

DOCUMENT RESUME

ED 304 999

HE 022 306

TITLE Effectiveness of Remedial Programs in New Jersey Public Colleges and Universities. Fall 1983-Spring 1985. Report to the Board of Higher Education.

INSTITUTION New Jersey State Dept. of Higher Education, Trenton. New Jersey Basic Skills Council.

PUB DATE 21 Nov 86

NOTE 192p.; For related documents, see HE 022 299-301. Document contains light type which may affect reproducibility.

AVAILABLE FROM Basic Skills Office, New Jersey Department of Higher Education, 225 West State Street, Trenton, NJ 08625.

PUB TYPE Statistical Data (110) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC08 Plus Postage.

DESCRIPTORS *Academic Achievement; *Basic Skills; *College Freshmen; Credits; Educational Assessment; Educational Attainment; Failure; Grades (Scholastic); Higher Education; Mathematics Skills; *Outcomes of Education; Program Effectiveness; *Public Colleges; Reading Skills; Remedial Instruction; *Remedial Programs; School Holding Power; State Colleges; State Surveys; Success; Supplementary Education; Writing Skills

IDENTIFIERS *New Jersey

ABSTRACT

The New Jersey Basic Skills Council seventh annual report to the Board of Higher Education looks at the status of the reading, writing, and mathematical skills of incoming freshmen and of the effectiveness of remedial programs in its public colleges and universities. A comparison is presented of students who needed and completed remediation; students who did not need remediation; and those who needed remediation but did not complete it. Findings are described for the New Jersey Higher Education System and for individual colleges. Seven outcome indicators reviewed for the student groups are passing rates, retention rates, college credits earned, grade point average, successful survival rates, pre- and post-testing, and performance in subsequent courses. Part-time remediation is noted. Conclusions include the need for improvement of the quality and completeness of the data on remedial outcomes that colleges collect. and note that New Jersey's remedial programs are successful in raising the skill levels of students who complete remediation. Recommendations include having all public colleges use exit-testing for their remedial programs and making sure all faculty teaching basic reading, writing, and mathematics access the latest research on effective teaching. Two appendices show sample tables (i.e. testing and placement of students, enrollment in and completion of remedial courses, and pre- and post-test results for remedial courses in reading, writing, math computation, and elementary algebra) and a listing of areas of research for future use. Tables are included. Contains two references. (SM)

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EFFECTIVENESS OF REMEDIAL PROGRAMS

in
New Jersey Public Colleges
and Universities

Fall 1983 - Spring 1985

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Department of Higher Education

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Report to the Board of Higher Education on the
Effectiveness of Remedial Programs in
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Fall 1983 - Spring 1985

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Guidelines for Preparation of 1983-85
Institutional Report on Remedial Program
Effectiveness

EXECUTIVE SUMMARY

The New Jersey Basic Skills Council reports annually to the Board of Higher Education on the status of the reading, writing, and mathematical skills of incoming freshmen and on the effectiveness of remedial programs in the public colleges and universities. Statewide test results have consistently shown that from 31 percent (in verbal skills) to 60 percent (in algebra) of entering college students need remedial courses. In order to monitor the effectiveness of remedial programs, extensive follow-up data on these students are requested from each of the public colleges and universities.

This report, the seventh in the "effectiveness" series, is the second in which the follow-up duration was two years. Each college submitted data and narrative reports, following standardized guidelines from the Basic Skills Council, for the cohort of full-time freshmen who entered college in the fall of 1983 and persisted through four semesters (through the Spring 1985 semester). This report presents a comparison, using multiple measures, of three groups: students who did not need remediation; students who needed and completed remediation in the appropriate skill area; and students who needed but did not complete remediation.

Findings are described both for the New Jersey Higher Education System as a whole and, in a separate section, for individual colleges. All data reported and policy issues raised in this report are as of the spring of 1985 and consequently do not reflect the impact of any subsequent program changes that may have been made by the colleges on the basis of their internal review of these data.

General Findings and Concerns

This report reviews seven outcome indicators for the three student groups defined above and concludes that, in the aggregate, remedial programs

in public colleges are upgrading the basic skills of underprepared students to a level where such students can be retained within, and hence profit from higher education. These outcome indicator data are reviewed in the body of the report.

Reports in this series have been concerned with the general question of whether collegiate developmental education is worthwhile, particularly when viewed at the system-wide level. Clearly, the answer is "yes." The reader, however, must keep in mind the distinction between evaluating system-wide remedial/developmental education and evaluating the extent to which an individual college's remedial program is successful. Statewide, a large number of remedial sequences (24,077 for the 1983-85 cohort alone) were completed by students who were previously judged unprepared for college work. This good news must be considered in the context of the four concerns raised below.

First, the extent of the need for remedial programs has not lessened. The percentages of freshmen needing skills courses have been relatively constant over the past eight years (as noted in the Council's annual test results report).

Second, the enterprise of remediation is not an easy one, for either the college or the students. Colleges, particularly in the two-year sector, expend a considerable percentage of their instructional effort on remedial courses. Students, for their part, often invest as many as three semesters in one or more remedial course sequences. Counseling, tutoring and advisement must be tailored to meet the needs of skills deficient students whose expectations and self-image may not be congruent with their academic preparedness. There is no quick fix for academic deficiencies.

Third, system or sector-wide averages mask wide variations in program effectiveness (see Section X). This report series began with an effort to collect accurate and appropriate data from each college. Upon the successful compilation of such system-wide

data, broad conclusions on the relative success of remedial programs were reached last year and are reconfirmed in this year's report. To our knowledge, New Jersey is the only state that has collected such an array of data on the outcomes of remedial programs.

While some comment is made on individual college programs in Section X of this report, the Council's next report in this series will focus on the strengths and weaknesses of individual programs. The general parameters of the remedial programs are now sufficiently known; it is time to take the next step toward fine-tuning the system.

Fourth, the analyses in this report are based on comparing the performance of remediation-completed students with that of non-remedial students. The latter serve us a yardstick for the former. The reader should also be alert to judging the absolute values of the data reported for non-remedial students. For example, is a four-semester retention rate of 63 percent for non-remedial students in the four-year state colleges a satisfactory figure?

Further, analyses in this report pertain only to students who persisted in the higher education system. No follow-up data was gathered on those who dropped out, "stopped out" or transferred before completing four semesters.

Design Dilemmas in Assessing "Effectiveness"

The evaluation design chosen is not one of a "controlled" experiment; i.e., one that withholds remediation from a randomly chosen needy group of students and compares their result to a "remediated" group. Rather, our strategy is to gather data on multiple indicators relating to most of the aspects that are relevant to a successful program. For example, regarding those students placed by a college in remedial course sequences, the assessment is designed to produce answers to the following questions: What percentage pass the remedial course? If post-tests are given, what percentage attain the placement criteria for the first college course? What percentage are retained in college for

four semesters? What are the grade point averages of retained students? What percentage of these students have a "C" average (or better)? What percentage of these students pass their subsequent, first college-level course that requires the skill area just remediated?

Judging the effectiveness of a program on only one or two of these indicators would not produce an accurate assessment of the college program. A pattern analysis of individual programs, much like a "personality profile," is required. Within such an analysis, based solely on statistical indicators, a potential exists both for unwarranted criticism and for unfounded praise. For example, do high remedial course passing rates indicate effective instruction or lax grading standards? Only an analysis of subsequent post-test competence and college course performance can tease this out.

A longitudinal analysis, i.e., over several cohorts of students, is the most accurate way to assess the effectiveness of programs. Such data will be available with the next report. Consequently, the Basic Skills Council has chosen a cautious interpretation of the individual college data presented in this report.

Statewide Patterns

The most important finding of the present report is that full-time, skills-deficient students who complete their college's remedial course sequence have two to three times the chance of college success as students who need but do not complete remediation. This is a pattern identical to the finding in the previous (1982-84) effectiveness study. It suggests to the Council that the state's investment in placement testing and remediation has been productive. Specifically, the data on outcome measures gathered for this study indicate that:

- o Retention Rates at four semesters for those students who complete remediation are similar to or higher than the rates

for students who did not need remediation. For these two groups respectively, retention was 72 vs. 69 percent at the state colleges and 56 vs. 52 percent at the county colleges. Retention rates of students not completing needed remediation, on the other hand, were only 31 percent in the state colleges and 21 percent in the county colleges. The pattern was similar at Rutgers and NJIT.

- o Since retention is a necessary but not sufficient indicator of program success, the Successful Survival Rate (SSR), that is the percentage of the original cohort who both remain and have at least a "C" average, was computed for all three groups. Students completing remediation had SSR's similar to non-remedial students at both state and county colleges. At Rutgers the SSR's of the two groups were not as close as in the other sectors.

In contrast, the SSR's of students who did not complete remediation were only about a third of those of students who completed remediation.

- o In terms of college credits earned at the two-year point, remediation-completed students in the state colleges were on the average only five credits (46 total) behind non-remedial students (51 credits). At the county colleges, where many students need multiple levels of remediation, the gap in credits earned between students not needing remediation and remediation-completed students was 10 credits (44 vs. 34). At both Rutgers and NJIT, this difference in credits earned was seven. For many students this "gap" can be effectively closed by taking two to three college courses in the summer.
- o Despite the temporary slowing of progress toward the degree, students who complete remediation benefit from: a preparation

that gives them a probability of passing college-level courses nearly as high as that of non-remedial students, of attaining grade point averages only slightly lower than non-remedial students, and of having successful survival rates two to three times higher than students who did not complete remediation.

- a If remediation is effective, students who have completed it should pass their subsequent college-level courses at rates similar to non-remedial students. Averaged across all college sectors, the difference in passing rate for college-level English Composition between non-remedial and writing-remediated students was seven percent (87% vs. 80%). In subsequent college-level mathematics courses the difference in passing rates between non-remedial and algebra-remediated students was 10 percent (84% vs. 74%).
- a While these passing rates are generally acceptable, they might be improved if all students exiting remedial sequences were indeed prepared for college work. While virtually all institutions that reported post-test data indicated significant gains in student scores on pre- and post-remedial course testing, not all students who passed a remedial course actually met the criteria established by that institution for entry to college-level work. Sixty cases of program exit-testing (representing approximately 10,000 students) were reported. Of these, only one-third of the programs had over 90 percent of their students reaching the college's placement criteria on the post-test after passing the highest level remedial course. Thirty-eight percent of the program post-tests revealed less than 70 percent of students reaching minimum competence on their post-tests.

- o The sample of post-test results in this report suggests that the success of remedial programs in our colleges, though considerable, is limited in some respects. For students who completed remediation, performance on multiple outcome measures heretofore has been judged on a standard relative to non-remedial students. Exit-testing imposes a more absolute standard of performance. Data from the current sample of post-tests suggests that there is considerable room for improvement in specific remedial programs in the state. However, these data are as yet too incomplete to suggest definitive conclusions.

The student progress seen in the post-test data is often significant and thus commendable. However, progress from a very low starting point may not always be sufficient to reach the level necessary for college work (e.g. pre-/post-test scores that increase significantly from a "12" to a "32" are commendable but insufficient if a "70" is the criterion). For students with several deficiencies more time may be needed to improve their skills to the college level.

Institution-specific Patterns

There is wide diversity across colleges in both remedial program structures and in the effectiveness of remediation within each skill area. Within colleges, variation was noted both in policies and in program effectiveness among skill areas. For example, a given college may demonstrate effective programs in reading and algebra but exhibit weak program results in writing. In addition, many institutions, particularly in the county college sector, choose to require remediation in algebra only of those students in math-related majors.

Further, in instances of incomplete or inadequate data from a college, judgements about the academic quality of a program may not be accurate. There could be one or more institutions which expend adequate effort and resources on remedial program instruction but do not do an adequate job of collecting and reporting outcome data. Needless to say, there is room for improvement in the quality and completeness of the data being given to the Council.

This report contains a section that presents individual institutional profiles for each remedial program. Areas where colleges can improve performance (or ought to conduct institutional research on anomalous outcomes) are explicitly noted. These reviews are provided in a collegial spirit with the intent of providing information that can lead to program improvement. Each college was given the opportunity to comment on its profile prior to the publication of this report.

The profiles section of next year's report will be more extensive and will use longitudinal data to illuminate program strengths and weaknesses more clearly.

Recommendations

This report is the second two-year cohort study of remedial students. The statewide and institutional patterns that have emerged are now sufficiently clear and consistent that the Basic Skills Council recommends the following:

o Exit-Test Data for Remedial Programs

College-level courses should be conducted on the expectation that students possess the skills needed to succeed in the courses. Therefore, placement criteria should be established carefully so as to allow students the opportunity to demonstrate these skills. Similarly, exit criteria from remedial programs should be developed to assure that students are entering college-level courses with the skills they need to succeed. Whatever level of skills proficiency a college determines for entrance into a

college-level course should apply equally to students who are initially placed in that course and to students who come to the course by way of a remedial program.

Exit-testing (i.e., at the end of the last remedial course) is currently being reported for only 63 percent of remedial programs. The Council recommends that all public colleges employ exit-testing for their remedial programs. Appropriate standardized tests such as the NJCBSPT should be used. If tests other than the NJCBSPT are used for post-testing, equating with the NJCBSPT should be done.

The Council's intent in collecting exit-test results is to assess programs, not individual students. Towards this end, a college could opt to test all exiting remedial students or a random, representative sample.

o Institutional Self Assessments

To date most institutions provide their remedial outcomes data without explicitly attempting to assess the status of their programs. In the future, the Council's reporting guidelines will ask each college to provide narrative that assesses its remedial program strengths and weaknesses, both in light of data from comparable institutions and in the context of program development over time.

o Consultative Assistance to Remedial Programs

The Council will expand its current site visit program, which to date has sought to observe noteworthy programs, to offer consultations to those programs seeking assistance or review. Further, the Council recommends that funds be made available to provide options for

consultative assistance to those institutions whose remedial program or program components need improvement.

o State-wide Faculty Networks

Faculty teaching basic reading, writing and mathematics courses should have access to the latest research on effective teaching methods. The Council recommends that the Board of Higher Education foster statewide networks designed to collect and exchange information on pedagogical methods.

o Local Research Efforts

The Council's guidelines for the preparation of institutional effectiveness reports should be viewed as minimum evaluation requirements. The Council urges colleges to conduct local research efforts that focus on areas needing improvement, serve to advance the effectiveness of student learning in established programs, and evaluate patterns over time that could reveal more about the strengths and weaknesses of individual programs. The Council would welcome the receipt of such reports from institutions for the purpose of sharing information among colleges.

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INTRODUCTION

Background

Evaluating any educational program is a difficult and complex process. Each college has a distinct mission, and a heterogeneous student body with a wide range of basic skills preparation. Most New Jersey institutions provide multiple levels of remedial/developmental courses. The Basic Skills Council's goal of evaluating remedial programs in a consistent manner depends upon formulation of a common set of questions and definitions which yield useful data yet permit recognition of institutional idiosyncracies and preserve institutional autonomy.

When it authorized the development of the New Jersey College Basic Skills Placement Test (NJCBSP) in 1977, the Board of Higher Education of the State of New Jersey also required reports from the public institutions of higher education on the character and effectiveness of their remedial programs. Virtually all freshmen entering New Jersey public colleges are now tested in reading, writing, computation and elementary algebra. The consistent finding from this testing program has been that between 31 percent (in verbal skills) and 60 percent (in algebra) of entering students lack the competence to begin college work in one or more areas. Consequently, all public colleges have remedial programs designed to raise the skill levels of students found to be poorly prepared for college. This is the seventh report of the Basic Skills Council to the Board on the effectiveness of remedial programs in New Jersey's public colleges and universities.

Assessment Design

Six years ago, recognizing the complexity of the data collection and analysis involved in an adequate and fair evaluation of the state's public college remedial programs, the Basic Skills Council created the Assessment Committee to advise the Council on methods of program evaluation. Composed of institutional researchers, administrators and faculty representing each sector of New Jersey public higher education, the Committee formulated and, over several years, refined the assessment design used in

this report. A report on program effectiveness is required of each college, including both a narrative description and a set of tabular data, following the "Guidelines for Preparation of Institutional Reports on Remedial Program Effectiveness" (see Appendix A).

In recognition of the fact that remediation (particularly for students who have more than one deficiency) may take longer than two semesters, the Council required reporting from each college on the cohort of full-time students who entered in the fall of 1983 and were enrolled through the spring of 1985.

The Council's approach to the assessment of remedial program effectiveness uses multiple measures to compare each of three full-time student groups within the colleges. Students who need and complete remediation are, on the one hand, compared with students who did not need remediation. On the other hand, remediation-completed students are compared with students who did not complete needed remediation. This is a "relative" form of comparison in that it judges the performance of a college's remedial program relative to the college's own standard -- its non-remedial student outcomes.

This approach is supported by the work of Akst and Ryzewicz, who conducted a national survey in 1985 of the methods used by 700 colleges to evaluate remedial mathematics programs: they recommended that "...summative evaluations should compare the achievement in follow-up courses of students who have passed remedial math courses with students who needed but did not receive remediation, and with students who were initially exempted from remediation" (Akst and Ryzewicz, 1985).

Program evaluation per se is a problematical and difficult task, but when diverse programs developed at very different kinds of institutions have to be assessed on the basis of uniform procedures it becomes a formidable undertaking. As educational researchers know, borrowing a strictly control/experimental groups design in which remedial students can be randomly assigned to control (no remediation) and experimental (receiving remedial instruction) groups, there is no other fully satisfactory method of evaluating the effectiveness of remedial programs. The control/experimental groups design was rejected by the Assessment

Committee as an impractical option because of the obvious ethical, public policy, and governance problems which could arise from a state requirement denying remedial help to a substantial number of students who need it.

In the absence of such a single measure which could provide sufficient information on the effectiveness of remedial programs, it was decided to identify multiple outcome measures which would provide evidence in context, even if it could only be interpreted cumulatively. If multiple measures for an institution form a consistent pattern, then adequate conclusions on the effectiveness of remediation at the institution could be drawn. As Sullivan and Feldman argued in 1975: "If we claim to measure a certain trait, or abstract concept, with each of several very different methodologies, and these very different measurement procedures produce results which are quite similar, we may be more confident in the validity of our measures than if this were not the case."

Our strategy is to gather data on multiple indicators relating to most of the aspects that are relevant to a successful program. For example, regarding those students placed by a college in remedial course sequences, the assessment is designed to produce answers to the following questions: What percentage pass the remedial course? If post-tests are given, what percentage attain the placement criteria for the first college course? What percentage are retained in college for four semesters? What are the grade point averages of retained students? What percentage of these students have a "C" average (or better)? What percentage of these students pass their subsequent, first college-level course that requires the skill area just remediated?

Judging the effectiveness of a program on only one or two of these indicators would not produce an accurate assessment of the college program. A pattern analysis of individual programs, much like a "personality profile," is required. Within such an analysis, based solely on statistical indicators, a potential exists both for unwarranted criticism and for unfounded praise. For example, do high remedial course passing rates indicate effective instruction or lax grading standards? Only an analysis of

subsequent post-test competence and college course performance can tease this out.

A basic dilemma is whether each program's functioning is adequately reflected in its reported data. A longitudinal analysis, i.e., over several cohorts of students, is the most accurate way to assess the effectiveness of programs. Such data will be available with the next report. Consequently, the Basic Skills Council has chosen a cautious interpretation of the individual college data presented in this report. Meanwhile, the existing indicators will continue to be refined. In addition, the Council will pursue ways of getting more complete data from the colleges and will develop new models for setting comparative standards using the present set of indicators.

Recently, the Assessment Committee has given considerable thought to a proposed supplemental design, namely a single-measure, pre- and post-test study with new data to be collected. The committee has concluded that this would be a weaker design than the present analyses of multiple indicators, would add no new information, and would lead to erroneous conclusions as explained below.

Pre- and post-test results on remediated students provide one of the seven indicators of program effectiveness. In the absence of similar data for a comparable control group, conclusions from such test results must still be open to several interpretations. Moreover, if assessment were to be based solely on significant differences between pre-test and post-test scores, almost all remedial programs would appear to be effective based on the data currently being submitted by institutions. Therefore, recognizing inherent problems involved in interpreting pre- and post-test data in the absence of a control group and recognizing that relatively small differences between pre- and post-test scores can be statistically significant, the Assessment Committee has de-emphasized the use of gain scores. Instead, the focus has been on the percent of those completing remediation who reach minimum competency on a post-test (i.e., earn a score sufficient for placement into first college-level course). It should be understood that this percentage is affected by the placement criteria adopted by an institution and by the match between post-tests and remedial course content.

This report primarily reflects statistics submitted by the institutions. However, the colleges' reports also included narrative sections containing the following information: history of the program, placement criteria and their efficiency, course descriptions, support services, staffing patterns, college policies, and student performance results. This additional information provides a valuable context for interpreting the numerical data. The individual college narrative reports should therefore be of great interest to each institution's Board of Trustees.

OUTCOME INDICATORS

The Summary Table below presents retention rates, percentages of grade point averages greater than or equal to 2.0, and successful survival rates for all the college sectors averaged across each of the four remedial areas. Parallel data for the 1932-84 cohort are provided for comparison. Throughout this table the dominant pattern is that the remediation-completed student data are similar to that of non-remedial students. In contrast, students not completing remediation have retention and successful survival rates two to three times lower than those of non-remedial students.

In the 44 tables that follow the narrative, data are presented on each of the seven outcome indicators for each of four remedial skill areas. Each table contains data for individual colleges as well as weighted means by sector.

Passing Rates of Students in Remedial Courses

The first of the seven outcome indicators to be examined is the passing rate of students in remedial courses. In general, a low passing rate indicates a problem which should be investigated. It may be a warning about the quality of instruction, or it may mean that the level of the course taught is too high for a large majority of the students. (In this latter case, more class hours or a lower-level course may be appropriate.) On the other hand, a high passing rate is often a good sign. It may indicate good teaching at an appropriate level for the students. However, an extremely high passing rate could also be a clue that the course is too easy for a large number of students. Analysis of other indicators would be needed to resolve such issues.

Tables 1 through 4 provide data by college on the passing rates in remedial courses in each skill area. The colleges were asked to provide data only on the highest level (or last) remedial courses in their sequences.

Across the county colleges, an average of 75 percent of full-time students passed their remedial reading courses (range: 53-100%), 72 percent passed writing courses (range: 59-87%), 68 percent passed computation courses (range: 55-84%) and 65 percent passed elementary algebra (range: 31-84%). Among

SUMMARY TABLE

PERCENTAGES FOR RETENTION, GRADE POINT AVERAGES AT OR ABOVE 2.0, AND SUCCESSFUL SURVIVORS AVERAGED ACROSS ALL REMEDIAL AREAS BY "NEED FOR REMEDIATION" STATUS AT FOUR SEMESTERS, FALL 1982 AND 1983 COHORTS

	COUNTY COLLEGES			STATE COLLEGES			NJIT			RUTGERS		
	Not Needed	Remediation Complete	Not Complete*	Not Needed	Remediation Complete	Not Complete*	Not Needed	Remediation Complete	Not Complete*	Not Needed	Remediation Complete	Not Complete
Retention												
1983-85	52	56	21	69	72	31	64	60	18	86	83	66
1982-84	51	55	22	70	75	39	66	64	18	83	83	73
GPA \geq 2.0												
1983-85	81	65	58	86	75	61	83	77	60	86	67	66
1982-84	79	69	60	86	76	57	79	69	25	84	73	69
Successful Survival												
1983-85	43	38	13	59	54	19	55	46	11	74	56	43
1982-84	40	37	12	60	57	24	55	42	5	71	61	52

*Includes all students identified as needing remediation who either had not enrolled in or else had not completed their college's recommended remedial sequence.

full-time students at the state colleges, passing rates were slightly higher: an average of 87 percent in reading (range: 80-98%), 85 percent in writing (range: 64-90%), 86 percent in computation (range: 66-92) and 83 percent in algebra (range: 70-93%). At Rutgers the average passing rates for 1983 full-time students were 84 percent in reading (range: 81-97%), 90 percent in writing (range: 78-93%) and 75 percent in algebra (range: 72-84%).

Despite the consistency of passing rates over a whole sector, passing rates varied widely among colleges and also within a given college by skill area and course level. Low passing rates within a course or a program should be analyzed by the individual college to determine which of the following factors might be in operation:

- inappropriate curricular levels (e.g., more than one level of a remedial course or more than one semester may be needed to serve the needs and raise the proficiencies of students with low skills levels);
- inappropriate placement (e.g., some students may have been placed at a level higher than they could handle);
- lack of effectiveness in the instruction provided; or
- various student-related factors (e.g., withdrawal from courses or from the college due to personal reasons).

Colleges should aim for the highest possible passing rates in these courses consistent with students attaining proficiency in the skill area being addressed.

Retention Rates

The rate of retention of an entering group of students is a traditional measure of the health of an institution of higher education, but it must always be interpreted in light of the mission and sector of the institution as well as in light of the objectives of the students.

Interpretation of retention rates for two-year colleges must take into consideration their more varied missions and their more "open-door" admissions

policies relative to four-year schools. While many students seek associate-level degrees in New Jersey's county colleges, a substantial number seek early transfer to a four-year school or desire to complete only a few career oriented courses. Early transfer of such students (i.e., at the second or third semester) may be seen as a mark of the institution's success in preparing these students, but at the same time this success lowers the institution's reported retention rates. On the other hand, a very low retention rate may indicate that an institution is not meeting its students' needs and that its policies and/or services should be reviewed.

Students leave college for a variety of reasons; for example, poor grades, transfer to other institutions, poor health, financial hardship and changes in career goals. Therefore, in inspecting the tables under "Retention Rates," it is important to examine not only the retention rates of the students needing remediation but also to compare those rates with those students who did not need remediation at the same college.

What continues to be the most consistent finding in this report series is that, across all collegiate sectors and in all skill areas, students who complete remediation are retained in college at rates that are similar to or higher than those for students who did not need remediation, and at rates much higher than for those who did not complete it (see Tables 5 - 8). This pattern was seen in the current two-year study group and in the comparable group from the previous (1982-84) Effectiveness Report. Two year retention rates for the groups for both cohorts are given as weighted averages across all skill areas in the Summary Table.

Overall, the county colleges have the lowest retention rates, and Rutgers University has the highest. Eighty-three percent of remediation-completed students at Rutgers were still enrolled at the fourth semester (Spring '85). Fifty-six percent of remediation-completed students remained at the county colleges at the fourth semester. These retention rates are reported as percentages of the original cohort that began in Fall 1983.

The remediation-incomplete groups in Tables 5 through 8 showed the lowest retention rates. In the county colleges, these students had a probability of remaining in college of only 14 to 27 percent if they had not completed remediation. At the state colleges, the retention rates in the fourth semester for the remediation-not-completed groups ranged from 26 to 35 percent.

Being "retained" in a college at the fourth semester, however, does not necessarily mean that the student is "successful" in that college. The section on "Successful Survival Rates" addresses this issue.

The consistent finding across the last two reports, that students who completed remediation are even more likely than non-remedial students to remain in college for at least four semesters, may seem surprising to some. One possible explanation is that the extra attention given to remedial students in the form of special advisors, peer tutors, etc. not only helps them academically but also helps them feel more socially "at home" and, hence, more likely to remain at the college. Last year, the Council recommended that individual institutions study this phenomenon on their own campuses. Site visits conducted during the past academic year by the Assessment Committee have begun to yield a pattern that suggests that this social milieu is important.

College Credits Earned

Colleges were asked to report the mean total college credits earned for each of the three study groups at the end of the fourth semester. Tables 9 through 12 display the average number of credits earned in each college by each skill area over the four-semester period. Tables 13 through 16 show the mean credits earned (by skill area) in each college for the most recent term only (Spring '85).

The most important issue arising from these data is the size of the difference, "the gap," in credits earned between non-remedial and remediation-completed students. Tables 9 through 12 contain the average credits earned both by college and as weighted averages by sector in each of the four remedial areas. The difference in credits earned ranges from as low as two credits for algebra-remediated students in the state colleges to

a high of 11 credits for writing-remediated students in the county colleges.

Combining all the remedial areas with weighted averages results in the following differences in total credits earned through four semesters between non-remedial and remediation-completed students: county colleges, 10 credits (44 vs. 34); state colleges, 5 credits (51 vs. 46); NJIT, 7 credits (59 vs. 52), and Rutgers, 7 credits (56 vs. 49).

A second, related issue is whether students who completed remediation assumed course "credits earned" levels in their fourth semester comparable to students who did not need remedial courses. Tables 13 through 16 display the credits earned for the Spring 1985 semester. Across all disciplines, remediated students at the county colleges averaged a Spring 1985 semester credit load within two credits (9 vs. 11) of their non-remedial peers; at the state colleges, the two groups were within one credit (12 vs. 13); at NJIT the difference was one credit (13 vs. 14); and at Rutgers, it was two credits (12 vs. 14). Students who were "full-time" in their first semester (and hence counted as such in these study groups) may become part-time students in any semester. This fact can depress the average credits earned reported for Spring 1985. The "credits earned" evidence is in keeping with the overall pattern of remediation-completed students progressing and succeeding in college very much like students who did not need remediation.

While it is encouraging that remediation-completed and remediation-not-needed groups were earning college credits at comparable rates, nevertheless some students who did not complete remediation by the fourth semester and who were still in college were also passing their courses and earning college credits. It should be noted that these students were very few in number (20-25 per college). Their motivation, their relative maturity, the nature of their skills deficiencies (e.g., "math only" versus multiple deficiencies) and their possible selection of less demanding courses may play significant roles in their success.

Grade Point Average

The fourth indicator used to assess remedial programs is grade point average (GPA). The use of GPA as a measure of performance is based upon the notion that students who have completed needed remediation should be able to earn satisfactory grades in non-remedial courses in the semesters following remediation. The colleges were asked to report GPA's for each of the three groups being studied (non-remedial, remediation-completed, and remediation-not-completed). Grade point averages were reported both cumulatively (i.e., from first through fourth semesters) and for the Spring 1985 term alone. For the students who were present in the spring semester, the colleges reported the percentage of students in each group whose GPA's were greater than or equal to 2.0 (the equivalent of a "C" average, which is generally the minimum average required for graduation from college). Tables 17 through 20 present the cumulative GPA's for the three study groups, by discipline for each college. Tables 21 through 24 present the GPA's for the most recent term only (Spring '85).

Across all the tables a consistent pattern is evident: students completing remediation (all areas combined) achieved much higher GPA's than the few remaining students who needed but had not completed remediation. Grade point averages of students completing remediation did not, however, equal the GPA's of non-remedial students. At the county colleges, the weighted GPA's across all skill areas for the three study groups were 2.53 (non-remedial students), 2.19 (remediation-completed students) and 2.01 (remediation-incomplete students). At the state colleges the respective GPA's were 2.70, 2.41 and 2.15. At NJIT, the averages were 2.61, 2.44 and 2.33 (for 10 students). For Rutgers: 2.69, 2.24 and 2.31.

The only apparent discrepancy in these results is the relatively high GPA found for the remediation-incomplete students at Rutgers. The bulk of this group was composed of students who had not completed algebra remediation but who were obviously coping well with their other college work.

Tables 17 through 24 also record the percentage of students in each college who had GPA's at or above 2.0. Within the four skill areas a number of

programs have percentages of remediation-completed students that are only in the 50 percent (or lower) range. While the mean GPA of these groups may hover around a "C," the future retention of the group as a whole requires that a more substantial percentage be at or above the "C" level. Colleges whose remediation-completed student groups have less than 60 percent of the cohort at or above a 2.0 average should carefully examine the academic status of these students and determine whether changes are needed in the remedial curriculum, in the advising system, or in other areas.

Successful Survival Rate

The successful survival rate (SSR) is a measure designed to assess the relative success of an academic program by combining the GPA variable and the retention rate. The successful survival rate for the four-semester cohort can be illustrated as follows: if 100 freshmen enrolled in the fall and 80 remained four semesters later; and of those 80, 65 had a GPA above 2.0, then the SSR would be 65/100 or 65 percent. Note that this rate is lower than the retention rate (i.e., 80%) because it asks the question: "How many students, as a percentage of the original cohort, both remained and had a "C" or better average?"

Data on the SSR's at each of the colleges are presented in Tables 25 through 28. Comparisons among the non-remedial, the remediation-completed and the remediation-not-complete groups are again striking. At the county colleges, the average successful survival rates across skill areas were 43 percent, 38 percent, and 13 percent for the three study groups respectively. At the state colleges, the successful survival rates were 59 percent, 54 percent and 19 percent.

At Rutgers, the four-semester SSR's averaged across the skill areas were: 74 percent for the group that did not need remediation, 56 percent for the group that completed remediation and 43 percent for the group that did not complete remediation. At New Jersey Institute of Technology, the three groups averaged 55 percent, 46 percent and 11 percent. Again, the results for Rutgers students were inconsistent with the statewide pattern. The SSR for students who did not complete remediation is high.

Rutgers attributes this finding, in part, to an over-identification of students in need of reading remediation in the fall of 1983. Many of these borderline students avoided reading remediation courses and yet maintained "C" averages.

The successful survival rate is the most sensitive and descriptive indicator that the Basic Skills Council uses to describe the relative success of remedial programs. It clearly illustrates the similarity in performance of students who have completed remediation to those who did not need remediation. It also illustrates rather graphically the low probability of success in college (13% in county colleges, 19% in state colleges) found for students who began college but did not complete a needed remedial sequence before the end of their second year.

The SSR for remediation-completed students varied widely within sectors. For example, in the groups of students who completed writing remediation, SSR's ranged from 20 to 48 percent in the county college programs and from 38 to 62 percent in the state college programs. Colleges which have SSR's for this group that fall in the lower end of the sector range should be actively reviewing their remedial programs to determine areas that can be improved.

Pre-/Post-Testing and Minimum Competency

Colleges were requested to submit data on the results of any pre- and post-testing in remedial courses. Most colleges provided "sample" post-test data-- that is, from several but not all course sections. Of 119 possible post-test areas, the colleges provided data for 75, or 63 percent of the possible total. Of the 75 reports of post-test data, only 60 include percentages of students reaching minimum competency on the given post-test.

The New Jersey College Basic Skills Placement Test could be considered a pre-test for all students, and the Council has made alternate forms of the test available for post-test use. However, many colleges use a variety of other pre- and post-tests (see Tables 29-36). This variety makes a consistent interpretation of pre- and post-test results difficult. Nevertheless, it is true that across the

colleges virtually every reported post-test analysis showed statistically significant gains in scores. In other words, the score gains between pre- and post-testing were large enough not to have occurred by chance.

It is important, however, to distinguish between a gain in test scores and the attainment of the minimum competency needed for college work. A student with an algebra score of, for example, 140 may "improve" to a post-test mean of 155. But if a 165 score on this hypothetical test represents minimum competency as set by the institution, then the student would still have a long way to go before being adequately prepared for college-level work. Such a student may need another semester of remedial work at that institution.

In the college profiles section, the percentage attaining minimum competency for the highest-level remedial course in each skill area is presented for each college that provided such data. Post-testing was specified only for students who passed the highest level remedial course. In Tables 29-36, it is clear that many samples showed that the percentage of students who attained the minimum level (as defined by the colleges) was not only highly variable out often very low.

Sixty pre-/post-test comparisons listing percentages of students attaining their college's minimum post-test level were reported. Of these only one-third revealed 90% of students both passing the last level remedial course and reaching minimum competency. Across all sectors and remedial areas, the program post-tests were distributed as follows: 20 percent of the program post-tests showed student attainment of minimum post-test scores as less than 50 percent; 18 percent of program post-tests revealed minimum post-test scores between five and 69 percent; 15 percent of program post-tests were between 70 and 79 percent; 13 percent fell between 80 and 89 percent; and the last third of program post-tests showed attainment of minimum post-test scores to be 90 percent or above. While these data represent but a sample of the possible post-tests, they raise questions about the possibly large numbers of students who were moved out of remediation without the confirming evidence of successful performance on an exit test with appropriate proficiency standards.

Inspection of the profiles of individual college remedial programs indicates that where minimum levels on "post" or exit-testing were low, the students who were then "passed along" into credit-bearing courses attained lower grade point averages than students who exited from programs where the percentage of minimum post-test levels upon exit was higher. Institutions should examine this pattern where it occurs in their remedial programs. It can suggest that another level of remediation should be added in that skill area or possibly that standards for completing remediation should be raised.

In order to ensure that students do complete remediation with appropriate, college-level skills, passing grades in courses must be supplemented with objective measures of minimum competency. Exit requirements from remedial programs should be defined by the faculty at the individual institutions. Like placement criteria, they should consist of multiple measures such as examination grades in the course, department-wide evaluations, in-class work, and standardized tests. Exit standards may be more complex (and higher) than the demonstration of "minimum competency" via objective testing.

Performance in Subsequent Courses

Colleges were asked to compare the passing rates in specific college-level courses of those students from the two-semester cohort who completed remediation with those students who did not need remediation. Obviously, it is a goal of remediation to enable students to succeed in subsequent college-level courses. Data were requested on this comparison for two types of courses, depending on skill area:

- first-semester, regular college course in English composition; and
- first college-level course in mathematics.

Tables 37 through 44 provide data on performance in subsequent college-level courses based on original need for remediation in four areas: reading, writing, mathematical computation and elementary algebra. The results indicated that across all the tables, the range of differences

between non-remedial and remediation-completed students was from 3 to 16 percentage points. The larger variations appeared between the two groups in subsequent first-level mathematics courses. At the county colleges (Table 37), the two study groups differed by only three percentage points (81 vs. 78%) in passing rates for English Composition, but by twelve points (78 vs. 66%) in passing rates for first-level college mathematics courses (Table 43) taken following algebra remediation.

The highest passing rates, in general, were found at Rutgers (up to 97% of non-remedial students pass English Composition). Remediation-completed students at Rutgers showed passing rates in English Composition quite comparable to non-remedial students. However, the widest variations in passing rates were also found in the Rutgers sector. The largest difference in passing rates in this study is the 15-point difference (88 vs. 72%) between non-remedial and remediation-completed students in first college-level mathematics at Rutgers (Table 44). It should be noted that the first-level mathematics courses represent a wide range of content across Rutgers' undergraduate colleges and that the students who complete mathematics remediation make up a relatively small percentage of the enrollment.

PART-TIME STUDENTS

The policy of the Board of Higher Education concerning part-time students with remedial needs is that such students should be enrolled in remediation within four semesters. Since this report covers only a four-semester time span, part-time student outcomes were not required from the colleges. Because of irregular enrollment patterns and lower course loads, very few part-time students complete remediation within four-semester. As a part of the October 18, 1985 report to the Board on the "Character of Remedial Programs in New Jersey Public Colleges and Universities," the Council reported on a special follow-up study of skills-deficient, part-time students. One finding in that study was that very few part-time, skills-deficient students (between 28 and 40%) actually attend college for four consecutive semesters; however, their rates of enrollment in required remedial courses were not significantly different from those of full-time students (84% enrolled in needed reading courses, 84% in needed computation, and 77% in elementary algebra).

The only data for part-time students in the current report are the passing rates for the first level of remediation, found in Tables 3 and 4. In general, part-time students passed their remedial courses at rates only a few points lower than the full-time remedial students. A comparison of Table 3 with the full-time student data in Table 1, for example, shows that in reading courses from the county college sector, 75 percent of full-time students passed, while 72 percent of part-time students passed. In writing, the comparable figures were 72 percent and 68 percent; in computation, 68 percent and 64 percent; and, in elementary algebra, 65 percent and 60 percent.

CONCLUSIONS

Statewide reporting on the outcomes of college remedial programs in as much detail as required by the Basic Skills Council is an effort currently unique to New Jersey. The public colleges have, over the past six years, restructured their computerized record keeping systems to comply with the Council's requirements for remedial outcomes data. While these data are self-reported by the colleges, the reporting guidelines are sufficiently standardized (and supplemented by workshops held for institutional report respondents) and the institution-specific data are sufficiently cross-checked that the Basic Skills Council can confidently draw the following general conclusions:

- a When viewed as a unified pattern, the seven outcome indicators studied in this report show that, in general, the remedial programs in the New Jersey system of higher education are successful in raising the skill levels of students who complete remediation to a point where their subsequent college performance (retention, grade point average and passing rates in subsequent courses) is satisfactory relative to the performance of non-remedial students.
- a In terms of the two-year duration of this report, the data should be regarded as a snapshot of a moving stream of students through the state's system of higher education. Across all college sectors and remedial areas, this report represents data from 30,581 grades¹ assigned at the level of the final remedial course in each college. Across the system, 75 percent of the students passed (range, 65-90%) their remedial courses.
- a Those students completing remediation across all skill areas (24,077¹)

¹ Duplicated need count. Many students are enrolled in more than one remedial area.

exhibited two-year retention rates similar to (and in the case of county and state colleges higher than) non-remedial students.

- a In subsequent college-level courses that assumed proficiency in the skills being remediated, students who completed remediation generally passed the courses at rates similar to non-remedial students. Passing rates in these subsequent courses ranged from 85 to 90 percent. Students completing mathematics remediation were not as close to their non-remedial counterparts as students who completed remediation in reading or writing.
- a Full-time students who completed remediation assumed college-level credit loads in their fourth semester that were within two credits of those of non-remedial students. Accumulation of total credits was lower for remediation-completed students by five to 10 credits—a gap that could conceivably be closed for many students by taking summer courses.
- a In contrast, students who did not complete remediation within two years have chances of successful survival approximately three times lower than remediation-completed students.
- a There is room for improvement in both the quality and the completeness of the data on remedial outcomes that colleges collect, both for their own internal use and for reporting to the Board. Systems of program evaluation can only be as valid as the data on which they are based. The numerous gaps in the tables contained in this report indicate that the data collection and reporting functions at many colleges can be improved.

The quality control of remedial programs that stems from exit testing is also in need of improvement. The data in this

report on program pre-/post-testing is incomplete, a mere sampling of the entire context of college remediation. The 60 pre-/post-test cases that were reported, however, give cause for concern. The percentages of students emerging from some programs with requisite scores for college-level placement are unsatisfactory.

Based on the findings in this report the Council makes the following recommendations:

Recommendations

This report is the second two-year cohort study of remedial students. The statewide and institutional patterns that have emerged are now sufficiently clear and consistent that the Basic Skills Council recommends the following:

o Exit-Test Data for Remedial Programs

College-level courses should be conducted on the expectation that students possess the skills needed to succeed in the courses. Therefore, placement criteria should be established carefully so as to allow students the opportunity to demonstrate these skills. Similarly, exit criteria from remedial programs should be developed to assure that students are entering college-level courses with the skills they need to succeed. Whatever level of skills proficiency a college determines for entrance into a college-level course should apply equally to students who are initially placed in that course and to students who come to the course by way of a remedial program.

Exit-testing (i.e., at the end of the last remedial course) is currently being reported for only 63 percent of remedial programs. The Council recommends that all public colleges employ exit-testing for their remedial programs. Appropriate standardized tests such as the NJCBSPT should be used. If tests other than the NJCBSPT are used for

post-testing, equating with the NJCBSPT should be done.

The Council's intent in collecting exit-test results is to assess programs, not individual students. Towards this end, a college could opt to test all exiting remedial students or a random, representative sample.

o Institutional Self Assessments

To date most institutions provide their remedial outcomes data without explicitly attempting to assess the status of their programs. In the future, the Council's reporting guidelines will ask each college to provide narrative that assesses its remedial programs' strengths and weaknesses, both in light of data from comparable institutions and in the context of program development over time.

o Consultative Assistance to Remedial Programs

The Council will expand its current site visit program, which to date has sought to observe noteworthy programs, to offer consultations to those programs seeking assistance or review. Further, the Council recommends that funds be made available to provide options for consultative assistance to those institutions whose remedial program or program components need improvement.

o State-wide Faculty Networks

Faculty teaching basic reading, writing and mathematics courses should have access to the latest research on effective teaching methods. The Council recommends that the Board of Higher Education foster statewide networks designed to collect and exchange information on pedagogical methods.

o Local Research Efforts

The Council's guidelines for the preparation of institutional effectiveness reports should be viewed as minimum evaluation requirements. The Council urges colleges to conduct local research efforts that focus on areas needing improvement; serve to advance the effectiveness of student learning in established programs; and evaluate patterns over time that could reveal more about the strengths and weaknesses of individual programs. The Council would welcome the receipt of such reports from institutions for the purpose of sharing information among colleges.

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DATA TABLES

Key to Symbols and Abbreviations Used:

- Not applicable, either for reasons indicated via footnote (e.g., institution lacks a course in the particular skill area, only part-time students are tested and tracked by an institution) or as a logical consequence of other data (e.g., retention rate was zero, no students were identified for remediation in a particular study group, etc.).
- //A Literally, "no account." Data not available (institution did not furnish data).

TABLE 1
 NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
 FALL 1983 THROUGH SPRING 1985
 FULL-TIME STUDENTS, BY COLLEGE
 ENTERING FALL 1983

<u>COUNTY COLLEGES</u>	<u>READING</u>		<u>WRITING</u>		<u>COMPUTATION</u>		<u>ELEMENTARY ALGEBRA</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Atlantic	168	80	109	81	167	70	-- ¹	--
Bergen	667 ²	85	308	59	1130	73	897	63
Brookdale	369	75	303	80	412	69	403	62
Burlington	245	78	381	80	240	81	146	74
Camden	339	67	416	64	445	59	466	61
Cumberland	96	73	132	87	113	65	122	77
Essex	119	69	348	59	319	55	318	51
Gloucester	96	76	209	74	253	69	N/A	N/A
Hudson	182	67	170	68	146	56	77	67
Mercer	577	82	634	83	614	72	643	73
Middlesex	759	77	666	69	987	69	180	84
Morris	334	78	388	75	255	57	185	38
Ocean ³	283	73	159	79	281	69	5	50
Passaic ⁴	90	53	116	72	52	79	10	80
Salem	91	67	80	72	95	66	87	76
Somerset	62	96	194	79	-- ⁵	--	374	64
Sussex ⁶	--	--	--	--	--	--	--	--
Union	530	61	474	65	497	66	169	66
Warren	4 ²	100	-- ⁷	--	6	84	0	--
County College Total/ Average %	5011	75	5087	72	6012	68	4082	65

TABLE 2
 NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
 FALL 1983 THROUGH SPRING 1985
 FULL-TIME STUDENTS, BY COLLEGE
 ENTERING FALL 1983

	<u>READING</u>		<u>WRITING</u>		<u>COMPUTATION</u>		<u>ELEMENTARY ALGEBRA</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>STATE COLLEGES</u>								
Glassboro	407	80	313	83	322	87	626	84
Jersey City	166	84	210	64	202	85	153	80
Kean	258	81	331	75	-- ¹	--	329	70
Montclair	393	98	152	92	251	92	741 ²	93
Ramapo	104	81	125	77	41	66	113	73
Stockton	308 ³	90	379	91	274 ⁴	88	-- ⁵	--
Trenton	233	90	310	92	258	78	391	77
William Paterson	269	87	480	91	280	89	124	77
Thomas Edison ⁶	--	--	--	--	--	--	--	--
<hr/>								
State College Total/Average %	2138	87	2300	95	1628	86	2477	83
<hr/>								
<u>NJIT</u>	49 ⁷	71	76	95	-- ¹	--	207 ⁸	85
<hr/>								
<u>RUTGERS UNIVERSITY</u>								
Camden	63	97	27	78	-- ¹	--	38	82
Newark	105 ⁷	82	-- ⁹	--	-- ¹	--	109	84
New Brunswick	317	81	538	93	-- ¹	--	317	72
<hr/>								
Rutgers University Total/Average %	485	84	565	92	-- ¹	--	464	75

TABLE 3
 NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
 FALL 1983 THROUGH SPRING 1985
 PART-TIME STUDENTS, BY COLLEGE
 ENTERING FALL 1983

<u>COUNTY COLLEGES</u>	<u>READING</u>		<u>WRITING</u>		<u>COMPUTATION</u>		<u>ELEMENTARY ALGEBRA</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Atlantic	100	70	85	62	91	67	-- ¹	--
Bergen	141 ²	71	46	61	281	72	218	68
Brookdale	145	68	113	66	172	73	129	67
Burlington	46	76	103	61	49	92	41	93
Camden	185	62	224	58	273	61	313	60
Cumberland	23	78	38	79	33	73	53	66
Essex	6	83	39	80	51	63	39	75
Gloucester	12	83	42	67	64	72	N/A	N/A
Hudson	96	73	70	67	63	67	30	60
Mercer	144	82	199	75	208	70	234	79
Middlesex	81	90	116	73	197	72	-- ³	--
Morris	2	50	6	50	1	0	5	40
Ocean ⁴	32	63	26	77	39	74	1	100
Passaic ⁵	29	69	58	64	18	83	5	29
Salem	18	67	18	83	36	64	25	60
Somerset	59	84	90	72	-- ⁶	--	168	72
Sussex	21 ²	97	-- ⁷	--	-- ⁶	--	33 ⁸	95
Union	101	60	87	59	111	68	32	72
Warren	1 ²	100	-- ⁹	--	1	100	0	--
County College Total/ Average %	1242	72	1360	67	1688	70	1326	70

TABLE 4
 NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
 FALL 1983 THROUGH SPRING 1985
 PART-TIME STUDENTS, BY COLLEGE
 ENTERING FALL 1983

	<u>READING</u>		<u>WRITING</u>		<u>COMPUTATION</u>		<u>ELEMENTARY ALGEBRA</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>STATE COLLEGES</u>								
Glassboro	17	81	14	57	21	100	18	79
Jersey City	34	79	106	50	72	70	42	60
Kean	102	79	113	80	-- ¹	--	148	64
Montclair	205	89	61	84	184	86	234	85
Ramapo	36	100	31	92	18	100	32	83
Stockton	3 ²	100	3	33	3 ³	100	-- ⁴	--
Trenton	0	--	0	--	0	--	0	--
William Paterson	35	89	67	88	46	98	16	88
Thomas Edison	2	100	3	100	0	--	4	100
<hr/>								
State College Total/Average %	434	86	398	74	344	86	494	77
<hr/>								
<u>NJIT</u>	--	--	--	--	-- ¹	--	--	--
<hr/>								
<u>RUTGERS UNIVERSITY</u>								
Camden	0	--	--	--	-- ¹	--	--	--
Newark	14 ⁵	50	-- ⁶	--	-- ¹	--	13	77
New Brunswick	2	50	5	60	-- ¹	--	15	73
<hr/>								
Rutgers University Total/Average %	16	50	5	60	-- ¹	--	28	75

TABLE 5
RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN
READING, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	<u>NO REMEDIATION *</u>		<u>COMPLETED REMEDIATION *</u>		<u>DID NOT COMPLETE REMEDIATION *</u>	
	<u>(N)</u>	<u>Retention</u>	<u>(N)</u>	<u>Retention</u>	<u>(N)</u>	<u>Retention</u>
<u>COUNTY COLLEGES</u>						
Atlantic	253	52	135	53	103	29
Bergen ¹	1169	47	564	51	187	10
Brookdale	593	49	277	48	155	26
Burlington	262	44	191	54	193	36
Camden	927	42	293	55	367	18
Cumberland	165	48	83	45	40	18
Essex	146	23	82	48	478	28
Gloucester	503	50	74	57	34	18 ²
Hudson	134	36	117	62	194	0 ²
Mercer	895	53	495	54	188	12
Middlesex	1461	53	614	58	201	7
Morris	1275	64	259	64	146	13
Ocean ³	620	60	221	64	173	27
Passaic	63	30	91	52	191	7
Salem	175	48	62	65	56	70
Somerset	524	41	140	54	51	4
Sussex ⁴	--	--	--	--	--	--
Union	620	54	321	62	260	18
Warren ¹	79	N/A	4	50	0	--
<hr/>						
County College Total/Average %	9964	51	4024	56	3017	19
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<u>STATE COLLEGES</u>						
Glassboro	736	70	327	72	85	40
Jersey City	325	57	139	67	129	41
Kean	717	65	229	76	57	28
Montclair	1124	75	460	76	28	11
Ramapo	264	36	140	63	33	52
Stockton ⁵	497	71	284	72	24	0
Trenton	794	77	155	70	27	33
Wm. Paterson ⁶	919	67	226	74	103	36
Thomas Edison ⁶	46	43	3	67	2	0
<hr/>						
State College Total/Average %	5422	68	1963	72	489	35
<hr/>						
<u>NJIT</u> ¹	533	63	35	57	14	43
<hr/>						
<u>RUTGERS UNIVERSITY</u> ⁷						
Camden ¹	247	75	85 ⁸	64 ⁸	10 ⁸	50 ⁸
Newark ¹	502	79	82	85	27	33
New Brunswick	3931	88	268	83	245	73
<hr/>						
Rutgers University Total/Average %	4680	86	435	80	282	68

TABLE 6
RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN
WRITING, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDICATION*		DID NOT COMPLETE REMEDICATION*	
	(N)	Retention	(N)	Retention	(N)	Retention
<u>COUNTY COLLEGES</u>						
Atlantic	376	52	88	45	27	19
Bergen	833	49	175	59	140	18
Brookdale	821	50	241	44	87	13
Burlington	240	45	306	53	100	16
Camden	830	40	365	62	444	14
Cumberland	144	49	121	43	11	9
Essex	194	15	206	45	306	20
Gloucester	392	51	154	57	75	14
Hudson	139	35	100	55	206	7
Mercer	895	53	538	52	143	10
Middlesex	1574	53	483	60	219	11
Morris	1284	63	289	58	107	22
Ocean	832	57	135	57	47	19
Passaic	32	22	126	42	182	8
Salem	172	51	58	69	55	13
Somerset	543	43	159	41	7	0
Sussex	--	--	--	--	--	--
Union	676	53	309	61	216	20
Warren	--	--	--	--	--	--
<hr/>						
County College Total/Average %	9977	51	3853	54	2368	14
<hr/>						
<u>STATE COLLEGES</u>						
Glassboro	827	68	260	76	62	27
Jersey City	382	57	134	69	77	29
Keon	656	65	284	79	63	19
Montclair	1456	75	142	63	14	0
Ramapo	206	34	157	62	74	15
Stockton	426	71	352	72	27	0
Trenton	589	90	252	75	35	46
Wa. Paterson	691	68	460	67	97	39
Thomas Edison	43	49	3	33	5	0
<hr/>						
State College Total/Average %	5376	71	2044	71	454	26
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<u>NJIT</u>	506	63	72	60	4	0
<hr/>						
<u>RUTGERS UNIVERSITY⁵</u>						
Camden	269	74	61 ⁶	66	12 ⁶	42 ⁶
Newark ³	--	--	--	--	--	--
New Brunswick	3830	87	544	86	70	34
<hr/>						
Rutgers University Total/Average %	4099	87	605	84	82	35

TABLE 7
RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN
COMPUTATION, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	<u>NO REMEDIATION *</u>		<u>COMPLETED REMEDICATION*</u>		<u>DID NOT COMPLETE REMEDICATION *</u>	
	<u>(N)</u>	<u>Retention</u>	<u>(N)</u>	<u>Retention</u>	<u>(N)</u>	<u>Retention</u>
<u>COUNTY COLLEGES</u>						
Atlantic	231	50	113	62	159	42
Bergen	690	51	821	53	409	16
Brookdale	572	51	253	63	284	19
Burlington	256	52	195	52	195	27
Camden	874	46	280	55	442	12
Cumberland	175	50	73	41	41	22
Essex	78	44	176	43	452	22
Gloucester	348	49	173	68	90	12
Hudson	126	35	78	47	239	15
Mercer	926	55	448	54	204	8
Middlesex	1190	55	738	61	348	11
Morris	1407	63	145	63	128	24
Ocean ¹	628	61	209	63	177	24
Passaic	4	75	119	49	111	11
Salen	185	50	61	57	47	15
Somerset ²	--	--	--	--	--	--
Sussex ³	--	--	--	--	--	--
Union	560	55	326	51	315	32
Warren	87	N/A	5	20	1	0
<hr/>						
County College Total/Average %	8337	54	4213	56	3642	19
<hr/>						
<u>STATE COLLEGES</u>						
Glassboro	778	70	279	73	92	33
Jersey City	278	61	172	60	143	36
Kean ⁴	--	--	--	--	--	--
Montclair	1350	76	236	70	26	8
Ramapo	375	40	43	53	19	11
Stockton ⁵	531	69	257	74	17	0
Trenton	702	76	201	81	73	41
Wm. Paterson	920	64	240	74	88	53
Thomas Edison ⁶	38	53	9	22	4	0
<hr/>						
State College Total/Average %	4972	68	1437	72	462	35
<hr/>						
<u>RJIT</u> ⁴	--	--	--	--	--	--
<hr/>						
<u>RUTGERS UNIVERSITY</u> ⁴						
Camden	--	--	--	--	--	--
Newark	--	--	--	--	--	--
New Brunswick	--	--	--	--	--	--
<hr/>						
Rutgers University Total/Average %	--	--	--	--	--	--

TABLE 8
RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN
ELEMENTARY ALGEBRA, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION *		COMPLETED REMEDICATION *		DID NOT COMPLETE REMEDICATION *	
	(N)	Retention	(N)	Retention	(N)	Retention
<u>COUNTY COLLEGES</u>						
Atlantic ¹	--	--	--	--	--	--
Bergen	203	42	531	71	1186	33
Brookdale	295	56	251	69	595	31
Burlington	166	54	108	63	279	32
Camden	709	30	361	66	708	21
Cumberland	97	61	53	49	13	54
Essex	49	45	160	49	497	19
Gloucester ²	N/A	N/A	N/A	N/A	N/A	N/A
Hudson	35	43	39	44	153	23
Mercer	694	57	483	61	401	18
Middlesex	413	62	158	53	90	22
Morris	1486	60	71	69	123	50
Ocean ³	244	62	3	0	9	22
Passaic	4	0	8	25	4	75
Salem	175	40	52	62	12	25
Somerset	353	51	241	41	161	7
Sussex ⁵	--	--	--	--	--	--
Union	380	56	111	52	69	35
Warren	80	N/A	0	--	0	--
County College Total/Average %	5383	53	2630	61	4250	27
<u>STATE COLLEGES</u>						
Glassboro	459	70	527	77	163	34
Jersey City	116	67	122	67	40	25
Kean	634	70	261	70	78	18
Montclair	609	76	730	72	27	44
Ramapo ¹	106	37	136	69	195	12
Stockton ¹	--	--	--	--	--	--
Trenton	565	78	303	80	108	41
Wm. Paterson ⁶	1054	68	113	61	81	35
Thomas Edison ⁶	12	58	30	23	9	89
State College Total/Average %	3585	71	2222	72	701	28
<u>WJIT</u> ⁷	369	68	175	61	38	11
<u>RUTGERS UNIVERSITY</u>						
Camden	279	75	32	63	31	55
Newark	492	78	94	88	21	33
New Brunswick	3775	88	229	89	432	72
Rutgers University Total/Average %	4546	86	355	86	484	69

TABLE 9
 MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN
 READING, BY COLLEGE
 CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDATION*		DID NOT COMPLETE REMEDINATION*	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
COUNTY COLLEGES						
Atlantic	132	45	72	35	30	N/A
Bergen ¹	547	42	287	31	19	12
Brookdale	339	40	134	29	40	31
Burlington	114	47	104	34	70	31
Camden	388	46	160	31	67	31
Cumberland	80	46	37	42	7	45
Essex	34	41	39	26	133	31
Gloucester	250	49	42	28	6	31
Hudson	43	46	72	19	-- ²	18
Mercer	477	30	267	25	22	7
Middlesex	772	47	357	40	15	17
Morris	821	44	166	37	19	18
Ocean ³	371	51	141	40	46	31
Passaic	19	34	47	18	13	12
Salem	84	53	40	45	39	43
Somerset	215	53	75	44	2	53
Sussex ⁴	--	--	--	--	--	--
Union	334	42	193	27	48	28
Warren ¹	N/A	N/A	2	34	--	--
County College Total/Average	5025	44	2240	32	576	29
STATE COLLEGES						
Glassboro	512	53	235	45	34	38
Jersey City	184	48	93	45	53	43
Kean	470	50	173	43	16	35
Montclair	841	56	348	50	3	51
Ramapo	95	53	65	44	17	41
Stockton ⁵	351	56	205	52	0	--
Trenton	611	51	133	46	9	21
Wm. Paterson ⁶	614	45	167	34	37	37
Thomas Edison ⁶	20	--	2	--	0	--
State College Total/Average	3698	51	1396	46	159	38
NJIT¹	336	58	20	55	6	48
RUTGERS UNIVERSITY⁷						
Camden ¹	186	57	54 ⁸	56	5 ⁸	52 ⁸
Newark ¹	396	55	70	48	9	34
New Brunswick	3440	56	223	47	179	50
Rutgers University Total/Average	4022	56	347	48	193	49

TABLE 10
 MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN
 WRITING, BY COLLEGE
 CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDINATION *		DID NOT COMPLETE REMEDINATION	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
COUNTY COLLEGES						
Atlantic	195	43	40	34	5	N/A
Bergen	407	42	104	42	25	28
Brookdale	407	39	106	28	11	17
Burlington	109	47	163	35	16	14
Camden	330	48	225	33	63	28
Cumberland	71	49	52	45	1	--
Essex	30	45	93	27	51	30
Gloucester	201	51	88	36	9	13
Hudson	49	45	56	19	15	12
Mercer	474	29	279	25	15	9
Middlesex	829	47	290	38	25	11
Morris	814	45	168	37	24	14
Ocean	472	49	77	32	9	22
Pascatic	7	40	53	23	14	6
Salem	87	53	40	45	7	26
Somerset	232	53	65	44	0	--
Sussex	--	--	--	--	--	--
Union	357	42	187	26	43	25
Warren	--	--	--	--	--	--
<hr/>						
County College Total/Average	5071	44	2086	33	343	22
<hr/>						
STATE COLLEGES						
Glassboro	565	53	193	43	17	36
Jersey City	216	48	93	47	22	40
Kean	424	51	223	43	12	31
Montclair	1102	55	90	43	0	--
Ramapo	71	53	97	47	12	38
Stockton	301	55	255	54	0	--
Trenton	622	51	190	49	16	31
Wm. Paterson	471	46	309	37	38	39
Thomas Edison	21	--	1	--	0	--
<hr/>						
State College Total/Average	3793	52	1456	45	117	37
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NJIT	319	58	43	53	0	--
<hr/>						
RUTGERS UNIVERSITY⁵						
Camden	200	57	40 ⁶	57	5 ⁶	52 ⁶
Newark ³	--	--	--	--	--	--
New Brunswick	3348	57	470	49	24	42
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Rutgers University Total/Average	3548	57	510	49	29	43

TABLE 11
 MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN
 COMPUTATION, BY COLLEGE
 CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDATION*		DID NOT COMPLETE REMEDINATION*	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
<u>COUNTY COLLEGES</u>						
Atlantic	116	47	70	35	66	N/A
Bergen	353	42	436	36	64	22
Brookdale	293	40	159	32	55	25
Burlington	134	44	102	32	52	39
Camden	400	45	153	30	51	31
Cumberland	87	45	30	44	9	51
Essex	34	46	75	27	98	31
Gloucester	169	51	118	40	11	18
Hudson	44	44	37	22	39	21
Mercer	507	29	241	24	17	12
Middlesex	654	48	453	41	37	16
Morris	884	44	91	38	31	27
Ocean ¹	384	51	131	39	43	35
Passaic	3	32	58	20	12	21
Salem	92	54	35	40	7	25
Somerset ²	--	--	--	--	--	--
Sussex ³	--	--	--	--	--	--
Union	309	41	165	30	101	29
Warren	N/A	N/A	1	35	0	--
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County College Total/Average	4463	44	2355	34	693	28
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<u>STATE COLLEGES</u>						
Glassboro	548	52	203	45	30	40
Jersey City	170	50	104	46	52	42
Kean ⁴	--	--	--	--	--	--
Montclair	1074	55	166	49	2	33
Ramapo	150	49	23	43	2	40
Stockton ⁵	365	56	191	52	0	--
Trenton	535	51	163	52	30	30
Wm. Paterson ⁶	593	44	178	36	47	35
Thomas Edison ⁶	26	--	2	--	0	--
<hr/>						
State Coll Total/Average	3405	51	1030	47	163	37
<hr/>						
NJIT ⁴	--	--	--	--	--	--
<hr/>						
<u>RUTGERS UNIVERSITY⁴</u>						
Camden	--	--	--	--	--	--
Newark	--	--	--	--	--	--
New Brunswick	--	--	--	--	--	--
<hr/>						
Rutgers University Total/Average	--	--	--	--	--	--

TABLE 12

MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN
ELEMENTARY ALGEBRA, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDICATION *		DID NOT COMPLETE REMEDICATION *	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
COUNTY COLLEGES						
Atlantic ¹	--	--	--	--	--	--
Bergen	86	42	378	40	389	34
Brookdale	164	41	174	41	170	29
Burlington	39	46	68	34	89	36
Camden	210	48	237	35	152	37
Cumberland	59	48	26	45	7	42
Essex	22	50	78	30	95	29
Gloucester ²	N/A	N/A	N/A	N/A	N/A	N/A
Hudson	15	37	17	23	35	27
Mercer	395	30	295	27	74	13
Middlesex	257	48	33	34	20	21
Morris	895	43	49	45	62	32
Ocean ³	151	52	0	--	2	29
Passaic	0	--	2	41	3	37
Salem ⁴	70	46	32	48	3	32
Somerset	190	53	99	47	12	27
Sussex ⁵	--	--	--	--	--	--
Union	213	46	69	32	24	29
Warren	N/A	N/A	--	--	--	--
County College Total/Average	2305	43	1608	36	1138	31
STATE COLLEGES						
Glassboro	321	54	404	49	56	36
Jersey City	78	50	82	51	10	48
Kean	462	50	183	42	14	38
Montclair	451	58	522	51	12	35
Ramapo	39	53	94	49	23	44
Stockton ¹	--	--	--	--	--	--
Trenton	443	53	241	50	44	29
Wm. Paterson	720	43	69	38	29	31
Thomas Edison ⁶	7	--	7	--	8	--
State College Total/Average	2531	51	1602	48	196	35
NJIT⁷	252	60	106	51	4	57
RUTGERS UNIVERSITY						
Camden	208	57	20	54	17	56
Newark	385	54	83	52	7	40
New Brunswick	3319	57	203	47	312	50
Rutgers University Total/Average	3912	56	306	49	336	50

TABLE 13
 MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN
 READING, BY COLLEGE
 SPRING 1985 TERM

	NO REMEDIATION *		COMPLETED REMEDICATION *		DID NOT COMPLETE REMEDICATION *	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
<u>COUNTY COLLEGES</u>						
Atlantic	132	10	72	9	30	N/A
Bergen ¹	547	9	287	8	19	4
Brookdale	339	9	134	7	40	7
Burlington	114	10	104	9	70	7
Camden	388	10	160	7	67	7
Cumberland	80	10	37	10	7	10
Essex	34	10	39	9	133	8
Gloucester	250	12	42	9	6	8
Hudson	48	11	72	8	0 ²	--
Mercer	477	10	267	9	22	3
Middlesex	772	11	357	10	15	3
Morris	821	11	166	11	19	2
Ocean ³	371	12	141	10	46	8
Passaic	19	9	47	7	13	5
Salem	84	13	40	12	39	13
Somerset	215	12	75	11	2	12
Sussex ⁴	--	--	--	--	--	--
Union ¹	334	10	193	7	48	7
Warren ¹	N/A	N/A	2	8	--	--
<hr/>						
County College Total/Average	5025	10	2240	9	576	7
<hr/>						
<u>STATE COLLEGES</u>						
Glassboro	512	13	235	12	34	10
Jersey City	184	12	93	11	53	12
Kean	470	12	173	11	16	10
Montclair	841	14	348	13	3	14
Ramapo	95	13	65	12	17	11
Stockton ⁵	351	13	205	12	0	--
Trenton	611	N/A	108	N/A	9	N/A
Wm. Paterson ⁶	614	11	167	10	37	10
Thomas Edison ⁶	20	--	2	--	0	--
<hr/>						
State College Total/Average	3698	12	1396	12	169	11
<hr/>						
<u>NJIT</u> ¹	336	14	20	14	6	10
<hr/>						
<u>RUTGERS UNIVERSITY</u> ⁷						
Camden ¹	186	13	54 ⁸	12	5 ⁸	9 ⁸
Newark ¹	396	13	70	9	9	6
New Brunswick	3440	14	223	12	179	13
<hr/>						
Rutgers University Total/Average	4022	14	347	12	193	12

TABLE 14
 MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN
 WRITING, BY COLLEGE
 SPRING 1985 TERM

	NO REMEDIATION*		COMPLETED REMEDATION *		DID NOT COMPLETE REMEDINATION *	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
COUNTY COLLEGES						
Atlantic	195	10	40	10	5	N/A
Bergen	407	13	104	9	25	5
Brookdale	407	9	106	7	11	2
Burlington	109	10	163	9	16	3
Camden	350	10	225	8	63	7
Cumberland	71	11	52	10	1	--
Essex	30	9	93	8	61	7
Gloucester	201	13	88	10	9	2
Hudson	49	11	56	8	15	5
Mercer	474	10	279	9	15	3
Middlesex	829	11	290	10	25	3
Morris	814	11	168	11	24	3
Ocean	472	12	77	8	9	7
Passaic	7	8	53	7	14	5
Salem	87	13	40	12	7	6
Somerset	232	12	65	11	0	--
Sussex ²	--	--	--	--	--	--
Union ³	357	10	187	8	43	7
Warren ³	--	--	--	--	--	--
<hr/>						
County College Total/Average	5071	11	2086	9	343	5
<hr/>						
STATE COLLEGES						
Glassboro	565	13	198	12	17	10
Jersey City	216	12	93	11	22	10
Kean	424	12	223	11	12	6
Montclair	1102	14	90	12	0	--
Ramapo	71	12	97	13	12	9
Stockton	301	13	255	12	0	--
Trenton	622	N/A	190	N/A	16	N/A
Wm. Paterson	471	11	30	11	38	9
Thomas Edison ⁴	21	--	1	--	0	--
<hr/>						
State College Total/Average	3793	13	1456	11	117	9
<hr/>						
NJIT	319	14	43	13	0	--
<hr/>						
RUTGERS UNIVERSITY⁵						
Camden ³	200	13	40 ⁶	13	5 ⁶	9 ⁶
Newark ³	--	--	--	--	--	--
New Brunswick	3348	14	470	13	24	12
<hr/>						
Rutgers University Total/Average	3548	14	510	13	29	12

TABLE 15
 MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN
 COMPUTATION, BY COLLEGE
 SPRING 1985 TERM

	NO REMEDIATION*		COMPLETED REMEDIATION*		DID NOT COMPLETE REMEDIATION*	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
<u>COUNTY COLLEGES</u>						
Atlantic	116	11	70	9	66	N/A
Bergen	353	9	436	9	64	6
Brookdale	293	9	159	8	55	5
Burlington	134	10	102	8	52	9
Camden	400	9	153	8	51	7
Cumberland	87	10	30	10	9	10
Essex	34	10	75	8	98	8
Gloucester	169	12	118	11	11	5
Hudson	44	11	37	8	39	8
Mercer	507	10	241	8	37	4
Middlesex	654	11	453	10	37	4
Morris	884	11	91	12	31	8
Ocean ¹	384	12	131	9	43	9
Passaic	3	10	58	7	12	8
Salem	92	14	35	10	7	5
Somerset ²	--	--	--	--	--	--
Sussex ³	--	--	--	--	--	--
Union	309	10	165	8	101	8
Warren	N/A	N/A	1	11	0	--
County College Total/Average	4463	10	2355	9	693	7
<u>STATE COLLEGES</u>						
Glassboro	548	13	203	12	30	11
Jersey City	170	12	104	12	52	10
Kean ⁴	--	--	--	--	--	--
Montclair	1024	14	166	13	2	10
Ramapo	150	13	23	10	2	10
Stockton ⁵	365	13	191	12	0	--
Trenton	535	N/A	163	N/A	30	N/A
Wm. Paterson ⁶	593	11	178	10	47	10
Thomas Edison ⁶	20	--	2	--	0	--
State College Total/Average	3405	13	1030	12	163	10
<u>NJIT⁴</u>	--	--	--	--	--	--
<u>RUTGERS UNIVERSITY⁴</u>						
Camden	--	--	--	--	--	--
Newark	--	--	--	--	--	--
New Brunswick	--	--	--	--	--	--
Rutgers University Total/Average	--	--	--	--	--	--

TABLE 16

MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN
ELEMENTARY ALGEBRA, BY COLLEGE
SPRING 1985 TERM

	NO REMEDIATION*		COMPLETED REMEDICATION *		DID NOT COMPLETE REMEDICATION*	
	(N)	Mean Credits Earned	(N)	Mean Credits Earned	(N)	Mean Credits Earned
<u>COUNTY COLLEGES</u>						
Atlantic ¹	--	--	--	--	--	--
Bergen	86	9	378	9	389	7
Bridgewater	164	10	174	9	170	7
Burlington	89	9	68	9	89	8
Camden	210	10	237	9	152	7
Cumberland	59	10	26	10	7	10
Essex	22	12	78	9	96	7
Gloucester ²	N/A	N/A	N/A	N/A	N/A	N/A
Hudson	15	10	17	9	35	8
Mercer	395	10	296	10	74	4
Middlesex	257	11	83	8	20	6
Morris	895	11	49	13	62	9
Ocean ³	151	12	0	--	2	9
Passaic	0	--	2	11	3	6
Salem ⁴	70	11	32	12	3	8
Somerset	180	12	99	12	12	7
Sussex ⁵	--	--	--	--	--	--
Union	213	11	69	9	24	6
Warren	N/A	N/A	--	--	--	--
County College Total/Average	2806	11	1608	9	1138	7
<u>STATE COLLEGES</u>						
Glassboro	321	13	404	13	56	9
Jersey City	78	13	82	12	10	10
Kean	462	12	183	11	14	9
Montclair	461	14	522	13	12	9
Ramapo	39	12	94	13	23	11
Stockton ¹	--	--	--	--	--	--
Trenton	443	N/A	241	N/A	44	N/A
Wm. Paterson	720	11	69	11	29	8
Thomas Edison ⁶	7	--	7	--	8	--
State College Total/Average	2531	12	1602	12	196	9
<u>NJIT⁷</u>	252	14	106	13	4	12
<u>RUTGERS UNIVERSITY</u>						
Camden	208	13	20	12	17	12
Newark	385	12	83	11	7	10
New Brunswick	3319	14	203	13	312	13
Rutgers University Total/Average	3912	14	306	12	336	13

TABLE 17

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION *			COMPLETED REMEDICATION *			DID NOT COMPLETE REMEDICATION		
	(N)	Mean	$\bar{x} \geq 2.00$	(N)	Mean	$\bar{x} \geq 2.00$	(N)	Mean	$\bar{x} \geq 2.00$
COUNTY COLLEGES									
Atlantic	132	2.79	91	72	2.27	70	30	2.16	65
Bergen ¹	547	2.52	82	287	2.10	63	19	1.18	16
Brookdale ²	339	--	--	134	--	--	40	--	--
Burlington	114	2.49	99	104	2.21	64	70	2.04	50
Camden	388	2.69	94	160	2.28	74	67	2.26	75
Cumberland	80	2.98	91	37	2.25	70	7	2.53	86
Essex	34	2.78	91	39	2.10	56	133	2.23	69
Gloucester	250	2.48	80	42	1.72	33	6 ³	1.15	0
Hudson	48	2.72	83	72	1.90	53	--	--	--
Mercer	477	2.46	75	267	1.99	52	22	1.09	27
Middlesex	772	2.55	82	357	2.22	69	15	1.32	33
Morris	821	2.40	76	166	2.00	55	19	1.40	21
Ocean ⁴	371	2.72	88	141	2.25	67	46	1.95	57
Passaic	19	2.68	74	47	1.86	38	13	1.60	23
Salem	84	2.78	85	40	2.22	63	39	2.27	64
Somerset	215	2.65	87	75	2.21	68	2	2.33	50
Sussex ⁵	--	--	--	--	--	--	--	--	--
Union	334	2.40	75	198	1.96	50	48	1.90	56
Warren ¹	N/A	N/A	N/A	2	1.79	50	--	--	--
<hr/>									
County College Total/ Average	725	2.55	82	2240	2.11	61	576	1.99	56
<hr/>									
STATE COLLEGES									
Glassboro	512	2.68	86	235	2.35	75	34	2.12	56
Jersey City	184	2.60	80	93	2.30	76	53	2.20	63
Kean	470	2.64	82	173	2.43	76	16	2.05	63
Montclair	841	2.90	99	348	2.50	83	3	2.50	100
Ramapo ⁶	95	2.76	89	65	2.27	74	17	2.44	80
Stockton	351	2.67	84	205	2.33	69	0	--	--
Trenton	611	2.76	93	108	2.36	71	9	1.98	56
Wm. Paterson ⁷	614	2.40	73	167	2.00	47	37	2.07	57
Thomas Edison	20	--	--	2	--	--	0	--	--
<hr/>									
State College Total/ Average	3698	2.69	87	1396	2.35	73	169	2.16	62
<hr/>									
NUJI¹	336	2.60	85	20	2.38	75	6	2.17	50
<hr/>									
RUTGERS UNIVERSITY⁸									
Camden	186	2.80	89	50 ⁹	2.50	82 ⁹	5 ⁹	2.40 ⁹	100
Newark ¹	396	2.60	84	70	2.10	50	9	1.80	38
New Brunswick	3440	2.70	86	223	2.10	60	179	2.20	58
<hr/>									
Rutgers University Total/ Average	4022	2.69	86	347	2.16	61	193	2.19	58

TABLE 18

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*			COMPLETED REMEDIATION*			DID NOT COMPLETE REMEDIATION*		
	(N)	Mean	% ≥ 2.00	(N)	Mean	% ≥ 2.00	(N)	Mean	% ≥ 2.00
COUNTY COLLEGES									
Atlantic	195	2.62	86	40	2.31	58	5	1.86	60
Bergen	407	2.58	85	104	2.43	78	25	1.87	52
Brookdale ¹	407	--	--	106	--	--	11	--	--
Burlington	109	2.54	77	163	2.17	61	16	1.55	25
Camden	330	2.72	96	225	2.33	78	63	2.33	73
Cumberland	71	2.91	93	52	2.35	75	1	--	--
Essex	30	2.80	93	93	2.23	68	61	2.04	59
Gloucester	201	2.62	87	88	1.86	43	9	0.92	0
Hudson	49	2.73	86	56	1.86	41	15	2.08	87
Mercer	474	2.46	74	279	1.96	52	15	1.18	27
Middlesex	829	2.54	82	290	2.22	70	25	1.39	24
Morris	814	2.40	76	168	1.90	55	24	1.50	17
Ocean ²	472	2.63	85	77	2.06	55	9	1.82	44
Passaic	7	2.92	71	53	2.01	47	14	1.57	21
Salem	87	2.79	85	40	2.38	72	7	1.69	29
Somerset	232	2.62	80	65	2.22	66	0	--	--
Sussex ³	--	--	--	--	--	--	--	--	--
Union	357	2.40	76	187	1.93	49	43	1.85	49
Warren ⁴	--	--	--	--	--	--	--	--	--
<hr/>									
County College Total/ Average	5071	2.55	82	2086	2.12	61	343	1.84	48
<hr/>									
STATE COLLEGES									
Glassboro	565	2.66	86	198	2.29	68	17	2.30	71
Jersey City	216	3.00	85	93	2.20	66	22	2.20	46
Kean	424	2.70	86	223	2.38	72	12	1.73	50
Montclair	1102	2.90	94	90	2.20	71	0	--	--
Ramapo	71	2.75	92	97	2.49	81	12	2.13	71
Stockton	301	2.61	81	255	2.46	75	0	--	--
Trenton	622	2.77	92	190	2.47	82	16	2.35	88
Wm. Paterson	471	2.43	75	309	2.13	56	38	2.12	53
Thomas Edison ⁵	21	--	--	1	--	--	0	--	--
<hr/>									
State College Total/ Average	3793	2.74	88	1456	2.33	70	117	2.15	61
<hr/>									
NJIT	319	2.58	85	43	2.57	79	0	--	--
<hr/>									
RUTGERS UNIVERSITY⁶									
Camden	200	2.70	88	40 ⁷	2.50	85 ⁷	5 ⁷	2.40 ⁷	100
Newark ⁴	--	--	--	--	--	--	--	--	--
New Brunswick	3348	2.70	86	470	2.20	65	24	1.90	38
<hr/>									
Rutgers University Total/ Average	3548	2.70	86	510	2.22	66	29	1.99	48

TABLE 19

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION *			COMPLETED REMEDATION *			DID NOT COMPLETE REMEDATION *		
	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00
<u>COUNTY COLLEGES</u>									
Atlantic	116	2.70	86	70	2.35	71	66	2.26	65
Bergen	353	2.56	82	436	2.27	73	64	1.67	44
Brookdale ¹	293	--	--	159	--	--	55	--	--
Burlington	134	2.44	73	102	2.10	56	52	2.22	62
Camden	400	2.64	91	153	2.35	80	51	2.12	63
Cumberland	87	2.74	91	30	2.56	77	9	2.21	56
Essex	34	2.72	79	75	2.19	67	98	2.23	69
Gloucester	169	2.54	82	118	2.14	59	11	1.57	27
Hudson	44	2.69	82	37	2.06	54	39	1.87	56
Mercer	507	2.39	71	241	2.04	54	17	1.53	35
Middlesex	654	2.55	82	453	2.33	75	37	1.54	35
Morris	884	2.40	74	91	2.10	64	31	1.70	23
Ocean ²	384	2.68	85	131	2.23	69	43	2.20	67
Passaic	3	2.36	67	58	1.99	40	12	1.83	46
Salem	92	2.75	84	35	2.31	69	7	2.32	57
Somerset ³	--	--	--	--	--	--	--	--	--
Sussex ⁴	--	--	--	--	--	--	--	--	--
Union	309	2.38	73	165	2.08	58	101	1.88	52
Warren	N/A	N/A	N/A	1	2.05	100	0	--	--
County College Total/ Average	4463	2.52	79	2355	2.22	67	693	1.99	55
<u>STATE COLLEGES</u>									
Glassboro	548	2.62	84	203	2.43	77	30	2.26	63
Jersey City	170	2.60	80	104	2.30	73	52	2.20	71
Keon ⁵	--	--	--	--	--	--	--	--	--
Montclair	1024	2.90	94	166	2.50	86	2	2.00	50
Ramapo	150	2.60	85	23	2.32	65	2	1.89	50
Stockton ⁶	365	2.65	83	191	2.33	70	0	--	--
Trenton	535	2.78	93	163	2.47	80	30	2.13	67
Wm. Paterson	593	2.38	71	178	2.14	56	47	2.04	51
Thomas Edison ⁷	20	--	--	2	--	--	0	--	--
State College Total/ Average	3405	2.69	86	1030	2.36	73	163	2.15	63
NJIT ⁵	--	--	--	--	--	--	--	--	--
<u>RUTGERS UNIVERSITY⁵</u>									
Camden	--	--	--	--	--	--	--	--	--
Newark	--	--	--	--	--	--	--	--	--
New Brunswick	--	--	--	--	--	--	--	--	--
Rutgers University Total/ Average	--	--	--	--	--	--	--	--	--

TABLE 20

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION *			COMPLETED REMEDATION *			DID NOT COMPLETE * REMEDATION		
	(N)	Mean	% ≥ 2.00	(N)	Mean	% ≥ 2.00	(N)	Mean	% ≥ 2.00
COUNTY COLLEGES									
Atlantic ¹	--	--	--	--	--	--	--	--	--
Bergen	86	2.57	78	378	2.47	80	389	2.18	68
Brookdale ²	164	--	--	174	--	--	170	--	--
Burlington	89	2.46	74	58	2.16	57	89	2.15	61
Camden	210	2.74	95	237	2.48	85	152	2.29	74
Cumberland	59	2.64	91	26	2.52	85	7	2.93	100
Essex	22	2.87	86	78	2.33	73	96	2.13	64
Gloucester ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hudson	15	2.77	93	17	2.19	59	35	2.09	63
Mercer	395	2.39	73	296	2.26	63	74	1.41	27
Middlesex	257	2.50	77	83	2.23	66	20	1.90	60
Morris ⁴	895	2.40	73	49	2.30	69	62	2.00	55
Ocean	151	2.73	87	0	--	--	2	1.70	50
Passaic ⁵	0	--	--	2	3.27	100	3	2.11	67
Salem	70	2.59	73	32	2.64	91	3	2.30	67
Somerset	180	2.56	82	99	2.45	80	12	2.09	83
Sussex ⁶	--	--	--	--	--	--	--	--	--
Union	213	2.51	78	69	2.15	61	24	1.79	58
Warren	N/A	N/A	N/A	--	--	--	--	--	--
County College Total/ Average	2806	2.50	78	1608	2.37	74	1138	2.10	64
STATE COLLEGES									
Glassboro	321	2.68	85	404	2.53	82	56	2.03	48
Jersey City	78	2.80	86	82	2.70	87	10	2.40	65
Kean	462	2.66	84	183	2.41	73	14	2.03	57
Montclair	461	3.00	97	522	2.70	89	12	2.10	58
Ramapo	39	2.51	79	94	2.54	92	23	2.38	85
Stockton ¹	--	--	--	--	--	--	--	--	--
Trenton	443	2.84	95	241	2.49	83	44	2.26	68
Wm. Paterson ⁷	720	2.33	69	69	2.17	57	29	2.02	45
Thomas Edison ⁸	7	--	--	7	--	--	8	--	--
State College Total/ Average	2531	2.66	84	1502	2.56	83	196	2.15	59
WJLT ⁸	252	2.66	76	106	2.40	76	4	2.57	75
RUTGERS UNIVERSITY									
Camden	208	2.70	87	20	2.60	90	17	2.60	88
Newark	385	2.60	80	83	2.40	74	7	2.30	57
New Brunswick	3319	2.70	85	203	2.30	74	312	2.40	72
Rutgers University Total/ Average	3912	2.69	85	306	2.35	75	336	2.41	72

TABLE 21

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE
SPRING 1985 TERM

	NO REMEDIATION*			COMPLETED REMEDATION*			DID NOT COMPLETE REMEDATION*		
	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00
COUNTY COLLEGES									
Atlantic	132	2.61	82	72	2.09	60	30	1.79	66
Bergen ¹	547	2.25	69	237	1.89	60	19	1.25	26
Brookdale ²	339	--	--	134	--	--	40	--	--
Burlington	114	2.38	N/A	104	2.01	N/A	70	1.91	N/A
Camden	388	2.64	87	160	2.17	73	67	2.08	64
Cumberland	80	2.73	84	37	2.11	62	7	2.40	86
Essex	34	2.51	79	39	1.90	51	133	1.96	63
Gloucester	250	2.49	74	42	1.57	33	6	1.11	17
Hudson	48	2.62	81	72	1.74	53	-- ³	--	--
Mercer	477	2.37	72	267	1.90	53	22	0.73	27
Middlesex	772	2.60	83	357	2.24	77	15	1.13	33
Morris ⁴	821	2.70	N/A	166	2.10	N/A	19	1.30	N/A
Ocean	371	2.52	75	141	2.14	67	46	1.68	54
Passaic	19	2.55	68	47	1.65	47	13	1.30	23
Salem	84	2.72	76	40	2.16	63	39	2.22	64
Somerset	215	2.65	80	75	2.25	68	2	2.02	50
Sussex ⁵	--	--	--	--	--	--	--	--	--
Union	334	2.31	77	198	1.75	50	48	1.82	58
Warren ¹	N/A	N/A	N/A	2	2.26	50	--	--	--
County College Total/ Average	5025	2.52	77	2240	2.01	62	576	1.80	56
STATE COLLEGES									
Glassboro	512	2.63	82	235	2.19	71	34	1.87	59
Jersey City	184	2.50	75	93	2.30	68	53	2.20	61
Kean	470	2.55	79	173	2.34	72	16	1.94	50
Montclair	841	2.90	90	348	2.40	76	3	2.70	100
Ramapo	95	2.66	86	65	2.17	69	17	2.47	79
Stockton ⁶	351	2.68	81	205	2.35	73	0	--	--
Trenton	611	N/A	N/A	108	N/A	N/A	9	N/A	N/A
Wm. Paterson ⁷	614	2.41	75	167	1.99	53	37	2.10	54
Thomas Edison ⁷	20	--	--	2	--	--	0	--	--
State College Total/ Average	3698	2.65	82	1396	2.27	70	169	2.12	60
NJIT ¹	336	2.61	83	20	2.26	63	6	1.93	67
RUTGERS UNIVERSITY⁸									
Camden	186	2.70	84	54 ⁹	2.40	74 ⁹	5 ⁹	2.00 ⁹	40 ⁹
Newark ¹	396	2.60	80	70	1.70	44	9	1.40	33
New Brunswick	3440	2.70	84	223	2.10	65	179	2.20	65
Rutgers University Total/ Average	4022	2.69	83	347	2.07	62	193	2.16	63

TABLE 22

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE
SPRING 1985 TERM

	NO REMEDIATION*			COMPLETED REMEDICATION*			DID NOT COMPLETE* REMEDICATION		
	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00
<u>COUNTY COLLEGES</u>									
Atlantic	195	2.39	75	40	2.17	63	5	1.70	60
Bergen	407	2.32	71	104	2.13	64	25	1.51	8
Brookdale ¹	407	--	--	106	--	--	11	--	--
Burlington	109	2.45	N/A	163	2.00	N/A	16	1.24	N/A
Camden	330	2.70	88	225	2.23	74	63	1.98	65
Cumberland	71	2.66	88	52	2.11	63	1	0.00	--
Essex	30	2.67	83	93	1.90	63	61	1.76	49
Gloucester	201	2.56	78	88	1.80	50	9	0.54	0
Hudson	49	2.56	80	56	1.73	45	15	2.19	87
Mercer	474	2.37	71	279	1.86	54	15	0.57	20
Middlesex	829	2.59	84	290	2.25	75	25	0.70	25
Morris	814	2.60	N/A	168	2.00	N/A	24	1.90	N/A
Ocean ²	472	2.46	78	77	1.77	56	9	2.02	67
Passaic	7	2.77	71	53	1.82	53	14	1.36	29
Salem	87	2.75	78	40	2.22	63	7	1.36	43
Somerset ³	232	2.62	86	65	2.25	68	0	--	--
Sussex	--	--	--	--	--	--	--	--	--
Union	357	2.30	77	187	1.79	49	43	1.53	49
Warren ⁴	--	--	--	--	--	--	--	--	--
County College Total/ Average	5071	2.51	79	2086	2.01	62	343	1.57	49
<u>STATE COLLEGES</u>									
Glassboro	565	2.60	82	198	2.11	66	17	1.81	53
Jersey City	216	2.50	76	93	2.20	58	22	1.90	58
Kean	424	2.63	81	223	2.27	70	12	1.13	17
Montclair	1102	2.80	87	90	2.10	63	0	--	--
Ramapo	71	2.54	84	97	2.38	76	12	2.51	91
Stockton	301	2.68	83	255	2.42	72	0	--	--
Trenton	622	N/A	N/A	190	N/A	N/A	16	N/A	N/A
Hm. Paterson ⁵	471	2.46	79	309	2.10	58	38	2.03	51
Thomas Edison ⁵	21	--	--	1	--	--	0	--	--
State College Total/ Average	3793	2.65	83	1456	2.22	66	117	1.91	54
<u>NJIT</u>	319	2.59	82	43	2.49	74	0	--	--
<u>RUTIGERS UNIVERSITY⁶</u>									
Camden	200	2.60	83	40 ⁷	2.50	78 ⁷	5 ⁷	2.00 ⁷	40 ⁷
Newark ⁴	--	--	--	--	--	--	--	--	--
New Brunswick	3348	2.70	84	470	2.20	67	24	2.10	63
Rutgers University Total/ Average	3548	2.69	84	510	2.22	68	29	2.08	59

TABLE 23

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE
SPRING 1985 TERM

	NO REMEDIATION*			COMPLETED REMEDICATION*			DID NOT COMPLETE REMEDICATION*		
	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00
COUNTY COLLEGES									
Atlantic	116	2.48	78	70	2.07	63	66	2.16	60
Bergen	353	2.27	67	436	2.09	67	64	1.38	42
Brookdale ¹	293	--	--	159	--	--	55	--	--
Burlington	134	2.23	N/A	102	2.01	N/A	52	2.12	N/A
Camden	400	2.59	84	153	2.18	74	51	1.89	63
Cumberland	87	2.43	82	30	2.52	73	9	1.59	44
Essex	34	2.34	77	75	1.88	55	98	2.04	65
Gloucester	169	2.58	75	118	2.05	59	11	1.63	36
Hudson	44	2.57	77	37	1.96	57	39	1.67	56
Mercer	507	2.52	70	241	1.83	51	17	1.57	53
Middlesex	654	2.58	83	453	2.39	79	37	1.39	53
Norris	884	2.70	N/A	91	2.30	N/A	31	2.00	N/A
Ocean ²	384	2.55	76	131	1.90	58	43	2.02	70
Passaic	3	2.46	100	58	1.80	43	12	1.86	54
Salem	92	2.69	79	35	2.14	54	7	2.25	57
Somerset ³	--	--	--	--	--	--	--	--	--
Sussex ⁴	--	--	--	--	--	--	--	--	--
Union	309	2.29	74	165	1.90	52	101	1.80	54
Warren	N/A	N/A	N/A	1	3.27	100	0	--	--
County College Total/ Average	4463	2.51	77	2355	2.10	64	693	1.85	57
STATE COLLEGES									
Glassboro	548	2.54	79	203	2.31	75	30	1.98	57
Jersey City	170	2.60	74	104	2.30	73	52	1.70	52
Kean	--	--	--	--	--	--	--	--	--
Montclair	1024	2.80	87	166	2.40	78	2	1.90	50
Ramapo	150	2.49	82	23	2.16	61	2	1.88	97
Stockton ⁶	365	2.68	81	191	2.33	72	0	--	--
Trenton	535	N/A	N/A	163	N/A	N/A	30	N/A	N/A
Wm. Paterson	593	2.38	73	178	2.13	62	47	2.02	56
Thomas Edison ⁷	20	--	--	2	--	--	0	--	--
State College Total/ Average	3405	2.62	81	1030	2.29	72	163	1.88	55
NUJIT⁵	--	--	--	--	--	--	--	--	--
RUTGERS UNIVERSITY⁵									
Camden	--	--	--	--	--	--	--	--	--
Newark	--	--	--	--	--	--	--	--	--
New Brunswick	--	--	--	--	--	--	--	--	--
Rutgers University Total/ Average	--	--	--	--	--	--	--	--	--

TABLE 24

GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS
 ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE
 SPRING 1985 TERM

	NO REMEDIATION*			COMPLETED REMEDICATION*			DID NOT COMPLETE REMEDICATION*		
	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00	(N)	Mean	≥ 2.00
COUNTY COLLEGES									
Atlantic ¹	--	--	--	--	--	--	--	--	--
Bergen	86	2.22	65	378	2.20	67	389	2.00	63
Brookdale ²	164	--	--	174	--	--	170	--	--
Burlington	89	2.24	89	68	2.07	87	89	2.00	85
Camden	210	2.70	88	237	2.41	82	152	2.06	65
Cumberland	59	2.25	81	26	2.29	73	7	2.85	100
Essex	22	2.53	82	78	2.05	64	96	1.88	58
Gloucester ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hudson	15	2.79	20	17	2.14	71	35	1.85	57
Mercer	395	2.31	71	296	2.12	61	74	1.31	35
Middlesex	257	2.60	86	83	1.94	66	20	1.52	44
Morris	895	2.70	N/A	49	2.40	N/A	62	2.30	N/A
Ocean ⁴	151	2.53	89	0	--	--	2	1.60	50
Passaic	0	--	--	2	3.17	100	3	1.47	33
Salen ⁵	70	2.43	81	32	2.60	75	3	2.45	67
Somerset	180	2.61	80	99	2.38	72	12	2.23	75
Sussex ⁶	--	--	--	--	--	--	--	--	--
Union	213	2.46	77	69	2.08	62	24	1.37	50
Warren	N/A	N/A	N/A	--	--	--	--	--	--
<hr/>									
County College Total/ Average	2806	2.55	79	1608	2.21	70	1138	1.94	62
<hr/>									
STATE COLLEGES									
Glassboro	321	2.62	83	404	2.43	77	56	1.79	55
Jersey City	78	2.80	81	82	2.60	78	10	2.40	65
Kean	462	2.60	79	183	2.25	68	14	1.72	64
Montclair	461	2.90	92	522	2.60	80	12	1.70	42
Ramapo	39	2.54	82	94	2.63	85	23	2.09	65
Stockton ¹	--	--	--	--	--	--	--	--	--
Trenton	443	N/A	N/A	241	N/A	N/A	44	N/A	N/A
Mt. Paterson ⁷	720	2.33	71	69	2.16	61	29	2.01	55
Thomas Edison ⁷	7	--	--	7	--	--	8	--	--
<hr/>									
State College Total/ Average	2531	2.58	80	1602	2.48	77	196	1.91	57
<hr/>									
WJLT ⁸	252	2.64	84	106	2.46	75	4	2.25	75
<hr/>									
RUTGERS UNIVERSITY									
Camden	208	2.60	82	20	2.50	80	17	2.40	71
Newark	385	2.50	74	83	2.30	72	7	2.20	71
New Brunswick	3319	2.70	84	203	2.30	68	312	2.40	71
<hr/>									
Rutgers University Total/ Average	3912	2.68	83	306	2.31	70	336	2.40	71

TABLE 25

SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDATION*		DID NOT COMPLETE REMEDATION*	
	(N)	SSR**	(N)	SSR**	(N)	SSR**
<u>COUNTY COLLEGES</u>						
Atlantic	253	47	135	37	103	19
Bergen ¹	1169	39	564	32	187	2
Brookdale	693	49	277	48	155	26
Burlington	262	43	191	35	193	18
Camden	927	39	293	40	367	14
Cumberland	165	44	83	31	40	15
Essex	146	21	82	24	478	19
Gloucester	503	40	74	19	34	0
Hudson	134	30	117	25	194	-- ²
Mercer	895	40	496	28	188	3
Middlesex	1461	43	614	40	201	3
Norris	1275	49	259	35	146	3
Ocean ³	620	53	221	43	173	15
Passaic	63	22	91	20	191	4
Salen ⁴	175	46	62	41	56	44
Somerset ⁵	524	37	140	36	51	2
Sussex	--	--	--	--	--	--
Union	620	40	321	31	260	10
Warren ¹	79	N/A	4	53	0	--
County College Total/ Average %	9964	43	4024	35	3017	12
<u>STATE COLLEGES</u>						
Glassboro	736	60	327	54	86	22
Jersey City	325	45	139	51	129	26
Kean	717	54	229	58	57	18
Montclair	1124	71	460	61	28	11
Ramapo	264	32	140	34	33	41
Stockton ⁶	497	59	284	50	24	0
Trenton	794	71	155	50	27	19
Wm. Paterson ⁷	919	49	226	36	103	20
Thomas Edison ⁷	46	44	3	66	2	0
State College Total/ Average %	5422	59	1963	52	489	21
<u>NJIT¹</u>	533	54	35	43	14	21
<u>RUTGERS UNIVERSITY⁸</u>						
Camden	247	67	85 ⁹	52	10 ⁹	50 ⁹
Newark ¹	502	67	82	43	27	11
New Brunswick	3931	75	268	50	245	42
Rutgers University Total/ Average %	4680	74	435	49	282	40

TABLE 26

SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMIATION*		DID NOT COMPLETE REMIATION*	
	(N)	SSR**	(N)	SSR**	(N)	SSR**
COUNTY COLLEGES						
Atlantic	376	45	88	26	27	11
Bergen	833	42	175	46	140	9
Brookdale	821	50	241	44	87	13
Burlington	240	35	306	32	100	4
Camden	830	38	355	48	444	10
Cumberland	144	46	121	32	11	--
Essex	194	14	206	31	305	12
Gloucester	392	44	154	25	65	0
Hudson	139	30	100	23	206	2
Mercer	895	39	538	27	148	3
Middlesex	1574	43	483	42	219	3
Morris	1284	48	289	32	107	4
Ocean ¹	832	48	135	31	47	9
Passaic	32	16	126	20	182	2
Salem	172	47	58	48	56	4
Somerset	543	34	159	27	7	0
Sussex ²	--	--	--	--	--	--
Union	676	40	309	29	216	10
Warren ³	--	--	--	--	--	--
<hr/>						
County College Total/ Average %	9977	42	3853	34	2368	7
<hr/>						
STATE COLLEGES						
Glassboro	827	59	260	52	62	19
Jersey City	382	48	134	46	77	13
Kean	656	55	284	56	63	10
Montclair	1456	70	142	42	14	0
Ramapo	206	32	157	50	74	12
Stockton	426	57	352	54	27	0
Trenton	689	70	252	62	35	40
Wm. Paterson	691	51	460	38	97	21
Thomas Edison ⁴	43	40	3	33	5	0
<hr/>						
State College Total/ Average %	5376	60	2044	50	454	16
<hr/>						
NJIT	506	54	72	47	4	0
<hr/>						
RUTGERS UNIVERSITY⁵						
Camden	269	65	6 ⁶	56	12 ⁶	42 ⁶
Newark ³	--	--	--	--	--	--
New Brunswick	3830	75	544	55	70	13
<hr/>						
Rutgers University Total/ Average %	4099	75	605	5 ⁶	82	17

TABLE 27

SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION*		COMPLETED REMEDiation*		DID NOT COMPLETE REMEDiation*	
	(N)	SSR**	(N)	SSR**	(N)	SSR**
<u>COUNTY COLLEGES</u>						
Atlantic	231	43	113	44	159	27
Bergen	690	42	821	39	409	7
Brookdale	572	51	255	63	284	19
Burlington	256	38	195	29	195	16
Camden	874	42	280	44	442	7
Cumberland	175	45	73	31	41	12
Essex	78	35	176	28	452	15
Gloucester	348	40	173	41	90	3
Hudson	126	29	78	23	239	6
Mercer	926	39	448	29	204	3
Middlesex	1190	42	738	46	348	4
Morris	1407	46	145	40	128	6
Ocean ¹	628	52	209	43	177	16
Passaic	4	50	119	19	111	5
Salem	185	47	61	40	47	9
Somerset ²	--	--	--	--	--	--
Sussex ³	--	--	--	--	--	--
Union	560	40	326	30	315	17
Warren	87	33	5	100	1	0
County College Total/ Average %	8337	43	4213	39	3642	11
<u>STATE COLLEGES</u>						
Glassboro	778	59	279	56	92	21
Jersey City	278	49	172	44	143	26
Kean ⁴	--	--	--	--	--	--
Montclair	1350	70	236	57	26	8
Ramapo	375	34	43	35	19	5
Stockton ⁵	531	57	257	52	17	0
Trenton	702	71	201	65	73	27
Wm. Paterson	920	46	240	42	88	27
Thomas Edison ⁶	38	53	9	22	4	0
State College Total/ Average %	4972	59	1437	52	462	22
NJIT ⁴	--	--	--	--	--	--
<u>RUTGERS UNIVERSITY⁴</u>						
Camden	--	--	--	--	--	--
Newark	--	--	--	--	--	--
New Brunswick	--	--	--	--	--	--
Rutgers University Total/ Average %	--	--	--	--	--	--

TABLE 28

SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS
ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE
CUMULATIVE THROUGH SPRING 1985

	NO REMEDIATION *		COMPLETED REMEDICATION *		DID NOT COMPLETE REMEDICATION *	
	(N)	SSR **	(N)	SSR **	(N)	SSR **
<u>COUNTY COLLEGES</u>						
Atlantic ¹	--	--	--	--	--	--
Bergen	203	33	531	57	1186	22
Brookdale	295	56	251	69	545	31
Burlington	166	40	108	36	279	19
Camden	709	28	361	50	708	16
Cumberland	97	56	53	41	13	54
Essex	49	39	160	36	497	12
Gloucester ²	N/A	N/A	N/A	N/A	N/A	N/A
Hudson	35	40	39	26	153	12
Mercer	694	42	483	39	401	5
Middlesex	413	48	158	32	90	13
Morris	1486	44	71	48	123	28
Ocean ³	244	49	3	0	9	11
Passaic	4	0	8	25	4	50
Salem ⁴	175	29	52	56	12	17
Somerset	353	42	241	33	151	1
Sussex ⁵	--	--	--	--	--	--
Union	380	44	111	38	69	2
Warren	80	N/A	0	--	0	--
County College Total/ Average %	5383	42	2630	47	4250	18
<u>STATE COLLEGES</u>						
Glassboro	459	60	527	63	163	17
Jersey City	116	58	122	58	40	18
Kean	654	58	261	51	78	10
Montclair	609	73	730	63	27	7
Ramapo	106	29	136	64	195	10
Stockton ¹	--	--	--	--	--	--
Trenton	565	74	303	66	108	28
Wm. Paterson	1054	47	113	35	81	16
Thomas Edison ⁶	12	59	30	23	9	89
State College Total/ Average %	3585	59	2222	60	701	16
<u>NJIT⁷</u>	369	60	175	46	38	8
<u>RUTGERS UNIVERSITY</u>						
Camden	279	65	32	58	31	48
Newark	492	63	94	65	21	19
New Brunswick	3775	75	229	66	452	52
Rutgers University Total/ Average %	4546	73	355	65	484	50

TABLE 29

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 READING, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE PRE-TEST	MEAN SCORE POST-TEST	% ATTAINING MINIMUM LEVEL ON POST-TEST
<u>COUNTY COLLEGES</u>							
Atlantic	No Data						
Bergen	No Data						
Brookdale	No Data						
Burlington	CSK100	Stanford Diagnostic NJCBSPT - RC	100 35	720 166	678.7 157	755.6 168	84 74
Camden	Basic Reading Skills II*	NJCBSPT - RC	220	32 raw	N/A	N/A	34
Cumberland	RDG 111	NJCBSPT - RC	59	165	146	170	91
Essex	RDG-099	TABE-Form D	67	574	547	556	34
Gloucester	RDG-010*	Stanford - Reading Comprehension	67	10.0	7.7	8.8	N/A
Hudson	College Reading II*	NJCBSPT-RC	163	165	141	156	36
Mercer	Level II	CTBS Reading-Level 4	233	622(11.0 GE)	628.89	643.87	100
Middlesex	RDG-001*	NJCBSPT - RC	255	162	154.9	160.5	53
Morris	No Data						
Ocean	No Data						
Passaic	RD 004	Stanford-Total Test	17	39	33.47	38.82	53
Salem	No Data						
Somerset	Critical Reading	NJCBSPT - RC	8:	N/A	155	148	7
Sussex	No Data						
Union	In-house Essay Administered as Post-test Only						
Warren	No Data						

TABLE 30

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 READING, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE PRE-TEST	MEAN SCORE POST-TEST	% ATTAINING MINIMUM LEVEL ON POST-TEST
<u>STATE COLLEGES</u>							
Glassboro	Reading & Study Skills Improvement/ Improving Personal Reading Skills*	NJCBSPT - RC	285	168	160.0	168.5	61
Jersey City	Reading Study Skills	Departmental Test	103	20 (70%)	16.3	18.5	78
Kean	CS 0411	Nelson-Denny	227	12.5 GE	10.5	13.6	N/A
Montclair	Basic Reading Skills	Diagnostic Reading Test	526	10	9.3	10.1	60
Ramapo	Dev. Reading*	NJCBSPT - RC	85	168	158.4	165.6	45
Stockton	Study Skills & Critical Thinking	Nelson-Denny-Vocabulary -Comprehension -Total	260	N/A N/A N/A	11.7 11.0 11.3	12.4 11.5 12.0	N/A N/A N/A
Trenton	RDG 102	NJCBSPT - RC	28	166	153.0	166.0	93
Wn. Paterson	RLA 107*	NJCBSPT - RC	148	166	152.1	164.8	92
Thomas Edison	(Not Applicable)						
<u>HJIT</u>	ENG 108/109*	Stanford Task Test - Form A	22	33	23.68	38.68	73
<u>RUTGERS UNIVERSITY</u>							
Camden	No data						
Newark	No data						
New Brunswick	No data						

TABLE 31

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 WRITING, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE PRE-TEST	MEAN SCORE POST-TEST	% ATTAINING MINIMUM LEVEL ON POST-TEST
<u>COUNTY COLLEGES</u>							
Atlantic	No Data						
Bergen	No Data						
Brookdale	No Data						
Burlington	ESK 070	NJCBSPT - SS	276	160	157.4	163.5	82
Camden	Basic Writing Skills II*	NJCBSPT - SS & Essay	N/A	N/A	N/A	N/A	N/A
Cumberland	ENG 100	NJCBSPT - SS	75	165	151	155	71
Essex	ENG 095	DTLS-Sentence Structure	226	24	17.3	21.8	41
Gloucester	COM 010*	NJCBSPT - Total English	150	162	152	164	84
Hudson	Basic English II*	NJCBSPT - SS	132	161	146	159	55
Mercer	Level II	In-house Test	328	42 (70%)	38.42	48.14	100
Middlesex	ENG 010	NJCBSPT - SS	289	162	154.1	159.2	43
Morris	No Data						
Ocean	No Data						
Passaic	EN 004*	Developmental Holistic Essay (Administered as Post-test Only)	25	7	N/A	7.48	N/A
Salem	No Data						
Somerset	Basic Composition	NJCBSPT - SS	97	N/A	154	157	42
Sussex	(No Separate Writing Course in Fall '83)						
Union	In-house Essay Administered as Post-test Only						
Warren	(No Separate Writing Course)						

TABLE 32:

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 WRITING, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE PRE-TEST	MEAN SCORE POST-TEST	% ATTAINING MINIMUM LEVEL ON POST-TEST
<u>STATE COLLEGES</u>							
Glensboro	Improving Person Writing Skills	In-house Essay	146	7	5.8	7.8	97
Jersey City	College Writing	In-house Essay	100	8	4.36	8.99	43
Kean	ENG 0109	Writing Sample	273	7/8	6.2	7.5	79/52
Montclair	No Data						
Ramapo	No Data						
Stockton	College Writing	Local Essay Test	283	N/A	7.5	8.2	N/A
Trenton	No Data						
Wn. Paterson	ENG 108*	NJCBSPT - Essay	276	7	5.5	8.3	90
Thomas Edison	(Not Applicable)						
<u>NJII</u>							
	No Data						
<u>RUTGERS UNIVERSITY</u>							
Camden	No data						
Newark	(No Separate Writing Course)						
New Brunswick	No data						

TABLE 33

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 COMPUTATION, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE PRE-TEST	MEAN SCORE POST-TEST	% ATTAINING MINIMUM LEVEL ON POST-TEST
<u>COUNTY COLLEGES</u>							
Atlantic	No Data						
Bergen	No Data						
Brookdale	No Data						
Burlington	MTH 001	In-house Test	82	35 (possible 48)	18.96	35.35	50
Camden	Basic Math Skills II*	NJCBSPT - MC	506	19 row	N/A	N/A	100
Cumberland	Math 095	NJCBSPT - MC	49	165	156	169	100
Essex	Math 081	Departmental Test	182	21 (70%)	7.5	23.4	77
Gloucester	MAT 010*	NJCBSPT - MC	149	165	156	168	67
Hudson	Basic Math II*	NJCBSPT - MC	97	168	152	166	52
Mercer	MS 100	NJCBSPT - MC	306	175	157.4	184.45	100
Middlesex	Math 010	NJCBSPT - MC	77	166	154.4	162.4	30
Morris	No Data						
Ocean	No Data						
Passaic	MA 004*	NJCBSPT - MC	22	24	18.73	22.27	36
Salem	No Data						
Somerset	(No Computation Course Until Spring '84)						
Sussex	MA 010-Computation*	NJCBSPT - MC	4	165	152	174	N/A
Union	MAT 001	NJCBSPT - MC	140	165 (19 row)	12.25	22.07	93
Warren	No Data						

TABLE 34
 PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 COMPUTATION, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE PRE-TEST	MEAN SCORE POST-TEST	% ATTAINING MINIMUM LEVEL ON POST-TEST
<u>STATE COLLEGES</u>							
Gloucester	Computation B*	NJCBSPT - MC	239	170	161.5	173.6	84
Jersey City	Developmental Math	In-house Computation	86	30 (possible 40)	19.3	33.1	68
Kean	(No Computation Course)						
Montclair	Dev. Math I-Computation	Computation Inventory	297	25	22.3	27.2	84
Ramapo	Computation*	NJCBSPT - MC/EA	N/A	24/24	21/10.2	25/27.8	100
Stockton	Quantitative Reasoning	NJCBSPT - MC	240	22 (possible 30)	16.7	23.2	69.1
		NJCBSPT - EA	240	22 (possible 30)	11.7	14.4	N/A
		CA Achievement-Computation	235	N/A	10.0	11.5	N/A
		-Concepts & Problems -Total	235 235	N/A N/A	10.6 10.3	11.7 11.7	N/A N/A
Trenton	MAT 091	NJCBSPT - MC	42	171	164	173	100
Wa. Paterson	MATH 101*	NJCBSPT - MC	145	169	154.0	173.0	88
Thomas Edison	(Not Applicable)						
<u>NJII</u>							
	(No Computation Course)						
<u>RUTGERS UNIVERSITY</u>							
Camden	(No Computation Course)						
Newark	(No Computation Course)						
New Brunswick	(No Computation Course)						

TABLE 35

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 ELEMENTARY ALGEBRA, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE		% ATTAINING MINIMUM LEVEL ON POST-TEST
					PRE-TEST	POST-TEST	
<u>COUNTY COLLEGES</u>							
Atlantic	(No Algebra Course)						
Bergen	No Data						
Brookdale	No Data						
Burlington	MTH 002	In-house Test	61	12	8.05	17.16	100
Camden	No Data						
Cumberland	MATH 100	NJCBSPT - EA	86	169	152	165	92
Essex	MATH 091	Departmental Test	164	21 (70%)	7.5	20.3	55
Gloucester	No Data						
Hudson	Basic Algebra*	NJCBSPT - EA	31	167	158	169	58
Mercer	MS 110	NJCBSPT - EA	132	179(?)	158.18	176.46	100(?)
Middlesex	Math 018	NJCBSPT - EA	43	167	157.5	178.9	84
Morris	No Data						
Ocean	No Data						
Passaic	No Data						
Salem	No Data						
Somerset	Elementary Algebra	NJCBSPT - EA	156	N/A	156	172	89
Sussex	MA 010-Algebra*	NJCBSPT - EA	5	167	150	175	N/A
Union	MAT 002	NJCBSPT - EA	89	166 (13.5 raw)	7.83	20.33	98
Warren	No Data						

TABLE 36
 PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
 CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
 ELEMENTARY ALGEBRA, BY COLLEGE

COLLEGE	COURSE	TEST ADMINISTERED	TOTAL NO. TESTED	MIN. SCORE NEEDED TO DETERMINE PROFICIENCY	MEAN SCORE		% ATTAINING MINIMUM LEVEL ON POST-TEST
					PRE-TEST	POST-TEST	
<u>STATE COLLEGES</u>							
Glassboro	Algebra B*	NJCBSPT - EA	475	175	165.4	180.4	91
Jersey City	No Data						
Kean	MA 0150	Local Test	107	35	15.1	40.1	77
Montclair	Dev. Math II-Algebra	Algebra Inventory	676	24	16.3	26.4	79
Ramapo	Elem. Algebra*	NJCBSPT - MC/EA	N/A	24	11.09	25.47	100
Stockton	(No Algebra Course)						
Trenton	MAT 092	NJCBSPT - EA	99	176	164.0	176.0	98
Un. Paterson	MATH 105*	NJCBSPT - EA	67	176	157.0	177.4	73
Thomas Edison	(Not Applicable)						
<u>NJIT</u>							
NJIT	No Data						
<u>RUTGERS UNIVERSITY</u>							
Camden	No Data						
Newark	No Data						
New Brunswick	No Data						

TABLE 37
 PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
 IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION
 ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE
 THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>COUNTY COLLEGES</u>				
Atlantic	166	84	39	90
Bergen	1404	78	549	75
Brookdale	520	83	207	84
Burlington	275	73	129	74
Camden ¹	602	74	199	66
Canterbury	167	83	66	80
Essex	78	64	31	65
Gloucester	411	76	55	75
Hudson	82	67	147	59
Mercer	134	87	186	82
Middlesex	1110	78	358	75
Morris	1159	88	225	91
Ocean	N/A	N/A	N/A	N/A
Passaic	39	80	65	55
Salem	144	83	39	89
Somerset	478	92	132	92
Sussex ²	--	--	--	--
Union	302	94	150	89
Warren	79	N/A	5	100
<u>County College Total/Average %</u>	<u>7150</u>	<u>81</u>	<u>2582</u>	<u>78</u>

TABLE 38

PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION
ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE
THROUGH SPRING 1985

	NO NEED FOR REMEDICATION		NEEDED AND COMPLETED REMEDICATION	
	No. Enrolled	% Pass	No. Enrolled	% Pass
<u>STATE COLLEGES</u>				
Glassboro	177	86	290	81
Jersey City	325	83	79	65
Kean	650	83	209	88
Montclair	811	99	334	99
Ramapo	111	96	73	91
Stockton	57	93	80	86
Trenton	736	98	137	92
William Paterson	623	86	187	80
Thomas Edison ¹	--	--	--	--
State College Total/Average %	4000	91	1389	87
<u>NJIT</u>	426	89	19	74
<u>RUTGERS UNIVERSITY</u>				
Camden	233	97	81	96
Newark	433	95	54	93
New Brunswick	3339	97	234	83
Rutgers University Total/Average %	4005	97	369	87

TABLE 39
 PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
 IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION
 ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE
 THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>COUNTY COLLEGES</u>				
Atlantic	358	85	64	77
Bergen	1025	80	205	71
Brookdale	531	84	164	77
Burlington	235	85	242	84
Camden ¹	514	76	296	67
Cumberland	147	84	89	79
Essex	73	64	145	64
Gloucester	337	78	129	72
Hudson	82	67	139	60
Mercer	80	88	318	77
Middlesex	1237	79	376	73
Morris	1186	89	244	84
Ocean	N/A	N/A	N/A	N/A
Passaic	23	91	97	55
Salem	138	80	45	96
Somerset	516	93	67	85
Sussex ²	--	--	--	--
Union	323	96	169	86
Warren ³	--	--	--	--
County College Total/Average %	6905	83	2790	75

TABLE 40

PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION
ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE
THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>STATE COLLEGES</u>				
Glassboro	769	87	240	69
Jersey City	382	80	130	80
Kean	622	89	263	84
Montclair	1052	99	176	97
Ramapo	41	83	81	85
Stockton	24	83	112	91
Trenton	640	98	228	93
William Paterson	627	85	240	78
Thomas Edison ¹	--	--	--	--
State College Total/Average %	4157	91	1470	84
<u>NJIT</u>	384	89	61	84
<u>RUTGERS UNIVERSITY</u>				
Camden	255	97	58	95
Newark ²	--	--	--	--
New Brunswick	3244	97	525	89
Rutgers University Total/Average %	3500	97	583	89

TABLE 41
 PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
 IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS
 ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE
 THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>COUNTY COLLEGES</u>				
Atlantic	129	84	70	76
Bergen	146	65	94	57
Brookdale	129	65	26	34
Burlington	72	74	33	30
Camden ¹	415	69	97	56
Cumberland	136	71	17	53
Essex	25	72	33	67
Gloucester	275	72	115	65
Hudson	31	87	62	55
Mercer	200	73	150	63
Middlesex	878	75	142	59
Morris	104	75	2	100
Ocean	N/A	N/A	N/A	N/A
Passaic	5	80	13	54
Salem	46	89	21	90
Somerset ²	--	--	--	--
Sussex ³	--	--	--	--
Union	128	87	32	72
Warren	87	N/A	5	100
County College Total/Average %	2806	74	912	61

TABLE 42
 PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
 IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS
 ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE
 THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>STATE COLLEGES</u>				
Glassboro	370	84	62	73
Jersey City	105	70	18	6.
Kean ¹	--	--	--	--
Montclair	662	97	10	68
Ramapo	84	92	2	100
Stockton	17	94	12	92
Trenton	177	93	79	82
William Paterson	159	82	22	77
Thomas Edison ²	--	--	--	--
<hr/>				
State College Total/Average %	1574	90	235	76
<hr/>				
<u>NJIT</u> ¹	--	--	--	--
<hr/>				
<u>RUTGERS UNIVERSITY</u> ¹				
Camden	--	--	--	--
Newark	--	--	--	--
New Brunswick	--	--	--	--
<hr/>				
Rutgers University Total/Average %	--	--	--	--

TABLE 43
 PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
 IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS
 ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE
 THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>COUNTY COLLEGES</u>				
Atlantic ¹	--	--	--	--
Bergen	15	87	208	59
Brookdale	74	62	85	57
Burlington	106	80	36	67
Camden ²	224	70	249	66
Cumberland	124	71	24	54
Essex	9	89	63	51
Gloucester ³	N/A	N/A	N/A	N/A
Hudson	13	92	41	63
Mercer	88	83	232	66
Middlesex	287	77	102	62
Morris	86	74	15	93
Ocean	N/A	N/A	N/A	N/A
Passaic	N/A	N/A	2	100
Salem	39	90	40	86
Somerset	153	88	147	82
Sussex ⁴	--	--	--	--
Union	80	95	31	74
Warren	80	N/A	0	--
County College Total/Average %	1378	78	1275	66

TABLE 44
 PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS
 IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS
 ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE
 THROUGH SPRING 1985

	<u>NO NEED FOR REMEDICATION</u>		<u>NEEDED AND COMPLETED REMEDICATION</u>	
	<u>No. Enrolled</u>	<u>% Pass</u>	<u>No. Enrolled</u>	<u>% Pass</u>
<u>STATE COLLEGES</u>				
Glassboro	170	68	103	67
Jersey City	82	72	27	67
Kean	375	83	86	71
Montclair	256	90	427	93
Ramapo	45	93	67	89
Stockton ¹	--	--	--	--
Trenton	135	92	117	86
William Paterson	80	79	58	78
Thomas Edison ²	--	--	--	--
State College Total/Average %	1143	86	885	85
<u>NJIT</u> ³	289	85	148	82
<u>RUTGERS UNIVERSITY</u>				
Camden	93	97	4	100
Newark	221	91	67	82
New Brunswick	1254	87	147	67
Rutgers University Total/Average %	1565	88	218	72

FOOTNOTES TO TABLES

Table 1

¹Institution does not offer a remedial course in algebra.

²Course integrates reading and writing.

³Passing defined as a grade of "C" or better, or "pass".

⁴Passing defined as a grade of "C" or better.

⁵Institution did not offer a computation course in 1983.

⁶Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁷Institution does not offer a separate writing course.

Table 2

¹Institution does not offer a course in computation.

²Includes 18 students enrolled in Intermediate Algebra, which the institution does not consider a remedial course.

³BASK 1102: "Study Skills and Critical Thinking."

⁴BASK 1103: "Quantitative Reasoning."

⁵Institution does not offer a remedial course in algebra.

⁶Not applicable. Institution reports students as part-time only.

⁷Course integrates reading and writing.

⁸Course includes trigonometry.

⁹Institution does not offer a separate writing course.

Table 3

¹Institution does not offer a remedial course in algebra.

²Course integrates reading and writing.

³Not applicable, since part-time students do not enroll in programs requiring algebra.

⁴Passing defined as a grade of "C" or better or "pass."

⁵Passing defined as a grade of "C" or better.

⁶Institution did not offer a computation course in 1983.

⁷Institution did not offer a separate writing course in 1983.

⁸Basic mathematics and algebra reported together.

⁹Institution does not offer a separate writing course.

Table 4

¹Institution does not offer a course in computation.

²BASK 1102: "Study Skills and Critical Thinking."

³BASK 1103: "Quantitative Reasoning."

⁴Institution does not offer a remedial course in algebra.

⁵Course integrates reading and writing.

⁶Institution does not offer a separate writing course.

Tables 5, 9, 13

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Course integrates reading and writing.

²Students who fail to complete remediation are not permitted to take college-level courses.

³Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

⁴Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁵BASK 1102: "Study Skills and Critical Thinking."

⁶Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁷Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

⁸Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Tables 6, 10, 14

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

²Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

³Institution offers a course that integrates reading and writing. These data are reported under reading.

⁴Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁵Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

⁶Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile copy (page 156) for explanation.

Tables 7, 11, 15

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

²Institution did not offer a computation course in 1983.

³Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁴Institution does not offer a course in computation.

⁵BASK 1103: "Quantitative Reasoning."

⁶Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

Tables 8, 12, 16

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Institution does not offer a remedial algebra course.

²Institution not able to provide data for its elementary and intermediate algebra courses.

³Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

⁴Second study group ("completed remediation") includes students who were not required to take remedial course but took it.

⁵Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁶Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁷Course includes trigonometry and intermediate algebra.

Tables 17, 21

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Course integrates reading and writing.

²Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

³Students who fail to complete remediation are not permitted to take college-level courses.

⁴Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

⁵Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁶BASK 1102: "Study Skills and Critical Thinking."

⁷Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁸Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

⁹Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Tables 18, 22

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

²Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

³Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁴Institution offers a course that integrates reading and writing. These data are reported under reading.

⁵Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁶Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

⁷Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile copy (page 156) for explanation.

Tables 19, 23

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

²Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

³Institution did not offer a computation course in 1983.

⁴Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁵Institution does not offer a course in computation.

⁶BASK 1103: "Quantitative Reasoning."

⁷Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

Tables 20, 24

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

¹Institution does not offer a remedial algebra course.

²Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

³Institution not able to provide data for its elementary and intermediate algebra courses.

⁴Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

⁵Second study group ("completed remediation") includes students who were not required to take remedial course but took it.

⁶Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁷Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁸Course includes trigonometry and intermediate algebra.

Table 25

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

¹Course integrates reading and writing.

²Not applicable, since students who fail to complete remediation are not permitted to take college-level courses.

³Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

⁴For cumulative data, note that at the time this cohort entered, students in some programs were not required to complete remediation in reading.

⁵Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁶BASK 1102: "Study Skills and Critical Thinking."

⁷Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁸Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

⁹Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Table 26

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

¹Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

²Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

³Institution offers a course that integrates reading and writing. These data are reported under reading.

⁴Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁵Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

⁶Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Table 27

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

¹Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

²Institution did not offer a computation course in 1983.

³Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁴Institution does not offer a course in computation.

⁵BASK 1103: "Quantitative Reasoning."

⁶Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

Table 28

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

¹Institution does not offer a remedial algebra course.

²Institution not able to provide data for its elementary and intermediate algebra courses.

³Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

⁴Second study group ("completed remediation") includes students who were not required to take remedial course but took it.

⁵Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

⁶Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

⁷Course includes trigonometry and intermediate algebra.

Table 37

¹First attempt at course only (explicit).

²Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

Table 38

¹Not applicable, since courses are taught elsewhere.

Table 39

¹First attempt at course only (explicit).

²Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

³Not applicable. Refer to data reported under reading.

Table 40

¹Not applicable, since courses are taught elsewhere.

²Not applicable. Refer to data reported under reading.

Table 41

¹First attempt at course only (explicit).

²Institution did not offer computation remediation in 1983.

³Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

Table 42

¹Institution does not offer a course in computation.

²Not applicable, since courses are taught elsewhere.

Table 43

¹Institution does not offer a remedial algebra course.

²First attempt at course only (explicit).

³Institution not able to provide data for its elementary and intermediate algebra courses.

⁴Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

Table 44

¹Institution does not offer a remedial algebra course.

²Not applicable, since courses are taught elsewhere.

³Remediation consists of trigonometry and intermediate algebra.

REMEDIATION PROGRAM PROFILES OF INDIVIDUAL COLLEGES

The Remedial Program Profiles for individual institutions are each divided into three parts. The first part is a tabular presentation of the relevant data as reported by the college. It includes the criteria the college used for placement in the fall of 1983, followed by a section giving the percentages of students identified for remediation, enrolled in remediation and reaching minimum competency at the end of the college's remedial course sequence. The placement criteria given are the scores (or combination of scores) below which students are placed into a remedial course. Cumulative outcome data are then given by remedial skill area for each of the three study groups (remediation not needed, remediation completed and remediation not completed).

The second part is a bar graph of the cumulative successful survival rate for the three study groups in each of the four remedial areas. Inspection of this graph can yield information on the relationships between the non-remedial and remediation-completed groups. It also allows for a comparison among the remedial program areas of the college being displayed.

The third part of the Remedial Program Profiles is a narrative interpretation of the data for each institution. The narrative is meant as a suggested interpretation of the data, taking into account, where possible, the sample size, the percent reaching the minimum criteria for placement into regular classes at the institution, and the college's narrative description of its programs.

The remarks are not meant to be an in-depth analysis of all aspects of an institution's remedial programs. Site visits are required for a more complete analysis. Most important here is the relative difference between the "no need" groups and the "remediation-completed" groups within each institution. Anomalous patterns and/or perceived weaknesses in programs are explicitly pointed out, where appropriate. Each institution was given the opportunity to review both the data and the narrative before publication. Where inadequacies are cited, the Council makes such comment for the purpose of stimulating improvement at the college.

ATLANTIC COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 549 98 %

Placement Criteria

Reading: NJCBSPT RC 166
 Writing: NJCBSPT SS 163
 Computation: NJCBSPT MC 165
 El. Algebra: (No algebra course)

Course Placement, Enrollment and Outcomes

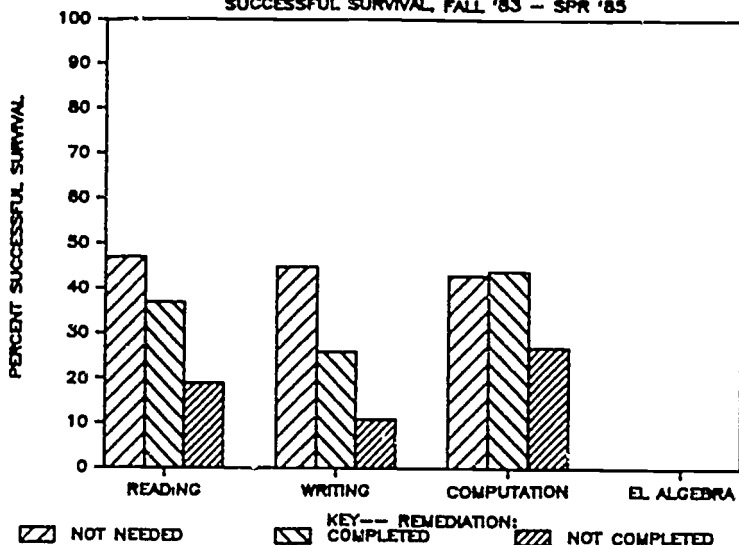
	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	48	26	53	
% Enrolled	63	78	57	
% Passing Final Remedial Course	80	81	70	
% Reaching Minimum Competency	N/A	N/A	N/A	

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	132 (52)	72 (53)	30 (29)
% GPA Greater Than/Equal to 2.0	91	70	65
% Successful Survival	47	37	19
% Passing First College-level Course	84	90	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	195 (52)	40 (45)	5 (19)
% GPA Greater Than/Equal to 2.0	86	58	60
% Successful Survival	45	26	11
% Passing First College-level Course	86	77	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	116 (50)	70 (62)	66 (42)
% GPA Greater Than/Equal to 2.0	86	71	65
% Successful Survival	43	44	27
% Passing First College-level Course	84	76	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			

ATLANTIC COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Students completing remediation at Atlantic in both reading and computation had higher retention rates than non-remedial students. In reading, writing and computation the performance in first college-level courses for students who completed remediation was close to the performance of students who did not need remediation.

No data were reported for the elementary algebra group because no algebra course is given at this college. The consequence of this for students who may be weak in algebraic skills and pursue higher level mathematics courses ought to be investigated by the college. The successful survival rates of students who complete the computation courses are more than equal to those of non-remedial students, but both the retention rate and the successful survival rate for students not completing remediation in mathematics appear high.

No post-testing data was presented for any discipline, nor any data on the percentage of students reaching minimum competence upon exiting remediation.

BERGEN COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1920 100%

Placement Criteria

Reading*: NJCBSPT RC & SS 161 average
 Writing: NJCBSPT RC & SS 161-164** average
 Computation: NJCBSPT MC 168
 El. Algebra: NJCBSPT EA 183 and curriculum requiring algebra

Course Placement, Enrollment and Outcomes

	<u>Reading*</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	39	17	64	89
% Enrolled	89	96	92	52
% Passing Final Remedial Course	85	59	73	63
% Reaching Minimum Competency	N/A	N/A	N/A	N/A

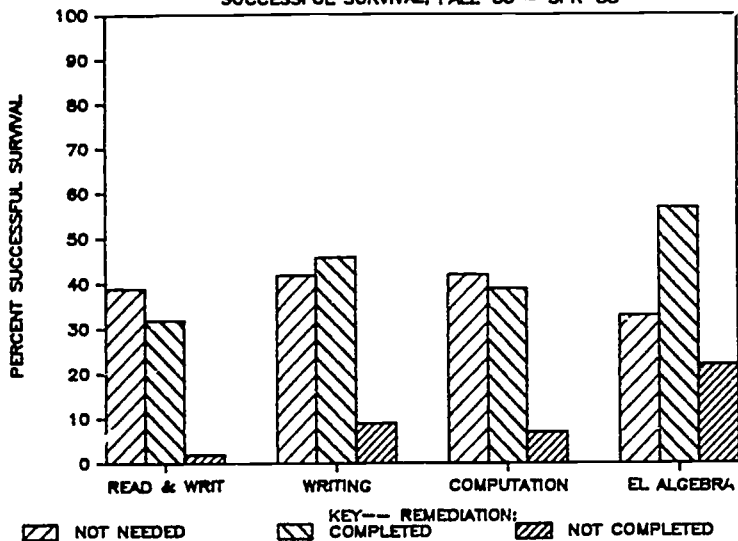
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading*:</u>			
# Returned Spring 1985 (%)	547 (47)	287 (51)	19 (10)
% GPA Greater Than/Equal to 2.0	82	63	16
% Successful Survival	39	32	2
% Passing First College-level Course	78	75	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	407 (49)	104 (59)	25 (18)
% GPA Greater Than/Equal to 2.0	85	78	52
% Successful Survival	42	46	9
% Passing First College-level Course	80	71	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	353 (51)	436 (53)	64 (16)
% GPA Greater Than/Equal to 2.0	82	73	44
% Successful Survival	42	39	7
% Passing First College-level Course	65	57	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	86 (42)	378 (71)	389 (33)
% GPA Greater Than/Equal to 2.0	78	80	68
% Successful Survival	33	57	22
% Passing First College-level Course	87	59	--

*Course integrates reading and writing.
 **Placement for students testing in the range 161-164 (inclusive), if below 161, placed into "reading."

BERGEN COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Bergen identifies and enrolls large numbers of students in its remedial programs (667 in reading, 897 in algebra for example). Consequently, it is impressive that students who have completed remediation in all four areas have significantly higher retention rates than students who have not completed remediation and even higher retention rates than students who needed no remediation. In contrast, retention and successful survival rates for remediation-incomplete students are very low (2 to 22%).

In areas of reading and writing, the performance in the first college-level course by students who completed remediation is also close to the performance of students who needed no remediation. However, students completing algebra remediation present a more complex picture. Their reported performance in subsequent mathematics courses (59% passing) is much lower than non-remedial students (87% passing). This suggests that the percentage of students reaching minimum competence upon exit from algebra remediation may not be adequate. Since the college provided no post-test data and no narrative explanation of its program, further interpretation is not possible. A further complication, as seen from the graph, is that remediation-completed students in algebra have higher successful survival rates than non-remedial students (although there were only 86 such students who returned for the fourth semester).

BROOKDALE COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1212 94 %

Placement Criteria

Reading: NJCBSPT RC 163
 Writing: NJCBSPT SS 161
 Computation: NJCBSPT MC 166
 El. Algebra: NJCBSPT EA 171

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	36	27	44	66
% Enrolled	85	92	77	51
% Passing Final Remedial Course	75	80	69	62
% Reaching Minimum Competency	N/A	N/A	N/A	N/A

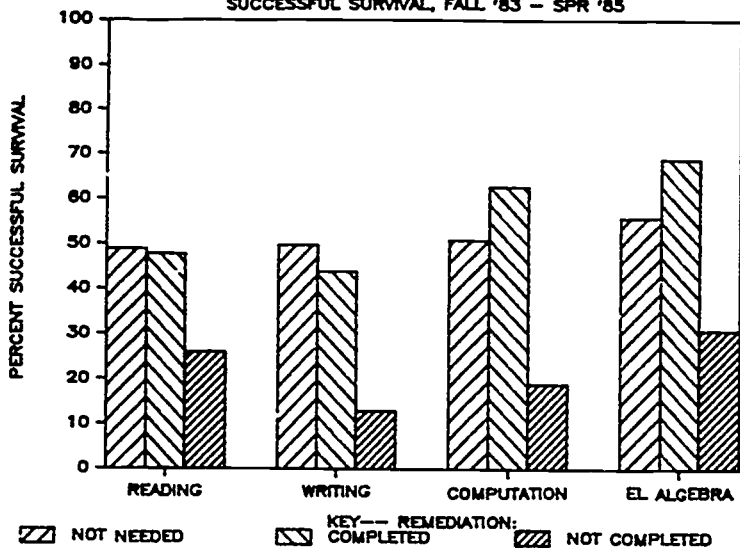
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	339 (49)	134 (48)	40 (26)
% GPA Greater Than/Equal to 2.0 ¹	--	--	--
% Successful Survival	49	48	26
% Passing First College-level Course	83	84	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	407 (50)	106 (44)	11 (13)
% GPA Greater Than/Equal to 2.0 ¹	--	--	--
% Successful Survival	50	44	13
% Passing First College-level Course	84	77	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	293 (51)	159 (63)	55 (19)
% GPA Greater Than/Equal to 2.0 ¹	--	--	--
% Successful Survival	51	63	19
% Passing First College-level Course	65	34	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	164 (56)	174 (69)	170 (31)
% GPA Greater Than/Equal to 2.0 ¹	--	--	--
% Successful Survival	56	69	31
% Passing First College-level Course	62	57	--

¹Institution's unique grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

BROOKDALE COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Brookdale's GPA data are unusual because the institution's "non-punitive" grading system results in every student having a GPA of 2.0 or better. Brookdale does not give a grade of D, and instead of E a "no credit" is given. This also results in the successful survival rate calculation not having the same meaning as in other colleges. Successful survivors were reported as all those who returned in Spring 1985 (some as the retention rate).

However, it should be noted that Brookdale employs a system of student accountability that looks at student performance on the basis of credits attempted versus credits earned, both for each semester and cumulatively. Students whose ratios fall below acceptable levels, while offered additional support services, are placed on academic warning, academic limitation, and are finally dismissed if they do not achieve acceptable ratios. Also, because Brookdale does not offer a grade of D, students who may have passed with a D at other institutions may not have been able to pass courses at Brookdale.

Overall, retention rates are very much like those of other county colleges and in terms of the earned-credits ratio, remediation-completed students appear to fare as well as non-remedial students. Retention rates for students who completed remediation were significantly higher than for students who did not complete remediation in all four areas and close to or higher than the retention rates for students who did not need remediation (except in writing). Students who complete needed computation remediation have a significantly greater survival rate than those who did not need remediation.

BROOKDALE COMMUNITY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

The college employs the "mastery learning" concept in all remedial courses but did not report post-test data. With the exception of the area of computation, the performance in the first college-level courses for students who completed remediation was close to the performance of students who did not require remediation.

BURLINGTON COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 646 96 %

Placement Criteria

Reading: NJCBSPT RC 167
Writing: NJCBSPT SS 162 or SS 173 & Essay judged remedial by faculty
Computation: NJCBSPT MC 168
El. Algebra: NJCBSPT EA 167

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	59	63	60	60 ¹
% Enrolled	86	94	62	38
% Passing Final Remedial Course	78	80	81	74
% Reaching Minimum Competency	74	82	50	100

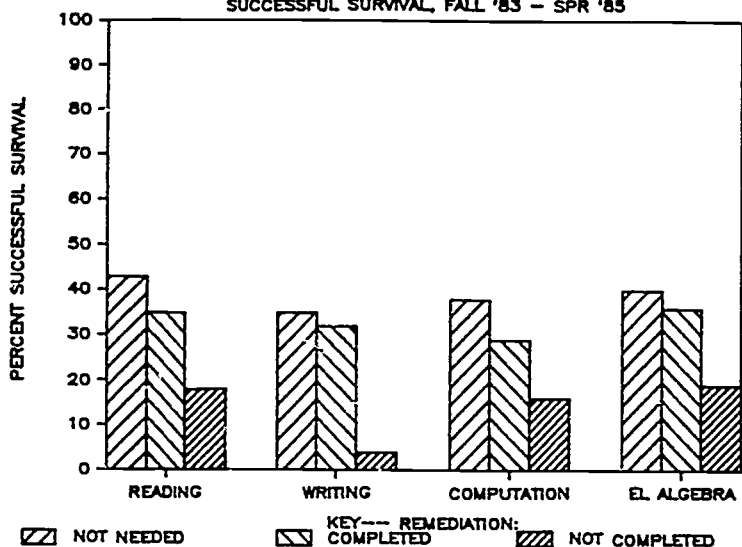
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	114 (44)	104 (54)	70 (36)
% GPA Greater Than/Equal to 2.0	99	64	50
% Successful Survival	43	35	18
% Passing First College-level Course	73	74	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	109 (45)	153 (53)	16 (16)
% GPA Greater Than/Equal to 2.0	77	61	25
% Successful Survival	35	32	4
% Passing First College-level Course	85	84	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	134 (52)	102 (52)	52 (27)
% GPA Greater Than/Equal to 2.0	73	56	62
% Successful Survival	38	29	16
% Passing First College-level Course	74	30	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	89 (54)	68 (63)	89 (32)
% GPA Greater Than/Equal to 2.0	74	57	61
% Successful Survival	40	36	19
% Passing First College-level Course	80	67	--

¹Includes only students that are in curricula that require algebra.

BURLINGTON COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIATION PROGRAM REMARKS

Burlington reported that they tested more part-time students than were required to be tested. For this report they tracked 646 full-time and 241 part-time students.

The passing rates reported for the final level of remedial courses for full-time students ranged from a high of 81 percent in computation to a low of 74 percent in algebra. As with most colleges, in all four areas the percent retained after two years was much higher for the group of students who did not need remediation as well as for the group who needed remediation and completed it, than for the students who needed remediation but did not complete it. However, the retention rates for students not completing remediation in reading and computation appear higher than those observed in other county colleges.

The mean GPA for the group not needing remediation was higher than the mean for the group needing remediation and completing it. In turn, the mean for those completing remediation was higher than the mean GPA for those not completing remediation. The pre-/post-test data reported indicates that Burlington has a comprehensive pre-test and post-test program and that the percentage of students reaching minimum competency is satisfactory in the verbal areas, and much improved in computation compared with last year's report (100% reached minimum competency vs. 60% last year). However, the remediation-completed group in mathematics had much lower passing rates in the college level mathematics course than those not needing remediation.

BURLINGTON COUNTY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

The high retention rates and GPA's for students needing remediation in algebra and not completing it, compared with those completing remediation, should be topics for institutional research at the college.

CAMDEN COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1156 96 %

Placement Criteria

Reading: NJCBSPT RC 166
 Writing: NJCBSPT Composition 166
 Computation: NJCBSPT MC 165
 El. Algebra: NJCBSPT EA 175

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	51	60	46	54
% Enrolled	79	82	95	107*
% Passing Final Remedial Course	67	64	59	61
% Reaching Minimum Competency	34	N/A	100	N/A

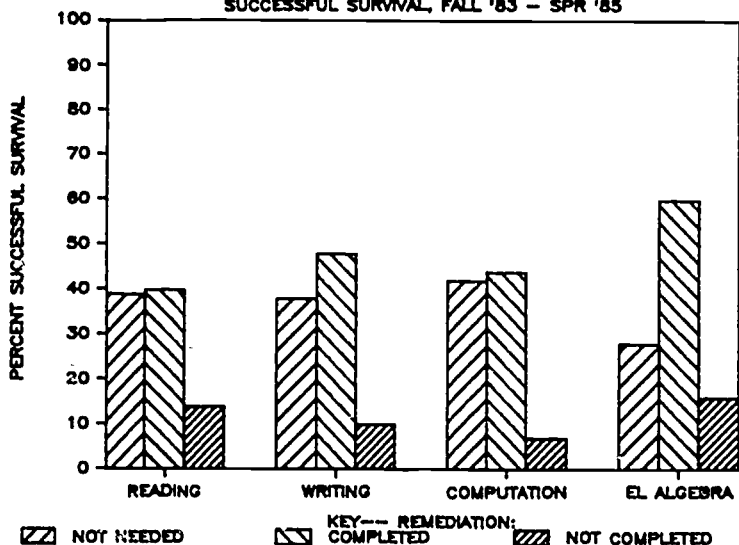
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	388 (42)	160 (55)	67 (18)
% GPA Greater Than/Equal to 2.0	94	74	75
% Successful Survival	39	40	14
% Passing First College-level Course ¹	74	66	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	330 (40)	225 (62)	63 (14)
% GPA Greater Than/Equal to 2.0	96	78	73
% Successful Survival	38	48	10
% Passing First College-level Course ¹	76	67	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	400 (46)	153 (55)	51 (12)
% GPA Greater Than/Equal to 2.0	91	80	63
% Successful Survival	42	44	7
% Passing First College-level Course ¹	69	56	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	210 (30)	237 (66)	152 (21)
% GPA Greater Than/Equal to 2.0	95	85	74
% Successful Survival	28	60	16
% Passing First College-level Course ¹	70	66	--

*College requests footnote stating that a considerable amount of the data compilation was done manually and therefore inexplicable errors may exist.
¹First attempt at course only (explicit).

CAMDEN COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Camden reported that they tested a large number of students (1156 Full-time and 521 Part-time). As with most colleges, in all four areas the percent retained after two years was much higher for the group of students who did not need remediation as well as for the group who needed remediation and completed it, than for the students who needed remediation but did not complete it. The successful survival rates followed the same pattern. However, 14 to 21 percent of students who needed remediation in any of the four areas but did not complete it, appear to have grade point averages that are above a "C" and only slightly lower than those who completed remediation.

Successful survival rates were higher among students who completed remediation in computation and algebra than those who completed remediation in verbal areas. The college did not report complete pre-test/post-test data because it uses local exit-essay exams in writing which seem to equate passing with minimum competence.

QUINCY COLLEGE OF MORRIS

1983 FULL-TIME COHORT

Students Tested: 1680¹ 94 %

Placement Criteria

Reading: NJCBSPT RC 166
 Writing: NJCBSPT Composition 165; C grade in high school English; SAT-V 350
 Computation: NJCBSPT MC 165; C grade in high school math; SAT-M 350
 El. Algebra: NJCBSPT EA 172; C grade in high school algebra/geometry; SAT-M 400

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	24	24	16	12
% Enrolled	82	98	93	95
% Passing Final Remedial Course	78	75	57	38
% Reaching Minimum Competency	N/A	N/A	N/A	N/A

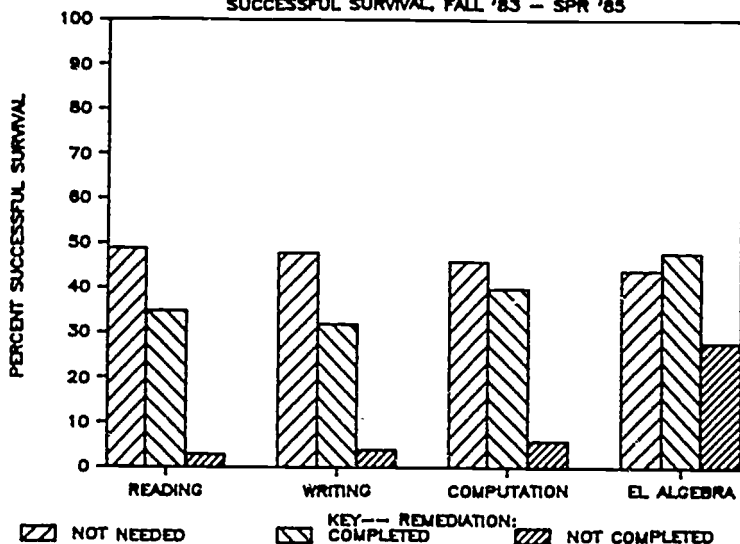
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	821 (64)	166 (64)	19 (13)
% GPA Greater Than/Equal to 2.0	76	55	21
% Successful Survival	49	35	3
% Passing First College-level Course	88	91	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	814 (63)	168 (58)	24 (22)
% GPA Greater Than/Equal to 2.0	76	55	17
% Successful Survival	48	32	4
% Passing First College-level Course	89	84	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	884 (63)	91 (63)	31 (24)
% GPA Greater Than/Equal to 2.0	74	64	23
% Successful Survival	46	40	6
% Passing First College-level Course	75	100	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	895 (60)	49 (69)	62 (50)
% GPA Greater Than/Equal to 2.0	73	69	55
% Successful Survival	44	48	28
% Passing First College-level Course	74	93	--

¹However, institution reports that only 1576 of these took the algebra portion of test.

COUNTY COLLEGE OF MORRIS

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

One of the larger county colleges, County College of Morris displays both high retention rates (for both non-remedial and remedial students) and a relatively low percentage of its student body identified as needing remediation (24% in reading, for example, vs. 41% as the sector average).

Over all skill areas, the remediation-completed group attained significantly higher rates of retention, credit ratios, percentages of GPA's above 2.0 and successful survival rates as compared to the remediation-not-completed group. Retention rates for the remediation-completed group were actually higher than the remediation-not-needed group in the areas of computation and elementary algebra.

Significant percentages (75 to 78%) of Morris' students pass their reading and writing remedial courses. In mathematics the percentages passing appear low (38 to 57%) but are misleading because of the college's use of an "in progress" grade for 40 to 56 percent of these students. Most significant is the comparison of passing rates in subsequent college-level courses where Morris' remediation-completed students often out-perform their non-remedial peers. The college did not report pre- and post-testing data, detracting from the otherwise fine outcome data reported.

CUMBERLAND COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 304 100 %

Placement Criteria

Reading: NJCBSPT RC 165
 Writing: NJCBSPT SS 165
 Computation: NJCBSPT MC 165
 El. Algebra: NJCBSPT EA 175

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	46	53	42	68 ¹
% Enrolled	86	91	88	59 ¹
% Passing Final Remedial Course	73	87	65	77
% Reaching Minimum Competency	91	71	100	92

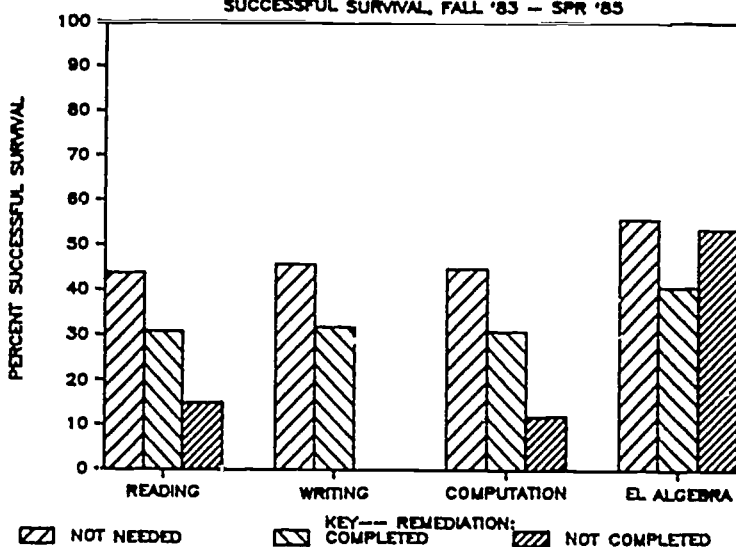
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	80 (48)	37 (45)	7 (18)
% GPA Greater Than/Equal to 2.0	91	70	86
% Successful Survival	44	31	15
% Passing First College-level Course	83	80	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	71 (49)	52 (43)	1 (9)
% GPA Greater Than/Equal to 2.0	93	75	N/A
% Successful Survival	46	32	N/A
% Passing First College-level Course	84	79	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	87 (50)	30 (41)	9 (22)
% GPA Greater Than/Equal to 2.0	91	77	56
% Successful Survival	45	31	12
% Passing First College-level Course	71	53	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	59 (61)	26 (49)	7 (54)
% GPA Greater Than/Equal to 2.0	91	85	100
% Successful Survival	56	41	54
% Passing First College-level Course	71	54	--

¹Includes students carried over from computation, since students identified as needing remediation in computation are required to take algebra.

CUMBERLAND COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Cumberland reported much higher retention rates for the non-remedial and remediation-completed groups than for the group needing remediation but not completing it in the areas of reading, writing, and computation, but not in elementary algebra. It should be noted that the number of non-completing students who were retained after two years was small (not larger than 9 in any area). It appears that these students did almost as well as those who did not need remediation and those who needed remediation and completed it in terms of mean credits earned and mean GPA. The percentage bars in the graph should be interpreted with caution because of the small numbers of students involved.

Following a similar pattern, with the exception of elementary algebra the successful survival rates for the groups not needing remediation and needing remediation and completing it was higher than that of the group needing remediation but not completing it. However, students who completed remediation in reading and writing had lower GPA's than those not needing remediation in these areas. In contrast, the remediation-completed group in computation and algebra had higher GPA's than the non-remedial students.

It can also be noted that Cumberland appears to have a comprehensive pre- and post-testing program. The percentage of students who attained minimum competency level ranged from 67 percent in reading to 100 percent in computation. The passing rates of remediation-completed students in first college courses were close to those of non-remedial students for reading/writing but lower in mathematics.

ESSEX COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 706 99%

Placement Criteria

Reading: NJCBSPT RC 161
 Writing: NJCBSPT SS 153, Essay 9
 Computation: NJCBSPT MC 169
 El. Algebra: NJCBSPT EA 168

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	79	73	89	92
% Enrolled	90	87	88	49
% Passing Final Remedial Course	69	59	55	51
% Reaching Minimum Competency	34	41	77	55

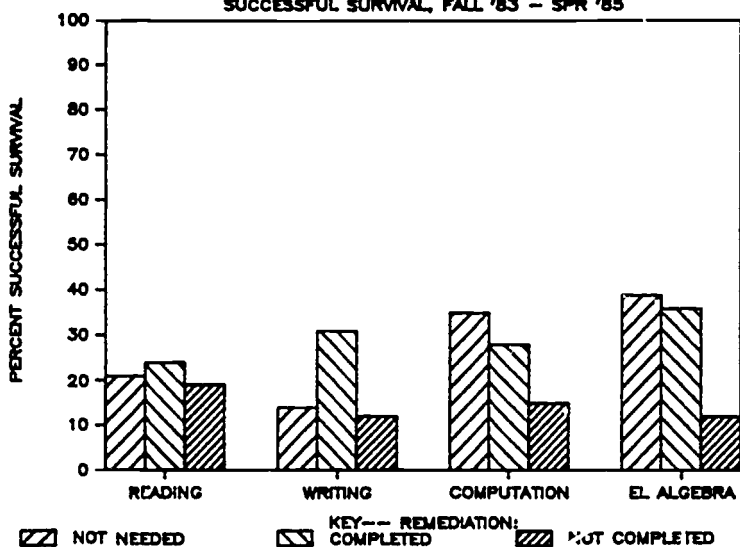
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	34 (23)	39 (48)	133 (28)
% GPA Greater Than/Equal to 2.0	91	56	69
% Successful Survival	21	24	19
% Passing First College-level Course	64	65	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	30 (15)	93 (45)	61 (20)
% GPA Greater Than/Equal to 2.0	93	68	59
% Successful Survival	14	31	12
% Passing First College-level Course	64	64	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	34 (44)	75 (43)	98 (22)
% GPA Greater Than/Equal to 2.0	79	67	69
% Successful Survival	35	28	15
% Passing First College-level Course	72	67	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	22 (45)	78 (49)	96 (19)
% GPA Greater Than/Equal to 2.0	86	73	64
% Successful Survival	39	36	12
% Passing First College-level Course	89	51	--

¹Includes students carried over from computation, s'nce those identified as needing remediation in computation are required to take algebra.

ESSEX COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

The percentage of students requiring remediation at Essex County College is very high, considerably higher than the sector average. The range is from 73 percent needing remediation in writing to 92 percent in algebra. Therefore, it is most important to compare the performance of those completing remediation with those who have not yet completed it.

Four-semester retention and successful survival rates for non-remedial students at Essex are well below those of other two-year institutions. Early transfer to four-year schools by non-remedial students is one explanation for this pattern (note the low percentage of non-remedial successful survivors in writing on the graph).

Retention rates for students who have completed remediation are much higher than for those who have not completed remediation, in all four disciplines. They are even higher than for those who did not need remediation in three of the disciplines and equal in the fourth, computation.

Passing rates for students in remedial courses are lower (51 to 69%) than in other colleges. Post-testing data also indicate that in many of the reading and writing courses less than half of the students who did pass reached minimum competence. The college reports using multiple criteria to assess minimum competence for exit from remediation. Nevertheless, it should be concerned about such post-test results.

ESSEX COUNTY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

Performance on GPA's is not so clear cut. In writing and algebra, remediated students perform better than those who did not complete remediation but the opposite is true for reading and computation. However, when using successful survival rate as the criterion, all disciplines follow the expected pattern with remediation-completed students showing twice the successful survival rate of non-completers.

GLOUCESTER COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 611 99 %

Placement Criteria

Reading: NJCBSPT Total English 162
 Writing: NJCBSPT Total English 162
 Computation: NJCBSPT MC 165
 El. Algebra: (Algebra data not available!)

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	18	37	44	
% Enrolled	97	98	94	
% Passing Final Remedial Course	76	74	69	
% Reaching Minimum Competency	N/A	84	67	

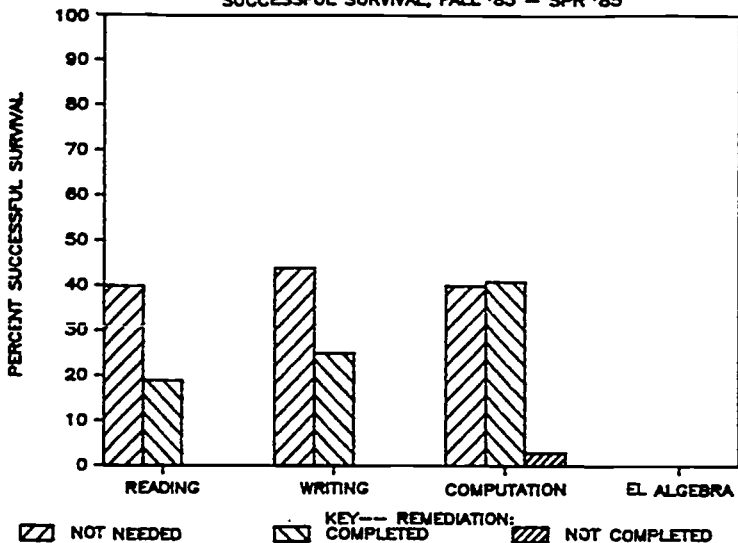
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	250 (50)	42 (57)	6 (18)
% GPA Greater Than/Equal to 2.0	80	33	0
% Successful Survival	40	19	0
% Passing First College-level Course	76	75	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	201 (51)	88 (57)	9 (14)
% GPA Greater Than/Equal to 2.0	87	43	0
% Successful Survival	44	25	0
% Passing First College-level Course	78	72	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	169 (49)	118 (68)	11 (12)
% GPA Greater Than/Equal to 2.0	82	59	27
% Successful Survival	40	41	3
% Passing First College-level Course	72	65	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			

¹Courses are offered in elementary and intermediate algebra; however, institution was unable to provide algebra data.

GLOUCESTER COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

The performance of students who have completed remediation is much higher than for those who have not completed remediation. This is evident in all four disciplines and on all criterion measures. Retention rates for completers are even higher than for those who needed no remediation. However, successful survival rates for remediation-completed students in reading (19%) are only half those of other community colleges while those in computation (40.5%) are slightly above the average. The college's pre-/post-testing means in reading suggest that a large percentage of students exiting remediation may not be reaching minimum competence. Equating the college's test instrument with the NJCBSPT may help resolve this issue. Paradoxically, students completing reading remediation have a high probability of passing the first level English Composition course (75%). A transcript analysis of this group of students may be necessary to determine why their mean GPA was only 1.72.

The importance of remediation in the basic English skills is further demonstrated by the failing grade point average of all students who did not complete their remediation. Less than 20 percent of them remain in college and none have achieved a GPA of 2.0 or better.

Although the college offers both elementary and intermediate algebra courses, computer support for placement in elementary algebra is not available. Thus, no data was reported on remediation in this area.

HUDSON COUNTY COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 499¹ 100²

Placement Criteria

Reading: NJCBSPT RC 165
 Writing: NJCBSPT SS 161
 Computation: NJCBSPT MC 168
 El. Algebra: NJCBSPT EA 167

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	71	67	86	39 ¹
% Enrolled	99	100	82	39 ²
% Passing Final Remedial Course	67	68	56	67
% Reaching Minimum Competency	36	55	52	58

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading³:</u>			
# Returned Spring 1985 (%)	48 (36)	72 (62)	--
% GPA Greater Than/Equal to 2.0	83	53	--
% Successful Survival	30	25	--
% Passing First College-level Course	67	59	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	49 (35)	56 (56)	15 (7)
% GPA Greater Than/Equal to 2.0	86	41	87
% Successful Survival	30	23	2
% Passing First College-level Course	67	60	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	44 (35)	37 (47)	39 (16)
% GPA Greater Than/Equal to 2.0	82	54	56
% Successful Survival	29	23	6
% Passing First College-level Course	87	55	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	15 (43)	17 (44)	35 (23)
% GPA Greater Than/Equal to 2.0	93	59	63
% Successful Survival	40	26	12
% Passing First College-level Course	92	63	--

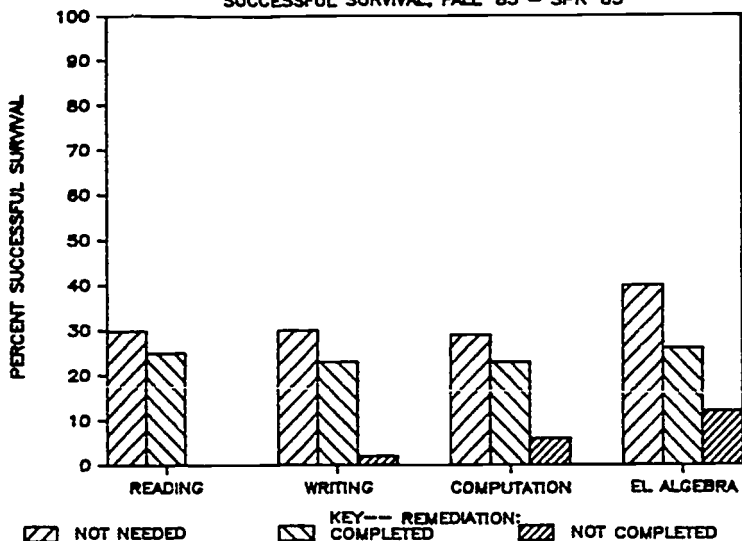
¹However, algebra portion of test not required for students who have not taken an algebra course.

²Algebra remediation required only in certain curricula.

³Third study group ("not completed") not applicable, since students who fail to complete remediation are not permitted to take college-level courses.

HUDSON COUNTY COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Hudson is an institution that contracts for the teaching of most of its college-level programs at other colleges. However, its remedial programs are handled in-house by its own faculty.

The percentage of students requiring remediation at Hudson County Community College is higher than the sector average. It ranges from 67 percent in writing to 86 percent in computation. Retention rates for both remedial and non-remedial students are considerably lower than in other community colleges.

Retention rates, however, for students who have completed remediation are much higher than for those who have not completed remediation, and are even higher than for those who did not need remediation. This is true in all four subject areas.

The performance on the other measures is not encouraging. The percentage of students who pass Hudson's final level of remediation is well below that found in other colleges. For example, only 56 percent of the 146 students enrolled in computation passed the course. Of those who pass their remedial courses, post-testing indicates that only 39 percent reach minimum competency in reading and 45 percent in computation. When these students go on to college-level courses, they have just over a 50 percent chance of passing them. The grade point averages of these remediation-completed students averaged just below a "C" for the reading/writing-remediated and just above "C" for the mathematics-remediated students.

HUDSON COUNTY COMMUNITY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

While Hudson County Community College has developed multi-tiered remedial courses and carefully tracked its students, the overall performance of the program as judged by outcome measures leaves much to be improved.

MERCER COUNTY COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1584 99 %

Placement Criteria

Reading: NJCBSPT RC 162
 Writing: NJCBSPT SS 165, Essay 8
 Computation: NJCBSPT MC 165
 El. Algebra: NJCBSPT EA 166

Course Placement, Enrollment and Outcomes

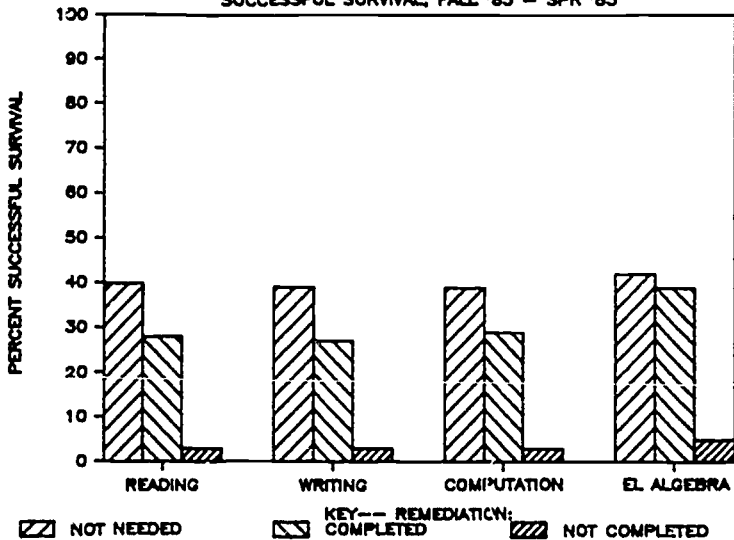
	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	44	43	42	56
% Enrolled	96	96	93	72
% Passing Final Remedial Course	82	83	72	73
% Reaching Minimum Competency	100	100	100	100

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	477 (53)	267 (54)	22 (12)
% GPA Greater Than/Equal to 2.0	75	52	27
% Successful Survival	40	28	3
% Passing First College-level Course	87	82	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	474 (53)	279 (52)	15 (10)
% GPA Greater Than/Equal to 2.0	74	52	27
% Successful Survival	39	27	3
% Passing First College-level Course	88	77	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	507 (55)	241 (54)	17 (8)
% GPA Greater Than/Equal to 2.0	71	54	35
% Successful Survival	39	29	3
% Passing First College-level Course	73	63	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	395 (57)	296 (61)	74 (18)
% GPA Greater Than/Equal to 2.0	73	63	27
% Successful Survival	42	39	5
% Passing First College-level Course	83	66	--

MERCER COUNTY COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Mercer's percentage of students tested and percentage enrolled in needed remedial courses are both over 95 percent with the exception of enrollment in remedial algebra. Over 80 percent of the students in remedial reading or writing pass their courses and over 70 percent pass remedial mathematics courses.

Non-remedial students and students who complete remediation at Mercer have virtually the same retention rates. More than half of both these groups from Fall 1983 were enrolled in Spring 1985. In contrast, approximately 10 percent of the unremediated students from Fall 1983 returned in the Spring 1985.

Students who exited remediation in reading and writing passed their subsequent college level writing course at rates comparable to non-remedial students. Students completing remediation in algebra, however, did not pass their next mathematics course at the same rates (66 vs. 83%) as non-remedial students. The college also reported an extensive, supplementary analysis of the passing rates of remediated vs. non-remedial students in 13 other college-level courses. Among these courses, five showed impressive performance by remediated students, while the comparison in eight others did not meet the college's expectations.

Pre- and post-testing data reported by the college are more extensive and complete than any other institution yet contain some seeming

MERCER COUNTY COMMUNITY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

Inconsistencies. While 100 percent of students who pass every remedial area are reported as attaining minimum competency, the mean post-test scores in elementary algebra are below the criterion the college uses for minimum competency. Data from the next (1984) cohort of students do not show this inconsistency. Further, in the reading area, there was some difficulty in equating the California test used for pre-testing with the initial placements of remedial students via the NJCBSPT.

Although the remediation-not-needed group evidenced the highest GPA's, credit ratios and successful survival rates, the remediation-completed group in general attained levels only slightly lower. Successful survival rates and credit ratios were lowest in the remediation-not-completed group. In fact, students who did not complete required remediation averaged only a five percent chance of successful survival at Mercer.

MIDDLESEX COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 2277 99 %

Placement Criteria

Reading: NJCBSPT RC 162
 Writing: NJCBSPT SS 162
 Computation: NJCBSPT MC 166
 El. Algebra: NJCBSPT EA 167 and curriculum requiring math

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	36	31	48	111
% Enrolled	93	95	93	96
% Passing Final Remedial Course	77	69	69	84
% Reaching Minimum Competency	53	43	30	84

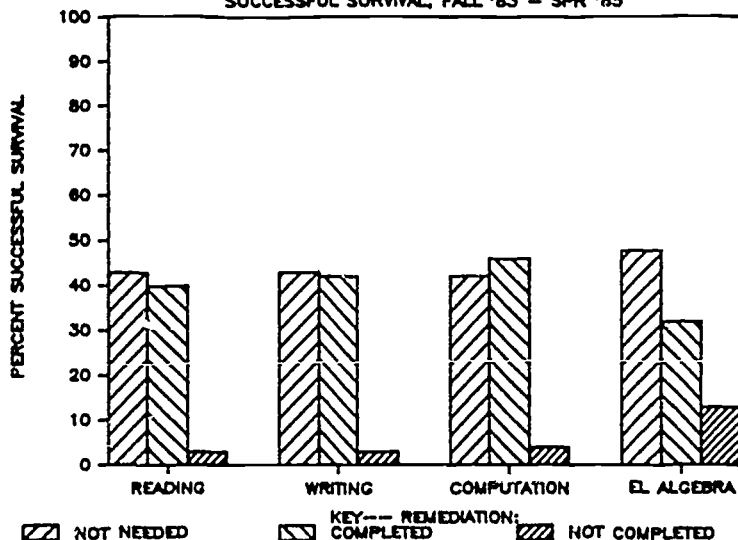
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
% Returned Spring 1985 (%)	772 (53)	357 (58)	15 (7)
% GPA Greater Than/Equal to 2.0	82	69	33
% Successful Survival	43	40	3
% Passing First College-level Course	78	75	--
<u>Writing:</u>			
% Returned Spring 1985 (%)	829 (53)	290 (60)	25 (11)
% GPA Greater Than/Equal to 2.0	82	70	24
% Successful Survival	43	42	3
% Passing First College-level Course	79	73	--
<u>Computation:</u>			
% Returned Spring 1985 (%)	654 (55)	453 (61)	37 (11)
% GPA Greater Than/Equal to 2.0	82	75	35
% Successful Survival	42	46	4
% Passing First College-level Course	75	59	--
<u>Elementary Algebra:</u>			
% Returned Spring 1985 (%)	257 (62)	83 (53)	20 (22)
% GPA Greater Than/Equal to 2.0	77	66	60
% Successful Survival	48	32	13
% Passing First College-level Course	77	62	--

1 Students are identified as needing algebra remediation only in certain programs.

MIDDLESEX COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

In all skill areas, the remediation-completed group achieved higher retention rates, higher percentage of GPA's exceeding 2.0, and higher successful survival rates than did the group who did not complete remediation.

Retention rates were higher for the remediation-completed group as compared with the remediation-not-needed group in each of the skill areas except elementary algebra, wherein the remediation-not-needed group rates were highest. Students who completed remediation also had successful survival rates similar to those who did not need remediation and approximately 20 times higher than those who did not complete remediation in either reading or writing.

Although the remediation-completed groups in reading, writing and computation had relatively small percentages of students achieving minimum competency, they performed at approximately the same levels as the remediation-not-needed group. The college reported that for the 1984 cohort post-testing will become a part of the final grading procedure in order to ensure high student motivation for post-testing.

OCEAN COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1682 99 %

Placement Criteria

Reading: NJCBSPT RC 161; In-house test
 Writing: NJCBSPT Essay 9 & SS 145; Essay 7-8 & SS 150; Essay 6
 Computation: NJCBSPT MC 161; In-house test
 El. Algebra: NJCBSPT EA 161

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified ¹	39	18	38	1
% Enrolled	72	87	73	38
% Passing Final Remedial Course ²	73	79	69	60
% Reaching Minimum Competency	N/A	N/A	N/A	N/A

Cumulative Four-semester Follow Up

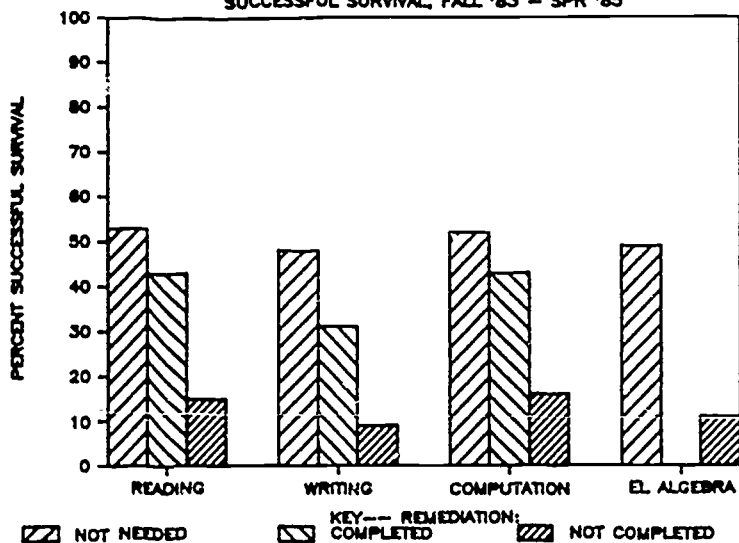
	<u>Remediation Not Needed</u>	<u>Remediation Completed²</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	371 (60)	141 (64)	46 (27)
% GPA Greater Than/Equal to 2.0	88	67	57
% Successful Survival	53	43	15
% Passing First College-level Course	N/A	N/A	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	472 (57)	77 (57)	9 (19)
% GPA Greater Than/Equal to 2.0	85	55	44
% Successful Survival	48	31	9
% Passing First College-level Course	N/A	N/A	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	384 (61)	131 (63)	43 (24)
% GPA Greater Than/Equal to 2.0	85	69	67
% Successful Survival	52	43	16
% Passing First College-level Course	N/A	N/A	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	151 (62)	0 (0)	2 (22)
% GPA Greater Than/Equal to 2.0	87	--	50
% Successful Survival	49	0	11
% Passing First College-level Course	N/A	--	--

¹Here based on number of tested and retained students (= 1014).

²Passing (and remediation completed) defined as grade of "C" or better, or "pass."

OCEAN COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Ocean County College has a "block" style remedial program in which the most skills-deficient students take only remedial courses in their first semester. "Developmental" courses are offered as separate units for those students who are judged to be transitional between remedial and college-level work. The college's placement criteria in writing (a combination of the essay and sentence sense scores) appear to result in an unusually low percentage (18%) identified as needing remediation in writing. In addition, of the 1,682 students tested only 13 were identified for remediation in algebra because the college requires algebra only in a few majors. Of the 13 algebra-identified students, five enrolled in the assigned course, three passed but no one was retained in the fourth semester.

The passing rates in remedial courses were comparatively high but the college did not present data either on the percentage of remediation-completed students passing subsequent college-level courses or on post-testing at the end of remedial courses. The post-testing data presented by the college in last year's report were problematic. Of the 206 students who passed the remedial course in reading, post-test results were available for only 135 students. There is no indication of which post-test was used, but if the mean of 56.4 on the post-test was on the New Jersey Reading Comprehension test, it was very low. It is not surprising that only 36 percent of the students for whom the post-test results were available attained the minimum level on the post-test. In writing, although 42 out of 125 students who passed remedial courses took the post-test, the data reported were impossible to interpret.

OCEAN COUNTY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

In terms of follow-up data, of the students who did not complete remediation, 27 percent in reading and 24 percent in mathematics were still enrolled in the fourth semester. And, in almost all skill areas, students who completed remediation had a much lower level of academic performance compared to those who did not need remediation.

Ocean County College repeatedly has had difficulty in adequately reporting the data asked of it by the Basic Skill Council. Adequate and fair analysis of its remedial program is obfuscated by inadequate and incomplete data reporting. It is entirely possible that on the pedagogical side their remedial program may be functioning well. Their placement policies in writing and algebra, as well as their data reporting, however, could benefit from review and revision.

PASSAIC COUNTY COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 347 93 %

Placement Criteria

Reading: NJCBSPT RC 161
 Writing: NJCBSPT SS 165, Essay 9
 Computation: NJCBSPT MC 165
 El. Algebra: NJCBSPT EA 176

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	82	89	95	3
% Enrolled	93	96	92	83
% Passing Final Remedial Course ¹	53	72	79	80
% Reaching Minimum Competency	53	N/A	36	N/A

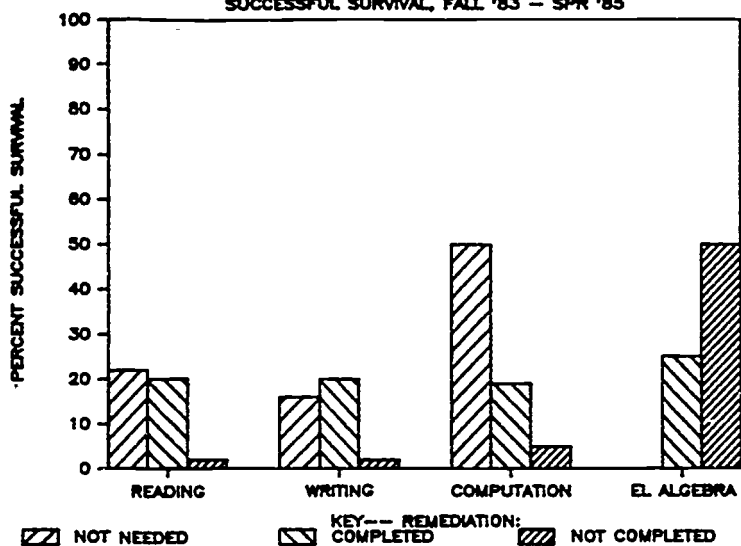
Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	19 (30)	47 (52)	13 (7)
% GPA Greater Than/Equal to 2.0	74	38	23
% Successful Survival	22	20	2
% Passing First College-level Course	80	55	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	7 (22)	53 (42)	14 (8)
% GPA Greater Than/Equal to 2.0	71	47	21
% Successful Survival	16	20	2
% Passing First College-level Course	91	55	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	3 (75)	58 (49)	12 (11)
% GPA Greater Than/Equal to 2.0	67	40	46
% Successful Survival	50	19	5
% Passing First College-level Course	80	54	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	0 (0)	2 (25)	3 (75)
% GPA Greater Than/Equal to 2.0	--	100	67
% Successful Survival	0	25	50
% Passing First College-level Course	--	100	--

¹Passing defined as grade of "C" or better.

PASSAIC COUNTY COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

It goes to the credit of Passaic County College that despite the fact that an overwhelming majority (more than 95%) of students entering the college were skills-deficient in one or more areas, the college succeeded in testing most of them (92-93%), and in enrolling in remedial courses over 90 percent of those needing remediation.

Except for the passing rates for full-time students enrolled in remedial reading courses, the passing rates in remedial courses were high. However, the percentages of students passing remedial courses and attaining minimum competency on the post-test were very low: 36.4 percent in math; 52.9 percent in reading; and even lower in writing.

Although retention rates at Passaic are only about half of the county college sector average, students who completed remediation had a much higher retention rate than those who did not need remediation. For example, only 21.8 percent of those who did not need remediation in writing were enrolled in the fall semester compared to 42 percent of those who had completed remediation. It may be that students with an adequate level of skills are transferring to other institutions before graduation.

In terms of GPA and performance in subsequent courses, those who completed remediation performed at a much lower level than those who did not need remediation. It should be noted, however, that very few students at Passaic who did not need remediation persisted for four semesters (e.g., 7 in

PASSAIC COUNTY COMMUNITY COLLEGE

REMEDIAL PROGRAM REMARKS, CONTINUED

writing and 3 in computation). However, while successful survival rates of both the groups were low, the completers had slightly higher rates than those who did not need remediation, mainly because of a higher retention rate among the students who completed remediation.

It appears from the data that the remedial program at Passaic is struggling to produce even low successful survival rates. Students completing remediation have a low rate of reaching minimum level on the post-test, have low GPA's and low passing rates in subsequent courses. Passaic's thorough analysis of its data and remedial program performance clearly indicates that the institution is fully aware of its problems with the outcomes of the program.

SALEM COMMUNITY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 293 99 %

Placement Criteria

Reading: NJCBSPT RC 159
 Writing: NJCBSPT SS 161
 Computation: NJCBSPT MC 161
 El. Algebra: NJCBSPT EA 168; in-house test

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	40	41	37	401
% Enrolled	77	90	88	741
% Passing Final Remedial Course	67	72	56	76
% Reaching Minimum Competency	N/A	N/A	N/A	N/A

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading²:</u>			
# Returned Spring 1985 (%)	84 (48)	40 (65)	39 (70)
% GPA Greater Than/Equal to 2.0	85	63	64
% Successful Survival	45	41	44
% Passing First College-level Course	83	89	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	87 (51)	40 (69)	7 (13)
% GPA Greater Than/Equal to 2.0	85	72	29
% Successful Survival	47	48	4
% Passing First College-level Course	80	95	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	92 (50)	35 (57)	7 (15)
% GPA Greater Than/Equal to 2.0	84	69	57
% Successful Survival	47	40	9
% Passing First College-level Course	89	90	--
<u>Elementary Algebra³:</u>			
# Returned Spring 1985 (%)	70 (40)	32 (62)	3 (25)
% GPA Greater Than/Equal to 2.0	73	91	57
% Successful Survival	29	56	17
% Passing First College-level Course	90	85	--

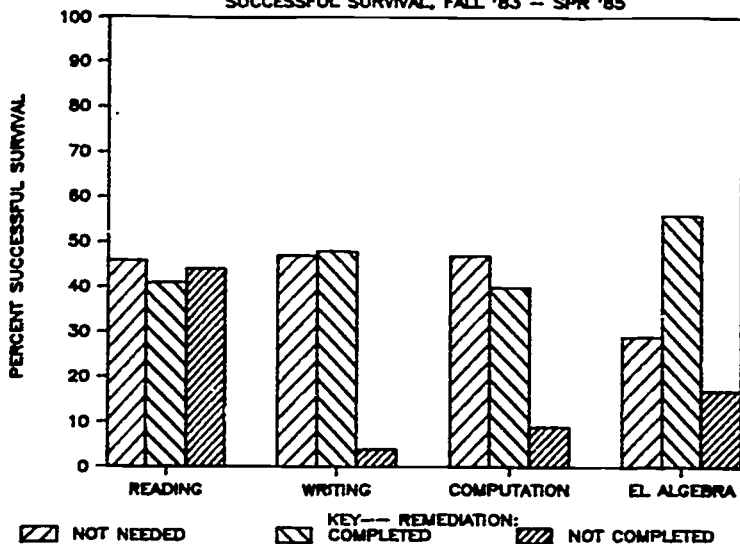
¹Only a fraction of students included here were in programs that require algebra.

²At the time this cohort entered, students in some programs were not required to complete remediation in reading.

³Second study group ("completed") includes students who were not required to take remedial algebra but took it.

SALEM COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Salem was able to test most of the students who needed to be tested, but its rate of enrolling remedial students in remedial courses was low for part-time students in general, and for full-time students needing remediation in reading and/or algebra (77% and 73%) in particular. Passing rates in remedial courses were reasonably high, but in the absence of past-test data, it was difficult to interpret those high passing rates.

Generally, completers had a higher retention rate than those not needing remediation; but, in reading, it is surprising to find that noncompleters had a very high rate of retention (69.6%), even higher than the rate for completers (64.5%). What is even more surprising, the 37 noncompleters in reading had a slightly higher term GPA (2.22) than completers (2.16), and higher successful survival rates (44%) than completers (41%). These findings need to be investigated by the college to find out what could be the probable reasons for these unexpected outcomes.

SOMERSET COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 808 99%

Placement Criteria

Reading: NJCBSPT RC 161
 Writing: NJCBSPT SS 162
 Computation: (No computation course until Spring '84)
 El. Algebra: NJCBSPT EA 167

Course Placement, Enrollment and Outcomes

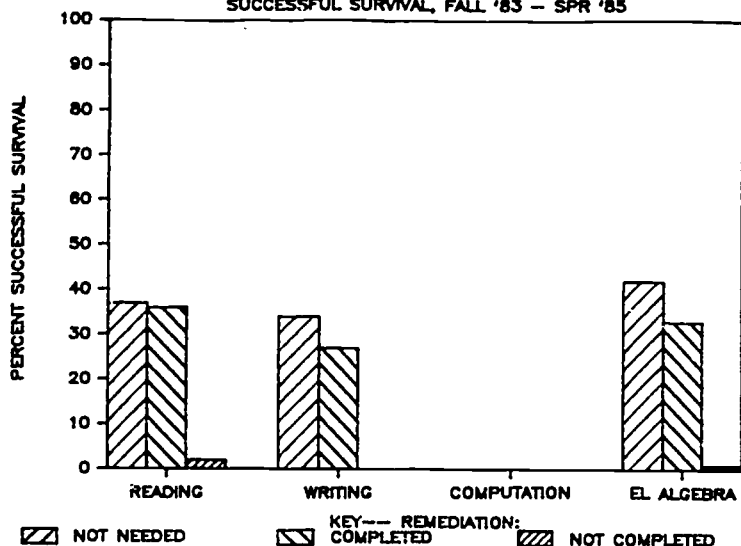
	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	31	24		46
% Enrolled	99	99		100
% Passing Final Remedial Course	96	79		64
% Reaching Minimum Competency	7	42		89

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	215 (41)	75 (54)	2 (4)
% GPA Greater Than/Equal to 2.0	87	68	50
% Successful Survival	37	36	2
% Passing First College-level Course	92	92	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	232 (43)	65 (41)	0 (0)
% GPA Greater Than/Equal to 2.0	80	66	--
% Successful Survival	34	27	0
% Passing First College-level Course	93	85	--
<u>Computation:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	180 (51)	99 (41)	12 (7)
% GPA Greater Than/Equal to 2.0	82	80	83
% Successful Survival	42	33	1
% Passing First College-level Course	88	82	--

SOMERSET COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



REMEDIAL PROGRAM REMARKS

Students completing remediation at Somerset County College have far less attrition, higher GPA's (except in algebra), and much higher successful survival rates than students who have not completed remediation. Moreover, students who complete the basic English skills remediation have even higher retention rates than those who needed no remediation. As can be seen in the graph, the successful survival rates for remediation-completed students are particularly impressive in the reading program. Thirty-one percent of the students tested required reading remediation, 99 percent of these enrolled in the remedial course(s); 96 percent passed the course and then 92 percent of these passed the subsequent college-level English course.

Post-test data in reading and writing were problematic for the 1983 cohort (student mean scores were reported to have decreased in a reading course from pre- to post-testing), but supplementary data presented from 1984 post-testing shows improved results though still not fully satisfactory. A computation course was added beginning with the Fall 1984 cohort.

SUSSEX COUNTY COMMUNITY COLLEGE COMMISSION

1983 FULL-TIME COHORT¹

Students Tested: 93 86 %

Placement Criteria

Reading*: NJCBSPT RC 165 and Essay evaluation
 Writing: (No separate writing course in Fall, '83)
 Computation: (No separate computation course in Fall, '83)
 El. Algebra**: NJCBSPT MC or EA 165

Course Placement, Enrollment and Outcomes

	<u>Reading*</u>	<u>Writing</u>	<u>Computation</u>	<u>El Algebra**</u>
% Identified	42			82
% Enrolled	54			43
% Passing Final Remedial Course	97			95
% Reaching Minimum Competency	N/A			N/A

Cumulative Four-semester Follow Up²

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading*:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			
<u>Writing:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			
<u>Computation:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			
<u>Elementary Algebra**:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			

*"English" (includes reading & writing)

**includes basic mathematics and algebra

¹Part-time data given here, since only these students are tested and tracked by institution.

²Full-time follow up not applicable.

(Sussex)

REMEDIAL PROGRAM REMARKS

In 1982, this new college had but one remedial course and contracted for educational services for its students at other nearby colleges. In 1983, two remedial courses were offered and in 1984 the remedial program expanded to two levels in both writing and mathematics and one level in reading. The college tracked only its part-time students attending classes within the Sussex County centers. The remaining full- and part-time students in need of remediation enrolled in the County College of Morris and were reported with that institution's data. Between 95 and 100 percent of the part-time students in need of remediation passed their assigned courses. Their post-test means were all above the minimum competency level.

UNION COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1201 94 %

Placement Criteria

Reading: NJCBSPT RC 164 (Cranford Campus); 161 (Scotch Plains Campus)
 Writing: NJCBSPT SS 169
 Computation: NJCBSPT MC 165
 El. Algebra: NJCBSPT EA 166 & curriculum that requires math

Course Placement, Enrollment and Outcomes

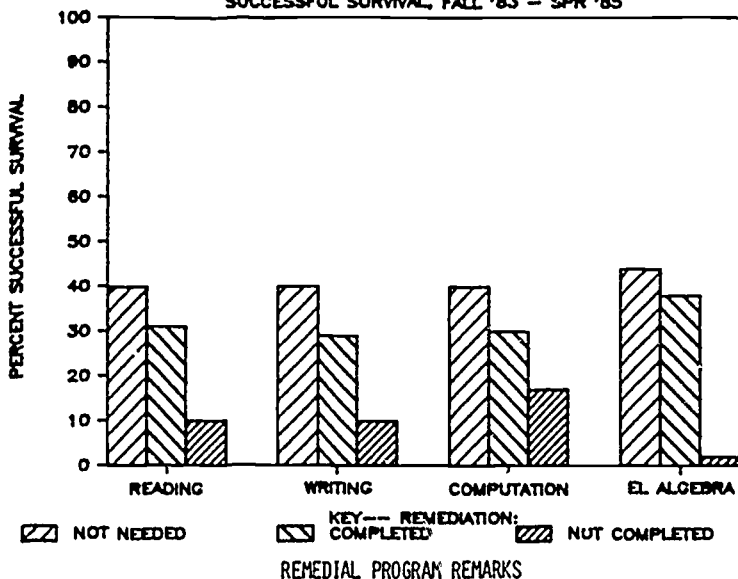
	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	48	44	53	15
% Enrolled	91	90	78	94
% Passing Final Remedial Course	61	65	66	66
% Reaching Minimum Competency	N/A	N/A	93	98

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	334 (54)	198 (62)	48 (18)
% GPA Greater Than/Equal to 2.0	75	50	56
% Successful Survival	40	31	10
% Passing First College-level Course	94	89	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	357 (53)	187 (61)	43 (20)
% GPA Greater Than/Equal to 2.0	76	49	49
% Successful Survival	40	29	10
% Passing First College-level Course	96	86	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	309 (55)	165 (51)	101 (32)
% GPA Greater Than/Equal to 2.0	73	58	52
% Successful Survival	40	30	17
% Passing First College-level Course	87	72	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	213 (56)	69 (62)	24 (35)
% GPA Greater Than/Equal to 2.0	78	61	58
% Successful Survival	44	38	2
% Passing First College-level Course	95	74	--

UNION COUNTY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 - SPR '85



Union County College did very well in testing most of their full-time students and in enrolling most of them in remedial courses if they needed remediation. The passing rates in remedial courses were reasonable, and, at least in math and algebra, the post-test results were very satisfactory. More than 93 percent of those who completed remediation in computation and 98.2 percent of those who completed remediation in algebra attained the minimum level on the post-test. In-house essay post-tests were used in reading and writing that were modeled on the NJCBSPT. However, the results are difficult to interpret because the college did not provide equated pre-test data or the percentage of students attaining minimum competency.

The follow-up data presents a mixed picture. Non-completers had fairly high retention rates. This was particularly true amongst those needing remediation in computation and algebra where the retention rates were 32 and 35 percent respectively. In terms of the average number of credits earned and of GPA's, the performance of those who completed remediation was much lower than those who did not need remediation, and comparable to those who needed remediation but did not complete it. However, in the first-level college courses, those who completed remediation performed at only a slightly lower level than those who did not need remediation.

Overall, remedial efforts at Union County College appear to be producing desirable results. Better post-test data in the verbal area would help, and there appears to be a need to investigate the better than expected performance of students who do not complete remediation in computation. The college reported that the data on the remediation-incomplete students in computation may be inaccurate because of miscategorizations due to unrecorded summer remedial enrollments and changes in full- vs. part-time status that were not entered into the data-base.

WARREN COUNTY COMMUNITY COLLEGE COMMISSION

1983 FULL-TIME COHORT

Students Tested: 65¹ 83²

Placement Criteria

Reading*: NJCBSPT Total English 161; Essay 7; high school grades
 Writing: (No separate writing course)
 Computation: NJCBSPT MC 165
 El. Algebra: NJCBSPT EA 166

Course Placement, Enrollment and Outcomes

	<u>Reading*</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	22		11	18
% Enrolled	29		86	0
% Passing Final Remedial Course	100		84	--
% Reaching Minimum Competency	N/A		N/A	N/A

Cumulative Four-semester Follow Up³

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading*:</u>			
# Returned Spring 1985 (%)	N/A	2 (50)	--3
% GPA Greater Than/Equal to 2.0	N/A	50	--
% Successful Survival	N/A	50	--
% Passing First College-level Course	N/A	100	--
<u>Writing:</u>			
# Returned Spring 1985 (%)			
% GPA Greater Than/Equal to 2.0			
% Successful Survival			
% Passing First College-level Course			
<u>Computation:</u>			
# Returned Spring 1985 (%)	N/A	1 (20)	0 (0)
% GPA Greater Than/Equal to 2.0	N/A	100	--
% Successful Survival	N/A	100	0
% Passing First College-level Course	N/A	100	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	N/A	--3	--3
% GPA Greater Than/Equal to 2.0	N/A	--	--
% Successful Survival	N/A	--	--
% Passing First College-level Course	N/A	--	--

*Includes reading and writing.
¹In-county and out-of-state students only (out-of-county, in-state attendees are reported by respective institutions).
²However, base N includes students not strictly required to be tested.
³Not applicable (study group total N equaled zero at the onset).

(Warren)

REMEDIAL PROGRAM REMARKS

The college began its remedial program in the spring of 1983. A total of 19 students (of 65 tested) required remediation. Seven of these students were enrolled four semesters later and all of them had passed their first-level college courses in writing and mathematics. No graph is presented because of the small sample size.

GLASSBORO STATE COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1149 100%

Placement Criteria

Reading: NJCBSPT RC 168
 Writing: NJCBSPT Total English 164 & Essay 7; Total English 167 & Essay 6;
 Essay 5 or less
 Computation: NJCBSPT MC 172
 El. Algebra: NJCBSPT EA 175

Course Placement, Enrollment and Outcomes

	<u>Reading</u>	<u>Writing</u>	<u>Computation</u>	<u>El. Algebra</u>
% Identified	36	28	32	60
% Enrolled	99	97	95	95
% Passing Final Remedial Course	80	83	87	84
% Reaching Minimum Competency	61	97	84	91

Cumulative Four-semester Follow Up

	<u>Remediation Not Needed</u>	<u>Remediation Completed</u>	<u>Remediation Not Completed</u>
<u>Reading:</u>			
# Returned Spring 1985 (%)	512 (70)	235 (72)	34 (40)
% GPA Greater Than/Equal to 2.0	86	75	56
% Successful Survival	60	54	22
% Passing First College-level Course	86	81	--
<u>Writing:</u>			
# Returned Spring 1985 (%)	565 (68)	198 (76)	17 (27)
% GPA Greater Than/Equal to 2.0	86	68	71
% Successful Survival	59	52	19
% Passing First College-level Course	87	69	--
<u>Computation:</u>			
# Returned Spring 1985 (%)	548 (70)	203 (73)	30 (33)
% GPA Greater Than/Equal to 2.0	84	77	63
% Successful Survival	59	56	21
% Passing First College-level Course	84	73	--
<u>Elementary Algebra:</u>			
# Returned Spring 1985 (%)	321 (70)	404 (77)	56 (34)
% GPA Greater Than/Equal to 2.0	85	82	48
% Successful Survival	60	63	17
% Passing First College-level Course	88	67	--