WRITING SKILLS--ARE LARGE CLASSES CONDUCTIVE TO EFFECTIVE LEARNING.

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EDRS PRICE MF-$0.25 HC-$0.52 13P.

BY A STRATIFIED RANDOM SAMPLING, 274 STUDENTS WERE ASSIGNED TO THREE SECTIONS OF 56 STUDENTS EACH AND FOUR SECTIONS OF 28 STUDENTS. EVALUATION OF THE INSTRUCTION IN THE LARGE AND SMALL GROUPS INVOLVED ANALYSIS OF TWO ESSAYS AND INSTRUCTOR-STUDENT EVALUATIONS. WHILE THERE WAS SOME VARIATION IN STUDENT PREFERENCES, THE RESULTS OF THE PRETEST AND THE POST-TEST SHOW THAT, GIVEN THE SAME QUALITY OF INSTRUCTORS, PROGRAM, AND STUDENTS INVOLVED IN THIS EXPERIMENT, CLASS SIZE UP TO 56 DOES NOT SEEM TO BE A SIGNIFICANT VARIABLE IN THE LEARNING OF WRITING SKILLS. (WO)
WRITING SKILLS: ARE LARGE CLASSES CONducIVE
TO EFFECTIVE LEARNING?

by

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UNIVERSITY OF
LOS ANGELES
JUL 31 1966

Indian River Junior College
F ort Pierce, Florida
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"I was convinced that better results would come from the smaller classes but my mind was opened to other possibilities by the experiment."

"I was psychologically negative toward the prospect of facing the immediate challenge of grading a mass of papers and returning them quickly enough for effective instruction, until I realized that the total number of students was no larger than I normally teach."

"I felt sure that the students in the smaller groups would report more readily to conferences but the final instructor-student evaluations did not substantiate this."

"I am convinced that one large class (as opposed to two small ones) helps prevent the instructor from repetitions boredom; furthermore, he will have additional time for grading or for personal conferences."

"There was no significant difference in the development of writing skills between small and large groups."

The comments above are instructor reactions to Project Eh-101, an experiment in teaching freshman English which evolved from an 86% increase in enrollment at Indian River Junior College;
Fort Pierce, Florida, in the fall of 1965. The experiment involved three instructors and 274 students (screened only on the basis of high school English grades), the latter of which were divided into three sections of 56 students each and four sections of 28 students each. Dual evaluative procedures were used: analyses of two carefully selected essays and instructor-student evaluations.

On August 23, 1965, all the students in project English 101 were required to furnish a writing sample done in class, an uninstructed analysis of "The Dark of the Moon," by Eric Sevareid.

On December 3, after 17 weeks of training in how to write a clear concise, meaningful, stimulating, and fully developed prose, the final writing analysis was given: "Autumn Kites On The Gridiron" by Thomas Hornsby Ferril. Both essays were graded using the general scoring standard for English Composition in use in the English department.

A student evaluation form was completed by each student at the end of the semester. It was originally planned to make tests of significant differences between the large and the small groups, without retaining the identity of the individual teachers. Initial results indicated, however, that the usefulness of the study would be somewhat enhanced by treating the large and small classes of each teacher independently. The results
unequivocably established that, given the same quality of instructors, program, and students involved in this experiment, class size up to 56 does not seem to be a significant variable in the learning of writing skills.

What were the initial steps?
Approximately 300 students who earned high school English grades of C or better were placed in the control and experimental groups in the following manner: teacher A was assigned two sections of 28 students and one section of 56; teacher B was assigned one section of 28 and one section of 56; teacher C had one section of 28 and one section of 56. To insure that the groups were comparable, the scheduling was accomplished through the use of stratified random sampling. The instructors employed the same methods in the small groups as they used in teaching the large groups. The measure of course effectiveness was decided by the three instructors. It was planned to ask all students to analyze an essay before receiving any formal instructions in how to do this and then at the end of the course to ask these same students to analyze another essay. On both the pre-tests and the post-tests the students would be given a coded test paper and the grading of the exams would be done anonymously by each teacher. Realizing that other factors (in addition to the grade one accomplishes) are important, the administration asked the students and the teachers in both large and small groups to evaluate their group experience. Asking the students and the teachers to
evaluate their groups' experiences seemed particularly important, for even though small class size was proved superior, large class size might be preferred by the participants. A report by the students and/or the faculty that the large class was not desirable would make the implementation of widespread large class sizes a debatable procedure in spite of statistical differences in accomplishment.

Were the Teachers' Attitudes Changed by the Experiment?
Prior to the beginning of the experiment, the instructors were unfavorably subjective. Four years of successful work with small classes in the department led two instructors to be skeptical; another, who activated much individual counseling, wondered at the effect of large classes upon the conference process; both these instructors thought that an attempt to teach communications skills to a large group would violate one of the advantages of attendance at a junior college - a close student-instructor relationship. There was great concern over possible weaknesses in the all important factor of critical discussion in the large groups but agreement that the unit on logic would go very well in either group. Only one instructor, new to the English faculty, professed to have an open mind. "I had no qualms," she professed, "although I felt that, for both student and instructor, the experience of a close intellectual relationship in the smaller groups would be more rewarding." The feelings of all instructors following the experiment were constructively
objective but instructors and administrative staff were strong in the conviction that excellent instruction within the framework of a well-defined program was the important factor. In brief, in spite of a strong predilection for small classes as the motivation for success in learning writing skills, all three instructors realized, by the end of the program, that large class size could be eliminated as a deterrent to learning. This judgment was the result of the following findings and procedures.

What Were The Results?

Teacher A

Teacher A had 48 students who came from two small classes, which took not only the pre-test but also the post-test. With these 48 students from small classes, 48 students were selected from the large class in a random manner. A test of the difference between the large and small class scores on the pre-test revealed, in teacher A's case, that the small groups scored significantly higher in the analysis of Eric Severeid's essay, than did the students from the larger group. This difference was significant at the 5% level. The results of the second test, however, showed that the difference between the large and the small groups was not significant. A test of the significance of the improvement in both the small group and the large group revealed that this improvement was highly significant. To see if there was a significant difference between the net change of the small group's improvement and the net improvement of the large group, a test of significance was made and revealed that there was no significant difference in the net improvement of the large class versus the
small one. In short it appears that there was no important difference in the level of learning of the large versus the small group, as far as the scores on analysis of these two essays is concerned.

Teacher B
Teacher B taught a small group of 28 students who took both the pre-test and the post-test. With these, 28 members from teacher B's large group were selected at random for matching purposes. A "t" test revealed there was no significant difference between the large and the small group on the first test. Similar findings of no significant difference between the two groups on the second test were also observed. While both groups showed significant improvement from the 1st to the 2nd score, there was no difference in the net improvement of the two groups. These results attest also to the effectiveness of the teacher in both the large group of 56 and the small group of 28.

Teacher C
A "t" test of the first exams, the large versus small groups for teacher C, revealed no significant difference between them. The large group on the 2nd test however, did significantly better at the 5% level than did the small group. Although the difference between the net change in the two groups (the first versus the 2nd test) is not significant, it should be pointed out that a subjective evaluation by members of the evaluating staff predicted the effectiveness of this particular teacher
in the large group situation. As was the case of teacher A and teacher B, the scores on the 2nd tests both in the large and small group of teacher C, were significantly higher than the scores on the first tests.

In summary, using this one measure of success, it appears that the variable, class size, is not at all important when there is a difference of 28 students between the class size of 28 and 56. An examination of the student evaluation forms from the standpoint of the variable, class size, does not indicate any significant preference for small class over large class per se but does present individual problems that seem to stem from class size. For instance, in the case of teacher A, there was more than a chance occurrence of the student complaint of buzzing in the back of the room, though this particular complaint did not occur in either of the other two classes. And similarly in teacher B, there was more than a chance occurrence of a student preference for small versus the large class. It should be noted that teacher B feels very strongly about the efficiency of small versus large classes; in the case of teacher C, there was more than a chance student preference for large group versus small group, with the recurrent comment that the large groups called out more and varied responses and therefore was stimulating. In the case of teacher B, the argument in favor of small classes was that there was more chance for individual attention, and one did not feel shy as he might in large groups. The overriding comment in each case (even
though these evualations were completed anonymously) was the outstanding learning that occurred on the part of almost all students, as they spoke in superlatives of the teaching ability of each of the three teachers. These student responses prompt this writer to conclude as did Pfister, in the 1958 conference on class size at the University of Michigan, that "class size is not the critical variable in teaching effectiveness in higher education; that it is rather the quality of the teaching, and of the learning."  

How Does This Experiment Substantiate Other Research?  
Though there has been a heavy clamor extolling the virtues of large instructional groups, the argument for large class sizes has not been uncontested. In an experiment carried on by Fordham University, involving the subjects of economics, political science, and sociology, it was found that increased class size is not the definitive solution for increased enrollment. Anderson reports, in a well controlled study he made in 1950, that the factor of the total daily student load assigned a teacher is important and those who had the lightest loads had the largest student accomplishment differential. O'Shaughnessy, in a much earlier study, showed a positive correlation between the size of classes and the percentage of students failing the courses, in favor of the small classes. Additional studies favoring the small class could be enumerated and many arguments favoring
class sizes could also be recorded. In fact, as Howard E. Bosley, in his article "Class Sizes and Faculty-Student Ratios In American Colleges" reports, it is likely that "when investigations of this nature are considered by numerical count, those favoring large classes would predominate." 5

And in the search for schedule and curriculum flexibility, the administration of Indian River Junior College would feel free to increase the size of the classes in English 101, without detriment to the students or the acquisition of writing skills, providing such a move is given the enthusiastic stamp of approval from the staff concerned.
FOOTNOTES


