This study reports the results of teaching junior college students in a block or mini-college plan, in which five teachers shared the same students in a core program of courses. Objectives of this approach included increasing student identity with the college, developing new concepts about team teaching, utilizing the advantages of modern technology in instruction, and increasing student learning. The evaluation of this program included faculty responses, student responses, scores on the Watson-Glaser Critical Thinking Appraisal, scores on the Purdue Attitude Scale, ACT Composite scores, and grades earned. Preliminary results indicated no definite gains in instructional efficiency. However, the general reaction by students and by teachers was positive. A value of this study was that it assisted in the identification of instructional problem areas. The report includes data from each of the measurement devices and a copy of the student questionnaire. (JC)
THE MINI-COLLEGE

SPRING, 1968

ALVIN BEAN
and
VERNON L. HENDRIX

August 30, 1968

UNIVERSITY OF CALIF.
LOS ANGELES

APR 19 1969

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION
The original design of the mini-college was the creation of Dr. Carol Zion, then Associate Dean of Instruction, El Centro College. After moving to the district office as Specialist for Educational Planning, Dr. Zion continued to plan for and implement the mini-college.

It was suggested that five teachers be chosen from "enthusiastic volunteers" to share the same 180 students. It was recommended that history and English be a part of such a program along with a general science course and two of the more popular electives, such as psychology and perhaps one of the humanities courses.

By giving these students a tight formal schedule of a limited nature (through computerized registration), the teachers assigned to these 180 students would be free to take such students on field trips to art galleries, etc., without worrying about interfering with other class work. The interdisciplinary theory would argue that a trip to the art gallery could result in a theme for the English class as well as a lesson for the art class.

Regarding stimulation for the teachers, the same approach would suggest that science exhibits would be of interest to the English, art, and history teacher, and a lecture on public affairs would be of interest to those not in social science. If the claim is made that a student must be a well-rounded individual, faculty members should not remain ignorant of the work of their colleagues in other fields and departments. It was thought that this would be a desirable experience for the teachers as well as the students.

The plan assumed utilization of the Learning Center facilities with programmed materials, films, etc. For such an extensive program, much planning was required, and it was first deemed best to pay these five teachers to develop such a program during the summer of 1968 and have it go into effect in September of 1968. However, it was eventually decided to take a step while enthusiasm ran high. On the condition that the right five teachers could be found and given planning as an overload during the Fall of 1967 (that is, pay them as though they were teaching a night class but instead have them do this programming), the decision was made to institute such a program during the Spring of 1968.

While the Dean of Instruction had a brief outline of such a plan, it had weaknesses to which these five instructors would address themselves.
It was realized that they could not possibly work out all the problems prior to instituting the program, but would have to adjust as they went along. Rather than wait until everything was just right for implementation, the risk was based on the selection of five excellent teachers, and the hope that students would not suffer from mistakes made, and that all who would be involved in this process would gain from it.

It was noted that one of the lowest factors in the spring 1967 Purdue evaluations was related to class size. If these evaluations were to be used constructively, it seemed appropriate that an experiment addressing itself to this problem be undertaken.

The core of this plan left large group assemblages for testing purposes, or to hear a consultant brought in for a special occasion, and for a film which had been rented for one particular showing. In the case of the consultant or the film, the teachers and the students together would form the audience.

Since this experimental college would, it was hoped, serve as a basis for future adaptation, it was necessary that it include all levels—lower, average, and honor students. In such a heterogeneous group, a further rationale against lecturing was being tested, since it is difficult for a lecturer to know at what level to direct his speech. The essence of this plan is shown on the following pages in a typical teacher's schedule and a typical student's schedule. Note that the one scheduled meeting per week was for a group of twenty students. The other TBA meetings were in individual assignments or in groups of five to ten. The tutorials were manned with the help of honor students. This approach fitted into a multi-faceted honors plan which went into effect in the fall of 1967.

**PLANNING—STRUCTURE OF THE BOARD**

The purposes of a college within a college are varied, as indicated by the structure of the board. It was hoped that the student, by being a member of a small unit within the larger college, would not lose the feeling of identity which often happens in our present day educational world. It was hoped to utilize established theory and, perhaps, develop some new concepts about team teaching. The board contains those with subject matter specialties as well as those with expertise in the area of student learning processes. In addition, it involved those who can truly make modern technology serve the instructional process. No finished product or theory is assumed. All ten members of the board were involved in developing the program.
While these people were planning the college within a college for the spring semester, during the fall term, they required some time in August to set the initial framework and begin to function as a unit.

5 Instructors

- History 102
- English 102
- Math
- Art 104
- Psychology

<table>
<thead>
<tr>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay Hammond</td>
</tr>
<tr>
<td>Paxton Moore</td>
</tr>
<tr>
<td>Mildred Finch</td>
</tr>
<tr>
<td>Nancy Sue Reynolds</td>
</tr>
<tr>
<td>Dorothy Booth</td>
</tr>
</tbody>
</table>

1 Counselor
1 Reading Specialist
1 Media Specialist
1 Data Processing Advisor
1 Coordinator

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnyce Bizzell</td>
</tr>
<tr>
<td>Mike Mayall</td>
</tr>
<tr>
<td>Richard Smith</td>
</tr>
<tr>
<td>Jim Hill</td>
</tr>
<tr>
<td>Carol Zion</td>
</tr>
</tbody>
</table>

**IMPLEMENTATION—THE STUDENTS ACTUALLY IN THE PROGRAM**

An analysis of the distribution of the ACT Composite Scores of the 1967-68 freshman class of El Centro College and the 1966-67 Texas Composite (college-bound) indicated the following comparison:

<table>
<thead>
<tr>
<th>Texas:</th>
<th>El Centro:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M = 18.05</td>
<td>M = 15.91</td>
</tr>
<tr>
<td>SD = 5.15</td>
<td>SD = 5.24</td>
</tr>
</tbody>
</table>

Actually, 98 students enrolled in the Mini-College instead of the 180 proposed. This was shown to be due to mathematical limitations imposed by the particular pattern of five courses -- a factor overlooked in initial planning. The mean and standard deviation of students on the ACT composite was determined to be as follows:

**Mini-College:**

- M = 19.4
- SD = 6.4

See Table 8 for a more detailed distribution of scores and comparison with a sample of "regular" El Centro College students.
RESULTS

Since advanced plans had not been made for any formal study of the Mini-College, as conducted during the spring semester, 1968, very few definitive statements can be made. The study consisted of five stages: (1) an informal, anecdotal description of the operation as viewed by the staff members; (2) student responses to a series of open-ended questions; (3) comparisons between Mini-College students and students enrolled in traditional sections of English and History on the Watson-Glaser Critical Thinking Appraisal; (4) comparison of Purdue Attitude Scale scores for students enrolled in Mini-College English, History, Mathematics, and Psychology, with students enrolled in regular sections of these courses; (5) comparison of grades received in Mini-College sections and regular sections of the same course.

Except for the math courses, no specific statement of objectives, with appropriate testing devices, was prepared.

FACULTY REACTIONS

A pattern of informal observation and interviews with instructors was implemented after mid-semester. No conclusive generalizations may be made, but some characteristic observations may be tentatively stated as follows as reported by the teachers:

"A sense of frustration over lack of regular attendance."

"Students were misinformed that they would pass 'regardless' in this experiment; therefore, they took a lot for granted."

"The good students are doing very well; the not so good--not so good."

The counselor assigned to the Mini-College reported instances of student dissatisfaction because of the unstructured nature of some of the teaching. Generally, it may be reported that four of the instructors attempted to achieve the standard outcomes of the respective disciplines. They all reported an esprit de corps among students and teaching staff not characteristic of the conventional teaching structure.

All of the instructors expressed difficulty in planning and developing tutorial and/or self-instructional components of the program. These took more time than anticipated and some were of doubtful effectiveness, as judged by the teacher concerned.
Several instructors expressed difficulty in "getting the seminars going". The apparent apathy of many of the students was hard to overcome. It was not easy to overcome twelve or more years of "lecture-listening" habits. Obviously special techniques needed to be developed for most effective utilization of the seminar sessions.

**STUDENT EVALUATION**

During the latter part of April, 1968, a questionnaire was submitted to the students in the Mini-College. A detailed description of the response to this questionnaire is hereby reported. Questions 1 - 4 were tabulated by Vernon Hendrix and the remaining questions by Mrs. Bizzell.

Seventy students completed the questionnaire which allowed them to express their opinions about certain aspects of the Mini-College. A description of the results for the first four questions follows.

**Question 1:**

Nineteen students either failed to answer the first question or gave unrelated responses, without any evaluation or information. Fifteen students indicated a positive attitude for the Mini-College. Ten of these were general responses such as "good", "fine", etc. Three of them were complimentary of the instructors in general, one of which stressed the casual and "without stress" atmosphere. Two were particularly positive about the films.

Fifteen students expressed essentially negative opinions in their response to question 1. The greatest number of negative reactions (six) were concerned with the films. These criticized the content (one student saying that they were lousy) and consistently stated that the films were not properly introduced or incorporated into the course. Two students gave general negative evaluations without specific complaints. The following points received two negative votes each: (1) In the history seminars it was difficult to "speak against the competition" and they appeared to be learning that there was no hope for future generations, the present government was generally wrong and corrupt. (2) The seminars in general kept getting "off the track". The lectures needed some introduction, so that their "place" in the total framework might be made clear. There were several single criticisms, two of which pertained to the nature of the students. One of these criticized the lack of student participation and the other criticized the inability to make the grade on your own when required to do individual study.
Fourteen students included both positive and negative evaluations in their reply to question 1. Most of the positive evaluations (five) were general in nature without specific reference. Four students were positive about the group discussion. Two students were negative about the small group discussions, both of them complaining about having to go to two history seminars. The positive and negative reactions to the small group discussions were both evenly divided between Art-History-English and Psychology-Algebra. (This two-category grouping of the courses has some rather interesting implications.) The negative reactions toward the small groups were due to "too much lecturing" and not enough discussion. Three positive reactions to the lectures were indicated, again these indicating the Art-History-English versus Psychology-Algebra categories. The negative reactions stated that the lecturers were disorganized and students did not know what to expect next. One positive and three negative reactions were concerned with the films. The negative reactions again indicated that these should be explained or introduced. Single negative reactions used the following as their reference: (1) tapes, (2) the history seminars need greater guidance and the topics for discussion should be announced in advance, (3) discussions should not be attempted with more than ten students in a class, (4) the students were not responding properly.

Six students offered neutral evaluations (neither negative nor positive) but included factual information in their response. The following comments were made: (1) Facts and applications were occurring in the audio-visual presentations and lectures; (2) the lectures do not relate (in content) to seminars; (3) lack of time and homework constitute weaknesses; (4) the films are informative; (5) there is not enough (formal) presentation; (6) group discussion is the primary method used by algebra, art, psychology and English, but lecture is the primary method used by history.

Question 2:

The responses to the second question included four "no responses" or irrelevant responses, one generally negative response and fourteen generally positive responses, without specific reference.

The largest number of responses were concerned with the films. Three responses were positive, one indicating that the psychology films were especially good. Eight responses were negative, again indicating that some introduction, explanation and analysis of the films should be included. One of these responses indicated that many of the films were "old".
Most of the other comments were directed towards specific subjects. Six references were made to history. One of these was positive, indicating that it was valuable to be left on your own. Five were critical, indicating that there was no basis for study, subjects were needed for discussion, and that the questions asked and vocabulary used were incomprehensible.

Another positive response with reference to psychology indicated that the seminars "remained on the subject". Five negative reactions toward psychology stressed the need for greater explanation, more small group discussion, and "lecturing on more of the text".

Three positive responses were directed toward math, one of these indicating that discussions remained on the subject.

Three negative responses were directed toward: (1) the quality of student response (many students were taking advantage of the Mini-College), (2) there was not enough discussion in the small groups, most of the discussion occurring between the teacher and one student. Two negative responses were directed toward each of the following: (1) discussions that wander off the topic, (2) lecturers do not give enough material for small group discussions, (3) the Mini-College is really no different from the regular type of organization, especially the big sessions, (4) everything is disorganized, (5) more time in class is needed. A number of single comments: (1) more assignments should be made, (2) the Friday seminars are boring, (3) attendance should be taken, (4) there should be more explanation, (5) the individual instructors should make more presentations.

Question 3:

In question three, which specifically directed the student to make suggestions for improvement, 38 persons did not respond or offer relevant responses. The largest number of suggestions pertained to the seminars (8). The seminars should have some fixed topic for discussion. Four of these responses were for seminars in general, three were directed specifically toward the history seminar, and one toward the art seminar. One student pointed out that seminars occurring before and after a lecture presented problems of coordination. Another referred to the history seminars as "third degree sessions". Five suggestions were directed toward the films, these again stressing the need for introduction, explanation, and analysis. Four suggestions indicated that more time for meetings was needed. Three suggestions indicated that student bull sessions or discussion groups, with or without the instructor, would be of value.
A variety of single suggestions were: less time should be spent discussing what is going to be done and what is wrong with the Mini College and more time doing something; there are some subjects that should have more experimentation since no two instructors can be expected to follow the same procedures; better teachers are needed; the regular three hour structure is better; questions should be asked of specific students to get more student participation; the material on tapes should be put in the lectures; there should be more films and speakers; more inter-disciplinary activity is required; students should be pushed; instructors should stay on the subject; and the Friday seminars are inferior due to the instructors being tired and losing interest.

Question 4:
Question 4 inquired about the relevance of the educational experiences to the student's own life. The majority of students either said there was no relevance or did not respond to this question. Only twenty students gave some indication that there was some relevance. Eleven of these were evidently referring to current events which were discussed in history. Nine students made some response giving specific evidence that the subject matter related directly to their life. Three of these were with reference to psychology, one with reference to math, one with reference to art, one with reference to history (and three with reference to no particular subject).

Question 5:
Have you acquired any new ideas or understandings? If so, what?

Responses: 52 positive; 13 negative; 7 no answer.

Positive responses to Question 5--
1. New ideas from speakers
2. Greater understanding of self
3. Better understanding of world situation (current events)
4. Better understanding of others
5. Appreciation of others ideas
6. The value of freedom to speak
7. Broadened my outlook
8. Better understanding of subject matter
9. Know I'm not well read
10. I'm more objectionable & seek to understand others
11. I stop to think more
12. See life in a different way
13. Don't go to school full time unless you have time
14. I learn more in small groups
15. I'm not as afraid to express my ideas
16. I'm able to look for hidden meanings
17. Learned I have a responsibility in college
18. Better outlook on world
19. Many things—too involved to go into in detail

Perhaps the one statement that is representative of the feelings of this (positive) group is:

I believe it is far more important to understand other individuals (and self) than to learn specifics or material in books. In the Mini-College we do both.

Negative responses to Question 5:
1. No
2. I do not like Mini College
3. An understanding of confusion
4. Not really
5. Learned that we are an aggressive nation, if that's good
6. Learn what you're able
7. I've learned that if teachers don't attend their seminars you can't learn much.
8. Yes, patience and tolerance

Overall feelings of this (negative) group seemed to be one of disillusionment (not meeting their expectations) and insecurity (need for more organization).

Question 6:

Do you feel you are progressing in the subject matter rapidly enough or do you feel this is important?

Responses: 48 positive, 14 negative, 7 positive and negative, 3 no answer

Positive responses to Question 6:
1. Sufficiently (as much as regular courses)
2. Feel this is not important as long as you cover what you are doing well. (It is more beneficial to know myself better than to know who was President in 1804). The purpose of college is to learn how to learn.
3. We're learning to think and to question—this is enough.
We are progressing at the rate we want—this is important. (Freedom to take time to question and to explain)

Progressing as far as how meaningful subject is to me.

Feel I've acquired more information than other college students.

Everyone to his own speed.

Yes, we are relating past to present, one subject to another.

I am doing better than ever, my teachers are personalities, not God-Heads.

See General Remarks under negative responses to Question 6.

### Negative responses to Question 6:

1. Not fast enough
2. No, due to lack of class time
3. Not stimulated enough
4. No tests—too much text in some subjects
5. Learned more 1st semester
6. Feel like I'm in high school
7. No, but doesn't bother me if doesn't bother teachers

### Yes and No responses to Question 6:

1. Progressing in some subjects, not all
2. Who is to say how fast one should progress
3. Sometimes I'm lost because of lack of planning of some teachers
4. Yes, because I learn by myself
5. We could progress faster

Nine students who answered Question 5 positively answered Question 6 negatively or Yes and No. Five of these answered negatively because of need for more class time; one more answered negatively because of lack of tests; the remainder were in the Yes-No category.

Of the 13 who answered Question 5 negatively, 10 answered Question 6 negatively and 3 answered Yes-No, which is quite interesting.

### Question 7:

Do you gain more from lecture or seminar?

1. Nothing gained from either
2. No answer
3. Gained same from both  
4. Seminar - A. Because of  
   Smallness of class--deeper discussions  
   Can ask questions  
   Everyone takes part  
   Exchange of ideas  
   Stimulates thinking  
   Compare thoughts and express ideas  
   Lecture period always films  
   Relaxed atmosphere  
Seminar - B. Several students suggested need for more seminars.  
5. Lecture - (Those who liked lecture or lecture and seminar mentioned guest speakers as best.)  
6. Depends on my receptiveness  
7. Own research and reading  

Reactions from positive group:  
- 33 Seminar  
- 6 Lecture  
- 4 Both  
- 4 Other  

Reactions from negative group:  
- 7 Seminar  
- 3 Lecture  
- 3 Other  

**Question 8:**  
D: you feel you have too much free time or too little?  

1. Too much  
   - Not enough class time  
   - Not enough pressure to study  
   - Not enough homework  
   - No motivation  
   - 7  

2. Too little  
   - Because of work  
   - I study, others do not  
   - 4  

3. Depends on person  
4. If use time properly the right amount  
5. No college student ever has too much  
6. I don’t utilize my time well  
7. Depends on class  
8. I plead the 5th  
9. No answer  

Out of this group the negative group responded:  
1. Too much  

- 6
2. Too little but I study, others don't 1
3. About right - you learn only what you want 1
4. No answer 2
5. I work 3

**Question 9:**

How would you rate your learning to this point in relation to your classes last semester?

1. Learned a lot 44
2. Learned a little 22
3. Learned almost nothing 1
4. No answer 6

**Question 10:**

If no understandings have taken place as a result of this work, did you stop and think (regarding the areas that have been discussed)?

1. Yes 45
2. No 2
3. No answer 24

**Question 11:**

Are there any suggestions that you feel you would like to offer?

32 students responded to this question. To benefit fully from these comments, I would suggest they be read in toto. This is possibly the only way the true feeling of the group can be perceived.

**Watson-Glaser Critical Thinking Appraisal**

Table I presents the means and standard deviations for mini-college students and students in regular sections of English and history on the Watson-Glaser Critical Thinking Appraisal scales and total scores. None of the differences are statistically significant. In all but one case, this being the interpretation subscale, the slight differences tend to favor the mini-college students. It must be remembered that no attempt was made to control for ability levels, as might be indicated by ACT scores, previous educational experience, etc.
Table 2 presents the mean score on the Purdue Attitude Scale for mini-college students, students in regular courses, the total mean and total standard deviation. In responding to this scale, the mini-college students were instructed to respond separately toward instruction in English, History, Mathematics, and Psychology. The students in the "regular" group consisted of English and History students. For those in these two sections also taking Mathematics and Psychology, comparisons were computed. Since none of the students in the English and History sections were taking Art, this comparison could not be made. Again, no statistically significant differences were observed. The slight differences observed tend to favor the mini-college. This partially confirms informal observations concerning the higher level of "esprit de corps" exhibited by mini-college students.

(Another reservation must be kept in mind if conclusions are based on the Watson-Glaser or Purdue scores. Only 2/3 of the mini-college students responded. About half of the remaining students were absent when the instruments were administered. Others "walked out" and refused to complete them.)

**Grades Earned**

Tables 3 through 7 indicate the grade distributions for students enrolled in each of the five mini-college courses compared to students enrolled in the same courses in the other traditional sections. Chi square statistics were computed to examine differences in these contingency tables. The only statistically significant result was obtained for Psychology. It appears that the mini-college students received a relatively greater proportion of "F's" than the students taking Psych 105 in regular sections. Even with the low probability, this should be taken with some reservation, due to the small cell frequencies involved. In general, the rather global evaluations of achievement as reflected in course grades, indicate no major differences between mini-college students and students in regular sections. It must be remembered, however, that the measurements upon which these grades were assigned were not the same, the goals toward which instruction was offered were not identical, and the relative values accorded these goals by faculty members differ considerably.

**ACT Composite Scores**

Table 8 presents the distribution of ACT composite scores for students enrolled in the mini-college and a sample of students representative of the entire college. The results in Table 8 indicate that there is a considerable difference between ACT composite scores for the two groups. The mean ACT composite score for the mini-college is almost two points higher than that generally characteristic of El Centro College students.
The distribution of ACT composite scores within categories indicates a greater proportion of students with ACT scores of 21 and above occurring in the mini-college; whereas fewer students with scores of 16 and below enrolled in the mini-college.

Students with ACT scores of 12 and below were not eligible to enter the mini-college and are normally directed to Guided Studies programs. In order to make the data more comparable within Table 8, scores of 12 or below were also not tabulated for the total college sample. Therefore, the mean ACT composite score for the total college sample reported in Table 8 is higher than that which would be computed from the total enrollment in the college. (See introduction)

Since differences in ACT scores were not controlled statistically in the previous analyses, this difference must be taken into consideration when the other statistics are examined.

Summary

Although no definite gains in instructional efficiency or effectiveness can be documented, the general reaction, by students and faculty, has been positive. The differences that do exist between mini-college and regular sections, although not statistically reliable, are mainly in favor of the mini-college type of organization. The most valuable outcome is that both instructors and students can more clearly designate instructional problem areas, thus making the gradual improvement of instruction more likely. The mini-college will be "repeated," with certain organizational changes and methodological improvements.
### Table 1

**Comparison of Watson-Glase: Critical Thinking Appraisal**

<table>
<thead>
<tr>
<th>Test</th>
<th>Mini-College N=67</th>
<th></th>
<th>Regular Sections N=39</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>1. Inference</td>
<td>11.4</td>
<td>3.1</td>
<td>10.9</td>
<td>3.0</td>
</tr>
<tr>
<td>2. Recognition of Assumptions</td>
<td>11.9</td>
<td>3.0</td>
<td>11.2</td>
<td>3.7</td>
</tr>
<tr>
<td>3. Deduction</td>
<td>18.6</td>
<td>2.7</td>
<td>17.5</td>
<td>3.2</td>
</tr>
<tr>
<td>4. Interpretation</td>
<td>17.6</td>
<td>3.1</td>
<td>18.3</td>
<td>2.4</td>
</tr>
<tr>
<td>5. Evaluation of Arguments</td>
<td>9.9</td>
<td>1.8</td>
<td>9.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Total Score</td>
<td>69.5</td>
<td>9.5</td>
<td>67.2</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>Mini College Mean (N=32)</td>
<td>Regular Sections Mean (N=21)</td>
<td>Total Mean</td>
<td>S. D.</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>English</td>
<td>7.9</td>
<td>7.6</td>
<td>7.9</td>
<td>1.5</td>
</tr>
<tr>
<td>History</td>
<td>7.5</td>
<td>7.3</td>
<td>7.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Mathematics</td>
<td>7.5</td>
<td>7.0</td>
<td>7.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Psychology</td>
<td>7.8</td>
<td>7.5</td>
<td>7.7</td>
<td>1.6</td>
</tr>
</tbody>
</table>
Table 3
Comparison of Mini College Grades and Other Sections for English 102

<table>
<thead>
<tr>
<th>Grades</th>
<th>Section 180</th>
<th>Other Section</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C, D, E</td>
<td>74</td>
<td>400</td>
<td>474</td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>46</td>
<td>60</td>
</tr>
<tr>
<td>I, W, WP, WF</td>
<td>9</td>
<td>56</td>
<td>65</td>
</tr>
<tr>
<td>TOTAL</td>
<td>97</td>
<td>502</td>
<td>599</td>
</tr>
</tbody>
</table>

\[ .20 < p < .30 \]
\[ x^2 = 2.64 \]
### Table 4
Comparison of Mini College Grades and Other Sections for History 102

<table>
<thead>
<tr>
<th>Grades</th>
<th>Section 180</th>
<th>Other Section</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C, D</td>
<td>84</td>
<td>573</td>
<td>657</td>
</tr>
<tr>
<td>F</td>
<td>8</td>
<td>71</td>
<td>79</td>
</tr>
<tr>
<td>I, W, WP, WF</td>
<td>6</td>
<td>66</td>
<td>72</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>98</strong></td>
<td><strong>710</strong></td>
<td><strong>808</strong></td>
</tr>
</tbody>
</table>

\[0.30 \leq p \leq 0.50\]

\[x^2 = 1.54\]
Table 5

Comparison of Mini College Grades and Other Sections for Math 101

<table>
<thead>
<tr>
<th>Grades</th>
<th>Section 180</th>
<th>Other Section</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C, D</td>
<td>25</td>
<td>103</td>
<td>128</td>
</tr>
<tr>
<td>F</td>
<td>5</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>I, W, WP, WF</td>
<td>8</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>182</td>
<td>220</td>
</tr>
</tbody>
</table>

\[ 0.50 < p < 0.70 \]

\[ x^2 = 1.36 \]
Table 6

Comparison of Mini College Grades and Other Sections for Psychology 105

<table>
<thead>
<tr>
<th>Grades</th>
<th>Section 180</th>
<th>Other Section</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C, D</td>
<td>74</td>
<td>133</td>
<td>207</td>
</tr>
<tr>
<td>F</td>
<td>12</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>I, W, WP, WF</td>
<td>12</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>TOTAL</td>
<td>98</td>
<td>148</td>
<td>246</td>
</tr>
</tbody>
</table>

\[ p < .01 \]

\[ \chi^2 = 12.58 \]
Table 7
Comparison of Mini College Grades and Other Sections for Art 104

<table>
<thead>
<tr>
<th>Grades</th>
<th>Section 180</th>
<th>Other Section</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C, D</td>
<td>82</td>
<td>33</td>
<td>115</td>
</tr>
<tr>
<td>F</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>I, W, WP, WF</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>97</td>
<td>38</td>
<td>135</td>
</tr>
</tbody>
</table>

\[.70 \leq p \leq .80\]

\[X^2 = .68\]
Table 8
Distribution of ACT Composite Scores

<table>
<thead>
<tr>
<th>Scores</th>
<th>Mini College</th>
<th></th>
<th>Total College Sample</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>13-14</td>
<td>13</td>
<td>13</td>
<td>216</td>
<td>17</td>
</tr>
<tr>
<td>15-16</td>
<td>12</td>
<td>12</td>
<td>262</td>
<td>21</td>
</tr>
<tr>
<td>17-18</td>
<td>16</td>
<td>16</td>
<td>235</td>
<td>19</td>
</tr>
<tr>
<td>19-20</td>
<td>18</td>
<td>18</td>
<td>216</td>
<td>17</td>
</tr>
<tr>
<td>21-23</td>
<td>25</td>
<td>26</td>
<td>217</td>
<td>17</td>
</tr>
<tr>
<td>over 23</td>
<td>14</td>
<td>14</td>
<td>108</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>98</td>
<td>(99)</td>
<td>1,254</td>
<td>(100)</td>
</tr>
</tbody>
</table>

\[ X^2 = 11.21, \ df = 5, \ p < .05 \]

MEAN 19.4 17.7
APPENDIX

1. How are the topics (facts, problems, theories, applications) being presented? (Lecture, Group Discussion, Audio Visual Aids (film, filmstrip), Small Group Presentation, Individual Reports, Debates, combination of any of the above or other.)

2. In your opinion, are the methods of presentation adequate? (Discuss) What are the strengths and weaknesses?

3. In your opinion, could the material be presented in a better way? If so, in what way?

4. Do the areas or topics presented have any relation to your life? Explain.

5. Have you acquired any new ideas or understandings? If so, what?

6. Do you feel you are progressing in the subject matter rapidly enough or do you feel this is important? Discuss.

7. Do you gain more from lecture or seminar? Discuss.

8. Do you feel you have too much free time or too little? Discuss.

9. How would you rate your learning to this point in relation to you classes last semester? Learned a lot ; Learned a little ; Learned almost nothing.

10. If no understandings have taken place as a result of this work, did you at least stop and think (regarding the areas that have been discussed)?

11. Are there any suggestions that you feel you would like to offer? Please use the back of this sheet for this purpose.