A learning model emphasizing objective-based instruction and learning style flexibility was tested in conjunction with a combined English 101-Social Science 101 course at Miami-Dade Junior College, Florida. During the spring 1970 semester, an experimental group of 34 students was provided weekly with objectives and the following five learning style options: lecture, small-group discussion, directed study, programmed instruction, or community involvement. Objectives were presented behaviorally in the form of a study guide, specifically indicating the work required to obtain a particular letter grade (A, B, or C). The student could thus select both learning style and objectives to be pursued. Affective evidence gained from weekly attitudinal questionnaires, optional attendance figures, and student-teacher communication indicated positive acceptance of the approach. Comparison of the experimental and control group performance at the end of the semester showed the following results: (1) experimental group students earned a C or better 20 per cent more frequently than the control group in the English classes; (2) experimental group students earned a C or better 10 per cent more frequently than the control group in the Social Science classes; and (3) on selected portions of the Educational Testing Service Cooperative English Test (Forms 1A and 1B), administered on a pre- and post-test basis, the experimental group did not gain as much as the control group. [Because of marginal reproducibility of original, this document is not available in hard copy.] (JO)
INNER COLLEGE

A REPORT OF THE

SPRING, 1970 EXPERIMENT

Barry Greenberg
Research and Development
Miami-Dade Junior College, South
July, 1970
During the Spring, 1970 semester, 34 students participated in a combined English 101-Social Science 101 course which provided them five learning options each week (lecture, small group discussion, programmed instruction, directed study and community involvement). Grading was based on the students mastery of behaviorally stated objectives. Students were extremely positive about their experience, earned "C" or better 20% more frequently than the average for all English classes held that semester, surpassed by 10% the campus Social Science "C" or better rate, but did not gain as much as did a control group on a post-administration of the Cooperative English Test.
INTRODUCTION

The program described on the pages which follow represents a small scale application of the concept of the Community College of 1979 as developed by Professor Arthur Cohen of U.C.L.A. Cohen's model was extracted because its conceptual underpinnings contained elements which seemed crucial to Inner College's planning team. Chief among these are a call for an objective based instructional system and a fluid learning environment in which students are encouraged to explore a variety of options according to their own cognitive and emotional style--be they teacher controlled or completely independent of the formal educational structure. He notes:

"One of the striking ironies of education is that no one style or approach to learning, even when laboriously identified, has proved sufficiently powerful to warrant the classification of students into useful instructional groups. Arguments about instructional methods soon lead to similar dead ends. Critics of programming and other replicable media aver that the 'good teacher' can 'turn on' the student. He can stimulate and motivate in mysterious ways. However, these skeptics fail to account for the fact that some students are turned off by live instructors. In the past how many students came to the junior college seeking direction, found instead instructors fulfilling themselves in incomprehensible ways, and then became 'failures' or 'dropouts'? A live instructor can stimulate some students in a fashion that a replicable medium cannot; a replicable medium may teach other students much better than certain instructors can."

2 Ibid. p. 24.
The proposed model was deliberately restricted for many reasons, which included:

a) Cohen conceives of the institution of 1979 evolving from student, community and faculty dissatisfaction with existing programs and approaches. Inner College received input largely from faculty with unfortunately much smaller contributions from students and the community-at-large. Under these circumstances, the rate at which change will be suggested or accomplished is far less than Cohen would have it be.

b) Smaller attempts may be better controlled and therefore more useful for extracting concepts appropriate for wider adoption, and, finally,

c) Cohen's "heresy", though based on a disenchantment with the junior college which most educators feel, nevertheless contains many untested components which, though appearing worthy of experimentation, may not produce the desired effect. (Indeed, there is no research data to support the notion that having objectives beforehand increases learning in students.) So, despite his advice, "Whatever it takes to move the junior college off dead-center, let it be soon!", an approach which called for a partial application of the model was used.

The implications of the model are challenging. It is hoped that it will be examined closely and continued on this campus, in mini-phases at least. Its first application, as described herein, certainly merits replication. Once that occurs, perhaps according to the suggestions presented in this report, expansion
to the entire General Education core may begin— but always on an experimental basis with modifications in the model possible at various stages of development.
OBJECTIVES

The concept of Inner College for Miami-Dade emerged from a series of meetings which the Department of Research and Development held with faculty from the Urban Opportunities Department, the Council for the Continuing Education of Women, the English Department, the Social Institutions Department and several students. Program goals were formulated around two General Education courses as follows:

1. To develop a model for the teaching of English 101 and Social Science 101 in combination incorporating the use of learning alternatives, behavioral objectives, community involvement and diagnostic and prescriptive evaluation devices.

2. To develop materials (objectives, curricula, tests) and techniques which if found appropriate in Inner College, may then be made available to other Social Science and English instructors.

3. To chart the learning style preferences of students and correlate them with achievement and course satisfaction.

4. To determine whether learning strategies applicable in experimental settings may be extracted for wider use.

5. To establish the "laboratory" concept on the campus so that new methodologies and materials in a variety of areas may be studied on a sample of students prior to more general adoption.
5.

APPROACH

Between November and April frequent meetings were held with the planners (who now included the instructional team, Patricia Cline of English and James Wernert of Social Science) in order to develop a structure which would incorporate the features elaborated above. Decided upon was a system whereby each week students would be presented with the weekly objectives and a learning style option sheet. They would then select any of the following five choices to pursue the specified objectives:

1. **Lecture**: Characterized by teacher-dominated behavior for the purpose of imparting specific information with a minimum amount of pupil involvement.

2. **Small Group**: Characterized by frequent pupil-pupil, pupil-teacher interaction in which learning results chiefly from peer expressions, peer reactions and peer "involvement" with material.

3. **Programmed Instruction**: Student obtains information in isolation, removed from classroom with material presented in small increments (frames) with frequent reinforcement provided.

4. **Directed Study**: Under guidance of instructor in one-to-one situation removed from the classroom, student pursues course objectives and outside interests using whatever material he and instructor deem appropriate.
5. Community Involvement (Sensitivity Modules): Student participates in experience (selected jointly by himself and instructor) in surrounding community to obtain first-hand impressions of various phenomena (housing deterioration, job market, church attendance patterns, racial bigotry etc.) and/or student experiences manifestations of folkways, mores etc. or implications of violating certain of them. Experience is supplemented with reading list supplied by instructor and geared toward weekly objectives.

Students who selected options 3, 4 or 5 above would therefore be in class only to receive objectives, select an option and, then, at the end of the week to submit their work. The objectives were presented in study-guide form, indicating precisely what work would be required for each grade (A, B, or C), so that the student had a flexible and specific grade-contract to work from. An attempt to make grading qualitative as well as quantitative was made by the type of objectives selected. It was hoped each unit's work could be returned in time for the students to see the comments of the instructors before they chose a learning style for the new week.

Learning style preferences, work sheet results and student attitudes (obtained via a semantic differential type questionnaire) were charted each week for each student. It was planned to add a counselor to the instructional team each Monday in the event that any student was in need of special assistance.
RESULTS

The course was offered during the Spring, 1970 semester for six-weeks extending from May 5, 1970 - June 15, 1970.

Thirty-four students registered for the class, fifteen of whom did so as a result of literature distributed about the program. Grades received were as follows:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>I</th>
<th>W &amp; WD</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 101</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>5*</td>
</tr>
<tr>
<td>Social Science 101</td>
<td>7</td>
<td>8</td>
<td>11</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

*Three of these students never appeared in class.

Thus, counting "I" as below "C", 68% and 76% respectively earned "C" or better in English 101 and Social Science 101. A conservative estimate by the instructors on the number of "I" students who will complete the worksheet requirements for a "C" grade within the next month brings the figure to 79% and 82%.

Control English 101 and Social Science 101 classes offered during a time period similar to the Inner College period had grade distributions as follows:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W &amp; WD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control English 101</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Control Social Science 101</td>
<td>7</td>
<td>7</td>
<td>18</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

This is 52% at "C" or better for English 101 and 78% at "C" or better for Social Science 101.
Adding figures for all English 101 and all Social Science 101 classes permits the following comparison:

PERCENT EARNING "C" OR HIGHER DURING THE SPRING 1970 SEMESTER

<table>
<thead>
<tr>
<th></th>
<th>English 101</th>
<th>Social Science 101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner College</td>
<td>68</td>
<td>79</td>
</tr>
<tr>
<td>Control Group</td>
<td>52</td>
<td>76</td>
</tr>
<tr>
<td>Total Campus</td>
<td>59</td>
<td>72</td>
</tr>
</tbody>
</table>

As a further index of cognitive gains, selected portions of the Cooperative English Test Form 1A and 1B published by the Educational Testing Service were administered on a pre- and post-test basis to Inner College and to the control English 101 class with the following results:

PRE-TEST (FORM 1A)

<table>
<thead>
<tr>
<th></th>
<th>Level</th>
<th>Speed</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner College (n=26)</td>
<td>159.62</td>
<td>158.42</td>
<td>159.31</td>
</tr>
<tr>
<td>Control (n=17)</td>
<td>152.24</td>
<td>148.94</td>
<td>149.65</td>
</tr>
<tr>
<td>Freshman Norms (Median)</td>
<td>158.9</td>
<td>158.1</td>
<td>159.4</td>
</tr>
</tbody>
</table>

POST-TEST (FORM 1B)

<table>
<thead>
<tr>
<th></th>
<th>Level</th>
<th>Speed</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner College (n=21)</td>
<td>158.86</td>
<td>158.76</td>
<td>158.62</td>
</tr>
<tr>
<td>Control (n=11)</td>
<td>156.00</td>
<td>153.45</td>
<td>154.82</td>
</tr>
<tr>
<td>Freshman Norms (Median)</td>
<td>158.9</td>
<td>158.1</td>
<td>159.4</td>
</tr>
</tbody>
</table>

In the affective realm, there is evidence to indicate that positive attitudes were exhibited by the students of Inner College toward the concept of the program, the subject matter and the instructors. Even though optional, attendance averaged between 70-80%. Students expressed high approval of the worksheets.

1 Estimate after "I" grades are converted.
2 All parts, with the exception of vocabulary, were administered.
Many students commented that they liked knowing the requirements for each grade.

Students clearly enjoyed having learning options despite the structural shortcomings elaborated below. At least six engaged in community involvement and three in programmed instruction. They were quite emphatic in their requests for a continuation of the program with several contending that for the first time, learning had been enjoyable to them.

The "safe" learning environment as created by the instructors and as manifested in student openness and high student-teacher, student-student rapport, may have been possible in a more traditional setting without the Inner College structure. However, the instructors felt the structure facilitated the open climate, while the students were more extreme in their praise of the possibilities Inner College afforded to them.

Many planned aspects of the program did not materialize or did so in a negative fashion. Thus, evaluation of students remained, as it began, largely a paper and pencil process based on the students completion of the worksheets. (It was originally hoped that other approaches to evaluation would be devised.) The worksheets themselves are in need of expansion and revision so that they might be more self-contained and permit greater freedom on the part of the student. (The ideal worksheet would specify in
detail, a multitude of available approaches from which the student could choose.)

The plan to provide weekly feedback to students proved too ambitious as the amount of papers accumulated. (The heavy load on the instructors also hampered the development of the directed studies option for students.) As a result, students often selected a learning option for a week without first having feedback on their work for the previous week.

Having only one section for Inner College sometimes resulted in large "small group" classes and small "lecture" classes though the instructors felt that the essence of both procedures was still preserved. The programmed instruction mode was the least favorably received by the instructional team owing to their displeasure with the available texts. Interestingly, the two students who repeatedly chose this option were satisfied with the results. (The instructors felt the students had not learned enough in either subject.)

Finally, the attitude questionnaire was abandoned half way through the program since it was not revealing anything over and above the information students were daily providing. (Their attendance, comments, participation, outside work etc. are probably more accurate indicators of their attitudes, anyway.)
DISCUSSION

What has been accomplished is an application of the broad principles of the Inner College concept with many of the specifics still to be worked through, tested and in some cases developed anew. Each of the objectives detailed on page 2 are on the way to being attained.

Progress by objective is as follows:

Objective 1: Each aspect, save diagnostic and prescriptive evaluation has been accomplished to a fair degree. Evaluation will be more individualized once the worksheets are refined.

Objective 2: Objectives and their test items have been developed and are being refined. One technique new to M-DJC has been used (community involvement) and the approach of offering a variety of learning options in one combined section has been attempted.

Objective 3: The preponderance of students choosing the small group option precluded the use of any correlational device though learning style preferences were charted for each student.

Objective 4: The experience would seem to indicate that, once refined, the concept of having learning options may be appropriate in a variety of non-experimental settings.

Objective 5: As with 4 above this may soon be a reality with regards to materials and methods for Inner College.

Several new possibilities have only now been identified. Thus the current planning team (the instructors, a student and the writer) recognizes the desirability of having several teams of instructors with worksheets which contain the same objectives.
and the same criteria for grades but leaves the selection of materials and methods or "process" up to the discretion of each team.

Grading is also now being conceived according to the elements of Bloom's Taxonomy. That is, students functioning (completing the worksheet) at the lowest levels, recall and comprehension might be considered "C" level while those answering questions in the applications and analysis mode would be "B" level and, finally, those capable of responding to questions requiring synthesis and evaluation would be considered as "A" students.

In short, many problem areas have emerged and are being attended to. Affective outcomes have been unquestionably positive. Each and every student expressed the desire to see the experience repeated and most indicated a desire to take their next level courses in this fashion.

Cognitive outcomes have equalled or surpassed the results for the Campus as a whole, at least as regards the percentage of students earning "C" or better. The results of the Cooperative English test as reported on page 6 will have to be carefully weighed to consider their meaning. Inner College began with students at the median for Freshman (somewhat superior to the control group) yet produced no gains as measured by the examination. The control group did gain on the test but failed their

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English course more frequently than did Inner College students. Is this because Inner College instructors, being involved in an experiment, lowered standards and accepted as "C" work that which the control instructor regarded as "D" or below? Or may it be attributed to a difference in focus between Inner College English and materials stressed on the test? This consideration, as well as the positive affective outcomes, is being considered during the summer planning phase in order that an improved offering may be available for Fall, 1970.