4 They devoted more time to other courses in which they were graded.
5 On the average, they recommend graded exams and papers as originally planned in the course syllabus, but with all students receiving an A for the course.
6 With regard to their evaluation of the impact of the course on other students (and not themselves), they evaluated the all A grading system as being somewhat more effective than grades and exams in terms of learning, interest in the subject matter, motivation, feel for the subject matter, and getting something out of class meetings.
7 With regard to the idea of having an all $A$, no exam course, students think it is a good idea (thus their ideology conforms with their pragmatic evaluation above).
8 When students were given the option of choosing among a number of course organizations, which included the all $A$ - no exam one, they selected that listed in point 5 above. When asked a direct question without qualification as to whether they would recommend the same all A structure again, a few said no, and of the remainder slightly less than half didn't know.
9 They evaluate their attendance in class as falling considerably after the all A structure was introduced.
10 Students almost unanimously enjoyed the course more after the change in grading.
11 In contrast to their evaluation of their performance, the students say they had a slightly greater desire to get involved in the course after the grade change.
12 In terms of their characteristics, the students tended to have $\mathrm{C}+$ average, do 13 hours of outside work (employment), have fathers with an income of slightly more than $\$ 25,000$ (half came from professional families), be mainly male (two females in the sample), halfway between middle
of the road and left in politics, closer to Humphrey than Bob Kennedy in Presidential preference (and closer to Johnson than McCarthy), and be slightly activist.
13 The students evaluated their instructor highly.

## Dimensions of Student Evaluation

The responses were factor analyzed (component analysis) to an orthogonally rotated solution. An interpretation of the factor analysis results suggest the following points. ${ }^{5}$
1 Those with the lower college rank, such as freshmen, applied themselves more to the course than to their other courses. Moreover, they were less likely to reduce their level of course work as a result of the change in grading system.
2 The less the students thought of the instructor, the greater the tendency to withdraw from the course (and they would have done so were it not for the course change). The evaluation of instructor and tendency to withdraw from the course were independent of (a) the student's performance in class before and after the course change and (b) of the evaluation of the course structure.
3 The students with the higher grade point average tended to decrease their application in the course after the change in grading structure; the poorer students tended to increase their application.
4 Students from professional families tended to enjoy the course more after the grade change and to suggest that this be done again; students from nonprofessional families enjoyed it less and were less inclined to recommend the same structure.
5 The more the students liked the instructor and the non-graded structure, the more they applied themselves after the course change.
6 Activist students from professional families did more reading; non-activists from nonprofessional families did less.
7 The students' evaluation of the course and the amount of work they did for the course were independent of the amount of outside employment they had and of their political philosophy.

## My Evaluation

My evaluation is based on the following observations:

1. No student turned in a paper to me, even though encouraged to do so.
2 Few, if any, students came around to discuss the course, the change in grading system, or special projects they might be doing with the greater flexibility they had.

5 Each one of the following seven points is an interpretation of a separate orthogonally rotated dimension.

3 Class interaction was poor, tended to be forced rather than spontaneous, and in content showed an almost total lack of study of the course texts. ${ }^{6}$
4 Many did not turn in their data collection assignments, even after extra time was given and it was stressed that the class as a whole would suffer by the poor analysis resulting from the lack of data.
5 After the course change, attendance dropped sharply. Attendance amounted to about $30 \%$ in the last month.
6 After the change in grading system, there was a marked drop in the number associating themselves with the DON project. In the last month there was only one.
7 This final observation is based on the feel you get over the years as a teacher for how well a class is learning - how well the members of the class are progressing along a number of dimensions. Following the change in course structure I felt a loss of momentum and by the end it seemed as though the class was idling along, engaged in first gear, with the foot off the accelerator and clutch.

## Conclusion

I am giving similar questionnaires to my present class, which is a class organized on a quiz, exam, and grade structure. These questionnaires were filled out after the first session and will be again given at the end of the semester. The responses will enable me to re-evaluate last semester's class and to discriminate between the elements general to both class environments and those specific to the one I created last semester. (I want to avoid the so-called potato correlation: on the average, $98 \%$ of U.S. criminals had potatoes to eat within 48 hours before committing their crime). Consequently, the following conclusions should be considered as only suggestive - but nonetheless, as a backstop for our pedagogical intuition.

1 If your teaching goals are the desire to (1) impart knowledge, (2) provide a conceptual map for an understanding of the world, (3) encourage a questioning and critical attitude, (4) and to help students develop an ability to create new knowledge, then a no exam, all A system is not as good as a graded, requirements system in the present University setting.

6 One student commented that he decided I did not know much, and thus did not do the reading. This student was a Marxist, an activist and in strong disagreement with much of what I said. He was also a prime mover in many class discussions.

2 Students need grades and exams as a way of getting feedback and as a stimulus to application (within a University in which they are getting graded in other courses - what happens when the other courses do not have exams and grades is another question). It is important to note that the students did not, on the average, agree with this point and that their disagreement appears unrelated to their application in the class, their political views and activism, and their evaluation of the instructor.
3 This final point may be like the above potatoe correlation, but nonetheless it may be worth considering. Those who have been in college longer or have better overall grades applied themselves less after the change in course structure. This leads me to hypothesize that by removing grades and exams from a course, one loses the more mature and better students. These students, I would argue, prefer the constant feedback of the graded course, prefer to apply themselves in competition with other students, are stimulated to apply themselves more in the graded course, or they realize the importance of grades in a competitive society and thus place their energy where it will have the greatest practical payoff.

