In fall 1970 several sections of a one-semester required U.S. history course (History 27: American History and Constitution) at Cerritos College (California) were combined into a joint lecture-discussion (JL) for 200 or more students. The opportunities for providing two lecturers stressing their topical specialties in group discussions seemed preferable to the traditional lecture (TL) class which enrolls 60 to 80 students. However, between fall 1970 and fall 1973, student interest and enrollment in JL sections continuously declined. In order to compare the relative benefits of JL and TL instruction, grade reports were obtained for the 1,006 JL students and the 1,525 TL students who had enrolled in History 27 from fall 1970 to fall 1973. Results indicate higher retention rates for the TL classes and no significant differences in student academic performance. Analysis of registration counts showed that the TL approach attracted students more readily than the JL approach. Possible reasons for these findings are discussed and a review of the literature relating to student motivational preferences for various teaching methods and a bibliography are provided. The authors also make recommendations for improving JL team-teaching ventures at Cerritos. (DC)
COMPARATIVE EVALUATION OF A JOINT LECTURE-DISCUSSION APPROACH TO U.S. HISTORY

BY

KEITH A. HINRICHSEN, M.A.
GARY F. SCHAUMBURG, M.A.
CERRITOS COLLEGE

A PRACTICUM PRESENTED TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

FEBRUARY 21, 1975
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION AND LITERATURE REVIEW</td>
<td>1</td>
</tr>
<tr>
<td>Student Motivational Preferences</td>
<td>2</td>
</tr>
<tr>
<td>Lecture, Tutorial, Team-Teaching</td>
<td>5</td>
</tr>
<tr>
<td>Simulation-Gaming, Role-Playing</td>
<td>7</td>
</tr>
<tr>
<td>Background</td>
<td>9</td>
</tr>
<tr>
<td>Specific Purposes and Hypotheses</td>
<td>10</td>
</tr>
<tr>
<td>Institutional Impact</td>
<td>10</td>
</tr>
<tr>
<td><strong>METHOD</strong></td>
<td>11</td>
</tr>
<tr>
<td>Procedure</td>
<td>11</td>
</tr>
<tr>
<td>Selection of Subjects</td>
<td>11</td>
</tr>
<tr>
<td>Measurement of Performance</td>
<td>11</td>
</tr>
<tr>
<td>Measurement of Course Attractiveness</td>
<td>12</td>
</tr>
<tr>
<td><strong>RESULTS</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>DISCUSSION</strong></td>
<td>15</td>
</tr>
<tr>
<td>Conclusions</td>
<td>20</td>
</tr>
<tr>
<td><strong>DEFINITIONS OF TERMS</strong></td>
<td>22</td>
</tr>
<tr>
<td><strong>REFERENCES</strong></td>
<td>25</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>Comparison of final grades between JL and TL history students as a function of categories of academic achievement.</td>
</tr>
<tr>
<td>2</td>
<td>Proportions of students registered relative to maximum JL or TL class enrollment for weeks 1 through 4.</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Longitudinal comparison of student registration counts between JL and TL classes as a function of the percentage of students registered relative to the maximum class size for weeks 1 through 4.</td>
</tr>
</tbody>
</table>
Introduction and Literature Review

Instructional frustration is often the most effective stimulus for curriculum innovation. Within the last ten years history curriculums on the collegiate level have been attacked from within and without. Student impatience with traditional lectures; decreasing student interest in history as a general education elective or requirement; saturation and collapse of an always limited job market, instructor boredom with the monotony of the same instructional format; and the need to reconcile general course goals with specific student behavior objectives have necessitated rethinking curriculum methods in history.

As Harper (1973) found in a study highlighting thirty innovative and exemplary projects conducted in Oregon's colleges, rising enrollments and increasing costs have been instrumental in increasing class size in required U.S. history courses. Harper stressed resulting problems which are national concerns in all large traditional lecture classes, namely: (1) little opportunity for conceptualized, individualized, analytical thinking; (2) a direct threat to and a denial of the traditional community college concept of dedicated teaching and close faculty-student relationships; (3) a growing impersonality as class size increases which results in less instructional relevance for many students; and (4) diminishing dialog between faculty and students, frustrating both, and resulting in decreasing educational motivations for both groups.
Student Motivational Preferences

In determining the efficacy of any instructional program it is imperative to consider, as Pascal (1971) stated in his article, "A few studies have reported that preferences for particular instructional methods was related to certain personality characteristics (p. 1)". Among earlier studies Wispe (1951) concluded that students in independent studies preferred permissive teaching methods, while insecure students wanted more directives. Cronbach (1957) was among the first to directly affirm the instructional impact of personality interactions between faculty and students. McKeachie (1961) found that students high in achievement motivation and low in anxiety generally do better in classes where instructors don't stress "correctness of student behavior". Koenig and McKeachie (1959) found that women high in the need for recognition and achievement tended to prefer independent study to traditional lectures; while McKeachie's (1966) study affirmed that male students who needed to affiliate with an instructor benefited from a class with a "warm, friendly atmosphere".

Pascal's (1971) study proposed four general motivational premises which all educators contemplating instructional innovation would be wise to consider: (1) there is no basis to presume that past experience with a particular subject will be that significant in determining over-all success in an experimental program; (2) overall, independent study students need more flexibility, but are not significantly different in performance standards than lecture-discussion students; (3) students who select the lecture-discussion option were more prone to interact with people, and did spend more time in "informal serious discussion"; and
(4) posterior analysis (Newman-Keuiss) showed that lecture takers were considerably more anti-intellectual and needed more authoritarian instruction.

Conclusions deduced from this study would tend to support commonly held assumptions, although his third finding points out a bitter-sweet student motivational trait which could destroy innovation after a promising start: (1) students in independent study need more sense of autonomy, are flexible, and have their tolerance for ambiguity more refined. They also are able to handle abstract thinking better; (2) lecture-discussion students tend to be moderate in their desire to pursue reflective thought and analysis in an academic context. Like lecture students, they take significantly less interest in abstractions, but are willing to accept apparent ambiguities and a sense of autonomy comparable to what the independent students will tolerate; (3) based on the Pascal-McKeachie (1970) study, students who are in favor of many instructional options often don't perform up to expectations when they are permitted to select their own instructional approach.

Among the most viable and increasingly popular instructional alternatives to large classes employing the traditional lecture method is team teaching. Class size can often be effectively increased when two or more instructors participate because discussion sections theoretically provide the needed dialog so essential if analytical and conceptualized thinking is to be encouraged. Motivation, participation and rapport by and between staff and students can certainly be enhanced. A variety of useful educational by-products also commend team-teaching. Lectures are prepared more concisely and thoroughly, simulation role-playing
can be most effectively practiced, and a degree of independent study stressed.

But whatever the instructional format, whatever the educational outcomes, two overwhelming advantages accrue when history is team taught. These advantages were concisely stated by Delaney (1974) in his recent article "Team Teaching of the History of Western Civilization at Clackamas Community College":

While all of us are generalists, we have sought in organizing the course to take advantage of the diverse backgrounds, interests and strengths of (the) instructors... What we do not want is for students to sit passively and treat the discussion groups as just one more lecture. Some are content to do just that, others are enthusiastic about being able to explore ideas informally (pp. 29-30).

Delaney's (1974) survey of the students taking the team-taught Western Civilization course in 1971-72 found that 89% felt team-teaching was "highly desirable" or "desirable". Only 11% seemed to be indifferent to the innovation, or preferred traditional instruction. Innovation taking advantage of instructional expertise, careful and concise preparation of limited lecture time, and student participation in stressing conceptualized and analytical thinking would seem to be the most effective way to teach history classes overburdened with students and undergirded with apathy.

A few of the student motivational problems which can undermine the best laid team-teaching plans were re-iterated by Delaney (1974):

- Other problems are not peculiar to team-teaching but remain problems: attendance at lecture and discussion sections, getting students to read the assignments and be prepared to discuss the material, encouraging students who are shy or less articulate than some of the fellow students to participate in the discussions while discouraging one or a few students from dominating the discussion (p. 30).
Lecture, Tutorial, Team-Teaching

Burns and Jones (1967) researched two experimental approaches to teaching freshman composition at Central Missouri State College in their report: "Two Experimental Approaches to Freshman Composition—Lecture-Tutorial and Team Teaching". Many of the problems Harper's (1973) study related as to student indifference to traditional lectures were stressed, including the length of the instructional week, tediousness of lesson plan preparation, repetition in lecture and grading practices, loss of student's sense of identity, and greater motivational incentive for both staff and students. The authors did caution that when tutorial or team-teaching ventures are tried, it is essential to give the students adequate time to overcome an initial disorientation with all the free time now available for self study projects. Students are often apprehensive about a "one-on-one" confrontation with the instructor in tutorial-office sessions, but most eventually come to appreciate the closer contact and more personalized approach. The writers also claimed that students retained more information in this experimental approach.

Paradoxically, students are often alienated by an educational innovation intended to provide them with closer faculty contact and rapport. While many students appear to be either too reticent or overly self centered in discussion, Delaney (1974) has also discovered an unforeseen disadvantage with the one or two hour joint lecture as well. It is simply more difficult for an instructor to get to know a class when they meet only once or twice a week in lecture. The impersonality and potential alienation which the joint-lecture (team-teaching) discussion section was created to mitigate only enhances such problems.
for students who need the security of a predictable educational routine three times a week with the same instructor.

Pursuing this paradox further, Harper (1973) applied experimental, innovative instructional methods to tradition-bound curriculums in U.S. history. Instructors modify traditional lecture formats because they are limited to dispensing factual information, specifically organized in a normative context. In turning to team-teaching, which does foster desired creative talents and some synthesizing abilities through a largely unstructured educational atmosphere, student morale often suffers because of the absence of the very structured environment the traditional lecture was thought wrong in maintaining.

Harper's (1973) study did substantiate the Burns and Jones (1967) contention that students tended to perform better in lecture-discussion formats rather than straight lecture classes, but he admitted it might be due to instructor variabilities instead of any instructional benefits. Although students who finished the experimental classes in history seemed to prefer them, attendance and retention were no better in such lecture-discussion sections than in the traditional lectures.

When educators deal with the resulting student alienation and hostility to a new experiment in team-teaching by imposing further experimentation in the hope of capturing student response, further alienation can and often does result. Delaney (1974) implied this in assessing the effectiveness of popular simulation, role-playing games, superimposed upon team-teaching formats. By concentrating on key historical issues or leading personalities in a historiographic approach through faculty and/or student simulation, greater confusion resulted for
those students who resisted the initial innovation of team-teaching. In short, certain students are not only content to sit passively, they openly resented any effort to further involve them in a required course.

In assessing the efficacy of any team-teaching approach this potential problem needs to be weighed against the obvious advantages which Elkins (1970) stated so simply and cogently in his article on team teaching history in West Germany. Team-teaching does save time, minimizes out of class preparation, and unifies student experiences.

Simulation-Gaming: Role-Playing

Because the gaming approach to instruction is still suspect, confusion and contradiction abounds. Baker's (1968) study of junior high U.S. history students being taught with simulation-gaming claimed it was a much more effective teaching devise than the traditional classroom format. Yet, just a year later, Heinkel (1970) found no significant improvement in either interest or performance in surveying a junior high political science class using simulation. A 1973 study by Wentworth and Lewis found that cognitive achievement in community college economics classes could be significantly lower when simulation-gaming was employed.

The most interesting conclusion reached by Lucas (1974) was that while simulation conditioned students performed no better than traditional lecture ones, delayed post-tests scores were higher than the original post-test evaluation for simulation classes. Students apparently continued to reinforce their cognitive study of the curriculum due to motivational involvement long after the experiment ended, certainly one of the real objectives of any educational approach.
In 1969 Holverson investigated the comparison of the cognitive (systems analysis) approach versus traditional lectures in sociology. The retention of objective data was not appreciably enhanced for students taking the simulation approach, as Heinkel (1970) found for political science, because significant performance differentials were not really due to methods of teaching at all. The represented, personality of the professor, time of the class, and size of the class were all factors which, in Halverson's (1969) estimation, influenced the differential. As he concluded, "It is apparent from this study that the systems analysis does not produce a significant improvement of objective knowledge in sociology (p. 16)."

Recently Bernstein (1974) analyzed "Simulation versus the Standard Lecture Approach in Teaching Introductory American Government". Stressing increased student motivation in those sections employing simulation, he did admit that research is remarkably consistent in concluding that there are no significant differences academically between traditional and simulation taught classes. Interestingly, he did recognize that too much forced role-playing apparently did cause a drop in attendance and resulting increase in the failure to retain students.

Janslowicz (1974) has effectively summarized the pitfalls of team-teaching in the related discipline of political science in his brief article: "Simulation in the Teaching of State and Local Politics". While enthusiastically endorsing experimental simulation, role-playing in his political science classes, he cautioned the reader that, "Although I am a strong advocate of the simulation method, I have realized and hasten to point out that it is not a panacea. There is no substitute for an insightful, informed and dynamic instructor (p. 37)."
Unfortunately, team-teaching is often not the panacea. This study will evaluate the effects these joint lecture (JL) approaches have had upon students.

Background

During the Fall Semester, 1969, Cerritos College's department of history began discussing the possibility of combining sections of an already large one semester required U.S. history course (History 27: American History and Constitution) into a JL for 200 or more students with discussion sections. The opportunities for providing two lecturers stressing their topical specialities in group discussion seemed a desirable alternative to the existing traditional lecture (TL) class which meets three hours a week with 60 to 80 students enrolled.

Meeting with administrative approval, our first JL section was scheduled for the Fall, 1970. Two instructors with nearly 240 students handled a class with eight discussion sections.

Two JL sections with a total of three instructors were used in the Spring, 1971, but with enrollment comparable to that for the Fall, 1970.

During the Fall, 1971, the original two instructors continued their JL approach for the third semester, experiencing stagnating interest and low enrollment. A second section this semester attempted a new strategy, having both instructors before the class concurrently in a simulated debate format stressing historical role-playing.

By the Spring, 1972, the department decided to limit our JL offering to this simulated debate class. We experienced disappointing enrollment, despite high instructor motivation.
After a year's hiatus, during the Fall, 1973, these same debate instructors tried a new twist, combining their TL section which met at the same time once a week in debate.

**Specific Purposes and Hypotheses**

The department, division; and increasingly the college has discussed the relative merits of this JL approach. But no one has ever bothered to objectively examine the comparative merits of a JL to TL instructional approach.

Specific purposes of this study will be to: (1) compare retention rates for students in both JL and TL history sections of History 27; (2) compare student academic performance in the same history classes; (3) analyze possible initial class appeal or preference by comparing registration patterns for both JL and TL sections of History 27.

It is hypothesized that: (1) retention rate is lower in JL than TL sections; (2) academic performance is higher in JL than TL sections, and; (3) students prefer TL to JL sections as evidenced in registration trends.

**Institutional Impact**

During the Fall Semester, 1974, California community colleges were placed on a dual census accounting basis for state ADA monies. Retention, always an educationally desirable goal, now assumes financial imperatives. Classes must retain students through the twelfth week as well as through the fourth, if revenues are to continue throughout the semester. Our JL history experiment would appear to have great significance campus-wide concerning retention.

With the announcement of plans to build our campus' first large lecture, multi-media classroom which all divisions are encouraged to use,
JL approaches are once more being actively considered. Although student receptiveness, financing, and improved multi-media support should be evident by 1976; administrative, instructional and student attitudes have changed little since our first JL venture during the Fall, 1970. For these reasons, an objective analysis of history JL classes is needed now more than ever before.

Method

Selection of Subjects. In order to carry out the aforementioned objectives of the study: (1) grade reports were acquired for all students who were enrolled in a JL History 27 class from the Fall semester, 1970 through the fall semester, 1973. Between Fall semesters 1970 and 1973 these seven JL History 27 classes had a total enrollment of 1006 students.

In order to provide bench marks for comparison, analogous data from students enrolled in TL History 27 classes from the Fall semester 1970 through the Fall semester 1973 were acquired. The TL courses that were selected had been: (1) taught by the same instructors who were involved in the JL approach and, (2) offered at approximately the same time of day as the JL classes. This selection procedure was employed in an attempt to avoid confounding by unwanted situational variables such as time-of-day and personalities of the teachers. Between Fall semesters 1970 and 1973 these nineteen TL History 27 classes had a total enrollment of 1525 students.

Measurement of Performance. Through the use of grade reports, final course grades, operationally defined as measures of student academic
performance, and course retention rates were used as criterion variables in an attempt to provide objective measures of course effectiveness.

Four measures were used to compare academic performance between JL and TL approaches: (1) a comparison of "retention rates" between JL and TL as measured by the proportion of students who received a "Withdrawal" grade; (2) a comparison of "survival rates" as indicated by the proportion of students receiving any "credit grade" (A+B+C+D+CR); (3) a comparison of "successful performance rates" (A+B+C+CR) and; (4) a comparison of "high performance rates" (A+B).

Concerning "retention rates" computation of proportions was based on the total number of JL or TL students enrolled. Proportions concerning "survival rates" were computed using as a divisor the total number of students who received grades A, B, C, D, F, E. Computation of proportions concerning the remaining "rates" were computed based on the total number of students who received a grade of A, B, C, D, F.

In order to assess the statistical significant between any observed differences in proportions between JL and TL approaches concerning the aforementioned performance measures, the Lawshe-Baker (in Downie & Heath, 1974) Nomographic method of comparing proportions based on the Chi-Square distribution was employed.

Measurement of Course Attractiveness. In an attempt to compare the attractiveness of the two approaches to prospective students, a comparative longitudinal analysis between JL and TL classes concerning daily student registration counts throughout the registration period was carried out. For comparative purposes, the registration period was divided into four one week segments. For each weekly segment the number of JL and TL
students enrolled was divided by the appropriate collective maximum class size figure (JL=240; TL=80), thus giving the proportion of students already enrolled relative to JL or TL class enrollment maximums. Again the Lawshe-Baker Nomographic method of comparing proportions was employed.

Results

Concerning academic performance, a comparison of "retention rates", "survival rates", "successful performance rates", and "high performance rates" is shown in Table 1. For procedures used in computing proportions refer to the Method section. As can be seen, "retention rate" is significantly (p < .05) better for the TL compared to the JL approach. The Lawshe-Baker Nomographic method of comparing proportions was used to test the significance of differences between the two approaches. Conversely, there were no significant (p > .05) differences between JL and TL approaches concerning "survival rate", "successful performance rate" and "high performance rate".

**TABLE 1**

**COMPARISON OF FINAL GRADES BETWEEN JL AND TL HISTORY STUDENTS AS A FUNCTION OF CATEGORIES OF ACADEMIC ACHIEVEMENT**

<table>
<thead>
<tr>
<th></th>
<th>Withdrawal Rate (&quot;W&quot;)</th>
<th>Survival Rate (A+B+C+D+CR)</th>
<th>Successful Performance Rate (A+B+C+CR)</th>
<th>High Performance Rate (A+B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Lecture</td>
<td>32.9%</td>
<td>98.1%</td>
<td>90.0%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Traditional Lecture</td>
<td>20.6%</td>
<td>96.7%</td>
<td>88.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Difference</td>
<td>12.3%*</td>
<td>1.4%</td>
<td>1.6%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

* Significant beyond .05 level of confidence.
Pertaining to course attractiveness, Table 2 presents the proportions of students registered at the end of weeks 1, 2, 3, 4 relative to maximum JL or TL class enrollments. As can be seen, the TL approach, as evidenced by registration counts, significantly \((p < .05)\) attracts students more readily than the JL approach (see Figure 1).

**TABLE 2**

PROPORTIONS OF STUDENTS REGISTERED RELATIVE TO MAXIMUM JL OR TL CLASS ENROLLMENT FOR WEEKS 1 THROUGH 4

<table>
<thead>
<tr>
<th></th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Joint Lecture</strong></td>
<td>8%</td>
<td>33%</td>
<td>58%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Traditional Lecture</strong></td>
<td>56%</td>
<td>91%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td>-48%*</td>
<td>58%*</td>
<td>41%*</td>
<td>37%*</td>
</tr>
</tbody>
</table>

* Significant beyond .05 level of confidence.

Figure 1. Longitudinal comparison of student registration counts between JL and TL classes as a function of the percentage of students registered relative to maximum class size for weeks 1 through 4.
Discussion

The findings indicate that the retention rate was lower in JL than TL sections. Apparently, an initial problem for any experimental class is student retention, and the JL innovation at Cerritos was no exception. The original JL section during the Fall, 1970, historically had by far the largest initial group of students ever in a JL class at Cerritos. Because of the size (240) the college was forced to schedule the section in the theater auditorium, conducive neither for classroom discussion nor role-taking. The resulting informality of the lecture possibly encouraged absenteeism, which in turn increased the high drop-out rate when students fell behind in class work.

The instructors decided to administer all exams in discussion sections. Certain students who disliked this instructional format unexpectedly had problems taking exams when they missed discussion, thereby denying themselves the practice necessary for successful mastery of exam material. It was observed that as long as the discussion section was devoted to answering questions on the week's lecture, or simple review, attendance was fairly constant; but when outside assignments, or in-class group discussions were introduced, retention suffered.

Perhaps one of the most significant reasons for lower retention in JL sections was the difficulty in scheduling the one-hour discussion section at times that fit the students' schedules. Two sections would logically correspond to the Friday meeting hour of the Monday-Wednesday lecture, which pleased those fortunate enough to get in; but any other time caused problems, problems that apparently could be easily solved by early withdrawal.
The results associated with academic performance do not support the hypothesis that academic performance is higher in JL than TL sections.

Before the present study's analysis of grade distributions was finished, instructors who had formerly participated in the JL classes were informally hypothesizing that "high performance" (A+B) would be significantly greater for JL sections than for their TL classes.

Surprisingly, although a slightly higher percentage of "A" grades was given in JL classes, it was often done at the expense of "B" scores, resulting in no significant difference in the "high performance" grade category compared with TL sections. When added to the lower retention rate the overall result was far from impressive scholastically. In an effort to mitigate some of the instructional difficulties inherent in team-taught lectures, as well as student fear of a new venture, the instructors decided to allow the JL students to drop one of the four exams given during the semester. Since this resulted in students rarely taking make-ups, many apparently suffered an unforeseen problem. By not gaining enough experience with the multiple choice tests which were given, students failed to improve their scores on later tests.

Intentionally, grading was intended to be more "liberal" in JL classes. Using a normative reference class curve, grades below the "B" level tended to be less predictable than in most TL classes. Because of the more unstructured study habits of students in JL classes, partly necessitated by the class format, grades did vary from exam to exam for all but the "A" students. This, in part, was one of the reasons for "throwing out" one of the exams.
Because the brief fifty question test had to be equally divided between instructors and among subject matter topics, the questions tended to be somewhat more general. It was the intent of the instructors to remove as much anxiety as soon as possible from the test situation, and make the JL evaluative curve comparable in percentage of successful grade achievers with the TL classes. Concerning the aforementioned, the JL approach apparently was successful, although the evaluative method did differ.

The findings associated with "course attractiveness" support the hypothesis that students prefer TL to JL sections as evidenced in registration trends. According to the instructors who were involved in the JL approach, of the study's three hypotheses, this hypothesis was the one most likely to be supported by objective analysis.

From the outset, enrollment mechanics broke down in the JL classes. The Schedule of Classes for the Fall, 1970, inadvertently deleted reference to the discussion sections, indicating only that there would be "one hour to be arranged". Quite accidentally, there was no problem this initial semester in filling the JL class, as most students signed up for it as if it was a TL section.

By the second semester, both JL classes had the required discussion sections listed but with the designation "lab" attached. This, added to the "no-unit credit" for the discussion section frightened away some potential students, even though the department was careful not to schedule other History 27 TL classes at the same "prime-time" hours.

Enrollment became so critical by the start of the third semester that the department decided to retrench on the experiment thereafter.
Only in the Fall, 1973, did the college succeed in filling both sections of a compromise JL-TL class format, and then students signed up for only the TL portion of the venture. Such deception, it was felt, did the program or the students little credit, and the experiment was dropped in January, 1974.

Among the articles previously cited, Delaney's (1974), Harper's (1973), and Pascal's (1971) seemed most relevant to the present study.

Cerritos College's history department instituted team teaching to avoid the impersonality of large classes by offering the students an opportunity to analyze topics in a generally conceptualized way, thereby hoping to improve rapport between faculty and students. Although one can not fault Harper (1973) for stressing similar general reasons for team teaching innovations, this study's findings concerning the JL teaching experience would tend to undermine both Harper's and the author's expectations.

Pascal's (1971) conclusions, more specific and more germane, would tend to reinforce the findings of this investigation. Past success of students in history seemed to have no direct correlation with potential interest or success in the JL class. Certain students electing the JL approach did interact more freely in discussion than they would have in TL classes; although performance was not significantly improved in JL classes, thus supporting Pascal's hypothesis. Above all, Pascal's implication that lecture takers preferred a more authoritarian environment seemed to be born out for JL as well as TL students.

None of the sources stated the administrative problems inherent in team teaching more succinctly than Delaney (1974). His conclusion that 89%
of the student participants favored team teaching was somewhat at variance with the present findings, but again, he taught an elective course while at Cerritos the course was a basic requirement.

On a secondary level Burns and Jones (1967) did provide substantiation for the basic initial disorientation faced by many students in experimental JL classes. The present study also found much student resistance to a "one-on-one" contact with instructors.

Successes and limitations with simulation-role playing teaching methods would tend to support the findings of Baker (1968), Holverson (1969), Heinkel (1970), Wentworth and Lewis (1973), Bernstein (1974), Jansiewicz (1974) and Lucas (1974). Bernstein's (1974) conclusion seemed most representative, namely, that instructors seemed to enjoy the intellectual interaction of role-playing more than the vast majority of the students. Not that the students failed to be entertained, but lower retention and insignificant improvement in successful grade achievements would indicate quite an educational gap between enjoyment and acceptance of the specific instructional objectives. Perhaps the instructors needed to be more explicit in what they expected, and why they felt simulation would get across the historical topics more clearly. Perhaps the students needed to be more receptive to innovation with goals as stated, and more willing to engage in analytical examination of differing historical positions.

Despite educationally viable reasons for continuing the JL experiment, especially after limited success during the Fall, 1973, the department decided to discontinue the venture for the same reasons Harper (1973) stressed in cautioning against the over use of JL methods. Students seemed
to prefer a structured, predictable course of least resistance, a TL section. The unstructured innovations in our JL classes did adversely affect student morale, which in turn resulted in fewer students voluntarily signing up for JL experimental classes.

Conclusions

If any JL team-teaching venture is to be successful at Cerritos College, five basic problems need to be recognized and resolved:

The college needs to realize that, at present, students prefer a traditional, structured instructional approach in a required course. The realities of student registration trends cannot be ignored.

If the college does try team teaching ventures other than the TL-JL variety, it must be willing to provide needed "software" in multi-media and instructional aides to provide the motivational contact students seek in all classroom situations.

In line with the above problem, the college must be willing to absorb over a long range period the declining ADA revenues and increasing teaching unit load expenses inherent in JL, team teaching classes. A basic investment has to be made in instructional costs, for it is financially impossible to teach a JL class as inexpensively as the TL sections. After all, the latter classes require only chalk, some maps, and the instructor's salary, along with occasional audio-visual equipment.

If large lectures, team taught or individual, are to become more appealing to students, careful administrative planning, adequate publicity, and intensive counseling will be required. It is essential that student attitudes be re-conditioned if any JL experiment is to succeed in an educationally honest environment.
Finally, it is imperative to realize that most literature reviews substantiated this JL-TL study's findings, namely that there was no noticeable improvement in student performance attributable to the JL innovation, although motivation could possibly be improved if a minimum of administrative structure was retained.
Definition of Terms

Traditional Lecture (TL). One instructor meets one section of History 27 (a one semester required U.S. history and Constitution course) of 80 students (class average and maximum) three hours a week. The sections could meet fifty minutes a day three times a week, seventy-five minutes a day twice a week, or one hundred and fifty minutes a day once a week. Within the traditional lecture format, carrying three student and instructor teaching units, there is, of course great variety of approach and content. In addition to the three hours of lecture-discussion, combinations of programmed accelerated, and self paced instruction are all under the unit umbrella of a TL section.

Joint Lecture (JL). As defined by the participating instructors, a joint lecture section consisted of three TL sections (240 students) combined into fifty minute sessions twice a week. Although both instructors were present for each JL, rarely did they share the "stage". Depending on the topical content of the course, one lecturer would conduct the class from one to four sessions in a row. The instructional load was equally divided during the semester.

Discussion Sections. This optimum JL with 240 students was divided into eight discussion sections of thirty each, meeting fifty minutes a week at times conducive to student class scheduling. Each instructor initially met four discussion sections per semester, and when possible, rotated sections. In each discussion section lectures were critiqued, topics expanded upon, supplemental information provided, and exams administered.
Joint Lecture-Role Playing Simulation. This approach evolved as a variation of the JL section. To stimulate discussion section response, and to better relate instructor approaches in one topic, both lecturers shared the "stage" each joint lecture meeting. Selecting topics which evinced differing interpretations, or biographical figures who represented differing historical interpretations with regard to the given topic, the students were subjected to a simulated debate-drama which, it was hoped, would make the topic more alive and relevant.

Traditional Lecture-Joint Lecture Simulation. This final variation of the joint lecture approach was itself a compromise between the TL and JL approach. Two instructors with concurrent TL sections combined their classes once a week for the role-playing simulation of the JL approach. The other TL session provided additional lecture material not always related to the JL debate, and provided the class format in which all exams were administered. In short, half the class was TL, half JL-Simulation, and the students signed up only for the TL section.

Administrative Guarantee. The JL instructors originally requested and received certain administrative guarantees that the complete program would "make" if the total enrollment equalled three quarters (180 students) of the JL maximum during the experimental period. The full complement of discussion sections would also be run.

ADA-Teaching Unit Equivalents. When enrollment leveled off from 120 to 150 students per JL section ADA (average daily attendance state monies) would no longer pay for the teacher units. It became necessary to cut the number of discussion sections, and hence, the number of TU granted. An example of this would be:
a. 180-240 students = 12 TU, divided equally. Each instructor received six TU, two for the lecture, and four for each of the four discussion sections.

b. 120-150 students = 8-9 TU. The customary division for sake of rescheduling of an instructor's total teaching assignment was to give one person three TU (two for the JL, one for the discussion section) and assign the other the remainder.

c. In the TL-JL Simulation offering, each instructor received three TU since he was assigned only one TL section. Obviously this solution provided maximum ADA income and minimum TU costs.

Scheduling Difficulties. From the outset, listing of the JL discussion sections caused problems in the class schedule. On two occasions they were listed as "labs" which frightened off many potential students. On another occasion they were simply not listed, and instead "one hour to be arranged" was inserted after the times of the JL. In all cases there was "0" class credit given, which frustrated students not accustomed to such offerings in the social sciences. In short, it was always easier for a student to receive three units for a TL course.

Prime Time. Instructional hours most favored by students, i.e. M-W-F 8a.m. to 12noon, T-TH 8a.m. to 11a.m.
References


Lucas, L.A. A comparative study of cognitive retention using simulation gaming as opposed to lecture discussion techniques. Muncie, Ind.: Ball State University, 1974, (ERIC ED 089690).


