

DOCUMENT RESUME

ED 211 607

TM 620 063

AUTHOR Smith, Jeffrey K.; And Others
 TITLE The Evaluation of College Remedial Programs.
 INSTITUTION ERIC Clearinghouse on Tests, Measurement, and Evaluation, Princeton, N.J.
 SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
 REPORT NO ERIC-TM-80
 PUE DATE Nov 81
 CONTRACT 44-78-0003
 NOTE 107p.
 AVAILABLE FROM ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service, Princeton, NJ 08541 (\$8.50).

EDRS PRICE MF01/PC05 Plus Postage.
 DESCRIPTORS Attitude Measures; *Basic Skills; Data Analysis; Data Collection; *Evaluation Methods; Higher Education; Program Descriptions; *Program Effectiveness; *Program Evaluation; *Remedial Programs; Research Design; Student Placement

ABSTRACT

The original impetus for this monograph was a grant from the New Jersey Basic Skills Council of the New Jersey Department of Higher Education to evaluate two college basic skills remedial programs (one in a four-year state college, one in a two-year community college) and to produce a handbook for conducting such evaluations. This monograph is directed at a general audience. This is not a text on conducting program evaluation; it is a list of evaluative activities. If combined with a text on evaluation which covered basic philosophical, theoretical, and design issues, this monograph would provide the "specifics" for translating generalities into the tasks which face the college basic skills program administrator who must actually conduct an evaluation. Examples used in the manuscript come from experiences in New Jersey and therefore do not provide a broad spectrum of studies geographically. At the end of this monograph is an annotated list of 32 studies conducted in colleges around the country. (Author/GK)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *



ED211607

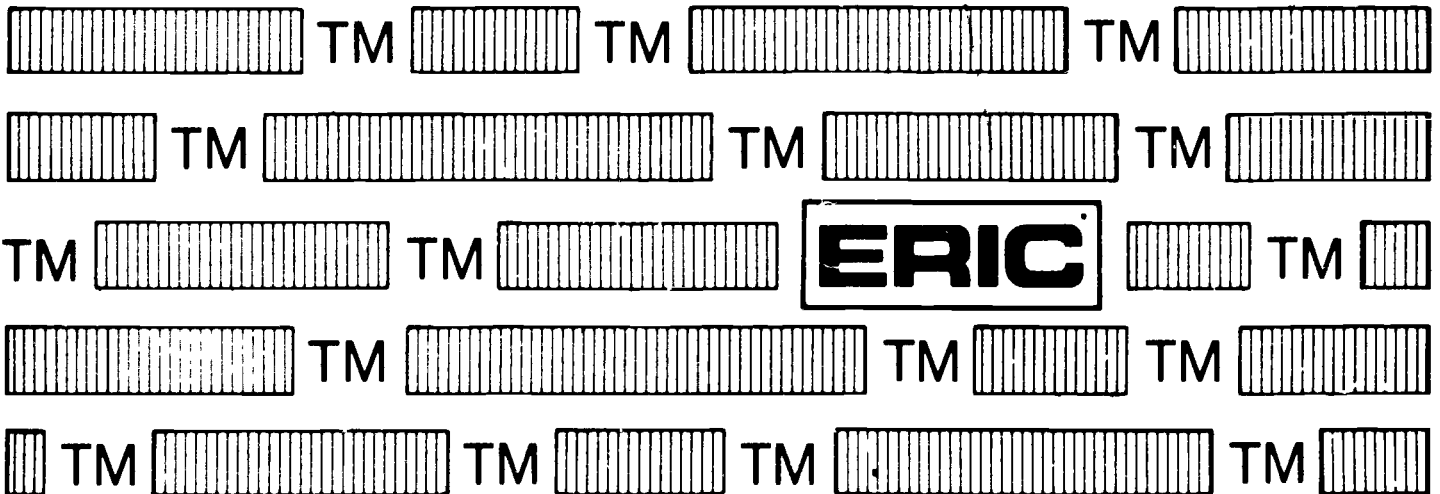
THE EVALUATION OF COLLEGE REMEDIAL PROGRAMS

ERIC/TM Report 80

by
Jeffrey K. Smith
Carl J. Schavio
Donald B. Edge

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- * This document has been reproduced as received from the person or organization originating it. Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.



ERIC ERIC CLEARINGHOUSE ON TESTS, MEASUREMENT, & EVALUATION
EDUCATIONAL TESTING SERVICE, PRINCETON, NEW JERSEY 08541

TM 820 062

ERIC/TM Report 80

The Evaluation of College Remedial Programs

by

Jeffrey K. Smith

Carl J. Schavio

Rutgers University

and

Donald B. Edge

New Jersey State Department of Higher Education

November 1981

ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service, Princeton, New Jersey 08541

The material in this publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Education. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to qualified professionals for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either these reviewers or the National Institute of Education.

ERIC Clearinghouse on Tests, Measurement,
& Evaluation
Educational Testing Service
Princeton, NJ 08541

TABLE OF CONTENTS

Overview. 1
Program Documentation. 4
Placement Effectiveness. 11
Program Effectiveness. 25
Special Studies. 47
References. 52

Annotated Bibliography

Appendix A

- Historical Perspective - College B
- Basic Studies Program - Burlington County College
- Placement Guidelines - Camden County College

Appendix B

- Student Attitude Survey I
- Student Attitude Survey II
- Basic Skills Questionnaire
- Faculty Questionnaire
- Burlington County College Retest Study

Appendix C

- Table of Gain Scores
- Graph of Gain Scores
- Student Opinion of Basic Studies Program - Burlington County College

PREFACE

The original impetus for this monograph was a grant from the New Jersey Basic Skills Council of the New Jersey Department of Higher Education to the Graduate School of Education of Rutgers University. The purpose of the grant was to evaluate two college basic skills remedial programs, one in a four-year state college, one in a two-year community college, and to produce a handbook for conducting such evaluations. This handbook was produced, and distributed to all public colleges in New Jersey. Drawing upon the response and suggestions from practitioners, the authors have produced this monograph for a more general audience.

This is not a text on conducting program evaluation; it is a list of evaluative activities that you might be interested in undertaking. If combined with a text on evaluation which covered basic philosophical, theoretical, and design issues, this monograph would provide the "specifics" for translating generalities into the tasks which face the college basic skills program administrator who must actually conduct an evaluation.

The examples used in the manuscript come from our experiences in New Jersey and therefore do not provide a broad spectrum of studies geographically. At the end of this monograph is an annotated list of 32 studies conducted in colleges around the country. The authors hope that this report will be a useful supplement to your evaluation library and that its suggestions will help you in your evaluation activities.

Jeffrey K. Smith
Carl J. Schavio
Donald B. Edge

OVERVIEW

The process of evaluation involves assessing the merit or value of some person, idea, or process. Because merit and value are subjective notions, evaluation itself is inherently subjective. Since some of the evidence which is brought forth in most evaluations is of an objective nature, the entire process can appear to be more objective than it really is. Outcomes which are quantifiable are not necessarily the outcomes which are most critical.

Thus, evaluations are never the straightforward, black or white activity that one might wish them to be. There are, however, a variety of ways to gather evidence regarding the merit or value of an educational program which are readily communicable and widely accepted. The purpose of this paper is to present detailed descriptions of some of the ways that evidence can be gathered for the purposes of evaluating remedial basic skills programs in colleges.

This paper is based on several assumptions which ought to be made explicit at the outset. First, the audience for this paper is the individual at the college who is responsible for evaluating the basic skills program. Often, this individual is the director of that program or reports to that director. For purposes of writing annual reports to boards of trustees or to funding agencies, there is an urge to frame the results as positively as possible. For purposes of improvement of the internal workings of the basic skills program, however, a 'warts and all' picture is necessary. It would be foolish to argue that "the data are the data" and cannot be cast in flattering or detracting lights. On the other hand, certain types of evidence are more compelling than others. Well aware of what needs the evaluator has,

we will present evaluative techniques that are not prescriptive in nature, but rather a list from which techniques may be selected.

Second, it is assumed that the reader has a rudimentary background in statistics (means, standard deviations, correlation), but not a sophisticated background. The more statistically sophisticated reader may wish to skip sections.

Third, it is assumed that each reader has at least one evaluation technique or approach that is superior to many which are presented here. At least a half dozen scholarly journals are devoted to the study of evaluation: Evaluation Quarterly, Educational Evaluation and Policy Analysis, Evaluation, Studies in Educational Evaluation, Measurement and Evaluation in Guidance and Evaluation and Program Planning. Actually, this third assumption is really a caveat in assumption's clothing. This paper is not the be all and end all of evaluating college basic skills remedial programs. What it attempts to provide is a set of reasonable and fairly efficient techniques that can be employed in basic skills evaluative efforts.

The report consists of five sections:

1. Program Documentation -- a discussion of how to assess what your basic skills program is so that you might know what is being effective and what isn't.
2. Placement Effectiveness -- a discussion of how to determine whether your placement procedures are satisfactory.
3. Program Effectiveness -- a discussion of how to assess the effectiveness of your remedial program.
4. Special Studies -- a discussion of how to address special questions in your program.

5. A Bibliography -- sources for finding more extensive discussions of particular issues and examples of other colleges' efforts.

PROGRAM DOCUMENTATION

In order to assess whether something is working well, it is beneficial to know what that something is. This is a fairly simple task when that something is say, a particular make and year of an automobile. The features and characteristics of the car are well-known, easily documentable, and fairly consistent from one car to the next. If one considers a play however, the problem is a little more complex. Casts vary; stages vary; props, scenery, and costumes vary. In assessing the merit of a play, there are variables which may affect the evaluation.

Now compare a play to an educational program. The play has characters, dialogue, and stage directions which are mostly invariant. Compared to an educational program, a play is a model of stability. Educational programs vary from one semester to the next, one instructor to the next, one student to the next. In order to understand the evidence that is provided in an evaluation, it is first necessary to understand the program that produced the evidence.

History of the Program

Some basic skills remedial programs have been in place much as they are today for ten or fifteen years. Others have gone through dramatic revisions and still others represent fairly recent endeavors. If a brief history of the program is presented in an introductory note to an evaluation report, it may provide a perspective for the efforts and achievements of the current year.

A history of the basic skills program may include the following points:

1. Impetus for the creation of the program. Was there a concern for admitting students less well-prepared than the student population at

that time? Were the students who comprised the student body at the inception of the program deemed to be insufficiently prepared for college level work? Was a funding source found for doing remedial work? Did the impetus come from students, faculty, administration, the state?

2. Original goals for the program. Was the program intended to be voluntary? Did the program consist of regular remedial classes or tutorial help? Were regular faculty used or were specialists in remediation hired?
3. Development of the program. How has the program grown and changed since its inception? What were the influences on the change? How has the magnitude of the program changed in terms of number of students, number of faculty, number of contact hours, number of administrators?
4. Status of the program within the college. What has been the status of the basic skills program in terms of how it is viewed by the various constituencies? What seem to be the causes of that status?

If you have been associated with the program since its inception, writing a history may not be too difficult. There is, of course, a problem of selective perception. If you have more recently joined the program or wish to approach writing a history of the program as if you had, some sources of information would be:

1. Previous evaluations. These are probably the best single sources.
2. Funding proposals. These are particularly valuable or looking at original goals.
3. Memos and other internal documents. Reports to superiors, suggestions for improvements, and so on, are good for providing evidence concerning goals and perceived status of the program.

4. Other college documents. Documents which refer to the basic skills program which were not written by or to program personnel but which refer to the program may be helpful. Reports on "the state of the college," accountability reports, and so on, may contain references to the program which are insightful.
5. Old records. These help provide estimates of numbers where no official figures exist.
6. Interviewing personnel: Both those associated with and not associated with the program can be helpful in understanding various aspects of the program. It might be worthwhile to find individuals who represent a cross section of experience with the program, and longevity at the college (student, faculty, administration).

Once the evidence concerning the history of the program has been gathered, it must be weighed and condensed. This is a difficult task; the goal should be to produce a brief but illuminating picture of the program. When making decisions on what to include and not include, the key question to ask should be "Does this help the reader understand where we are now?"

The Program Today

The documentation of the program as it currently exists provides the framework for understanding the evaluation as a whole. Among the pieces of information that might be included in a description of the program are:

- I. What is the program?
 - A. What help is offered?
 1. Through classes (a breakdown of courses and sequences)
 2. Through tutorials

3. Other (Some colleges have programs where students are identified as having special needs and then are helped through their regular college courses.)

B. Who is involved in instruction?

1. Regular faculty
2. Full-time basic skills faculty
3. Co-adjutant instructors
4. Tutors
5. Other students

II. How large is the program?

A. Enrollment -

1. Total
2. By sequence
3. By course
4. By section
5. Tutorial or laboratory attendance

B. Faculty (By breakdown in I.B. above.)

III. Who is in the program? (This information can be presented for the group as a whole or could be broken down by course, subject area, subject level, and so on.)

A. Statistical breakdown of student demographics

1. Sex
2. Ethnicity
3. Age
4. Year of high school enrollment
5. Type of high school program

6. High school class rank
 7. Number of years of high school study in various subject areas
- B. Statistical breakdown of student pre-instructional performance, attitudes, expectations and goals.
1. Means, standard deviations, of student pretest scores by course, subject area, or level
 2. Results of responses to attitudinal and self-report questionnaires such as:
 - Perceived need for course by student
 - Courses taken in high school
 - Work experience
 - Expectations of college work
 - Attitudes toward college
 - Attitudes toward self as a learner
 - Post college aspirations
- C. Informal analysis of students in program
1. From interviews
 2. From teacher's or administrator's impressions
- D. Description of the typical student. This can be constructed by combining the modal response to all variables -- "The typical student is female, white, 24⁷ yrs. of age, graduated from high school, and so on". This is often useful in a summary statement of who is in the program. It can be misleading if the student body is quite diverse.
- IV. How does the placement program work?

This should be a description of the process that occurs for placement. Cut-off scores, contingencies, possibilities for exceptions should all be described. A flow chart can be useful in describing the system.

V. What is the nature of the curriculum?

- A. Syllabi can be presented in appendices
- B. What training do faculty receive?
- C. Do all faculty use the same materials?
- D. How is continuity across sections of a course assured?
- E. How is continuity across levels of a subject area assured?

VI. How is the program currently perceived?

- A. By students
 - 1. Remedial
 - 2. Non-remedial
- B. By faculty
 - 1. Regular
 - Not teaching basic skills
 - Teaching basic skills
 - 2. Basic Skills
 - 3. Coadjutants

Obviously much of the analysis called for here requires planning, the development of questionnaires, and interviews with faculty and students. Several questionnaires appear in Appendix B; basically, these do not require a high level of sophistication. The biggest problem with collecting data of this type is to assemble in one place all the various sources of information that might be gathered on a student. Information management is a complex

issue and well beyond the scope of this document. It is essential, however, that the record for a student be kept at a central location and that information can be added to that record. The easiest way to accomplish this is through the assignment of identification numbers which can be placed on all questionnaires, tests, and so on. This makes data additions particularly easy to do on the computer.

Appendix A provides some examples of the procedure mentioned here. Specifically, there is a history of a college's remedial program (one that was evaluated as part of this study); a documentation of a program (at Burlington County Community College in New Jersey); and several flow charts of placement procedures (at Camden County Community College in New Jersey).

PLACEMENT EFFECTIVENESS

The placement of students with special educational needs into the proper level of remedial work has long been a problem known to educators. Binet (1905) was commissioned by the City of Paris to develop a test to help place pupils into special schools. His work developed into the Binet-Simon scales which later became the Stanford-Binet IQ test which is currently so popular and controversial. The problems of placing students in programs remain today.

Two basic questions need to be asked in evaluating a placement system:

1. Are the students being properly placed?
2. Can the placement program be made more efficient/effective/humane?

Several sub-questions implied in these two general questions will be addressed as we look at methods for answering the questions.

Are Students Being Properly Placed?

There is a natural interaction between the placement of students into remedial programs and the nature and content of those programs. For purposes of discussion, let us assume that the remedial program itself is a satisfactory one. That is to say that the contention "Students are properly placed here, but his course ought to be easier.", is logically one which should be addressed in the next section: "Remedial Program Effectiveness."

To begin an evaluation of the placement program, a first question to ask would be "Are the data that are used in placement decisions valid?" Most colleges use standardized tests in making placement decisions. Validity evidence for such tests can be found in one of three sources: (1) the technical manual provided by the publisher, (2) the Eighth Mental Measurements Yearbook (Buros, 1978), (3) journals such as Educational and Psychological Measurement or the Journal of Educational Measurement.

In New Jersey, students in public institutions are placed into remedial programs based in part or in full by their performance on the New Jersey College Basic Skills Placement Test (NJCBSPT). If your institution uses the NJCBSPT, then the "validity of the data question" can be addressed by referring to "Validation of the New Jersey College Basic Skills Placement Tests," Educational Testing Service (1980, prepared by L. Hecht). This report concludes that the test in fact produces valid data for placement decisions; the supporting data for this conclusion are fairly strong. If your institution use data from sources other than a standardized instrument, then the Hecht report would serve as an excellent model for generating such validity evidence.

Once the question of the validity of the data being used in placement decisions has been established, then one must turn to the question "Are these data being used in a reasonable fashion?" In placing a student into a course, there are three possible occurrences:

1. The student is placed into a course of proper difficulty.
2. The student is placed into a course that is too difficult.
3. The student is placed into a course that is too easy.

The simplest method of ascertaining which of these three states exists for a given student is to ask the student and his/her instructor. If you are interested in the reactions of students who have been placed this semester by your system, this might be done at the end of the current semester. (If you have a considerable number of drops and adds, you might want to obtain these data during say, the second week of instruction.) If you are interested in the overall impression of your students concerning basic skills placement, a more general survey could be mailed to a sample of students or administered in a sample of classes.

Gathering "student/faculty satisfaction with placement" data is a fairly straightforward task. In Appendix B are copies of two questionnaires used in our studies with students. The first is a one-page instrument for use in particular courses. The second is a three-page instrument that could be administered at any time to a sample of students. (Feel free to use them as is or modify them in any manner you wish.)

Drakulich (1980) has developed an extensive and quite interesting questionnaire concerning placement decisions and the NJCBSPT as part of his doctoral dissertation. This questionnaire (which also appears in Appendix B) is much more extensive than those we used (and covers a broader area). We recommend that the reader spend some time examining this questionnaire.

Although student opinions of placement provide important information concerning the appropriateness of the placement, student opinions suffer from bias as well as honest misperception. Faculty evaluation of student placement is much more likely to be an accurate reflection of placement effectiveness. A questionnaire to ascertain faculty evaluation of placement accuracy developed for the Hecht ETS study mentioned earlier is contained in Appendix B. As can be seen, the questionnaire is very simple in design; it can be administered near the beginning or the end of a semester. More detailed questionnaires could be developed to ascertain faculty opinion on a variety of issues concerning students in basic skills programs, but if the issue at hand is primarily one of determining appropriateness of placement, the questionnaire as presented is probably quite sufficient.

Analyzing and Presenting the Data

Once data on student and faculty satisfaction with placement have been collected, the analysis and presentation of the data is not difficult (but

it is somewhat tedious). Even for fairly simple analyses with relatively small data sets, we recommend using a "canned" computer package such as SPSS, BMD, or SAS. Most college computer centers will have at least one of these packages available. If the person doing the analysis is a newcomer to canned programs, we recommend using SPSS because of the clarity of the user's manual. If the person doing the analysis is sophisticated in such activities, he/she will probably want to use SAS.

In order to present the results of the questionnaires discussed or similar questionnaires, frequencies, means, and mean percentages are sufficient. Tables 1 and 2 were constructed to present some results of the questionnaires discussed. They are self-explanatory and can be readily comprehended without a high level of statistical sophistication.

In terms of presenting material to readers who will not spend a great deal of time on the report, graphic displays of data are often effective. They are also somewhat more dramatic than tables and have received considerable use in popular news media. Graphs are easy to construct; they simply require a translation of the data. For example, in Figure 1, a graphic representation of the "Summary of Responses to Instructor Satisfaction Questionnaire at College B" is presented.

For most readers, this graph makes the placement data reflect more positively on the placement system than the table does. Interestingly, the graph makes placement into Reading 090 look almost perfect and placement in Writing 090 weak by comparison. What does not appear in the graph but does appear in the table is the sample size for these groups. The 18.4 percent of the students which are reported to be underprepared in Writing 090 is

Table 1

Summary of Responses to Instructor Satisfaction
Questionnaire at College B

Course	Number of Sections Responding	Number of Students Represented	Percent Underprepared	Placed Correctly	Percent Overprepared
Writing 090	2	38	18.4	71.1	10.5
Writing 103	21	383	9.1	88.3	2.6
Reading 090	2	43	0.0	97.7	2.3
Reading 102	12	213	9.4	76.5	14.1
Math 090	21	387	20.4	76.5	3.1

TABLE 2

PERCENT DISTRIBUTIONS OF RESPONSES TO STATEMENTS RELATED TO
STUDENT OPINION OF THE NJCBSPT

Statement	Responses											
	SA		A		U		D		SD		NR	
	N	%	N	%	N	%	N	%	N	%	N	%
N=375												
Overall, I believe the NJCBSPT was fair. (1)	103	27.5	175	46.7	50	13.3	28	7.5	17	4.5	2	0.5
Overall, I believe the test was easy.(2)	31	8.3	94	25.1	79	21.1	118	31.5	46	12.3	7	1.9
I tried to do as well as I could on the NJCBSPT. (3)	180	48.0	153	40.8	17	4.5	18	4.8	1	0.3	6	1.6
Overall, I believe the test was too long (3-1/2 - 4 hours). (4)	111	29.6	116	30.9	45	12.0	69	18.4	29	7.7	5	1.3
The 20 minute essay was a good measure of my ability to write. (5)	78	20.8	144	38.4	47	12.5	66	17.6	36	9.6	4	1.1
I guessed on most of the items on the NJCBSPT sentence structure test. (6)	34	9.1	110	29.3	79	21.1	113	30.1	38	10.1	1	0.3
I was so nervous I could not concentrate on the test. (7)	78	20.8	99	26.4	41	10.9	111	29.6	42	11.2	4	1.1
The NJCBSPT was designed for students who are smarter than I am. (8)	25	6.7	61	16.3	52	13.9	144	38.4	88	23.5	5	1.3
It is a good idea to require students to take the NJCBSPT.(9)	152	40.5	137	36.5	38	10.1	30	8.0	16	4.3	2	0.5
I think the NJCBSPT was a waste of time. (10)	25	6.7	45	12.0	54	14.4	138	36.8	104	27.7	9	2.4
The NJCBSPT provided important information for my adviser to use in selecting appropriate courses for me.(11)	120	32.0	149	39.7	38	10.1	46	12.3	17	4.5	5	1.3
The NJCBSPT results were a good indicator of my scholastic potential.(12)	70	18.7	119	31.7	79	21.1	67	17.9	30	8.0	10	2.7

Percent
Placed
Correctly

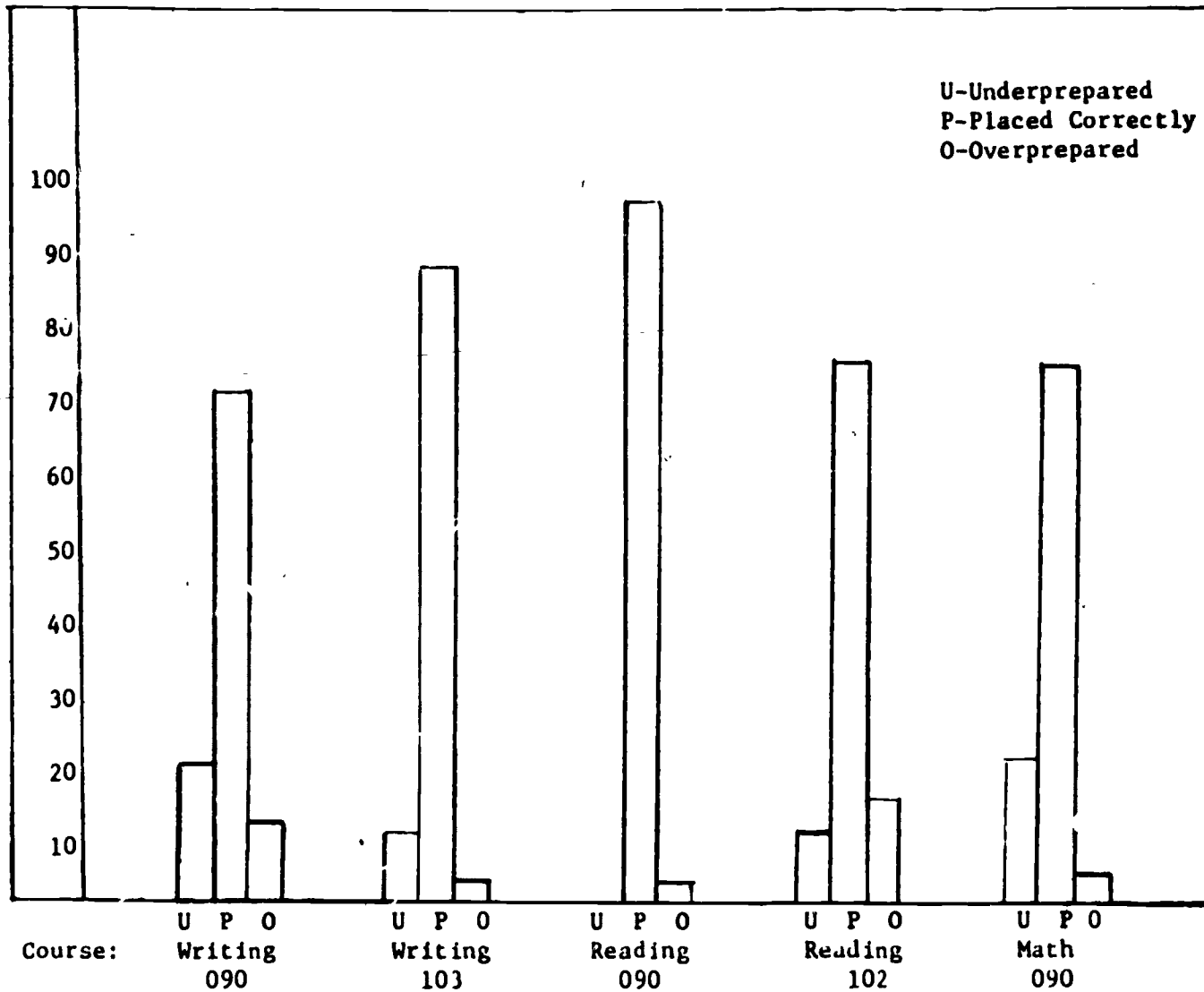


Figure 1.

RESPONSES TO INSTRUCTOR SATISFACTION

only seven students, and only two sections responded. (Two sections responding is also the case for Reading 090.) Although this information could have been added to the graph, it is still less likely to be attended to in the presence of more visually appealing stimuli.

Interpreting the Analysis

One of the largest problems in program evaluation is misinterpretation of the analyses that are performed. Let's stay with the table and graph that were discussed in the section above and use them as an example to provide some general rules for interpretation.

1. The first thing to do in interpreting data is to get a general picture of what's happening. This will help keep things in perspective. In the faculty satisfaction data presented here, the overall picture is a positive one. For all courses, at least 2/3 of the students are (reported to be) properly placed. For all but Writing 090, at least 3/4 of the students are properly placed (according to faculty).
2. The next thing that might be examined is those aspects of the data which stand out. Probably the two pieces of data which are the least consistent with the overall pattern here are the very high satisfaction rate in Reading 090 (97%) and the large number of reportedly under-prepared students in Math 090 (20.4%), especially when compared to the small number reportedly overprepared students (3.1%).
3. With a general picture of the data as well as those aspects which stand out, the next step is to draw some tentative conclusions concerning the placement program. Again, overall the picture is quite good. In math, however, we see that a fairly substantial number of students are underprepared according to their instructors. If we multiply the 20.4%

by the number of students who were in the sample, we find that 79 students were classified as underprepared. This suggests that the math remedial sequence might be broken into a two course sequence rather than a single course. This is a finding that does not in and of itself merit a change in the program, but does merit further investigation (What do the math faculty think? What do students think? If we take the bottom fifth of the students (based on placement test scores), how well do they perform in Math 090?) It is interesting to note that this is actually a concern of the remedial program, not the placement program (there is currently no lower course in which to place these students).

In reading, the placement into Reading 090 looks excellent; the placement into Reading 102 is also very good, but perhaps the cut-off score for placing out of Reading 102 might be dropped a point or so. It would be worthwhile to find some of the highest scoring students who placed in Reading 102 from this year and previous years, some of the lowest scoring students who placed out of Reading 102, and interview them concerning their regular academic course success. This would allow for an informal evaluation of the benefit of Reading 102 to those students who are "right on the line."

In writing, there appears to be a problem with students being underprepared for Writing 090. The sample is small however, and should be regarded with some caution. There are only seven students in this "underprepared" group. It is difficult to infer too much from the small sample, especially when placement in the higher writing course (Writing 103) looks excellent.

Two principles emerge from this section on interpreting the analyses:

1. Results should be explainable. Something caused the data to be the way they are. The task is to find the most parsimonious explanation.
2. These data are not the only data available. Interpretations should "fit" the data from all sources. The conclusions we draw from these data have to be consonant with the rest of the data.

Can the Program Be More Efficient/Effective/Humane?

For most placement programs that have been in operation for several years, the overall efficacy of the system is probably quite acceptable (severe placement problems are usually apparent). This situation can lead to the impression that the placement program is satisfactory in all respects and would not benefit from some fine tuning. In this portion of the Placement Effectiveness section, we will examine evaluation techniques of a more formative nature; that is, how can a system which is considered good be made better?

Analysis of the Program

To begin, a critical analysis of the program itself can be made. Although this analysis could be performed by program personnel, an individual who is familiar with basic skills programs, but external to the program in question might be helpful. For example, directors of basic skills programs in neighboring colleges might agree to examine one another's programs.

The analysis should consist of a step-by-step examination of the placement procedures. The analysis might be broken down as follows:

1. Identification and notification of students concerning the testing.

How are students identified?

How are students notified of the testing? If by letter, is the letter bureaucratic or friendly?

How many testing dates are there? Do students have an option?

2. Nature of the testing.

Under what conditions does the testing take place?

Does anything but testing occur on the day of the testing? Is there any consideration of a social aspect to the day?

What about no-shows? How are they identified, contacted, tested?

3. Nature of the placement/counseling.

Who analyzes the scores for placement recommendations?

How rigid is placement with respect to scores? Does any latitude exist? Can counselors/students override the scores? How?

Who explains the scores/remedial courses to students?

What consideration of student affective response to placement is made?

Do students have any recourse on placement decisions? Can the test be retaken?

Of course, other aspects and questions will be peculiar to each placement program. The list above is intended as an example of an approach to analyzing programs.

Analysis of Record

Some evidence reflecting on the placement program is collected routinely by the college. In particular, this would be the number of students who transferred from one course to another or who dropped courses altogether. For example, should you find that there are large numbers of students transferring into the more elementary remedial courses, this suggests raising the cut-off score for the higher elementary course. Transfer data would be particularly appropriate for those institutions who use some form of secondary evaluation in remedial classes once students have been placed.

We have found that actually referring to the college drop/add data can be quite difficult and confusing. It may be easier to survey faculty (even informally) about the magnitude and direction of transfer activity in their courses.

In Appendix B, there is a document concerning students who were retested at the beginning of a remedial course at Burlington County College. This is a good example of the type of information concerning the placement system that can be gathered by looking at the "running record" of student performance.

Interview Data

Some information comes out only in the course of conversation. Especially in terms of making placement a more humane activity, interviews are extremely valuable. In terms of examining the placement programs, the people who could provide the best formative information would be students and the individuals who counsel students on placement.

In our evaluation efforts, we found gathering a small group (4-10) of students and posing some general questions concerning placement to be quite effective. Common experiences and reasonable recommendations came forth from the group. As a side note, the students at both colleges we worked with felt that the interview session itself was a valuable activity. They expressed the opinion that regular meetings of students (sometimes with, sometimes without staff) to discuss the placement and (especially) the remedial program would be beneficial.

Questions used in our student interviews are listed below:

1. (Interviewer traces the placement procedures showing samples of documents - letters to students, etc. - where appropriate.) How accurately does the procedure described and the material presented match the method in which you were actually placed?

2. How fair and equitable do you think this procedure is?
3. What was your initial reaction to being placed in a Basic Skills Program?
4. How has your attitude toward the program changed?
5. Do you feel that you were "placed" properly?
6. Do you feel you have any channels of communication through which to:
 - a. Gain an understanding of why you were "placed" where you were?
 - b. Appeal what you may perceive is an improper placement?
 - c. Air any grievances you might have?

We employed the small group method in our faculty interviews also.

In these groups were faculty who were:

1. Full-time remedial faculty.
2. Regular academic faculty who taught one or two remedial courses.
3. Co-adjutant faculty who taught only remedial courses (usually on a part-time basis).

These interviews were not as successful as we might have hoped. Loyalties to one's group (as listed above) inhibited the free exchange of ideas and opinions. We would recommend gathering faculty together by group status and not across groups (or at any rate, not just across groups). Below is a list of questions we used in the faculty interviews:

1. (Interviewer traces the placement procedure.) How accurately does the procedure just described match the actual placement of students into the program?
2. How adequate and appropriate do you view the placement procedure?
3. Would you comment on your satisfaction/dissatisfaction with your role in the placement procedure?

4. What impact have the basic skills placement and remedial programs had on your college?
5. What do you perceive the role of the placement and remedial programs to be?
6. Is there an apparent need to develop any additional or improved evaluation procedures to assess the effectiveness of the placement and remedial programs?
7. What kinds of feedback have you received from students concerning the effectiveness of the placement and remedial programs?

In our evaluation, we also interviewed administrators of remedial programs and administrators of colleges. These interviews were essential because of our "outside" status and a need to assess institutional support. These interviews would not typically be part of an "in-house" evaluation.

Summary

This section has relied heavily upon student and instructor satisfaction as indicators of a successful placement program. In the minds of some evaluators, use of these indicators may raise a question of the validity of the data being used. Our rationale for focusing on satisfaction data was twofold:

1. If there are serious problems with your placement system, you won't need a sophisticated mechanism to pick up that fact; people will beat down your door telling you about it.
2. If you are interested in researching various alternative selection systems, there is a section on that under the Special Studies subheading. In summary, the guiding rule to assessing placement effectiveness involves answering the questions:
 1. How can we document the effectiveness of the program as it exists?
 2. How can we shed light on areas for improvement?

PROGRAM EFFECTIVENESS

The evaluation of remedial programs at any level of education poses a particularly difficult task. In addition to the difficulties encountered in any evaluative activity, remedial programs usually have three additional features which exacerbate the problem:

1. All students identified as candidates for the remediation must be included in the remediation. (Thus we have no control group.)
2. Candidates represent one end of the ability continuum; suitable contrast subjects are not available. (Thus any kind of comparison is difficult.)
3. Mortality rate (in the statistical sense) is very high. (Thus we can only know that a treatment works if people don't drop out.)

These three problems exist in varying degrees in public colleges and pose problems for evaluation of remedial programs in those colleges. Remedial programs also exist in the public elementary and secondary schools, most notably under the ESEA Title I provisions for economically disadvantaged children. The federal government has developed evaluation models for those programs which attempt to ameliorate the problems listed. We have examined the applicability of those models for college basic skills remedial programs and concluded that none of them are directly applicable. These models are discussed further in the section on Special Studies. What is contained in this section is a variety of evaluative techniques which can be used for remedial program evaluation. None of them are faultless. What we have done is to list for each of the seven techniques to be presented: (1) "Pros": benefits of the technique, (2) "Cons": problems of the technique, (3) "Summary of Pros and Cons," and (4) "Method": how to employ the technique.

We are not recommending that you use all of them. They are presented as options which may be more or less useful in your evaluation efforts.

Before presenting these techniques, we need to attempt some common understanding of remedial programs. We are making the following assumptions in discussing these techniques:

1. That the primary goal of remedial programs is to prepare students for regular college work.
2. That this goal can be reached in a variety of ways, but that the predominant methods are through remedial courses in reading, mathematics, and writing, and tutorials/labs which may accompany these courses or operate independently of them.

The seven evaluative techniques which make up the remainder of this section are:

1. Pre-/Posttesting
 2. Success in Future Work
 3. Success in Remedial Courses
 4. Faculty Satisfaction
 5. Student Satisfaction
 6. Analysis of the Curriculum
 7. Evaluation of Labs/Tutorials
1. Pre-/Posttesting

Since in most instances students are pretested using a standardized instrument, there would be a natural inclination to posttest with the same instrument and compare the pre-/post results.

Pros. Perhaps the strongest argument for pre-/posttesting using a standardized test is that the test represents the best efforts of professional psychometricians in determining what college-relevant basic skills are. If

students are shown to perform substantially better on the posttest as opposed to the pretest, then it would only be reasonable to conclude that the remedial program was effective.

A second strong point of this technique is that the results are readily interpretable and communicable. If a student's performance on the posttest is sufficient for him/her to have been initially "placed out" of the remedial course he/she has just completed, this is compelling evidence of effective remediation and easily understood even by those who are statistically naive.

A third strong point of this technique is that the data are suitable for a wide variety of statistical analyses, including analysis of variance and multiple regression.

Cons. There are some serious problems with pre-/posttesting that need to be considered. The first (and perhaps largest) problem concerns the motivation of students engaged in the testing. During the pretest, students are highly motivated, since good performance can place them out of remedial courses. If the placement is given as a posttest, there is almost no motivation to perform well whatsoever, unless the test is used as part of a student's grade in the course. In an evaluation we conducted as part of this study, we found students whose posttest scores dropped by as much as 30 points from the pretest in a college that did not use the posttest as part of the grade. Obviously students do not regress by 30 points as the result of a semester's instruction. Cases such as those are easy to spot and take into consideration in an analysis, but what about scores that drop 5 or 10 points or show little or no gain? How accurately has growth been reflected by those scores? It is impossible to determine. This problem is

quite serious and needs to be addressed before putting too much weight behind a pre-/posttest analysis.

If the posttest is used as part of the grade in a remedial course (or as the exclusive determiner of advancement in the sequence), then the motivation problem becomes much less severe. (Of course, if the posttest is 10-20% of a grade and if a student is doing quite well going into the test, this could still be a problem.) There are, of course, problems incumbent with having the test be part of the grade. Anxiety toward the test may impede learning; teaching to the test may occur; security of the test could be a problem, and so on. These issues would have to be considered if mandatory, grade-related posttesting were to be implemented.

A second problem area concerning posttesting concerns the transfer of skills from the remedial course to a regular college course. Joy Hughes from Burlington County College reports that students who perform well using the NJCBSPT still show difficulty (in some cases) in regular course work because of difficulties in transferring skills from remedial to regular courses. This problem will be discussed further later, but the point here is that the posttest may not be capturing exactly what you want students to be able to do (i.e., succeed in regular courses).

A third problem with pre-/posttesting is a purely statistical one. The problem is called the "regression effect." Stated simply, the regression effect occurs when the bottom portion of a distribution of scores that have measurement error is isolated and then retested. Even if the retesting occurs the next day, the scores will tend to rise. This is because the people in the bottom portion of a distribution are more likely to have had a negative (or depressing) error made on their pretest measurement. When

retested, as a group, their errors would tend to even out (sum to zero). Thus the posttest mean score would be higher than the pretest mean score. Just how much higher the posttest mean would be is a function of the reliability of the measure in question.

The perceptive reader will note that the regression effect works in favor of the evaluation. Actually, if a pretest is given at the beginning of the remedial course (not the placement instrument, but a new testing) and again at the end of the course, the regression effect is eliminated.

Summary of Pros and Cons. Pre/Post is not the sine qua non of evaluation (or of anything else, for that matter). It can however, provide good evaluation evidence if used and interpreted properly. The regression effect problem is one that could be ameliorated if the motivational problem could be overcome. If you believe the motivational problem could be minimized at your institution, then you may well want to use pre-/posttesting. We would recommend using an instrument other than the placement instrument but if you do use a placement test/posttest model, recognize that some of the growth noted will be due to regression (just how much is impossible to tell without knowing what proportion of the students were placed in the remedial program as well as the reliability of the test for your students.)

Method. There are a variety of techniques for analyzing and displaying the results of a pre-/posttest analysis. Basically, the data used in this method are the pre- and posttest scores. If you use different forms of a standardized instrument in pre- and posttesting make sure you always use the scaled scores provided by the publisher and not the raw scores. Raw scores from different forms of the test are not comparable. Make sure that the scores are the relevant scores (don't use reading comprehension for your

remedial math classes). Also, if you use holistically scored essays, both pre- and post- essay scores must come from the same scoring session.

The basic statistical tool used in analyzing pre-/posttest data is the dependent samples (sometimes called "correlated samples") t-test. This procedure can be found in almost any elementary statistics text. This analysis could be performed on any breakdown of students as well as all students (in a course) combined. For example, you could show results as in the following (simulated) table:

Gain in Reading Comprehension Scores*

	All Students in Reading Remedial Courses	All Students in 101 Sections	All Students in 102 Sections	Students in 101:235	Students in 101:238, etc.
Mean Pre	56.5	52.7	59.4	54.1	53.9
SD	8.4	8.8	7.6	9.2	7.8
Mean Post	62.4	58.0	66.3	58.6	56.2
SD	11.1	10.6	9.2	12.8	8.6
Mean Gain	5.9	5.3	6.9	5.5	3.2
t statistic	8.3	6.4	10.4	2.3	1.6
P-value	.001	.001	.001	.01	.08
N	430	248	182	24	20

*These values have been generated as an example. There are not actual scores.

It is easy to become overly impressed by the results of such an analysis. One should keep in mind that the t-test is simply establishing that the students learned more than nothing at all! An instructional intervention should be better than nothing. "Significance" in a statistical sense should not be confused with "importance" in an educational sense.

A second problem with the t-test is that it does not provide a picture of the overall performance of a course or a section of a course. Several methods might be used to convey these. The first is called the stem and leaf diagram. The stem and leaf diagram allows for a picture of the data to be seen without losing the actual scores. Below is an example of a stem and leaf diagram for a single group of scores:

Stem and Leaf Diagram of Single

Set of Scores

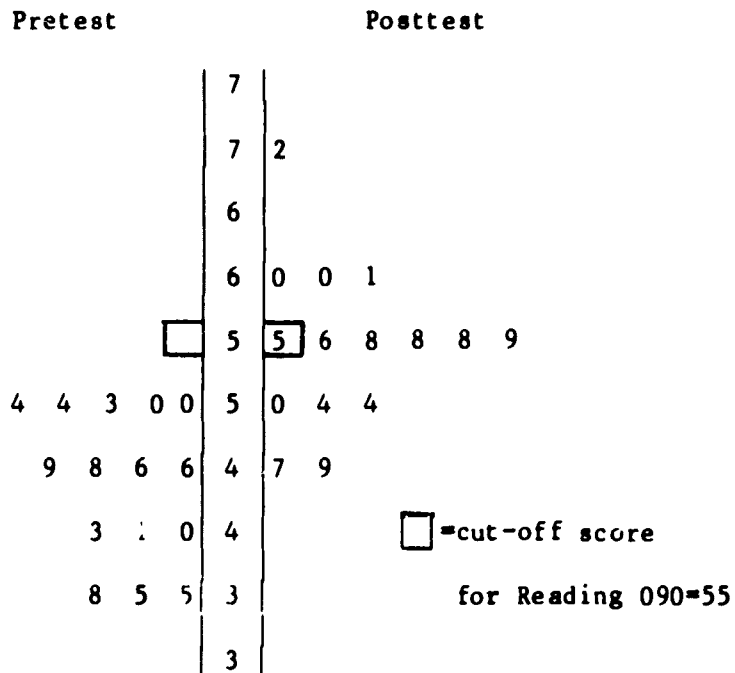
7		8					
7		0	3				
6		5	5	6	9		
6		0	0	1	2	2	4
5		5	6	6	6	7	
5		0	0	1	3		
4		7					
4		0	3				
3		5					
3							

Basically, the tens column is represented on the left of the "stem" and the ones are represented on the right of the stem. In the example above, there was one score of 35, one score of 40, 43, 47; two scores of 50, and so on. The tens column has been broken in half (two 3's, two 4's, etc.) in order to spread the scores out more. Scores from 30-34 would be placed next to the lower 3 in the tens column; scores from 35-39 in the upper 3.

Once the basic stem and leaf idea is perceived, a variety of elaborations might be employed. First, pretest scores could be placed to

the left of the tens columns and the cut off score for testing out of the course might be identified. This would result in a stem and leaf diagram like the one below:

Stem and Leaf Diagram for
Reading 090 Section 123



Not only can we get a general picture of performance using the stem and leaf diagram, but all of the individual scores are retained. Stem and leaf diagrams can be constructed for courses, sections, or other relevant breakdowns.

Another graphic display technique and another tabular display technique for showing gains in pre-/posttesting are presented in Appendix C.

2. Success of Remedial Students in Future Work

A second evaluative technique is to look at how well formerly remedial students perform in regular college work. It should be recognized at the outset that this technique will not provide information on your remedial

program as it exists today, but rather as it existed when your "formerly" remedial students were in remedial courses.

Pros. In some respects this is the single best evaluative technique available. It is the most direct measure of the goal of the remedial program: to prepare students for regular college work. If variables such as grade point average, graduation rate, and so on, are comparable for formerly remedial and non-formerly remedial students, then the efficacy of the remedial program is clear.

Cons. There are several problems associated with comparing formerly remedial and non-formerly remedial students:

1. The comparison group (non-formerly remedial students) presents a fairly high standard to attain. Just how close to that standard would be considered acceptable is an arbitrary judgment. If the GPA's of the two groups were not statistically significantly different, this would be strong evidence of the quality of the program. Given that such a standard is close to unattainable, the question becomes: "How close will we accept?"
2. The data necessary for such a comparison are exceedingly difficult and tedious to obtain unless you have a fairly sophisticated management information system.
3. The comparison relies on course grades, which are frequently unreliable, and graduation (drop out) rates, which involve a number of variables unrelated to academic preparedness.

Summary of Pros and Cons. If you can get these data, and you are interested in evaluating your program as it has existed over the past two to three years, this is the best technique of the seven. The only major problem is that your comparison group is not students who needed remediation but didn't

receive it, but students who didn't need remediation. Thus, the benchmark is high; if you approach it, you probably have an excellent program.

Before proceeding to the method of analysis, a comment on differences between two-year and four-year colleges should be made. The express purpose of many two-year schools is to offer the opportunity of college to a diverse population. This inherently necessitates admitting a number of "high risk" students. Consequently, the proportion of students who go on to complete remedial work and obtain college-level credit is often low. The evaluation question is "Given the nature of the admitted students and the degree of their remedial needs, are a satisfactory number of students acquiring college credit?" The issue: "How large a proportion is satisfactory?" is particularly difficult. We can imagine situations where if 15% of entering remedial students receive regular college coursework credit, a positive assessment of the program would result. It depends on what population the college is intending to serve.

For four-year colleges, this is frequently much less of a problem. The point here is that in order to set a reasonable standard, one needs to consider the goals of the program.

Method of Analysis. In order to make these comparisons, grade point averages and/or dropout (persistence) data are necessary for samples of formerly remedial students. For comparing GPA's, an independent samples t-test can be computed. If you have multiple remedial groups (for example, students who took one remedial course, two courses, and so on), a one-way analysis of variance could be used. Do not, however, be overly impressed by the hypotheses tests. What is important to look at is the mean GPA's for

the groups. Whether they are close or not can be assessed by simple inspection. Results might be presented in tabular form as follows:

	No Remedial Courses	One Remedial Course	Two Remedial Courses
Mean GPA after four semesters	2.45	2.36	2.15
SD	.34	.39	.46
N	643	337	259

At the community college level, GPA is often a less meaningful statistic than, say, number of credits completed. A comparison using number of credits completed can be made by using the same methods as above, but simply changing the outcome variable. This could also be displayed graphically.

If you are interested in comparing dropout rates, then the simple percentage of dropouts for remedial versus non-remedial students can be compared. The statistical significance can be assessed by using the chi-square statistic and the table below:

	Dropout	Persister
Remedial	n	n
Non-Remedial	n	n

(Chi-square with one degree of freedom, Yates' correction should be applied)

3. Success in Remedial Courses

A good technique for formative evaluation is the success that students are having in remedial courses. Should your program have positive

results based on technique 2 (comparing remedial and non-remedial students), then this procedure will also provide good information of a summative nature. That is, the argument could be made that "Our formerly remedial students are doing quite well, and our current remedial students are doing well in comparison with their predecessors."

Pros. This technique is probably most appropriate for internal analysis. Questions such as "Are our grading practices consistent?", "How do regular faculty compare to basic skills faculty compare to coadjutant faculty in grading practices?", "What do dropout rates look like by course and section?" can be addressed with this technique.

Cons. This technique is not going to be overwhelmingly convincing outside of the institution. Grading standards vary from instructor to instructor; dropout rates from remedial programs will vary greatly depending on the nature of the student body at the institution. Another problem with this evaluation technique is that if conducted on a section-by-section basis, it could generate substantial negative faculty reaction.

Summary of Pros and Cons. If combined with a strong result from technique 2, this technique is convincing. In the absence of that result, this technique serves primarily internal, formative needs.

Method of Analysis. The best analysis method here would be a simple cross-tabulation of grades (or dropout rates) by course, section or other relevant breakdown as in the table below:

Section	A's	B's	C's	D's	F's	Withdrew
090:101	3(15%)	4(20%)	12(60%)	1(5%)	0(0%)	0(0%)
090:102	6(60%)	2(20%)	0(0%)	0(0%)	2(20%)	0(0%)
090:103	2(8%)	5(20%)	7(28%)	3(12%)	3(12%)	5(20%)
110:101	2(20%)	3(30%)	1(10%)	1(10%)	1(10%)	2(20%)
.
.
.

4. Faculty Satisfaction

Another good method of internally monitoring the remedial program is to assess faculty satisfaction with the program. This can be done with a survey instrument, through interviews, or through a study, where regular faculty are asked to rate a small sample of their students, some of whom are formerly remedial, some of whom are not (more on this later).

Pros. Assessment of faculty satisfaction with the remedial program allows for early identification of trouble spots in the program and also engenders a sense of participation on the part of the faculty. Furthermore, since the faculty are the individuals who work with the "products" of the remedial program, there is a sense of ecological validity to their opinions. That is, if the English faculty is satisfied with the students' abilities following remediation, then the remediation must be successful.

Of course, "faculty" does not mean just those individuals who teach regular college courses, but also includes the faculty who teach remedial courses. Thus, faculty satisfaction has two rather distinct connotations. The satisfaction of the remedial faculty with the remedial

program reflects the professional judgment of those individuals involved in the process, and hence is valuable.

Cons. From an external perspective, there is a certain lack of rigor in asking those people who are performing a task if they think they are doing it well. The opinions of the remedial faculty are thus of primary importance to an internal perspective. The opinions of regular faculty concerning the remedial program provide more convincing data but are difficult to compare from setting to setting. That is, "If faculty at College A are pleased with the remedial efforts of their basic skills program, and the faculty at College B are not pleased, can we conclude that the basic skills program at College A is superior to College B?"

Summary of Pros and Cons. The assessment of regular faculty opinion of formerly remedial students is a good method of ascertaining program efficacy. It is rather difficult to compare ratings across colleges; thus, such ratings do suffer somewhat from lack of interpretability. The opinions of the remedial faculty are an excellent means for the early identification of problems, but are not particularly convincing data from an external perspective.

Method of Analysis. There are three possibilities here. The first is an interview of faculty. This is the method we used in our evaluative efforts. We interviewed faculty in small groups; the groups contained regular faculty, fulltime remedial faculty, and coadjutant remedial faculty. As mentioned in the section on Placement Effectiveness, we do not recommend this as the exclusive procedure for faculty interview. Instead, we would recommend gathering faculty in small groups that were homogeneous with respect to their position within the college. After those interviews have

been conducted, perhaps an interview which cuts across the various types of faculty would be productive. Below is a list of questions that we used in our interviews:

1. What impact have the basic skills placement and remedial programs had on your college?
2. What do you perceive the role of the placement and remedial programs to be?
3. Is there an apparent need to develop any additional or improved evaluation procedures to assess the effectiveness of the placement and remedial programs?
4. What kinds of feedback have you received from students concerning the effectiveness of the placement and remedial programs?
5. What do you see as legitimate concerns of students enrolled in the placement and remedial programs?
6. Do you believe there exist adequate channels of communication for airing of concerns which you might have with the program?
7. How would you rate the basic skills courses in terms of: course relevance, skill development, course expectations, outcome proficiency, and requirements?
8. How much latitude do you have with respect to implementing your own instructional strategies and techniques?
9. Has the college provided sufficient safeguards to assure the integrity and purpose of the basic skills placement and remedial programs for the students?
10. How would you assess the impact of the placement and remedial program on student academic success in regular college English and math courses?

11. How would you evaluate the placement and remedial programs at this college?
12. What suggestions do you have for program improvement?

A second method for gathering faculty opinion data is, of course, a questionnaire. The questions could cover basically the same areas that were covered in the interviews; the format would be different. Also in the questionnaire, you would want to find out information concerning status in the college, years at the college, courses taught, and so on.

A third method for assessing faculty satisfaction with the remedial program would be to set up an experimental study concerning formerly remedial and formerly non-remedial students. Ten (or so) regular courses could be selected and six students identified in each course. The six students would be three formerly remedial students and three non-formerly remedial students. The faculty would be asked to rate the six students in their class (at the end of the course) regarding the students' academic preparedness and performance in the class (the students' status would not be made known to the faculty). Faculty could rate students on several Likert-type items. These ratings could then be used to compute t-tests on the differences between remedial and non-remedial students.

This method is essentially identical to method 3 (Student Success in Future Work) except that the ratings would probably be more reliable than grades. Data analysis and presentation would be the same as in method 3.

This third technique requires some work, but would provide particularly strong data. In most instances, it would be worthwhile if the courses and students selected stayed within a subject area. That is, you shouldn't use formerly remedial reading students in a study involving 10 sections of math courses (unless the students are also formerly remedial math students).

5. Student Satisfaction

A critical component of evaluating any instructional program is the assessment of the students' opinions toward the program.

Pros. Students comprise the group that is most sensitive to the actual workings of the remedial program. Student satisfaction data are not only excellent for internal analysis, they are also fairly convincing from an external perspective. Since being placed into a remedial program is inherently negative in its connotation, if students report a positive experience in the program this is strong evidence of program effectiveness.

In the two college remedial programs that we evaluated, as well as several other evaluations of colleges that we looked at, student evaluations of remedial programs were quite positive. These data might be used in an introduction to the program for newly placed students.

We also found that students enjoyed the opportunity to express their feelings concerning the remedial program. (This aspect of evaluation could actually be incorporated as part of the remedial program.)

Cons. Again as in the faculty satisfaction section, attitudinal data are by their nature subjective. Since the students are the consumers of the remedial effort, their opinions are more likely to be taken seriously from an external perspective.

Summary of Pros and Cons. Student satisfaction data are important and would be expected to be included in an evaluation of an instructional program concerning those students.

Method of Analysis. Two methods might be employed to assess student satisfaction with the remedial program. The first would be to interview the students. We found the approach described in the Placement

Effectiveness section to be quite useful. The questions that we posed in that interview concerning remedial effectiveness were:

1. Have you found the basic skills courses to be:
 - a. Relevant to your needs?
 - b. True to course outline?
 - c. Reasonable in terms of expectations?
 - d. Important to your success in the next basic skills course in your sequence?
 - e. Important to your success in regular college English and math courses?
2. Has the College provided sufficient safeguards to assure the integrity and purpose of the basic skills program for the students?
3. How would you evaluate the placement and remedial programs at this College?
4. How satisfied are you with the services offered by the Placement Office?
5. What suggestion/s would you make for improving the program?

A second method would be to survey student opinions with a questionnaire. In Appendix C there are several questionnaires which could be used to assess student opinion of remedial program and course effectiveness. The construction, analysis and presentation of questionnaires would be the same as discussed in the section on student satisfaction in Placement Effectiveness.

6. Analysis of Curriculum

A method for insuring consistency of instruction as well as for improving the match between the remedial program and the needs of students in regular courses is a critical analysis of the curriculum.

Pros and Cons. A critical analysis of the curriculum allows for the two positive benefits mentioned above. What it does not provide is information concerning whether the curriculum is well-implemented or particularly effective in real life. Of course, techniques 1 - 5 address those issues.

Method of Analysis. Analyzing the curriculum in a particular subject area would require professionals from that area to generate a list of objectives or behaviors that should be included in instruction. It might be worthwhile, for example, to have several regular math faculty members develop such a list of objectives which should be mastered before entry into the first regular math course. First, once the list of objectives exists, the curriculum of the math sequence can be matched to the objectives to look for gaps in the curriculum. Second, several remedial math instructors could indicate which objectives were covered in their math classes. In this way, the curriculum (as it exists in the mind of the remedial program director) can be matched against the needs of students as expressed by regular math faculty. Third, the actual math curriculum (as it is taught in classes) can be matched against the curricula of the math faculty and the remedial program director.

Analyses such as the one described above may well have taken place at the inception of the remedial program. It might be worthwhile to run through that process again to check for slippage over the years.

7. Evaluation of Labs and Tutorials

Many colleges use labs or tutorial sessions. These are an important part of the instructional process, but it is rather difficult to assess their impact.

Pros. Evaluation of labs and tutorials is a necessity. As is the case with most things, they can be run poorly or well. Attendance rates and student satisfaction are good indicators of the success of labs/tutorial sessions.

Cons. It is almost impossible to assess the cognitive growth of students as a result of their participation in a lab or tutorial session. Hence, the data gathered must be attendance data or attitudinal.

Method of Analysis. Below are examples of the lab/tutorial recordkeeping system and evaluations from Camden County College which would serve well as an example of how to provide for evaluation of lab/tutorial sessions.

Name of Lab: MATH LAB - FALL 1979

Date: 12/27/79

Campus: _____

Specialist: _____

Table I	Course Name BNS I	Course Name BNS II	Course Name CM I	Course Name CM II	Course Name Other	TOTAL
DAY	# students 27	68	50	18	50	213
	# visits 97	212	204	72	172	757
EVENING	-	-	-	-	-	-
TOTAL	27	68	50	18	50	213
	97	212	204	72	172	757

Table II	Course Name BNS I	Course Name BNS II	Course Name CM I	Course Name CM II	Course Name Other	TOTAL
1 visit	# students 10 37% percent	30 44%	17 34%	6 33%	15 30%	78 37%
2-5 visits	13 48%	28 41%	24 48%	8 44%	23 46%	96 45%
6 + visits	4 15%	10 15%	9 18%	4 22%	12 24%	39 18%
Total	# students 27	68	50	18	50	213

Name _____
Last
First
Initial

Ac. Sec. _____ Term _____
/
/
/
Semester
Yr.

Course _____ Number _____
/
Sec.

Instructor _____

Reading Writing Math

Other _____

- Effort: 1. = adequate
 2. = inadequate
- Progress: 1. = excellent 3. = minimal
 2. = satisfactory 4. = none
- Recommendation: 1. = no further tutoring
 2. = additional tutoring
 3. = regular tutoring necessary
 4. = refer to counselor

Date	TIME		Assistance Provided	E	P	R
	In	Out				



SPECIAL STUDIES

As mentioned in the introduction to this document, the ESEA Title I evaluation models were considered as possibly being applicable to college basic skills remedial programs. After such consideration, it was determined that none of those models were directly appropriate for college basic skills remedial programs. The models may however, be useful for special studies that a college might wish to conduct. In this section, we will briefly describe the three Title I models and suggest what utility they may have for college remedial programs.

1. The Treatment/Control Group Design

This is a classic experimental design in which students are placed randomly into a treatment or control group and then tested at the end of the remediation to examine treatment/control differences. The problem with this design is that it requires placing children who need remediation into a "no-remediation" situation which is clearly undesirable.

There could be a use of this design for college remedial programs. If the basic skills office is interested in the efficacy of an alteration of the remedial program, or in a new instructional technique, this new program can be examined with this model. Students could be randomly assigned to the new program (or programs) or to the existing program. At the end of the semester, measures can be taken on achievement or attitude of the students. (If students are randomly assigned, no pretesting is necessary.) These data are then subjected to a t-test analysis (if there is just one experimental treatment), or to one-way analysis of variance (if there is more than one treatment). This procedure will provide a rigorous test of a new program.

2. The Standardized Control Group Design

In this design, standardized tests are used to provide a "national control group" which is based on the performance of a representative sample of children from across the nation. This is clearly not possible in the college remedial setting. The closest approximation to it would be to use the cut-off scores for placement into remedial sections as a quasi-control situation. The basic evaluative argument here would be to show that students who have gone through remediation would no longer be placed into that remedial course based on their posttest results. This would allow for a table such as the one below to be constructed.

% of Reading I Students Who Would Place Into Reading II Based on Posttest NJCBSPT Results		% of Reading II Students Who Would Place into English 101 Based on Posttest NJCBSPT Results	
Section 101	Section 102	Section 201	Section 202
48%	86%	60%	56%

3. The Regression Discontinuity Design

After examining the literature on the regression discontinuity design and relating it to college remedial programs, the authors felt that this design is inappropriate for any kind of college remedial program. It is an interesting evaluative idea, but appears to have too many difficulties in implementation to be of practical value.

Other Studies

There are two other studies that colleges may wish to carry out that we will discuss in this section. They are more appropriately labelled research than evaluation, so we did not discuss them in earlier sections.

1. Examining Alternative Placement Rules

Under any placement system, you are going to end up with students

who barely placed out of a remedial course and students who barely placed into it. Since these students were very similar in their academic abilities it would be interesting to follow the two groups through your college. This could be accomplished by first identifying two such groups, say, 20 students who barely placed out of the highest remedial reading course and into the first English course, and 20 students who barely missed the first English course. The grade point averages, dropout rates and attitudes (academic self-concept, feelings toward the college, and so on) can be compared for the two groups.

The real attractiveness of this idea is that you needn't wait two or three years for results to come in. You can run this study by going back two or three years and identify student's who are now in their fourth or sixth semester.

Another idea related to this is to generate several alternative placement procedures to the ones you have. Apply these procedures to students and identify the following groups:

Old Procedure

		Remedial	Not Remedial
New Procedure	Remedial		
	Not Remedial		

Again, gather the data mentioned in the earlier discussion and and you can make comparisons to answer these questions:

1. How well do students do who would be remedial under the new system but weren't under the old system?

2. How well do students do who would be remedial under old system but not under the new system?

There are probably other possibilities here also. The basic idea is to use the existing data and decisions to examine possible alterations.

2. Examining Levels of Remedial Identification

Some colleges do not notify students of the fact that they need help in basic skills, but do notify the faculty in the courses they take of their needs. The idea is to have the faculty provide help to the students without having students feel that they are second-class citizens.

This is an intriguing idea and there are many possible variations of it:

1. Students could be assigned volunteer peer tutors such that only the tutor and the student knew that students were in need of remedial help.
2. Peer tutors and faculty (as described above) could be made cognizant of students' remedial needs.
3. Students who have remedial needs could be informed of those needs and then offered a variety of remedies (courses, labs, tutorials, peer tutors, direct faculty course help).

An experiment such as this is clearly not appropriate for all colleges and should be entered into with great care and considerable planning. These ideas have been successful elsewhere, however, and may be worth trying at your institution. Evaluation of these ideas could be effected by using the first evaluation design mentioned in this section.

Summary

The purpose of this Special Studies section was to encourage colleges to make an ongoing effort at improving their programs. The first

three sections of this document (Program Documentation, Placement Effectiveness, Remedial Program Effectiveness) focused on formative evaluation more as a "fine-tuning" device. In this section we hope to have encouraged you to try some more dramatic alterations occasionally.

REFERENCES

Buros, Oscar Krisen, Ed. The Eighth Mental Measurements Yearbook. Two volumes. Highland Park, N.J.: Gryphon Press, 1978.

Drakulich, Scott. The Opinions of New Jersey Junior College Basic Skills English Students of the New Jersey College Basic Skills Placement Test (NJCBSPT), the Advisement Experience, and Appropriateness of Advice. Ed.D. dissertation, Rutgers Univ., 1980.

Hecht, Lawrence W. Validation of the New Jersey College Basic Skills Placement Test. Princeton, N.J.: Educational Testing Service, September 1980.

ANNOTATED BIBLIOGRAPHY

Introduction:

The following is an annotated bibliography of a number of articles yielded from two different computer searches. They are listed according to:

- Title
- Author
- Source
- Annotation

Reports from the Education Research Information Clearinghouse (ERIC) System are available from any ERIC facility for a nominal fee. (You must have the ERIC System No. to order)

The reports are categorized according to the following areas:

- I Reports on Institutional Studies
- II Research on Basic Skills Programs
- III Basic Skills Evaluation Methodology
- IV Bibliographies, Reviews, Overviews.

The reports in this bibliography give an overview of research done in the area of Basic Skills. The intent of their inclusion is to direct interested parties to the work done in this area.

I. Reports on Institutional Studies

Title: A Follow-Up Study: How Do Basic Skills Students Compare with Non-Basic Skills Students in Some of Their Subsequent College Courses?

Author: Bergman, Irwin; Gerace, Robert

Source: ERIC System No. ED 135435 JC 770164

Annotation: The academic records of over 2,000 students who were required as a result of their national percentile scores on the Cooperative English Examination to take a remediation course in reading and writing skills during their first semester at Queensborough Community College (New York) were compared to the academic records achieved by an equal number of students who were not required to take a remediation course. The basis of comparison used was the grades received by both groups of students in various introductory academic courses taken one semester after the remedial students had taken their required reading and/or writing course. The same survey was conducted the following year with the new class of incoming freshmen. In both years of the study, the academic performance of the former remedial students with regard to the percentage of passing grades they received was very comparable to the percentage of passing grades received by the non-remedial students. The implications may be useful for evaluating programs given to underprepared students in two-year colleges. Extensive tabular data are appended.

Title: Effects of the Basic Studies Program on the Scholastic Performance of a Selected Group of Low-Achieving Students Enrolled at Bucks County Community College During the 1973-1974 Academic Year.

Author: Rosella, John D.

Source: ERIC System No. ED 119794 JC 760188

Annotation: Bucks County Community College's Department of Basic Studies is a comprehensive developmental education program which involves work for credit in basic academic skills--reading and study skills, writing and mathematics. In addition, special counseling is given to students in order to change negative habits and attitudes, and to develop a more positive self-image. During the 1973-74 academic year, a study was conducted to determine the effect of the Basic Studies Program. Students included in the study ranked in the bottom 40 percent of their

high school graduating class and scored at the 25th percentile or below on the Comparative Guidance and Placement Test. This study contrasts 86 students participating in the Basic Studies Program (experimental group) with 97 nonparticipants (control group). The average GPA earned by the experimental group was 2.285, while the control group earned an average GPA of 1.77, a difference which was statistically significant. While 75 (87 percent) of the experimental group participants returned to Bucks for the fall 1974 semester, only 59 (61 percent) of the control group returned. The experimental group also proved to be more successful in English Composition I and mathematics than the control group. They more frequently earned grades of "C" or better, and showed more persistence. Tables of data are appended.

Title: Do Remedial Programs Really Work?

Author: Losak, John

Source: ERIC System No. ED 045975 TM 000335

Annotation: Selected aspects of the remedial reading-writing program of Miami-Dade Junior College were evaluated. Placement in the program was designed as the independent variable. Grade point average, reading and writing test scores, continuation in college, and performance in regular college courses were dependent variables. Students earning a raw score of 22 or less on the School and College Ability Test, Form 1A, Verbal, were classified as academically underprepared for college-level work and were required to enroll in the remedial program. Results indicate that the program does not produce any meaningful differences in student withdrawal from college, is not effective in raising grade point average during the second semester of college enrollment to a "C" level, and does not result in significantly higher scores on a reading or writing test when compared with the control group scores. The remedial program produced no differential effects by race or sex. A paradigm for devising remedial programs is suggested.

Title: A Multivariate Analysis of a Special Studies Program.

Author: Brown, Sidney E.; Ervin, Leroy

Source: College Student Journal, v12 n4 p379-81 Win 1978 78

Annotation: The differences between two groups of students (17 Blacks and 23 Whites) were examined on the basis of participation and nonparticipation in a special studies program designed

primarily to meet the needs of minority and disadvantaged students. Participating students met with more academic success than nonparticipating, irrespective of race.

Title: A Study of Remedial Reading Courses (BE-03) Offered During the Fall, 1972 Semester: A Baseline for Longitudinal Studies.

Author: Cohen, Edward G.: And Others

Source: ERIC System No. ED 144653 JC 770466

Annotation: This study was designed to determine whether or not students assigned to remedial reading courses at Queensborough Community College were actually improving their reading skills. Students (1,543) who scored below 33% on the Reading Comprehension Subtest of the Cooperative English Test (COOP) were divided into four classes of ascending ability and two mixed classes. At the end of the semester all were post-tested using the same test. Scores were compared in vocabulary, level of comprehension, speed, and total reading. Mean scores for each class increased significantly in all four variables. Analysis of variance tests showed the groups to be distinctive from each other, and significantly different on each variable. Students at each reading level progressed on the post-test to the level of the pre-test of the next highest group. A comparison of final grades and the COOP post-test showed more agreement in classes of higher reading ability; 32% of those in the highest group failed COOP, and .6% of that group failed the course, while 77.6% of the lowest group failed COOP, and 33.3% of that group failed the course. Overall, 40.2% reached an acceptable reading level according to COOP, but final grades yielded a success rate of 86.9%. Tukey multiple comparison tests on pre- and post-test scores and frequency tables for the four reading levels are appended.

Title: Description of a Compensatory College Education Program For the Disadvantaged and Its Associated Research and Evaluation Program.

Author: Spuck, Dennis W. and Others.

Source: ERIC System No. ED 042827

Annotation: This paper reports on a large-scale project of research and evaluation of a program for disadvantaged minority group students conducted by the Center for Educational Opportunity at the Claremont Colleges. The Program of Special Directed Studies for Transition to College (PSDS), a five-year experimental project, is aimed at providing a four-year, high quality college education

(4)

for educationally and economically disadvantaged minority group students. Forty students were admitted in 1968 with full financial support. A three-week orientation program tailored their course load to their abilities and interests, with adequate and individualized counseling. Two years are allowed to qualify for regular admission with no grades recorded on the permanent transcript during this time. The research intrinsic to the program is for the purposes of: (1) investigating the consequences of special collegiate arrangements; (2) evaluating and accounting for areas of success and failure; (3) making research available locally and nationally; and, (4) providing bases for desirable changes in PSDA and other programs. The research design is a pre-test, post-test control group allowing for analysis of test scores. The multivariate definition of "success" and evaluative measures to be used are included.

Title: The University Learning Laboratory: Meeting Student Needs in the '70's.

Author: Nayman-Robbie. and Others

Source: ERIC System No. ED 128688

Annotation: College and University Learning Centers have evolved from narrowly defined remedial services to agencies serving the entire student community. The changing role of Learning Centers necessitates systematic program evaluation and assessment of student needs. During 1975, the Colorado State University Learning Laboratory staff collected data on client characteristics and client perceptions of learning laboratory programs. Results are presented and major findings are discussed. (1) The University Learning Laboratory serves a diversified clientele including students with all levels of academic functioning. (2) Needs of learning laboratory clients can be appropriately categorized as remedial, preventative and developmental, following the model of Morrill, Oetting and Hurst (1974). (3) A large majority (70-80%) of clients responding to the survey had favorable attitudes toward learning laboratory services. (4) One-half to two-thirds of clients responding to the survey agreed that the learning laboratory had helped them to develop skills, improve academic performance and enrich their learning experiences. (5) Recommendations are presented for continuous assessment of student needs to allow the learning laboratory to respond to changing campus conditions.

Title: Evaluating and Auditing a Community College Learning Skills Center Program: Second Year.

Author: Cohen-Benjamin, Barbara; Olson, Gerald T.

Source: ERIC System No. ED 138331 JC 770263

Annotation: An evaluation of Los Angeles City College's Learning Skills Center (LSC) was conducted in order to ascertain the nature of the LSC's outcomes. The LSC offers students an opportunity to participate in diagnostic and prescriptive open-entry open-exit programs in an individualized setting. Types of programs available through the LSC include communication skills, quantitative skills, and tutoring in other college-level courses. The evaluation of the LSC considered three specific areas: the first consisted of analyses of data gathered in relation to specific program objectives, the second examined unexpected spinoffs, and the third considered the humanistic characteristics of the LSC. Results of the evaluation indicated: (1) students who utilized the LSC's services in the areas of basic math, basic English, accounting, business, and chemistry were associated with significantly lower dropout rates than were students who enrolled in these courses but did not utilize the LSC; (2) the LSC had gained the support of the Academic Senate and a number of departments traditionally opposed to remedial courses; and (3) numerous students who had used the LSC offered favorable personal evaluations of the Center. A critique of the causal-comparative method employed in the study is included.

Title: Factors in Remedial Education. The Case Study of an Alternative School.

Author: Millonzi, Joel; Kolker, Aliza

Source: ERIC System No. ED 135425 JC 770154

Annotation: The Middle College High School, an experimental school at LaGuardia Community College (New York) which incorporates the last three years of high school and the first two years of college, was designed for adolescents of average ability but deficient computational and communication skills. Remediation was viewed as a social as well as instructional process; the remedial strategy involved academic and personal counseling and basic skills instruction in a small, personal setting. This study was designed to isolate and analyze the remedial aspects of the program's social structure and functions. Participant observation data were collected over

a three-semester period, focusing on instructional methods and content, motivating devices and failure management techniques, counseling patterns, discipline management, and interface between the Middle College and the college. Interviews were also conducted with staff and samples of students. The data indicated that the strongest component of the program was its small size and that the college environment facilitated student motivation, but that the counseling component fell somewhat short of its potential due to teacher/counselor uncertainty over non-traditional role expectations. The overall impact of basic skills instruction was found to rank behind that of size, setting, and counseling.

Title: A Study of Remedial Algebra Courses Taught At Queensborough Community College: Spring and Fall 1973.

Author: Cohen, Edward G.; Diamond, Arnold H.

Source: ERIC System No. ED 144654 JC 770467

Annotation: A study of 159 students assigned to remedial algebra courses was initiated at Queensborough Community College to determine levels of improvement in algebraic skills and the effects of regular, programmed, and modular teaching methods. All students studied the same material with the following differences: (1) regular instruction used no programmed or modular techniques; (2) programmed sections used pre-testing to decide individual areas for study; and (3) module students were placed in one of four instructional levels according to pre-test scores, and completed from one to four modules. The Cooperative Math Test: Algebra 1, was used for placement/pre-test, and as a post-test after final class examinations. Mean scores of all sections increased from pre- to post-test; all increases were statistically significant. Analysis of covariance showed no statistical difference among means of the three instructional groups. However, modular and programmed methods required less student time for completion, although only in modular sections could students actually complete the course in three, six, or nine weeks. Sampling was dependent on teacher cooperation. Future research relating to all remedial sections is recommended. Mathematics requirements by curriculum are appended.

Title: Evaluation of College Learning Center Instruction in Six Subject Areas, Spring 1975.

Author: Tatham, Elaine L.; And Others

Source: ERIC System No. ED 110141 JC 750448

Annotation: This study evaluates the success of Johnson County Community College's College Learning Center (CLC) in helping students to improve specific skills in six areas: spelling, vocabulary, English, mathematics, reading comprehension, and reading rate. The CLC offers individualized programs which employ a combination of self-instructional materials and individual tutoring. Data were analyzed separately for the spring 1972-summer 1973 and fall 1973-summer 1974 periods in order to detect any difference in the success patterns of CLC instruction. Evaluation was based on analysis of gains in performance for every student participating during either period. The average gains represented significant improvement from pre-test to post-test in all six areas; the improvement was similar for both time periods. Statistical data is presented graphically for each subject. Appendix A describes the six courses and their pre- and post-tests. Appendix B lists supplementary instructional materials for the six programs.

II. Research on Basic Skills Programs

Title: Proceedings of the National Conference on Remedial/
Developmental Studies in Post-Secondary Institutions. '77

Source: ERIC System No. ED 152882

Annotation: This Conference was called to discuss the need for, and the strategies used in, Implementing Basic Skills Remediation at the College and University Level. All levels of Higher Education were represented, as well as research professors, elementary, secondary, and post-secondary school administrators and teachers, representatives of the business and governmental communities and individuals from the community at large. Among the issues that were discussed were whether universities should be teaching remedial courses and whether credits should be given for these courses when they are taught. It was noted that when thinking about programs of remediation, writing should be stressed instead of reading. The assumptions that guide remediation programs, and the goals of remediation programs must be carefully thought about prior and during program planning. It was noted that although universities have made an effort to seek minority students this trend has declined. In addition, although universities can be elitist with regard to their admission policies there are some that have departed radically from this position. Both of these factors shape the form of

programs that intend to remediate the difficulties experienced by minority students. Furthermore, whether programs should be based on the disadvantage of students, or the differences among students is another important concern guiding remediation/developmental programs.

Title: Developmental Program Primes High-Risk Students.

Author: Milander, Henry M.; Simmons, George A.

Source: ERIC Systems No. EJ 040939

Annotation: As community colleges open their doors to a wider range of students a variety of programs must be designed to develop basic skills in underachievers.

Title: Basic Skills Programs: Are They Working?

Author: Grant, Mary Kathryn; Hoeber, Daniel R.

Source: ERIC System No. ED 159918 HE 009659

Annotation: Basic Skills programs are now almost a given in the curricula of postsecondary institutions; however, the key area of concern of basic skills researchers is, Are they working? The answer is two fold: yes, those involved in and committed to the programs are working very hard, and no, the programs themselves are not working very well. There is a dearth of empirically based evaluation research on the programs. The following are important in the discussion of basic skills programs: a historical perspective of governmental and institutional policies that have been challenged by the need for basic skills programs; the nature of the student who enters a program; a generalized description and definition of basic skills programs; and the conclusion drawn by some researchers that the existing compensatory programs have done very little toward eradicating the academic problems of disadvantaged college students.

Title: A Center for Communications Skills.

Author: Coons, Daniel E.

Source: ERIC System No. ED 127607

Annotation: The nationwide problem of declining communication skills is evident in the large numbers of students entering college with de-

iciencies in reading, writing, and speaking skills. This paper discusses the operation of a communication skills program within a college communication skills center which functions as a supportive resource service and provides students with the basic communication tools for academic achievement and self-image improvement. The discussion focuses on reading, writing, and speech programs, as well as on the staffing of a center, on the selection of students for a skills program, and on the evaluation of a skills program. The paper concludes that the success of a communication skills center may be measured by the number of students completing the program, by the reduction in the college drop-out rate, and by the improvement in test scores of graduate students.

Title: Opportunity Programs for the Disadvantaged in Higher Education.

Author: Gordon, Edmund W.

Source: ERIC System No. ED 114028

Annotation: Numerous federal, state, and institutional projects have been undertaken in the areas of current educational opportunity programs for the disadvantaged, but there is still a need to bring about significant changes in the areas of administration, curriculum, program evaluation, and financial assistance. The state of compensatory education at the college level and the equivocal status of evaluation efforts is confused, but some conclusions can still be drawn. Where programs have been implemented with full systems of student support services, special opportunity students showed equal or higher grade-point averages than regular students of comparable ability, equal or higher retention rates, and increased self-esteem and motivation. Where special opportunity students are selected on the basis of previously demonstrated talent, college completion rates exceed those of the traditional college population. Some student support services that show promise include: full systems of student support services, services that provide protection from an impersonal atmosphere, remedial courses based on specific needs, programs which give attention to the socio-political life of the students, behavior modification, course content that complements the nationalistic concerns of students, developmental programs in test taking and study habits, and programs that prepare adolescents in the transition from high school to college.

Title: Developmental Education: A Primer For Program Development and Evaluation.

Author: Roueche, John E.; Roueche, Suanne D.

Source: ERIC System No. ED 148237

Annotation: Addressed in this book is the problem encountered by institutions as more students have entered colleges without adequate preparation in the basic subject areas--communications, mathematics, and science. To accommodate the diversity in the new student populations, varying instructional methods are required. Developmental education programs need therefore to be measured for quality and effectiveness. Aspects of program development to be considered are: an overview of developmental studies programs; institutional commitment; program design components; staffing; and consolidating all the elements. Program evaluation takes into consideration the essential data and personnel, and the development of an evaluation design for developmental education. A survey instrument for program evaluation is included, along with a four-page bibliography.

Title: Equal Opportunity in Higher Education. The Current State of the Art and Recommendations for Change and a Review of the Studies of the Programs.

Author: Gordon, Edmund W.; Fahrer, Kimberly.

Source: ERIC System No. ED 123331

Annotation: These two articles focus on opportunity programs in Higher Education, the first of which notes that the state of the art of designing and delivering these programs is confused, contradictory, and yet encouraging. Positive and negative research findings and program variation contributes to the confused state of the art. Another problem concerns the indicators used to define the target population. These may be insufficiently sensitive to either plan adequately for educational experiences or to evaluate program effectiveness. The status of the programs is contradictory in part because the roles and purposes of the institutions in which they exist are contradictory. Overall, effects of programs is positive, even if limitedly so. When adequately supported and implemented, college completion rate is high and attrition low. Among recommendations for change include the following: the establishment of free or low cost continuing post secondary education, development of improved diagnostic assessment technology, and

matching of student characteristics to institutional capabilities. A review of the studies of the program is provided in the second article, which notes that policy changes have occurred in three broad areas in the structure of Higher Education: Admissions/recruitment, financial aid, and curriculum. The practical responses to the necessity for change in these areas are then discussed as well as the theoretical issues involved.

III. Basic Skills Evaluation Methodology

Title: Needed: Systematic Evaluation of College Remedial Reading Programs.

Author: Deem, James M.

Source: ERIC System No. ED 163410

Annotation: Although, as an important component of any basic skills curriculum, college remedial reading programs need to be objectively and fully evaluated, no comprehensive, systematic procedures have been developed for this purpose. Three guidelines should be followed in evaluating college remedial reading programs: first, appropriate variables that allow for maximum input must be selected; second, the evaluation must cover not only the performance of the students in the program but the entire program itself; and, finally, the end result of the evaluation must be program improvement. Since no complete evaluation model has been developed to aid college remedial reading program directors, directors must rely on the few evaluation models that have been proposed. Until meaningful systematic evaluations of college remedial reading programs can be carried out, the success of such programs and their various methodologies--in short, the need for such programs--will be seriously questioned. (The paper includes an outline of one model for program evaluation and a bibliography of relevant readings.).

Title: Human Diversity, Program Evaluation and Pupil Assessment; And, A Critical Review of Black Consciousness, Identity And Achievement.

Author: Gordon, Edmund W.; Grannis, Joseph C.

Source: ERIC System No. ED 141451

Annotation: The first of two papers included in this document addresses two related problems: problem one: the appropriateness of

existing standardized tests of achievement for the assessment of academic function in minority and disadvantaged group member students. Problem two: the appropriateness of such instruments for the assessment of the impact of large-scale educational programs. Gordon asserts that "The problem of large-scale evaluation... is larger than one of what kind of achievement tests to use." It may be that we could endure the problems related to the tests if we were better able to deal with such problems as the following: 1) The nebulosity and variability of treatments, 2) The complex economic, political, and social context in which the treatments are set, 3) The diversity of populations served and goals sought, 4) The reconciliation of necessary and sufficient conditions, and, 5) Such limitations of evaluative research technology as: program and population specification, program and population sampling, interchangeable and dialectical nature of the dependent and independent variables, inappropriateness of extant statistical analyses for the study of the dynamic blending of variables by which effects may be explained, the policy of the best generic treatment, and, normative approaches to aggregate data in search of relationships that may be idiosyncratically expressed. The second paper in this document critically reviews the book "Black Consciousness, Identity and Achievement," by Patricia Gurin and Edgar Epps, New York: John Wiley, 1975.

Title: Higher Education Equal Opportunity Program: 1974-75 Annual Report. Pennsylvania Dept. of Education, Harrisburg.

Author: Brehman, George E., Jr.; McGowan, Kristine A.

Source: ERIC System No. Ed 154047

Annotation: Part of this report gives the 1974-75 survey findings and distribution of Quality Point Average (QPA) of the 44 programs set up under Pennsylvania's Higher Education Equal Opportunity Program (Act 101) established in 1971. The program is supported entirely by State funds which are distributed to postsecondary degree granting institutions to maintain learning and special counseling services for disadvantaged undergraduate students. The report also provides an analysis of the relative effectiveness of the tutoring and counseling aspects of the Act 101 programs in Pennsylvania's institutions of Higher Education. It covers specifically the design of the study and findings. The findings are discussed separately as follows: (1) tutoring effectiveness by institutional category; (2) counseling effectiveness by institutional category; (3) institutional ranking for tutoring; (4) institutional ranking for counseling; and (5) patterns of overall program effectiveness. It is concluded that there

is a positive correlation between hours of intervention (either tutoring or counseling) and achievement (Quality Point Average).

Title: Statewide Assessment of Developmental/Remedial Education at Maryland Community Colleges.

Author: Linthicum, Dorothy S.

Source: ERIC System No. ED 175514 JC 790505

Annotation: A study was conducted to determine the scope and characteristics of developmental/remedial activities in Maryland's 17 community colleges in terms of objectives and goals, courses and activities, student information, costs and revenues, and administration and organization. The study revealed: (1) 15 colleges offered developmental education for credit in English and mathematics; (2) 15 colleges offered courses in reading and/or study skills, and provided tutoring, counseling, and self-paced instruction; (3) total enrollment in remedial courses in fiscal year (FY) 1978 was more than 42,000--30,000 in credit courses and 12,000 in continuing education courses; (4) direct costs for FY 1978 totaled about \$3.4 million (direct remedial instructional cost for each remedial full-time equivalent (FTE) student statewide was \$931); and (5) developmental programs tended to be decentralized, with most programs conducted within academic departments. Another aspect of the study involved measuring a sample of students enrolled in developmental English courses at eight colleges against the success of a sample of students enrolled in English 101. Developmental students tended to complete fewer college-level English courses and make lower grades than the control group. The study report considers the implications of the findings in terms of placement, open admissions, professional development, organizational structure, evaluation, and funding.

Title: Evaluating the Effectiveness of the Special Higher Education Opportunity Programs Financially Assisted by New York State.

Source: ERIC System No. ED 105054
(Expenditure Review, NY State Legislative Commission)

Annotation: This program Audit evaluates the effectiveness of the Special Higher Education Opportunity Programs financially assisted by New York State in the four year public and private Universities and Colleges in the State. These programs are officially identified as: seek--search for education, elevation and knowledge (1966)--the program at the City University of New York; EOP--Education Opportunity Program (1967)--the program

at the State University of New York; and HEOP--Higher Education Opportunity Program (1969)--the program at the private Universities in New York State. This audit compiles statistics to evaluate and compare the performance of the programs for the disadvantaged in selected units of participating Universities and Colleges. Comparisons are made between the "disadvantaged" group and the "regular" College population and between the "disadvantaged" group and students in the "open" admissions group at the City Universities. Information and statistics used in the audit come from three primary sources: reports which have been submitted by the State Education Department, SUNY and CUNY, a detailed sample questionnaire asking for specific information in the same format for 26 selected schools; and a 10 percent random sample of the average annual enrollment in the program for the disadvantaged at these selected schools.

Title: Evaluation of Remedial Programs in Community Junior Colleges: Community College Presidents' View.

Author: Gwynne, Margaret; And Others

Source: ERIC System No. ED 089810 JC 740119

Annotation: This report describes a survey which was conducted to determine community junior college presidents' views of how to evaluate remedial programs. Questionnaires were mailed to 166 schools in the New England and Middle Atlantic States. Since no institution forwarded a copy of any formal evaluation guidelines, it is suggested that very few of the community college sample have any formal evaluation of remedial education courses or programs. It was found that the faculty was involved in program evaluation in more than half the community colleges responding and the academic dean in slightly less than half. The questions and responses are included in the report.

Title: An Analysis of a Multidimensional Success: Measure for PSDS Students.

Author: Spuck, Dennis W.

Source: ERIC Systems No. ED 043667 TM 000115

Annotation: The Program of Special Directed Studies (PSDS) identifies persons with intellectual ability whose academic achievement, as indicated by traditional measures, is inadequate to secure admission to selective colleges. Then, through a program of supervised college courses, special services and individual

tutoring, it attempts to prepare these students for a standard degree program. This study seeks to expand the concept of success, traditionally measured by grade point average, into a multidimensional measure which includes grade point average, student self-evaluation, and evaluation of students by faculty. These evaluations are compared with those of regularly enrolled students. A detailed description and analysis of the data derived from the 40 students involved in the program at the Claremont Colleges is presented. Use of this multidimensional measure of success seems to indicate the effectiveness of PSDS.

Title: A Systems Analysis and Evaluation of a Junior College Developmental Studies Program.

Author: Sparks, June R.; Davis, Cynthia L.

Source: ERIC System No. ED 13 892 JC 770231

Annotation: This paper describes the structure and operation of an evaluation system for the developmental education program at Dalton Junior College (Georgia). All applicants for admission to the college who score below 330 on either section of the Scholastic Aptitude Test are required to take the Comparative Guidance and Placement (CGP) test to determine their proficiency in various skills. Those falling below the institutional cut-off point on the CGP are required to complete Special Studies courses before being admitted to college credit courses. Students may exit from a Special Studies course by completing the course requirements and scoring above the cut-off point on the CGP in that area; otherwise they are advised to enroll in the next sequential developmental course. In order to monitor student progress, an evaluation system is utilized which allows identification, testing, registration, and accounting for every Special Studies student. This system also allows followup studies of subsequent student progress in credit courses. Among the methods used to evaluate the program are analyses of CGP score differentials and retention rates in subsequent credit courses. Included in the paper are graphic representations of the Special Studies program and the evaluation system. Special Studies course descriptions and content objectives are appended.

IV. Bibliographies, Reviews, Overviews.

- Title: Special Secondary School Programs For The Disadvantaged:
An Annotated Bibliography of Doctoral Dissertations.
- Author: Jablonsky, Adelaide Comp
- Source: ERIC System No. ED 102223.
- Annotation: This annotated bibliography is the seventh in the doctoral research series. It encompasses doctoral research on "Special Secondary School Programs for the Disadvantaged" reported in "Dissertation Abstracts International" from 1965 through June 1973. The citations are arranged in the following categories: College Preparatory Programs (Upward Bound, Project Opportunity, Other Programs), special programs (Vocational, Outward Bound, Other Programs), follow-up studies, and history and evaluation. Under these categories, citations are presented in order of year of completion. Where a number of citations appear in a category and in the same year, they are arranged in alphabetical order by name of author. A subject index, an author index, and an institution index are appended.
- Title: Developmental Education: A Rapidly Expanding Function.
- Author: Lombardi, John
- Source: Community College Review, v7 n1 p65-71 Sum 1979 79
- Annotation: Discusses four phases of developmental education in community colleges: pretransfer, handicapped, remedial, and adult basic education (ABE). Reviews literature regarding enrollments, program costs, faculty attitudes, and program effectiveness in each area.
- Title: Developmental Education: Does It Work?: An ERIC Review.
- Author: Hill, Andrew
- Source: Community College Review, v6 n2 p41-47 Fall 1978 78
- Annotation: Reviews developmental education programs stressing the need for institutional research to determine the viable parts of such curricula in view of cutbacks being made of costly

programs. Discusses factors causing insufficient skills in students, considers program evaluation, and reviews six established developmental programs.

Title: Overview of Developmental Studies for Occupational Students: A Sourcebook for Post-Secondary Programs. Research Publication 76-4.

Source: ERIC System No. ED 128031 JC 760467

Annotation: This publication is intended to be used as a sourcebook and reference by practitioners interested in postsecondary developmental programs, with a particular focus on occupational students. The information presented was derived from a statewide survey of staff members involved in the operation of developmental programs in 51 two-year colleges and 10 Educational Opportunity Centers in New York State (58% responded). Part I, State of the Art, compiles the survey data regarding college and student characteristics, developmental program characteristics, program components, and ratings of program success. Part II, Program Descriptors, describes a composite mythical most successful developmental program, and compares survey responses by the various types of institutions surveyed to the composite profile. Part III, Program Resources, lists recommended resources for reading, writing, study skills, math, and vocational-personal/decision-making programs in regard to desired outcomes, standards of success, strategies/approaches, measurement tools, instructional materials, and modes of instruction, and compiles consensus recommendations for programmatic standards. Part IV, Human Resources, lists respondents willing to serve as contact persons.

Title: The Junior College Remedial Program.

Author: Roueche, John E.

Source: ERIC System No. ED 013661 JC 670938

Annotation: A review of 20 documents in the ERIC Clearinghouse for Junior College information was the basis for this report on remedial instruction. Most Junior Colleges, having an "Open Door" admission policy, are enrolling increasing numbers of low ability students, and accept remediation as a legitimate function. While remedial programs are common among Junior Colleges, most available material about such programs is

descriptive, and there is little research evidence of their effectiveness. Lack of success appears to be due to failure to formulate appropriate objectives, inadequate student selection processes, and lack of teachers qualified for such programs. Research is needed for evaluation of present programs and for a foundation on which to build new remedial services. (W0)

Descriptors: *Junior Colleges/ *Low Ability Students/
*Low Achievers/ Program Evaluation/ *Remedial Programs/ Research.

Title: The Effectiveness of Secondary and Higher Education Intervention Programs: A Critical Review of Research.

Author: Sherman, Roger H.; Tinto, Vincent

Source: ERIC System No. ED 106378

Annotation: This paper reviews and synthesizes the available literature concerning the effects of intervention programs at the secondary higher educational levels. In achieving an understanding of the design of these efforts it is important to recognize that the first projects, e.g., the Demonstration Guidance Project, Higher Horizons, established a virtually universally followed model of educational intervention which: (1) employed a "deficit" model to account for differential rates of academic achievement; (2) offered supportive educational services; (3) worked with a segment of the "disadvantaged" population; and, (4) concentrated on the development of reading and mathematical skills. While most of the studies considered possess serious methodological weaknesses, the resulting evidence nevertheless suggests that the projects have increased the numbers of students graduating from high school and applying to, enrolling in, and graduating from college. The findings also indicate some positive impact in the areas of academic values, attitudes and motivations. But neither the gap in academic achievement between "disadvantaged" and "advantaged" students nor the academic achievements of participating students relative to non-program students from similar backgrounds seems to have been affected.

Appendix A

1. Historical Perspective - College B
2. Basic Studies Program - Burlington
County College
3. Placement Guidelines - Camden County College

HISTORICAL PERSPECTIVE - College B

The placement and remediation programs at College B predates the 1978 State Board of Higher Education mandate that all entering freshmen at New Jersey state and community colleges be evaluated for basic skill deficiencies in reading, writing, and mathematics.

In 1972 the college decided to adopt a "learning center" concept as a foundation for the development of a full scale tutorial program. This early attempt to assess the extent of underpreparation of entering freshmen resulted in the establishment of two elective reading courses. In the spring of 1974, as the placement and remedial programs continued to evolve, the Faculty Senate formally adopted a resolution expressing their concern with the underpreparation of entering freshmen establishing a Basic Skills Council charged with documenting the learning center idea. The Council was commissioned to study the questions of needs assessment, placement, and remediation. This task involved a comprehensive review of the literature on basic skills and an examination of how and what other colleges were doing to meet this growing problem.

From this experience grew a project initiated in September of 1975. The experiment involved testing all entering students in an effort to assess the extent of their underpreparation. From this pool of subjects, two matched samples of students, identified as being underprepared in two or three areas (reading, writing, mathematics), were selected. The control group (80 students) was tracked into the regular freshman curricula, while the experimental group (80 students) was identified as underprepared and required to take courses to remediate their skill deficiencies. Built into the structure of this experimental program was an evaluation proce-

dure that established three criteria for determining the success of the program:

- (1) student grade point average--predicted vs actual;
- (2) an analysis of pretest/posttest gain scores;
- (3) an analysis of attrition/retention rates.

The results of the study suggested the potential benefits to be derived from a systematic basic skill assessment process, and placement and remediation programs by revealing a statistically significant differences in all three categories between the experimental group and the control group.

The favorable outcomes cited above led to the decision by the college administration to continue the program into the 1976-77 academic year, and to follow and evaluate the progress of the 1975 group. The Council followed the same procedure adopted in 1975 by selecting two matched samples. An evaluation of the program's effectiveness again suggested that an established procedure for identifying and remediating basic skill deficiencies could make a favorable difference in: (a) student grade point average, (b) pretest/posttest gain scores, and (c) attrition and retention rates. The success of the two-year project led to the Council's recommendation and the college administration's approval to, beginning in the fall of 1977:

- (1) test all entering students;
- (2) identify those students who are underprepared or deficient in one or more basic skill areas (reading, writing, mathematics);
- (3) place those identified students in a required, structured program of remediation; and
- (4) require all freshmen to take a one-credit "survival skills" course (Freshman Seminar).

The College B experience has led to the establishment of a fully-staffed Academic Development Office, which assumes responsibility for; identifying skill deficiencies, placing students in the appropriate courses, and remediating skill deficiencies. In addition the Academic Development Office provides all students with labs/tutorials in the basic skills areas as well as counseling, program evaluation, staff recruiting, and inservice training.

BURLINGTON COUNTY COLLEGE
Pemberton-Browns Mills Road
Pemberton, NJ 08068 609-894-9311

=====

BASIC STUDIES PROGRAM

Chairperson: Ms. Joy R. Hughes
January 1980

The Basic Studies Program for full-time, first-time freshmen aims to develop the student's ability to succeed academically at the college level. The program is developmental rather than remedial in nature since its curriculum and its goals are concerned with the development of the student as an eager independent learner, and because it aims to provide the student with a whole range of cognitive, affective, social and political experiences that bridge the gap between high school and college.

The majority of the students in the Basic Studies Program are recent high school graduates with average or above average academic records from schools or programs within schools that did not provide, and in some cases, did not intend to provide students with the comprehensive and intense college preparatory work that is needed for success in college. Most of our students, for example, did not have four years of college preparatory mathematics or four years of college preparatory English with rigorous writing requirements. As a result, the students, though in every sense entitled to have graduated from high school, are not adequately prepared to succeed in college. A minority of the BSP students either did not do well in high school or did not complete high school and, as a result, these students may require more time to complete the program.

The majority of the BSP Students complete the program in one semester

and then, with the assistance of their BSP counselor, select a balanced, full-time program of typical first-year college courses in the second semester. Some of the students proceed at a faster rate and, therefore, receive credit for a higher level course(s) in their first semester; others need to spend more than one semester in the Basic Studies Program. In all cases grades and credit for the BSP courses or more-advanced courses are based on published criteria which include competency-based performance measures.

Approximately sixty-five (65) percent of the first-time freshmen in Fall 1978 had test scores that indicated they should be enrolled in the Basic Studies Program. Due to funding limitations and other constraints, however, only full-time students planning to attend day classes on the Pemberton Campus were placed in the program. The remainder of the students eligible for the program were advised by counselors in the Student Development Division to enroll in one or more of the pre-college level courses provided by the college to prepare students for college level work. In order to carry out the charge of the N.J. Chancellor of Higher Education to require students with pre-college level courses, arrangements have been made to offer a day and an evening Basic Studies Program at the new Cinnamon Center in Winter 1979, and it is expected that an evening program on the main campus in Pemberton will be offered by Fall 1980, so that students will be able to take courses in locations relatively near their homes no matter in which section of the County they reside.

The overriding purpose of the BSP and, indeed, its *raison d'etre* is to provide our students with the skills, experiences, and knowledge needed to succeed in their college program so that the extremely high attrition rate of BCC's first-year, full-time students can be legitimately reduced to an

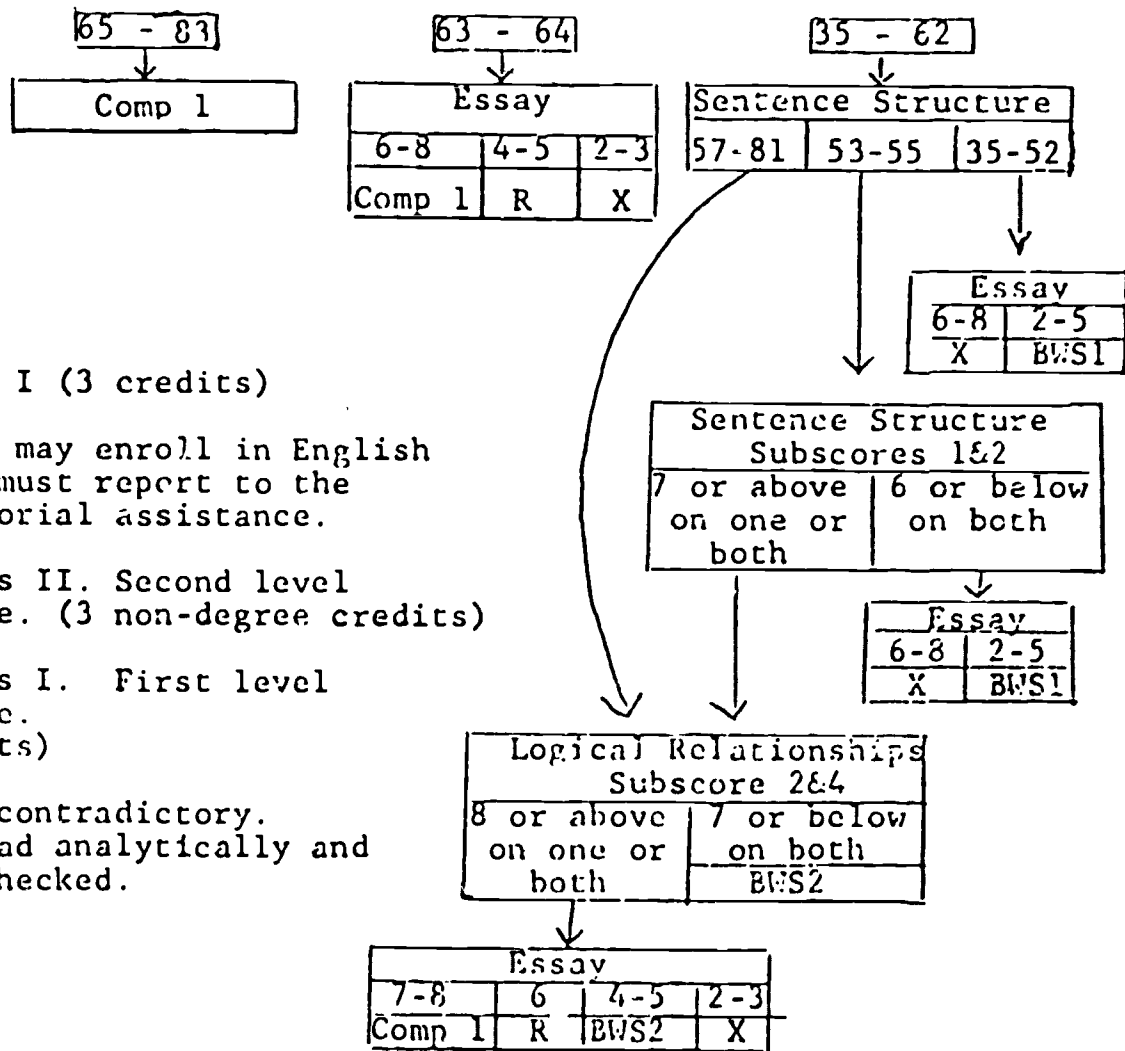
acceptable level. The staff of the Basic Studies Division agree that it is regrettable that students who have satisfactorily completed the requirements of their respective high schools should not be able to enter immediately into regular college level programs. Many programs in high school, however, are not intended to be college preparatory in scope and depth; therefore, many of our freshmen are not adequately prepared for college and will need to spend a semester or, in some cases, two semesters in the Basic Studies Program.

So that students may complete their college preparatory work as quickly as possible, the curriculum and out-of-class assignments have been coordinated for maximum effect by the faculty on the team that services a particular set of students. (A team consists of 1 Social Science Instructor, 1 Writing Instructor, 1 Reading/Study Skills Instructor, 1 Counselor, 1-2 Head Tutors, peer tutors, and students). This coordination also reduces the time our students, many of whom work full or part-time, need to spend on out-of-class work and should reduce the amount of time an individual faculty member needs to spend on routine correction of assignments so that faculty can spend more time with students.

The statistics listed below refer to the students enrolled in the Basic Studies Program in Fall, 1979, the first semester of the program.

CAMDEN COUNTY COLLEGE
 WRITING PLACEMENT GUIDELINES
 FOR THE NJCBSPT

Composition
 Score:



- Comp 1 = English Composition I (3 credits)
- R = Referral. Students may enroll in English Composition I, but must report to the Writing Lab for tutorial assistance.
- BWS2 = Basic Writing Skills II. Second level developmental course. (3 non-degree credits)
- BWS1 = Basic Writing Skills I. First level developmental course. (3 non-degree credits)
- X = Certain scores are contradictory. Essays should be read analytically and reading placement checked.

Note: When reading placement is higher than writing placement, the essay will be read analytically and the writing placement re-evaluated.

READING PLACEMENT GUIDELINES

FOR THE NJCBSPT

Reading Comprehension
Score:

65 - 95
Comp 1

60 - 64

54 - 59
BRS2

49 - 52

35 - 48
BRS1

Logical Relationships Subscores 1, 2, & 4	
10 or above or 2 of 3	9 or below or 2 of 3
R	BRS2

Logical Relationships Subscore 2	
8 - 13 BRS2	1 - 7 BRS1

Note: If there is a gross discrepancy between Reading Comprehension and Logical Relationships scores, student should be re-tested with the reading comprehension portion of the McGraw-Hill test.

Comp 1 - English Composition 1 (3 credits)

R - Referral. Student may enroll in English Composition I, but must report to the Writing Lab for tutorial assistance.

BRS2 - Basic Reading Skills II. Second level developmental (3 non-degree course credits)

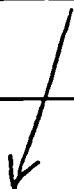
BRS1 - Basic Reading Skills I. First level developmental course. (3 non-degree credits)

CAMDEN COUNTY COLLEGE
MATHEMATICS PLACEMENT GUIDELINES
FOR THE NJCBSPT

(Raw scores on top; standard scores on bottom)

COMPUTATION SCORE

0-15	16 or more
<u>35-56</u>	<u>55 or more</u>
BMS 1	



ELEMENTARY ALGEBRA SCORE

0-13	14 or more
<u>46-64</u>	<u>65 or more</u>
BMS 2	CMO

BMS 1 = Basic Math Skills 1 (Arithmetic)

BMS 2 = Basic Math Skills 2 (Elementary Algebra)

CMO = College Math Option (Whatever college level math course is appropriate to the student's high school math background and college curriculum.)

Appendix B

1. Student Attitude Survey I
2. Student Attitude Survey II
3. Basic Skills Questionnaire
4. Faculty Questionnaire
5. Burlington County College
Retest Study

STUDENT ATTITUDE SURVEY

Course Number: _____

Date: _____

Student's Name: _____

This survey is being given to first-semester students as part of an assessment of the English and mathematics placement system used by this College. Please select the one most appropriate answer to each question and circle the letter that corresponds to the answer. For question number 1, answer "yes" only if you have taken this course (not necessarily the same instructor) at this college before.

Thank you for your cooperation.

1. Have you taken this course before?
 - A. Yes.
 - B. No.

2. Is this the first semester you have attended this college?
 - A. Yes.
 - B. No.

3. In my opinion, I
 - A. should have been placed in a lower course.
 - B. belong in this course.
 - C. should have been placed in a higher course.

4. In my opinion, most of the other students in this class
 - A. should have been placed in a lower course.
 - B. belong in this course.
 - C. should have been placed in a higher course.

The New Jersey Basic Skills Council and the Rutgers University Bureau of Educational Research and Development are in the process of developing a prototypic model for the evaluation of placement programs at state and county colleges.

Your college has agreed to assist us in our efforts to collect data for this project. Since student input is essential to the success of this project, we would appreciate your cooperation in completing the attached questionnaire. All individual responses are anonymous and confidential; no student, course, department, professor, or college will be identified in the study.

Please read each question carefully and answer those questions which pertain to your situation. Feel free to add any additional comments, suggestions, or information which might aid us in this endeavor. Thank you.

PART 1

Please circle the appropriate response to each question below.

1. Class - Freshman Sophomore Junior Senior
2. Sex - Male Female
3. Have you taken any courses offered by the Academic Development Office (for example: MAT 090, ENG 103, etc.)?

YES NO

If your answer to question #3 was "YES", please complete ONLY Part 2.

If your answer to question #3 was "NO", Please complete ONLY Part 3.

PART 2

Please circle the Academic Development courses which you have taken:

MAT 090 RDG 090 ENG 090 RDG 102 ENG 103

1. Are you satisfied that the course/s circled above have alleviated any needs you might have had?

YES NO

Comments: _____

If your answer to question #1 above is "YES", do you feel that your success in subsequent English and/or Math courses is a direct result of knowledge/skills gained through Academic Development courses?

YES NO

Comments: _____

If your answer to question #1 above is "NO", do you feel that you were properly "placed" in the Academic Development program?

YES NO

Comments: _____

2. Do you feel that the New Jersey Basic Skills Placement Test and the Academic Development Office adequately assessed your academic needs?

N.J.B.S.P.T. YES NO
Academic Development Office YES NO

Additional Comments: _____

1. Do you feel that the New Jersey Basic Skills Placement Test and the Academic Development Office have adequately assessed your academic needs?

N.J.B.S.P.T.	YES	NO
Academic Development Office	YES	NO

Comments: _____

2. Do you feel that participation in one or more of the Academic Development courses would have facilitated your success in regular college Math and English courses?

YES NO

Comments: _____

3. Do you feel that your fellow students who were "placed" in Academic Development courses have benefited from participation in the program? (That is, participation in an Academic Development course directly contributed to their success in regular college Math and English courses.)

YES NO

Comments: _____

Additional Comments: _____

BASIC SKILLS QUESTIONNAIRE

This questionnaire is designed to assess your opinions of: (1) the New Jersey College Basic Skills Placement Test (NJCBSPT), (2) the advisement you received at your college pertaining to placement into this course, and, (3) finally, your opinion of this English course. The information will be used for research purposes. All results will be presented as group, not individual data, thus, the confidentiality of your responses is assured.

A. Demographic Information

Please respond by placing a check in the appropriate space or by writing in the information requested. You may omit any question you feel is objectionable or too personal.

1. Sex Male _____ Female _____
2. Age 18 or less _____ 30 - 39 _____
 19 - 20 _____ 40 - 49 _____
 21 - 24 _____ 50 or more _____
 25 - 29 _____
3. Your ethnic background:
 Black _____ White _____ Spanish American/Puerto Rican _____
 Oriental _____ Other (Please list) _____
4. List father's occupation: _____
5. List mother's occupation: _____
6. How many years did you study English while attending high school:
 None _____ Three years or equivalent _____
 One Year or equivalent _____ Four years or equivalent _____
 Two years or equivalent _____
7. Are you a high school graduate: Yes _____ No _____ GED _____
8. Is English your native language: Yes _____ No _____

General Instructions

The following statements pertain to the New Jersey College Basic Skills Placement Test (NJCBSPT), your college advisement program, and to the English course you are now taking.

To refresh you, the NJCBSPT was a three-and-one-half hour test you took at your college after being admitted. It is not to be confused with the Scholastic Aptitude Test (SAT).

After each statement you are to indicate whether you "strongly agree" (SA), "agree" (A), "disagree" (D), or "strongly disagree" (SD), with the statement. If you are uncertain of your opinion or do not feel you can respond to the item, circle the "uncertain" (U) space. Circle the one response that best represents your opinion.

B. New Jersey College Basic Skills Placement Test (NJCBSPT)

Did you take the NJCBSPT? Yes _____ No _____ Don't Remember _____

If your answer to this question is "no" or "don't remember" go on to section C below.

Did you receive a copy of the "Student Information Bulletin concerning the NJCBSPT?"

Yes _____ No _____ Don't Remember _____

- | | | | | | |
|---|----|---|---|---|----|
| 1. I knew the purpose of the NJCBSPT before I took it. | SA | A | U | D | SD |
| 2. I would have been better prepared for the NJCBSPT if I had been better informed about the subject areas covered in the test. | SA | A | U | D | SD |
| 3. Overall, I believe the NJCBSPT was fair. | SA | A | U | D | SD |
| 4. Overall, I believe the test was easy. | SA | A | U | D | SD |
| 5. I tried to do as well as I could on the NJCBSPT. | SA | A | U | D | SD |
| 6. Overall, I believe the test was too long (3½ - 4 hours). | SA | A | U | D | SD |
| 7. The 20 minute essay was a good measure of my ability to write. | SA | A | U | D | SD |
| 8. I guessed on most of the items on the NJCBSPT sentence structure test. | SA | A | U | D | SD |
| 9. I was so nervous I could not concentrate on the test. | SA | A | U | D | SD |
| 10. The NJCBSPT was designed for students who are smarter than I am. | SA | A | U | D | SD |
| 11. The examiner gave clear and understandable instructions when he/she administered the test. | SA | A | U | D | SD |
| 12. It is a good idea to require students to take the NJCBSPT. | SA | A | U | D | SD |
| 13. I think the NJCBSPT was a waste of time. | SA | A | U | D | SD |
| 14. The NJCBSPT provided important information for my advisor to use in selecting appropriate courses for me. | SA | A | U | D | SD |
| 15. The NJCBSPT results were a good indicator of my scholastic potential. | SA | A | U | D | SD |

C. Advisement Process

Do you remember being advised to take this English course?

Yes _____ No _____ Don't Remember _____

If your answer to this question is "no" or "don't remember" go on to item 30.

- | | | | | | |
|--|----|---|---|---|----|
| 16. My adviser explained the results of the English portion of the test to me. | SA | A | U | D | SD |
| 17. I was placed in this English course on the basis of my test results on the NJCBSPT. | SA | A | U | D | SD |
| 18. My adviser took the time to explain the results of the NJCBSPT to me. | SA | A | U | D | SD |
| 19. I understood my adviser's explanation of the NJCBSPT results. | SA | A | U | D | SD |
| 20. My adviser answered any questions I had regarding my test results. | SA | A | U | D | SD |
| 21. The NJCBSPT results were useful in helping me plan my educational goals. | SA | A | U | D | SD |
| 22. In explaining the NJCBSPT results, my adviser made me feel stupid. | SA | A | U | D | SD |
| 23. My adviser gave me advice which was helpful in choosing courses which I could academically handle. | SA | A | U | D | SD |
| 24. I had too little time to spend with my adviser. | SA | A | U | D | SD |
| 25. My adviser did a good job of advising me. | SA | A | U | D | SD |
| 26. My adviser did not seem to know how to interpret the test results. | SA | A | U | D | SD |
| 27. The results of the NJCBSPT made me lower my educational goals. | SA | A | U | D | SD |
| 28. I was treated courteously and in a friendly manner by my adviser. | SA | A | U | D | SD |
| 29. The NJCBSPT results made me realize I needed this English course. | SA | A | U | D | SD |

D. English Course

These statements refer to the English course you are now in.

- | | | | | | |
|---|----|---|---|---|----|
| 30. The objectives of this course were made clear to me by my teacher. | SA | A | U | D | SD |
| 31. I believe I accomplished most of the objectives of this course. | SA | A | U | D | SD |
| 32. The objectives of this course were related to my own educational goals. | SA | A | U | D | SD |
| 33. This course is interesting. | SA | A | U | D | SD |
| 34. This course is intellectually challenging. | SA | A | U | D | SD |
| 35. If I had my choice, I would have taken a more difficult English course. | SA | A | U | D | SD |
| 36. This course is one of the best courses that I am now taking. | SA | A | U | D | SD |
| 37. I tried hard to succeed in this course. | SA | A | U | D | SD |
| 38. I feel confident in my ability to write as a result of this course. | SA | A | U | D | SD |
| 39. This English course is exactly the English course I needed. | SA | A | U | D | SD |
| 40. This course is not too hard nor too easy for me. | SA | A | U | D | SD |

- | | | | | | |
|---|----|---|---|---|----|
| 41. I should have been placed in a more difficult English course. | SA | A | U | D | SD |
| 42. This course has helped me with other courses in the college. | SA | A | U | D | SD |
| 43. Overall, I believe this course has been beneficial for me. | SA | A | U | D | SD |
| 44. This course is a waste of time. | SA | A | U | D | SD |
| 45. This course has taught me how to write well. | SA | A | U | D | SD |

END

Thank you for your assistance!

Sponsored by:

ESSEX COUNTY COLLEGE
STUDENT AFFAIRS OFFICE OF RESEARCH
EDISON O. JACKSON, VICE PRESIDENT

Questionnaire by:

J. SCOTT DRAKULICH
ASSOCIATE PROFESSOR/PSYCHOMETRIST

NEW JERSEY COLLEGE BASIC SKILLS PLACEMENT TEST

FACULTY QUESTIONNAIRE

College _____ Date _____

College Course Number _____ Section Number _____

Number Enrolled _____

1. Please estimate the number and percentage of students who are underprepared, overprepared or properly placed in your course.

	Number	%
Underprepared		
Overprepared		
Placed Correctly		

2. Did you make any use of the results of the New Jersey College Basic Skills Placement Test? If "yes" please describe.

3. Did you modify your instructional plans as a result of the New Jersey College Basic Skills Placement Test. If "yes" please describe.

4. Do you think that the New Jersey College Basic Skills Placement Test provided the basis for proper placement into this course.

Yes _____ No _____ Uncertain _____

GH

BURLINGTON COUNTY COLLEGE
MEMORANDUM

TO: The Staff of the Student Development Division

FROM: Joy Hughes, Chairperson: Division of Basic Studies and
Educational Measurement Services (ACTING)

RE: I Fall '79 Performance of Students Retested with the Nelson-
Denny Reading Test
II Success rate of BSP Students Who Also Took MTH001 or MTH002
III Success Rate of Students Who Re-enroll in MTH001

DATE: January 7, 1980

I There were 42 Fall '79 full-time students who tested out of the Basic Studies Program via retesting with the Nelson Denny Reading Test. Of these, only 40% successfully completed all four of their first semester courses, 17% completed three of their four courses, 19% were only able to complete two of their courses, 14% completed just one course, and 10% did not even complete one course.

There were 12 students who, although they were not able to test out of the BSP via the Nelson Denny Test, did move up a track within the BSP. Of these 12, 10 students successfully completed their four BSP courses, 1 passed three of the four and 1 did not pass any courses. Five of the twelve students who moved up a track enrolled in an additional course outside the BSP (SEC102, MTH001 (3), MTH002 (1)), however, only 1 student (MTH001) passed the fifth course.

I plan to conduct further research prior to the start of Fall '80 pre-enrollments in order to determine the distinguishing entry characteristics of the 40% of the students who did succeed and will keep you informed. In the meantime, however, I would advise that any student who tests out of the BSP via the Nelson Denny be strongly urged to enroll in a reading course.

II For Fall '79, we only permitted those BSP students who tested into the top track of BSP to take a 5th course. Thirty seven of those students elected to enroll in MTH001 and their completion rate for that course was 60%. Seven of the students elected to enroll in MTH002 and their completion rate was 59%. I have not yet examined the grades of those BSP students who elected a fifth course other than MTH001 or MTH002, however, I will forward these results to you as soon as I have done so.

III An interesting statistic calculated by Carol Gibbons is that whereas 50% of the students in the last two years who took MTH001 for the first time completed it successfully only 25% of the students who re-enrolled after receiving a W, U, or SP, completed it successfully. Moreover, only about 20% of the students who don't complete it the first time ever re-enroll for a second try. This latter statistic indicates that the failure to succeed the first time around in MTH001 can have far more serious implications for students future academic careers that I had ever suspected.

JH/mh

cc: J. McGinnis
D. Tindall
F. Thomas
BSP Faculty
N. Reburn

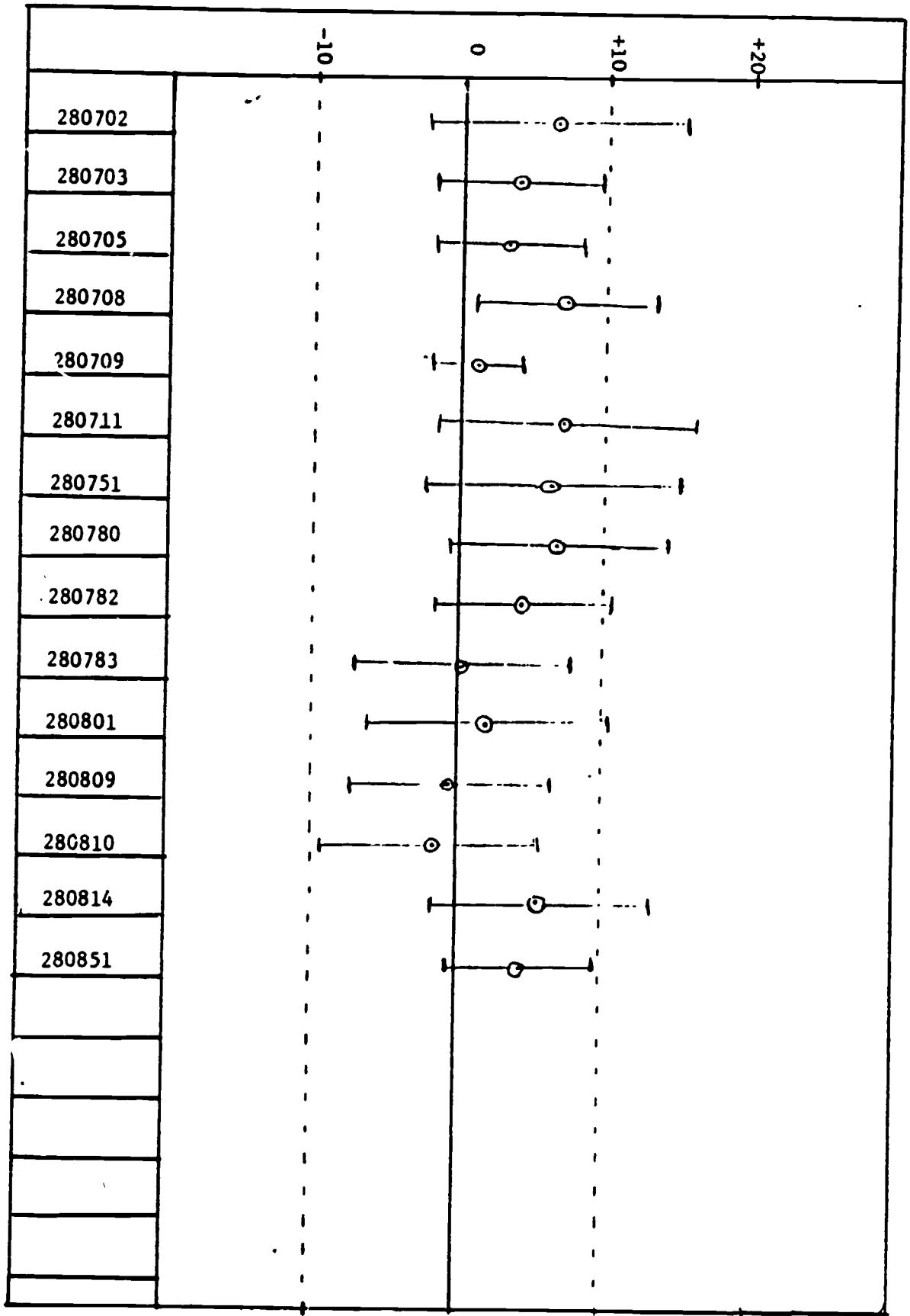
Appendix C

1. Table of Gain Scores
2. Graph of Gain Scores
3. Student Opinion of Basic Studies Program (Burlington County College)
(For more questionnaires on student evaluation of basic skills programs, see Appendix B.)

COMPUTATION POST-TEST SCALE SCORE

SECTION	COURSE	MEAN	STD DEV	N
520101.	BMS 1	62.6923	9.6901	(13)
520102.	BMS 1	61.8333	5.9058	(12)
520103.	BMS 1	65.2000	10.7796	(5)
520105.	BMS 1	63.8571	5.3675	(7)
520106.	BMS 1	55.9000	8.4781	(10)
520108.	BMS 1	59.5556	10.2727	(9)
520112.	BMS 1	61.5000	10.6348	(6)
520151.	BMS 1	72.0000	4.0708	(8)
520152.	BMS 1	63.1667	11.1586	(12)
520202.	BMS 2	36.0000	0.0	(1)
520216.	BMS 2	70.0000	0.0	(1)
520222.	BMS 2	60.0000	0.0	(1)
520257.	BMS 2	60.0000	0.0	(1)
520259.	BMS 2	58.0000	0.0	(1)
TOTAL		62.2069	8.8290	(87)

Sentence Structure Gain Scores (280702 - 280851)



STUDENT OPINION OF BASIC STUDIES PROGRAM

The following items will help you evaluate the Basic Studies program. Please rate the items by circling a number on a scale of 1 to 5 with 5 being the highest rating. After you rate the items, write in any additional comments you wish to make. Give specific examples where possible.

1. The Basic Studies program lived up to my expectations.

Rate: 1 2 3 4 5

Total: 1 2 4 8 16

2. The schedule of classes (days of week, time) was helpful.

Rate: 1 2 3 4 5

Total: 1 1 9 5 18

3. The courses met my needs:

Social Science

Rate: 1 2 3 4 5

Total: 4 8 3 5 14

Reading

RATE: 1 2 3 4 5

Total 10 6 8 4 7

English

RATE: 1 2 3 4 5

Total: 5 13 18

Human Development

Rate: 1 2 3 4 5

Total: 1 2 7 23

4. The Basic Studies program introduces students to college level work.

Rate: 1 2 3 4 5

Total: 1 7 7 6 6

5. The amount and difficulty of work were appropriate to my needs.

Rate: 1 2 3 4 5

Total: 1 4 7 6 7

6. The faculty team worked cooperatively to help students.

Rate: 1 2 3 4 5

Total: 2 2 7 17

7. People were available to help me.

Rate: 1 2 3 4 5

Total: 4 3 21