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ABSTRACT

Factors that might enable students with minimal basic skills deficiencies to succeed at Jersey City State College (JCSC) were studied. On the basis of students' performance on the New Jersey Basic Skills Placement Test, it was possible to identify those students with minimal skills deficiencies in English, mathematics, and reading. Data were obtained from student records, student and faculty questionnaires, and semi-structured interviews with students and faculty. Nine factors were identified that distinguished JCSC students from students enrolled in other public New Jersey colleges and universities. Teachers' opinions about the following competencies were determined: communication, problem solving, clarifying values, using science and technology, and understanding the arts. In comparison to faculty in other general studies subjects, natural sciences faculty rated more strongly the need for student competencies in communication and problem solving. Group interviews with students resulted in recommendations concerning advisement, course offerings, course outlines, course content, and student evaluation. Bar graphs and statistical tables of the findings are appended, along with questionnaires and interview schedules. In addition, summaries of interviews are provided. (SW)

FACTORS ASSOCIATED WITH THE ACADEMIC PERFORMANCE OF MARGINAL STUDENTS IN AN URBAN COLLEGE SETTING

by

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I

INTRODUCTION

The purpose of this study was an attempt to identify those factors, as perceived by both faculty and students, that might enable students with minimal basic skills deficiencies to be academically successful at Jersey City State College.

On the basis of their performance on the New Jersey Basic Skills Placement Test, it was possible to identify those students with minimal skills deficiencies in: (1) English; (2) Mathematics; and (3) Reading. These identified students tended to score in the upper range of scores for placement in non-degree credit remedial courses or in the lower range of scores for placement in degree credit developmental skills courses. Thus, these students being examined in this study exhibited deficiencies in the basic skills; however, they did not fall into the lowest range of scores for placement in remedial non-degree credit course work.

Given the range of skill deficiencies and the large number of students (80 percent of the freshman class) enrolled in either remedial and/or developmental courses, it was decided that a study designed to identify those instructional factors that enable students to be academically successful would be of value

to the College, and also to other institutions which have large numbers of students with similar skills deficiencies.

Because of various reports on retention and student success rate in passing skills courses which were already prepared by Dr. Linda Lyons, Director of the Office of Institutional Research, it was decided to limit the scope of this study to only those students with minimal skills deficiencies, and who thus have the greatest chance of being academically successful. There is another group of students, those with substantial skills deficiencies who, because of their low success rate in passing skills courses, were not included in this study.

II

COMPARISON OF JERSEY CITY STATE COLLEGE STUDENTS WITH NEW JERSEY STUDENTS REGARDING SELECTED ACADEMIC FACTORS

Jersey City State College has, on many occasions, been described as the "urban college" in the state of New Jersey. In fact, it is the only one of the eight State Colleges which is actually located in an urban area--being situated in Hudson County, one of the most densely populated counties in the nation. Also, Jersey City State College is the only non-residential, commuter State College.

As such, it could be hypothesized that the student body of Jersey City State College would differ from the student bodies of the other New Jersey State Colleges and other New Jersey public institutions of higher education. If this hypothesis were to hold true, it then might also be argued logically that the instructional needs of Jersey City State College student body might differ from those of student bodies in other colleges.

The above hypothesis can be examined empirically by utilizing data which is collected early each fall semester from freshmen students entering all public New Jersey institutions of higher education. This data is collected by means of an administration of New Jersey Basic Skills Placement Test at all two-and four-year state institutions. This test yields scores

in the following six areas:

1. Reading Comprehension;
2. Logical Relationships;
3. Essay;
5. Computation; and
6. Algebra

In addition, students are asked to provide a great deal of background information, and analyzed data is presented in this report for just the following ten factors:

1. Sex of student;
2. Attendance on either a full-time or part-time basis;
3. Is English your best language;
4. Year of high school graduation;
5. Type of high schiol program;
6. Years of high school English;
7. Years of high school Mathematics;
8. Perception of comparison with other students in Written Expression;
9. Perception of comparison with other students in Mathematical ability; and
10. Perception of academic areas in which help is wanted in order to improve.

As might be expected regarding academic factors relating to students, the Jersey City State College Office of Institutional Research and Testing, under the direction of Dr. Linda Lyons, has already analyzed empirically some data in this area. A study entitled Comparison of Placement Test Scores and Background Information Date - 1978, 1979, 1980 Freshman Groups was completed by Dr. Lyons in December 1980. As the title implies, this fourteen-page report speaks to both test scores and background information regarding entering Jersey City State College freshmen. Appendix G contains a photocopy of Table 1 from Dr. Lyons' report which lists Mean average raw scores for the six test areas and the three-year time period noted above, and also for three groups

of students:

1. Jersey City State College;
2. Four-year public colleges in New Jersey; and
3. All public New Jersey institutions of higher education.

As may be noted from the content of the table, Jersey City State College students obtained the lowest Mean score for the three groups of students for each of the three years (1978, 1979, and 1980) in all six academic test areas. And the same findings held true in this present report for Mean scores resulting from the 1981 administration. Consequently, the findings in this report regarding test scores would tend to confirm again Dr. Lyons' conclusion that Jersey City State College "freshmen are less adequately prepared for college-level work than are freshmen at the other state colleges" (page 14).

Dr. Lyons makes this statement based upon examination of both the students' 1978, 1979, and 1980 test scores and background information--which is also presented in this report for 1981. For the purpose of this present report, background information collected from the freshmen students in 1981 was analyzed inferentially, and the findings are presented graphically in Figure 1-10 (See pages 34-43). These figures are constructed so that there can be a visual comparison of responses to background informational questions by students from the three following groups of New Jersey higher education institutions:

1. All New Jersey public institutions;
2. All four-year state colleges; and
3. Jersey City State College.

Two arithmetic/numerical factors should be noted regarding these figures. First, the responses to the various categories for

any group of colleges should total to 100%. If the total is less than 100%, the difference reflects the percent of "No Responses." Second, data for "All four-year state colleges" does not include Jersey City State College data, either for graphic portrayal or inferential calculation purposes.

1. Sex. Figure 1 indicates that all three groups of institutions enrolled a lesser percentage of males than females, but the difference between institutions are not statistically significant.

2. Full-time/Part-time. Compared to other institutions, Figure 2 indicates that Jersey City State College enrolled a larger proportion or part-time students ($p < .001$).

3. English Best Language. As may be noted in Figure 3, more ($p < .001$) Jersey City State College students responded that English was not their best language.

4. Year of High School Graduation. Figure 4 indicates that a lesser proportion ($p < .001$) of Jersey City State College students enrolled in college immediately upon graduation from high school.

5. High School Program. Less ($p < .001$) Jersey City State College students were enrolled in the Academic--and more enrolled in the General--high school program (See Figure 5).

6. Years of English Studied. Jersey City State College students studied less years of high school English than their peers in all Four-Year State Colleges (See Figure 6)--

with the disparity significant at ($p < .001$).

7. Years of Mathematics Studied. A lesser proportion (See Figure 7) of Jersey City State College students studied four years of high school Mathematics than was true for their peers from the two other groups of institutions ($p < .001$).

8. Comparison with Others in Written Expression. As is portrayed in Figure 8, compared with the other groups of students, less ($p < .001$) Jersey City State College students perceived themselves to be "Above Average" in Written Expression.

9. Comparison with Others in Mathematical Ability. Figure 9 illustrates graphically that--compared to other groups of students--less ($p < .001$) Jersey City State College students view themselves as being "Above Average" in Mathematical Ability--and this perception for Mathematical Ability was even more negative for Jersey City State College students than it was for Written Expression.

10. Academic Areas in Which Help is Needed. As may be noted in Figure 10, Jersey City State College students felt they needed academic help in all areas more ($p < .001$) than their peers at other institutions, and this request for additional help was most prevalent for the academic area of mathematics.

Conclusion

An empirical examination of the test and background information data collected from all freshmen entering New Jersey public institutions of higher education indicates that Jersey City State College students are significantly different (generally in a negative sense) than their peers at other institutions.

In reality, the negative findings from Jersey City State College result primarily from a comparison with students in other four-year state colleges--rather than with students in all New Jersey public institutions, which includes two-year colleges.

Jersey City State College students also appear to be of a non-traditional variety (i.e., attending part-time, with a greater time lag to college from a high school with an academic program that was not too vigorous). They also seem to feel that they, more than other students, need help in all academic areas (especially Mathematics!, a belief which analyzation of test scores supports.

In summary, it appears that Jersey City State College students; (1) differ from their peers (in a negative academic sense) in other public New Jersey institutions; and (2) may require a differing instructional program.

III

RESEARCH FACTORS

It was noted in the Introduction (Chapter I) that data was collected from both students and faculty. This chapter will speak to the methods whereby: (1) subjects were selected for inclusion in the study; and (2) data was collectd from these subjects.

Subjects

Students

It was also noted in Chapter I that student subjects for this study were those freshmen students who "exhibited deficiencies in the basic skills; however, they did not fall into the lowest range of scores for placement in remedial skills deficiencies."

These students (initially titled "marginal students") were defined more precisely in an empirical sense in a February 27, 1982 memorandum (See Appendix A) which was sent to all Arts and Sciences faculty who were teaching General Studies courses. As may be noted in the cover sheet of this memorandum.

> Another term that needs to be defined is "marginal students." Generally, this group of students would be viewed as those whose academic background and aptitude is such that their chances for academic success at JCSC are uncertain. This group of marginal students would <u>not</u> include those students who:

1. are probably going to succeed academically, regardless of ancillary services and instructional techniques utilized; and/or

2. are probably going to encounter academic difficulties and fail academically, regardless of ancillary services and instructional techniques utilized.

Empirically, these students could be described as those whose test scores on the New Jersey College Basic Skills Placement Test (for local norms) falls between the Mean and -1 sigma unit--or the 50th and 16th percentile--on the various sub-tests.

Again, it should be recalled that the major focus of the study will concern the students identified above who are enrolled in General Studies courses.

Faculty

It was just noted in the previous section that the memorandum contained in Appendix A was sent to the "Arts and Sciences Faculty Teaching General Studies Courses." During the 1982 Spring Semester when data was gathered for this study, there were 203 full-time Arts and Sciences faculty, of whom 62 were teaching General Studies courses. This latter group of faculty would be viewed as the population of subjects for this study.

Questionnaires

Students

A copy of the twenty-item student questionnaire is contained in Appendix B, and this questionnaire was administered to 195 students (enrolled in primarily General Studies courses) during the latter portion of April and early portion of May 1982.

The content of items used in this questionnaire was determined by obtaining both verbal and written comments from the groups of students described previously.

Verbal comments were obtained by means of interviews with students. (See Appendix C for a copy of the letter mailed to fifty "Randomly Selected Jersey City State College Students"). These students were selected randomly from the 1981 freshmen studonts whose test scores fell between the 16-50 percentile on four of the five test areas (Read I, Read II, Math I, Math II, and Sentence Structure) on the New Jersey Basic Skills Placement Test.

Of the twenty-eight students described above who agreed verbally during a telephone conversation to be interviewed, eight actually met with the graduate-student interviewers mentioned in the Appendix C letter. The comments elicited from these eight students were utilized to construct some of the twenty questions in the Student Questionnaire.

Other questions were constructed on the basis of written responses from students to a request for them (the students) to reply to the following questions:

1. How can college faculty be/do better in making classes really work for students?
2. What things could be missing from classes that causes students not to do well?
3. What could the faculty do to help students in your classes?

These questions were asked of students enrolled in three General Studies classes and one Speed Reading class.

Faculty

The faculty rated the various student competencies contained in the Appendix A questionnaire. The competencies listed in the questionnaire were those which the three researchers conducting the study felt were most appropriate regarding the Jersey City State College students, and these competencies were taken from those listed for the College Outcome Measures Project: Assessment of General Education Knowledge and Skills, The American College Testing Program, Iowa City, Iowa, 1980.

The questionnaire was distributed initially to all full-time Arts and Sciences faculty on February 25, 1982, with a request that the completed questionnaires be returned by March 19th. With only twenty-eight questionnaires being returned by that date, a follow-up distribution took place on March 29, and twelve more questionnaires were returned by April 8th. Of these forty questionnaires which were returned, thirty-seven were deemed useable in terms of data analysis. A return from forty faculty represents a 65% return from the sixty-two faculty teaching General Studies courses during the 1982 Spring Semester.

Interviews

Students

The final data-gathering activity was group interviews with students in some of their General Studies classes. These semi-

structured interviews were (See Appendix D) conducted on a group basis during October and November of the 1982 Fall Semester.

The initial interview was conducted with all the students (no instructor present) in a Saturday morning, General Studies Psychology class. All four interviewers were present for this interview in order that the interviewing techniques which would be used in subsequent interviews could be observed and evaluated during this initial interview. The four interviewers included two of the faculty conducting the research study--one of whom conducted earlier the faculty interviews, and who also conducted subsequent student interviews. The other two interviewers were graduate students enrolled in, and graduated from, the sixth-year School Psychology Program. Both graduate students interviewers worked previously with the type of "marginal" student mentioned earlier in the study--one teaching these students, and the other counseling them. Customarily, General Studies Faculty teaching the class were contacted two-three weeks in advance, and an interviewer would then spend approximately 30-45 minutes interviewing the students in the class--with the instructor usually excusing her/himself from the class.

Faculty

The three researchers conducting this study decided upon the content of the interview, and also which of the few General Studies faculty who should be interviewed during the 1982 Spring Semester. All General Studies faculty chosen were interviewed

by just one of the three faculty researchers--the same one who participated later in the student interviews.

Appointments were made two-three weeks in advance with the General Studies faculty, and the interviews were conducted by discussing primarily the list of competencies contained in Faculty Interview Schedule (Appendix E). Actually, a copy of that Schedule was placed or identified for each interviewee as the (approximately) one-hour interviews were conducted.

Data Analysis

Data resulting from the administration of questionnaires to both students and faculty were coded, punched on data cards, and then analyzed at the Jersey City State College Computer Center.

Since the majority of the data was collected in a non-parametric (distribution-free) format, analyzed data is presented: (1) descriptively in terms of percentages; and (2) inferentially as the result of a Chi-Square analysis.

IV

RESULTS OF QUESTIONNAIRE ADMINISTRATIONS

As was mentioned in the Data Analysis section, the analyzed data discussed in this chapter is presented primarily in percentage form, with Chi-Square being the inferential statistical technique which was utilized to determine the significance of the difference between the pattern of responses for various groups of respondents.

Students

Responses, in percentage form, to the Student Questionnaire are presented in Tables I through III, with the responses being presented respectively for students who indicated they took (a) course(s) in basic: (1) Reading; (2) Mathematics; and/or. (3) English.

The five items for which at least 75% of the students in all three groups either "Agreed or Disagreed" follows:

1. Most teachers seem to enjoy teaching . . . . . .AGREE
2. Teachers should spend more time at the beginning of a semester explaining and discussing the goals and objectives of the course . . . . . .AGREE
3. Some teachers should spend more time reviewing for major tests. . . . . .AGREE

4. Each department should establish a study program to help tutor students taking courses in that department . . . . . .AGREE

5. The way things are going, I'll probably "drop out" of college before my senior year. . . . . .DISAGREE

Five other items for which at least 65% of the students in all three groups either "Agreed or Disagreed" follow:

1. Some teachers spend too much time explaining material over again for those students who have cut classes. .DISAGREE

2. Some teachers don't explain their subject in enough detail because they think the students know more about it than they really do . . . . .AGREE

3. Most students really want to get the most out of their classes. . . . .AGREE

4. There are enough good places on campus to study between classes. . . .AGREE

5. I feel better about college now than when I first attended Jersey City State College. . . . . .AGREE

In summary, then, the responses the students gave to the attitudinal statements seem to indicate that the students are not unhappy with their college experience. They view their academic environment in a positive light. However, the students recognize their need for academic assistance in terms of the teachers/instructors providing more basic information regarding the structure and content of courses in which these students are enrolled.

Faculty

Tables IV through IX (See pages 53-61) present data in percentage form representing the manner in which the four groups of General Studies faculty (Natural Sciences, Performing/Fine Arts, Social Sciences, and Humanities) feel the six groups of competencies are needed by the Jersey City State College students. These six groups are: (1) Communication; (2) Solving Problems; (3) Clarifying Values; (4) Functioning Within Social Institutions; (5) Using Science and Technology; and (6) Understanding the Arts.

Of the 35 specific competencies in the six groups which were rated by these four groups of faculty, only the following two competencies were rated significantly different ($p < .05$) by the four different groups of faculty:

1. In Communication: student can receive information using numerical and graphic representations; and
2. In Solving Problems: student can identify and define a problem.

In both cases, the majority of the Natural Sciences faculty (more than other faculty) felt these competencies were needed to a great extent.

Additional information regarding the ratings which the faculty assigned to the 35 competencies which they felt might be needed by the marginal students identified for this study may be obtained from the date appearing in Tables IV-IX.

There were only six competencies (listed below) for which at least 50% of the total faculty felt the "competency (was) needed to a great extent" by the students.

Communication

1. receive information from oral and speech presentation (70%);
2. receive information from written materials (78%); and
3. send information using written materials (73%).

Solving Problems

4. identify and define a problem (57%);
5. select approaches to solve problems (54%); and
6. collect various forms of information (data) regarding proposed solutions with respect to a problem and its constraints (51%).

There were no competencies (among the 35) for which more than 39% of the total faculty polled felt a "competency was not needed at all."

In summary, General Studies faculty felt that marginal students needed competencies primarily in the general area of: (1) Communication; and (2) Solving Problems. Also, Natural Sciences faculty were the ones especially who felt student competencies were needed in the latter area.

V

RESULTS OF INTERVIEWS

It was mentioned earlier in the RESEARCH FACTORS Chapter that semi-structured interviews were conducted with both students (on a group basis by three different interviewers) and faculty (on a one-to-one basis by just one of the three interviewers). Brief verbatim reports of the student interviews are contained in Appendix F, and a digest of those interviews is contained in the following section of this Chapter. The results of the faculty interviews are reported in the latter section of this Chapter.

Students

Many of the specific factors listed in Appendix F which students felt would assist them in improving their academic performance are not discussed in this section. Rather, factors mentioned by students are presented and discussed by general areas.

Advisement

The factor mentioned most frequently by students was the lack of proper advisement. In some cases, no advisement at all was available.. In other cases, it was available only after a long wait. Sometimes, due to the press of time, advisors

signed student class cards without examining them or they infrequently provided improper advice to the students. The length of time spent in Add/Drop line by students was felt to be excessive by the students.

Scheduling of Courses

Students felt that they were being deterred in their academic progress by the small offering of required courses.

Course Outline

A frequent request of students was that they be provided with a course outline prior to the beginning of the course. This outline should be realistic, and should speak to both the structure and content of the course.

One-Hour/Three-Hour Sessions

Many students being interviewed spoke against three-hour class sessions, and this response was consistent with the students' questionnaire responses. Reasons were that classes were boring after the first hour, and that homework assignments were excessive.

Content and Pace of Courses

Students felt that instructors over-estimated the students' prior knowledge in their content area, and therefore taught "over their heads." Also, on occasion, teachers tried to present too much information during the last few class sessions of a semester.

Frequent Evaluation of Students

A frequent suggestion by students was that instructors provide more frequent feedback to the students regarding their progress in a course. Variable quizzes, in addition to a mid-term and a final exam, were desired. This request was especially true for students enrolled in technical courses.

Additional Equipment

The only area in which students expressed a desire for additional equipment/facilities was the need for more computer terminals. Students said that waits of two-three hours for using the computer terminal were not uncommon.

Faculty

A synthesis of the responses given by the faculty to the five questions asked of them during a semi-structured interview (See Appendix D) follows:

1. Factors and Weights Considered When Determining A Grade.

Responses indicated that there is a strong pattern of tests, supplemented by other means of evaluation. However, all faculty relied heavily on tests. They also individually considered such factors as: (1) class participation; (2) attendance; (3) effort; (4) reaction papers to (museum) trips; (5) research papers; (6) term papers; (7) oral reports; (8) reports on outside readings; and (9) field work with individuals. However, excepting for tests and quizzes, there was not overall pattern or consensus on the other factors for determining a grade.

Still, more weight was given to tests as a grade determiner than any other factor. Although each interviewee had his or her own system of weights for calculating a grade, all gave tests either a very heavy or important weight.

The wide variety of different evaluation means made it impossible to determine any other pattern of factors and weights for calculating grades. However, it should be noted that each faculty member had carefully constructed an individual evaluation rationale which was very professional.

2. What Competencies Do you Teach in Your Courses?

There was great agreement about the importance of competencies in communication, solving problems, clarifying values, and functioning within social institutions. Using science and technology, and understanding the arts were identified respectively by those professors who taught courses with content involving science and art.

3. Student Skill Deficiencies Which Affect Achievement in Grades, Teaching and Competencies.

Writing deficiency emerged as the (lacking) skill which almost all of the faculty described as foremost. Reading was also important and mathematics to some extent.

In the area of writing, professors strongly identified the necessity for the student to have the ability to organize material. Since this is the basic skill for writing, many of the students lacking this skill have difficulty in handling

assignments which involve narrative and expository writing. Individual factors which were mentioned by faculty were that students: (1) don't understand tenses; (2) have difficulty spelling words; (3) don't submit papers on time; (4) have limited vocabularies; and (5) make too many mechanical errors.

Because of student weaknesses in writing, some professors have stopped assigning the writing of papers. Instead, they use more objective-type tests (such as multiple choice), correct more of the students' work, provide a vocabulary workbook, and teach them how to write a term paper.

Reading ability did not evoke as strong an emotional response from faculty as did writing. However, there was enough response so that it should be considered an important skill deficiency. From conversations with faculty it seemed this deficiency resulted from a combination of study skill deficiencies, such as notetaking, vocabulary, and also literal, interpretive, critical and creative comprehension.

In both writing and reading, the problems of foreign students were noted by one professor. In reading, too, there was a strong, sincere effort by the instructors to help their students. This was done through such ways as carefully organizing material through study guides, selecting the most readable textbooks, and presentations of content so that it would be clear.

Mathematics received much less emphasis, but was identified as being important, particularly by those professors who teach courses with scientific content.

It should be noted that this researcher was struck by the overall attitude of concern and support by the instructors who taught these "marginal" students.

4. Have Your Course Requirements Been Seriously Affected by Students' Skill Deficiencies? If So, to What Extent?

A majority of the faculty being interviewed replied "No" to this question, but there were a number of qualifications. Examples were that these students: (1) don't have time tc observe individuals and describe their behavior in papers; (2) receive lower grades; (3) use easier textbooks; (4) receive less written assignments and are evaluated more by objective tests; (5) have fewer supplementary reading assignments; (6) require more time for help with reading and other skills which then takes away from the breadth of class content; (7) receive help in reading with analysis of articles; (8) don't know how to read a textbook for test-taking skills (multiple choice); (9) don't know how to review for essay questions; (10) don't have the ability to understand test questions; and (11) need help with their writing and mathematics (such as interpreting formulas).

5. Identify Traits of Students Who Passed Your Courses and Those Who Didn't.

Traits of Those Who Passed

Ability to synthesize material;
Motivation with honest effort to understand material;

Involved in course and try to do better;
Good notetaking;
Interested and conscientious;
Not afraid to answer questions;
"Better background;"
Intelligent;
Self-disciplined in terms of attendance and sustained effort;
Possess maturity and sensitivity toward people and content;
Good study habits;
Intellectual curiosity;
Written communications and reading comprehension skills; and
Older and came from more traditional background.

Traits of Those Who Failed

Lack of time due to working;
"Sleepwalking;"
Absenteeism;
Smart-alecky;
Bored, lack of motivation; and
Financial worries.

Excellence in achievement seems to come from the following combination of factors which were identified in these interviews; but which has no real data base associated with the factors.

(1) Skills preparation in the full sense; students who can read, write, take notes, think and work with mathematics tend to do well.

(2) Previously developed competencies. It is reassuring to note that..as might be expected..experienced senior majors attain a higher standard of achievement than sophomores majors of comparable ability. Education does, at least, occur in the milieu.

(3) Organization and work habits. Students who organize their time efficiently and work at a reasonable high level for a sustained period of time do well when compared to others of comparable ability.

(4) "Natural Ability" is difficult to define, but some genetic/environmental combinations do seem to produce "bright," intuitive students, and these students are academically advantaged.

(5) Motivation and curiosity help, but the latter trait can be misdirected and hence be a disadvantage. Students who are thrilled by "science mythology" often find the realistic rigor of science a let down.

(6) Ability to ask questions. Students who think enough to pose questions, and then have enough maturity/self-confidence, or "brass," to ask them, seem to achieve at a higher level than those students who do not.

VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

During the 1981-82 academic year, an empirical study was conducted at Jersey City State College in an attempt to identify possible factors that might be of value in assistang the "marginal" student enrolled in General Studies courses to be successful in a higher education program. Marginal students were identified as those who scored essentially in the 16 percentile-Mean interval (local norms) on the New Jersey Basic Skills Placement Test.

Data for this study resulted from:

1. Department of Higher Education records;
2. Group questionnaires administered to both students and faculty; and
3. Semi-structured interviews conducted on both an individual and group basis with students, and on an individual basis with faculty.

The private semi-structured interviews with students mentioned above were conducted prior to the construction of the student questionnaires in order that the information obtained from these interviews could be used in the content of the questionnaire. Additionally, students enrolled in four different classes were asked to provide information which was also used in the content

of the questionnaire. The three faculty members conducting the study, referring to ACI program materials, decided upon the content of both the faculty questionnaire and the semi-structured interview schedule for the faculty.

Conclusions

The following conclusions can be drawn after examining/analyzing the information/data resulting from the:

1. New Jersey Department of Higher Education Records.

Background information collected from students at the same time they completed the New Jersey Basic Skills Placement Test revealed that the Jersey City State College students differed ($p < .001$) from students enrolled in other public New Jersey institutions of higher education for the following nine factors. Analyzed data indicated that Jersey City State College students, in comparison to other students (primarily those with other State colleges):

a) had a larger proportion of part-time students in their ranks;

b) felt English was not their first language;

c) did not enroll in college immediately upon graduation from high school;

d) had a larger proportion of students enrolled in their high school General, rather than Academic, program;

e) studied less years of English in high school;

f) studied less years of Mathematics in high school;

g) did not perceive themselves to be "Above Average" in Written Expression;

h) did not perceive themselves to be "Above Average" in Mathematical Ability; and

i) felt they needed more help in the academic areas, especially Mathematics.

In addition, the analysation of test scores revealed lower scores for Jersey City State College students in the areas of: (1) Reading Comprehension; (2) Logical Relationships; (3) Sentence Structure; (4) Essay; (5) Computation; and (6) Algebra. These tests comprise all six academic areas tested. This finding concerning test scores parallels the findings of a similar three-year study conducted by Dr. Linda Lyons, Director of Institutional Research at Jersey City State College.

2. Questionnaires Administered to Students--who took (a) course(s) in basic: (1) Reading; (2) Mathematics; and/or (3) English revealed that the five (of twenty) items for which at least 75% of the students in all three groups either "Agreed" or "Disagreed" are as follows:

a) Most teachers seem to enjoy teaching . . . AGREE

b) Teachers should spend more time at the beginning of a semester explaining and discussing the goals and objectives of the course . . . . . AGREE

c) Some teachers should spend more time reviewing for major tests. . . . . AGREE

d) Each department should establish a study program to help tutor students taking courses in that department. . . . . AGREE

e) The way things are going, I'll probably "drop out" of college before my senior year . . . . . DISAGREE

3. Questionnaires Administered to General Studies Faculty.

Of the 35 competencies which faculty from the four General Studies areas of: (1) Natural Sciences (2) Performing/ Fine Arts (3) Social Sciences and (4) Humanities rated, the only statistically significant ($p < .001$) difference in ratings occurred when Natural Sciences faculty rated more strongly the need for the two following competencies:

a) In Communication: student can receive information using numerical and graphic representations; and

b) In Solving Problems: student can identify and define a problem.

4. Group Interviews with Students. There are certain factors that students generally agreed would assist in improving the instructional climate for them, such as:

a) Advisement - More advisement is needed, and "more" could improve the entire process.

b) Course Offerings - Required courses could be offered more frequently.

c) Course Outlines - Outlines speaking to both the content and structure should be available at the beginning of the course.

d) Course Content - Instructors present too much material, possibly over-estimating the students' aptitude and prior knowledge.

e) Student Evaluation - Students preferred a more frequent type of evaluation feedback, especially students in the technical area.

5. Private Interviews with General Studies Faculty.

Those General Studies Faculty who were interviewed privately by means of a semi-structured interview indicated--regarding their students--that:

a) These students lacked: (1) writing; (2) reading; and (3) mathematical skills--with lack of writing skills probably causing the most academic problems; and

b) Although course requirements were not seriously affected by lack of these skills, faculty members indicated that these students received, for example: (1) more instructor assistance; (2) fewer supplementary reading assignments; and (3) fewer written assignments.

Recommendations

The recommendations which follow result from the data which were gathered for this study--and these data were collected primarily during the 1982 Spring semester and 1982 Fall semester. This Recommendation section of the report is being written during the 1983 Summer and Fall session. Therefore, some of the recommendations/actions which the researchers may suggest could have already been implemented by the College due to the obvious need for these actions.

Also, the researchers would like to note again that the students to which reference will be made in this section are not those who possess academic preparation usually associated with college students attending non-urban institutions of higher education. Most of the students in this study required remedial coursework upon entering Jersey City State College. Therefore, if recommendations are made for the College to provide additional assistance to the student (in the area of advisement, for example), the reader of this report might initially counter, "the student could locate that information him/herself in the

College Catalogue or Student Handbook." But, some of the students to whom reference is made would, in all liklihood, not:

1. know that such documents existed;
2. be able to locate the information in the documents; and
3. read/comprehend the information.

Listed below are some recommendations resulting from the data gathered and analyzed for this study:

1. The College should continue to remind/inform the faculty that many of its students are "marginal" in terms of the competencies/skills which are needed to survive at (graduate from) Jersey City State College. Academic test data and background information collected annually from students entering all New Jersey public institutions of higher education indicate that Jersey City State College students are significantly different (to a lesser extent, statistically) from their counterparts on academic testing and background factors associated with academic success. These findings have been documented previously and are still fact.

2. More academic advisement is needed for students. It should be noted that "more," not "better" is the word used in this recommendation. Students who were interviewed cited the paucity of overworked advisors, and it was felt that more would result in better.

3. Faculty should provide students with more information regarding both the structure and content of courses. Students

indicated, during both the interviews and on the questionnaire, a need for more information about their courses. Such information was desired at the beginning of the semester.

4. Faculty should provide students with more evaluative feedback in courses. Even as much as students may be stereotyped as not enjoying examinations and quizzes, these students in this study need some sort of indication (frequently) as to how they are progressing in a course. Students in the technical areas especially desire this feedback.

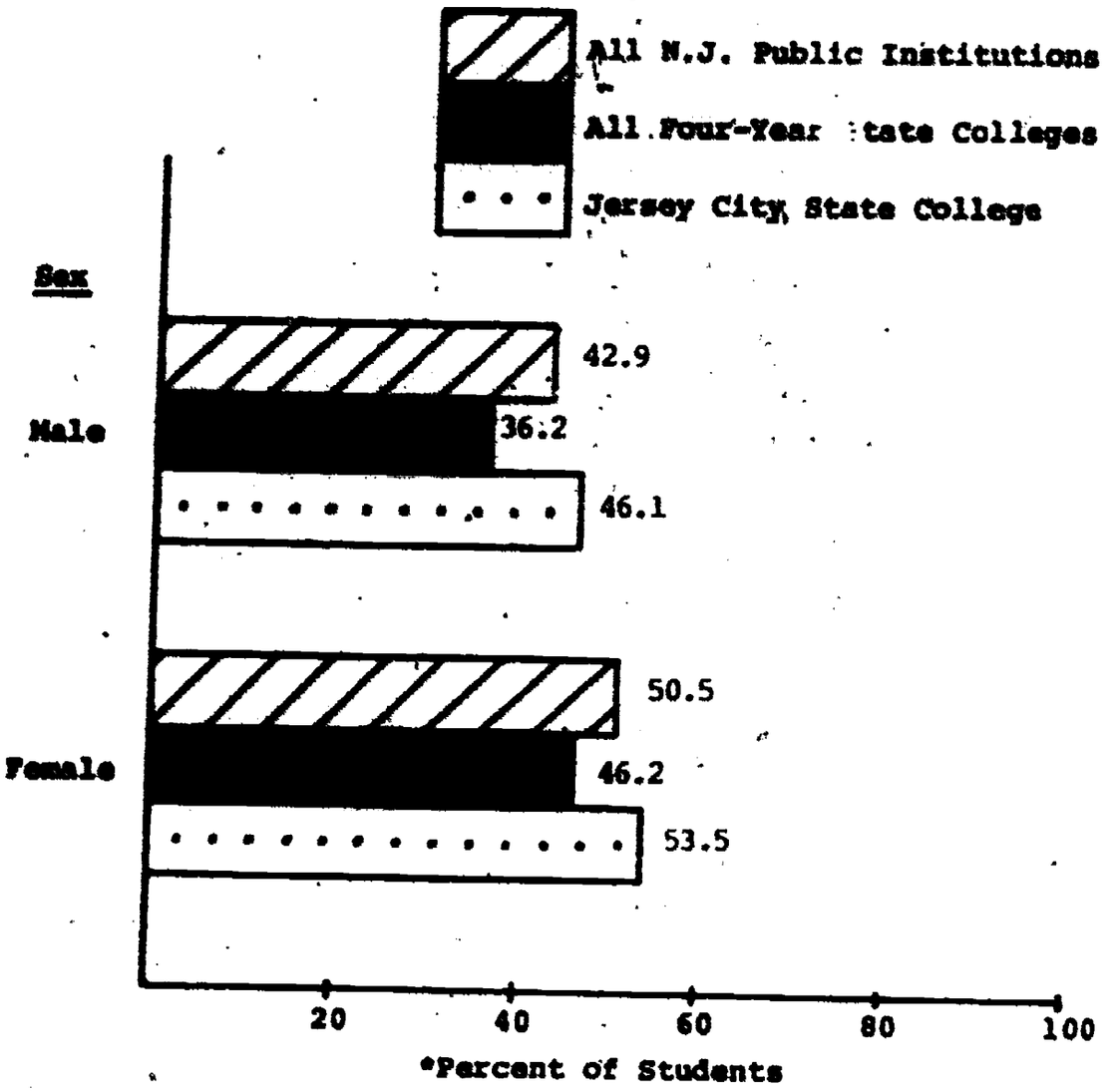


Figure 1. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Categorized by Sex.

*Responses Not Totaling 100% Indicate "No Response."

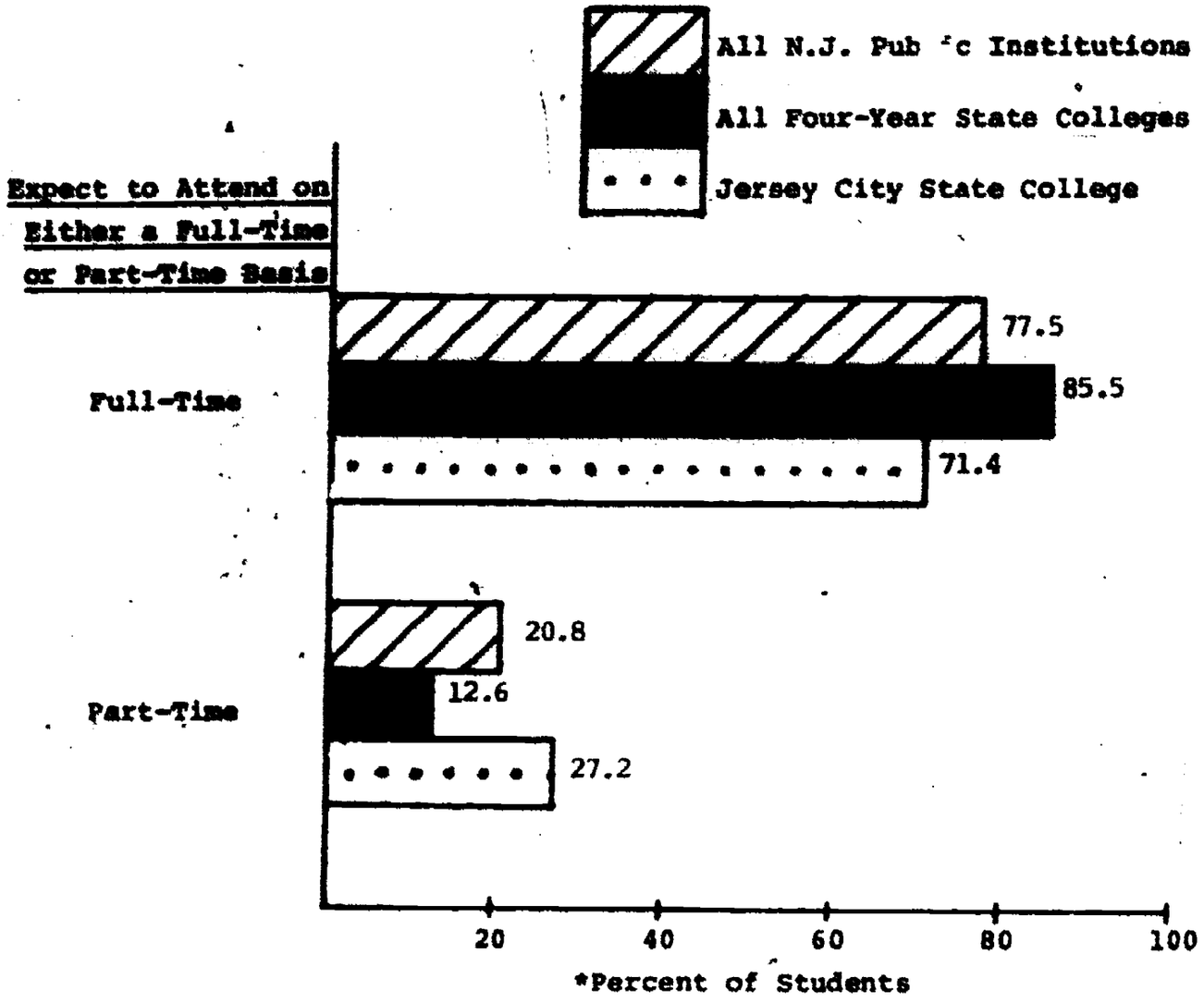


Figure 2. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Who Expect to Attend College on Either a Full-Time or Part-Time Basis.

*Responses Not Totaling 100% Indicate "No Response."

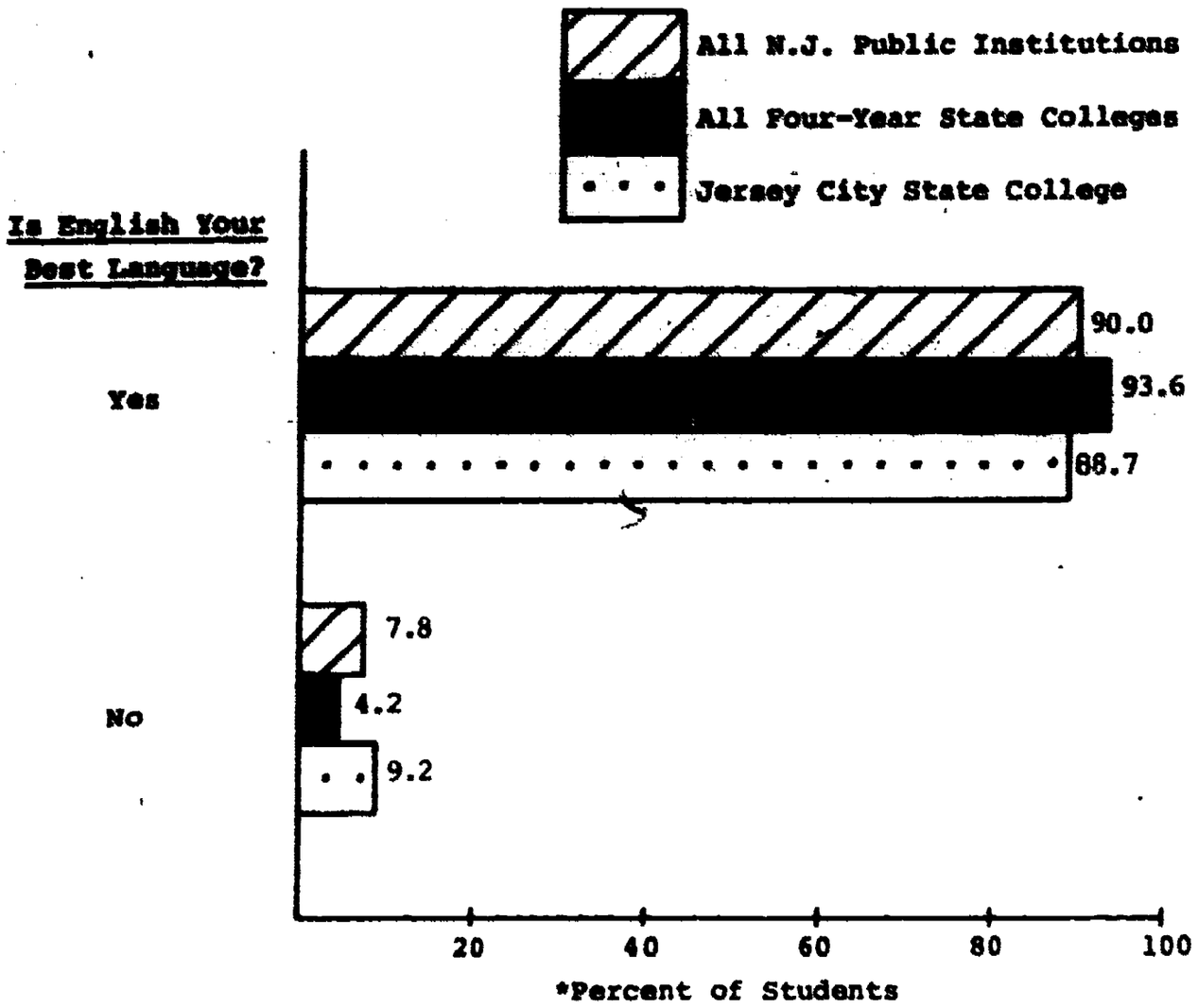


Figure 3. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Who Identify English as Their Best Language.

*Responses Not Totaling 100% Indicate "No Response."

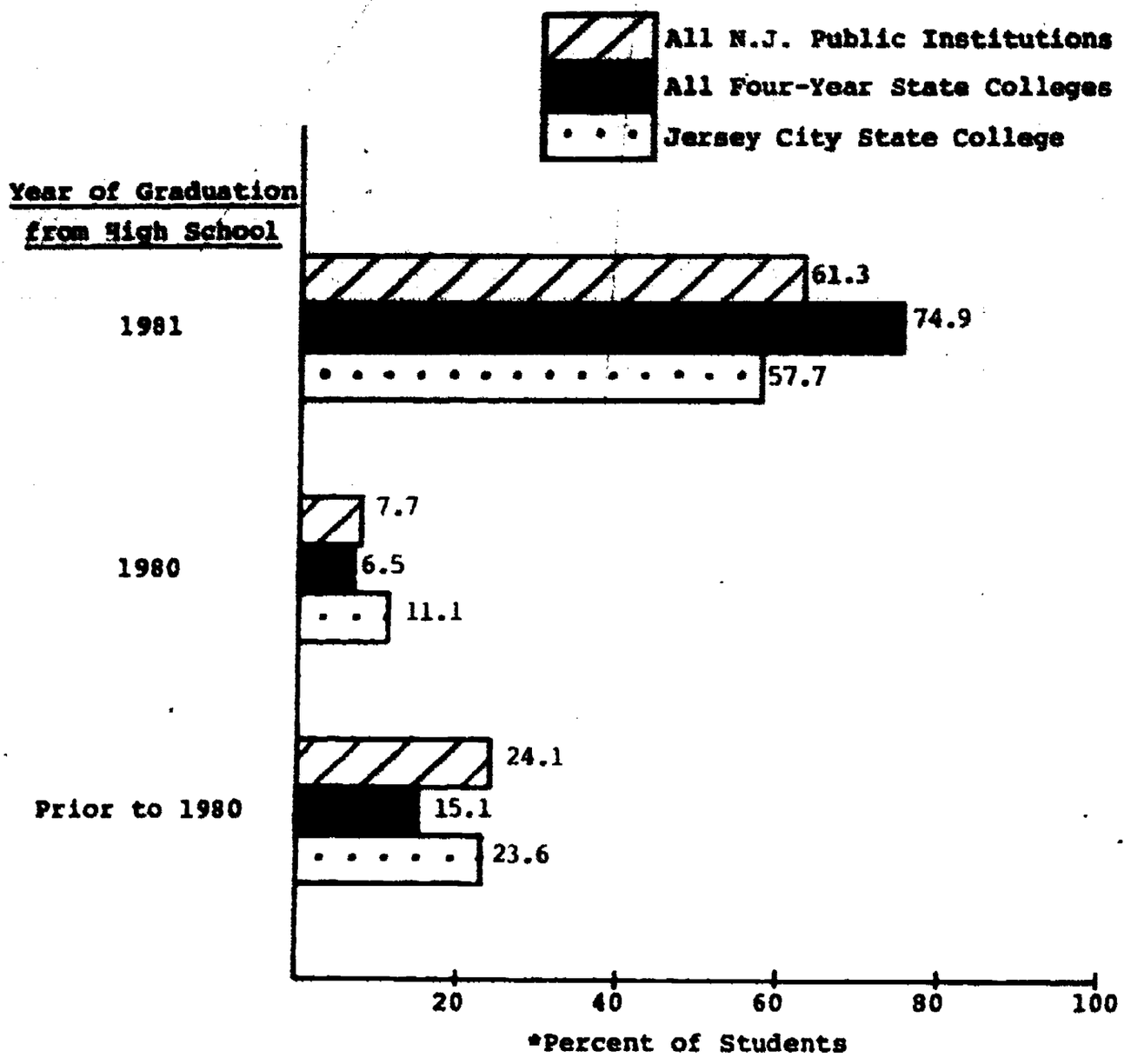


Figure 4. A Comparison of the Percentage of Freshman Students Attending Various New Jersey Institutions of Higher Education Categorized by Their Year of Graduation from High School.

*Responses Not Totaling 100% Indicate "No Response."

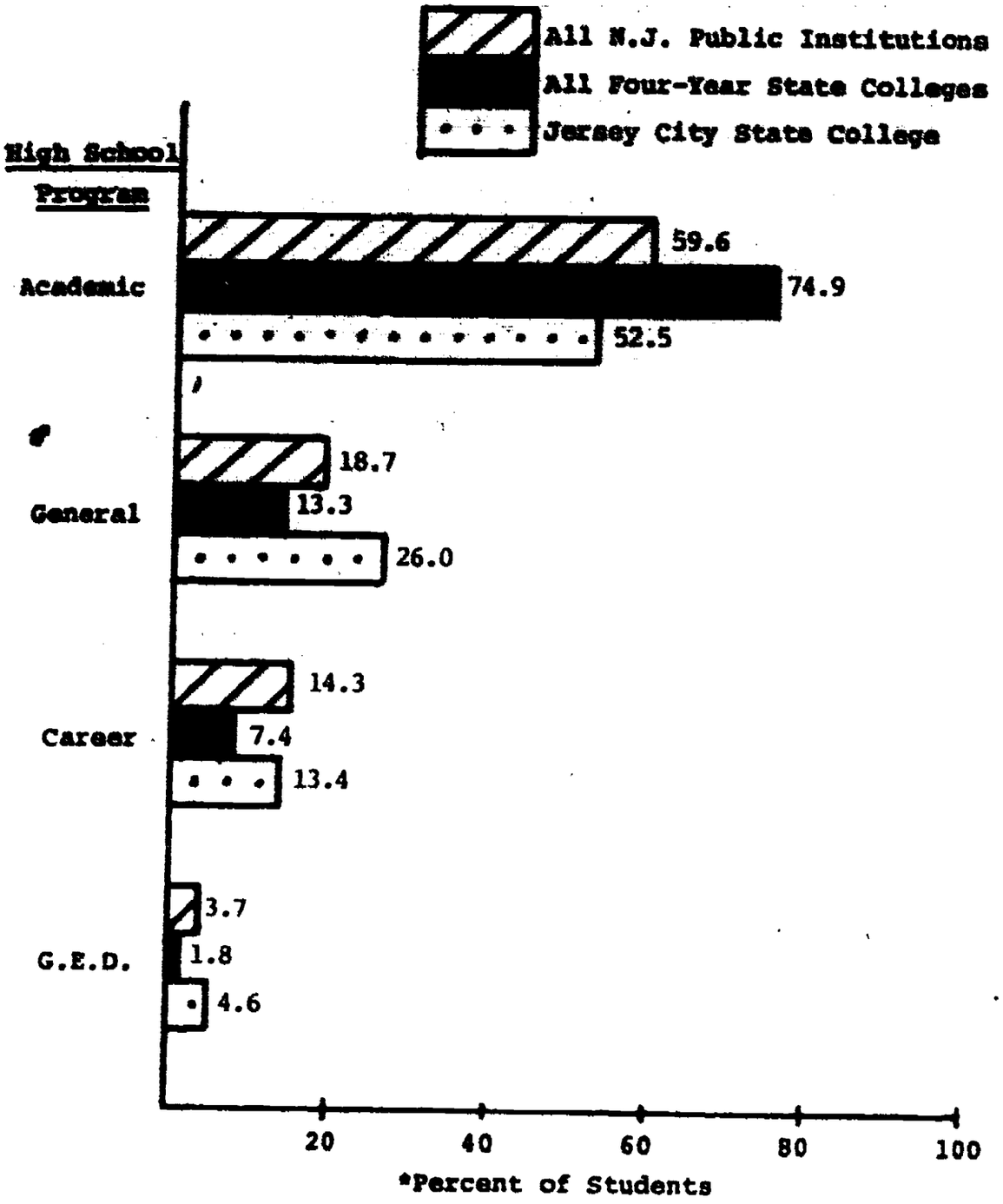


Figure 5. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Categorized by Their Type of High School Program.

*Responses Not Totaling 100% Indicate "No Response."

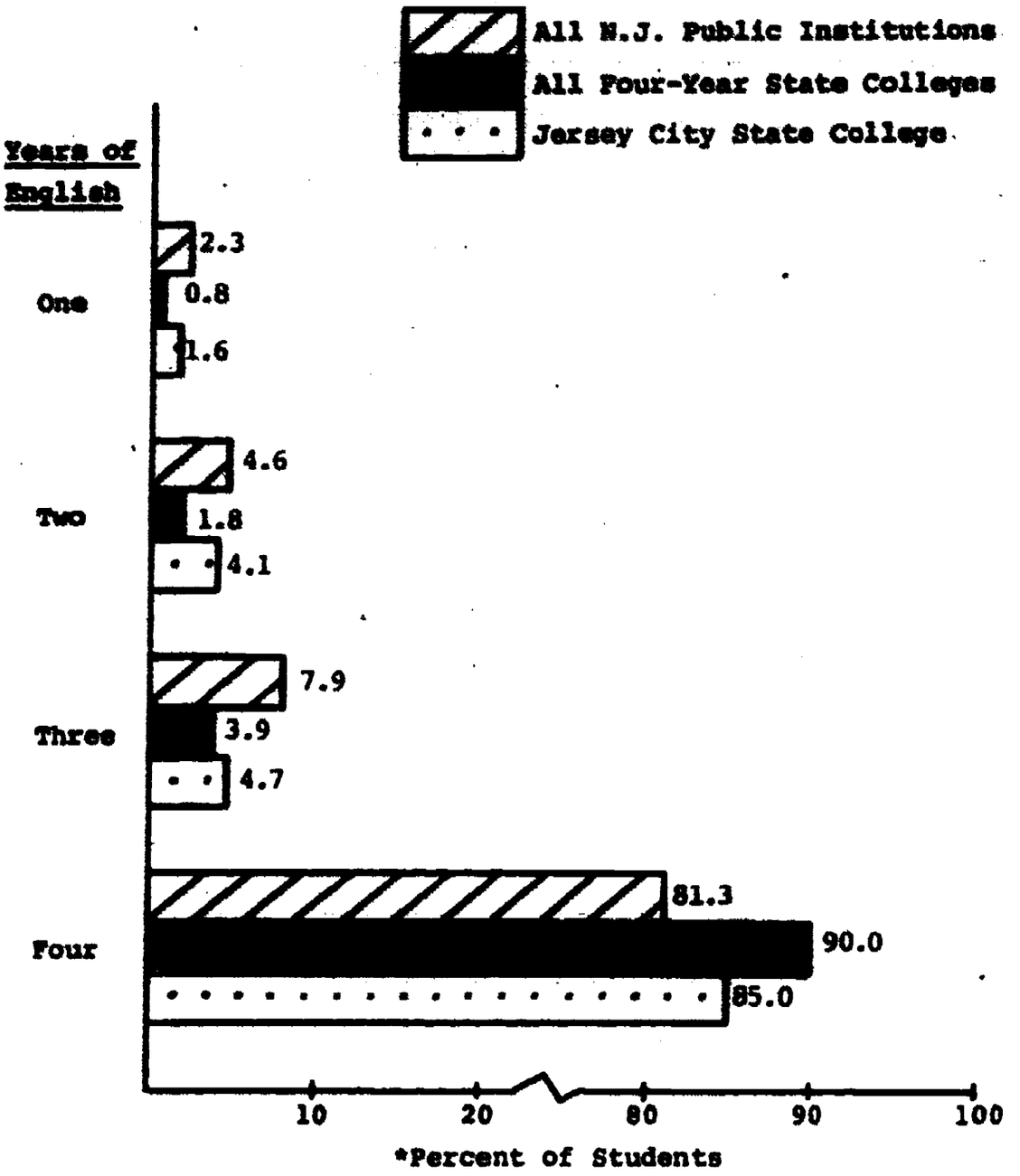


Figure 6. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Categorized by the Total Number of Years of English Studied in High School.

*Responses Not Totaling 100% Indicate "No Response."

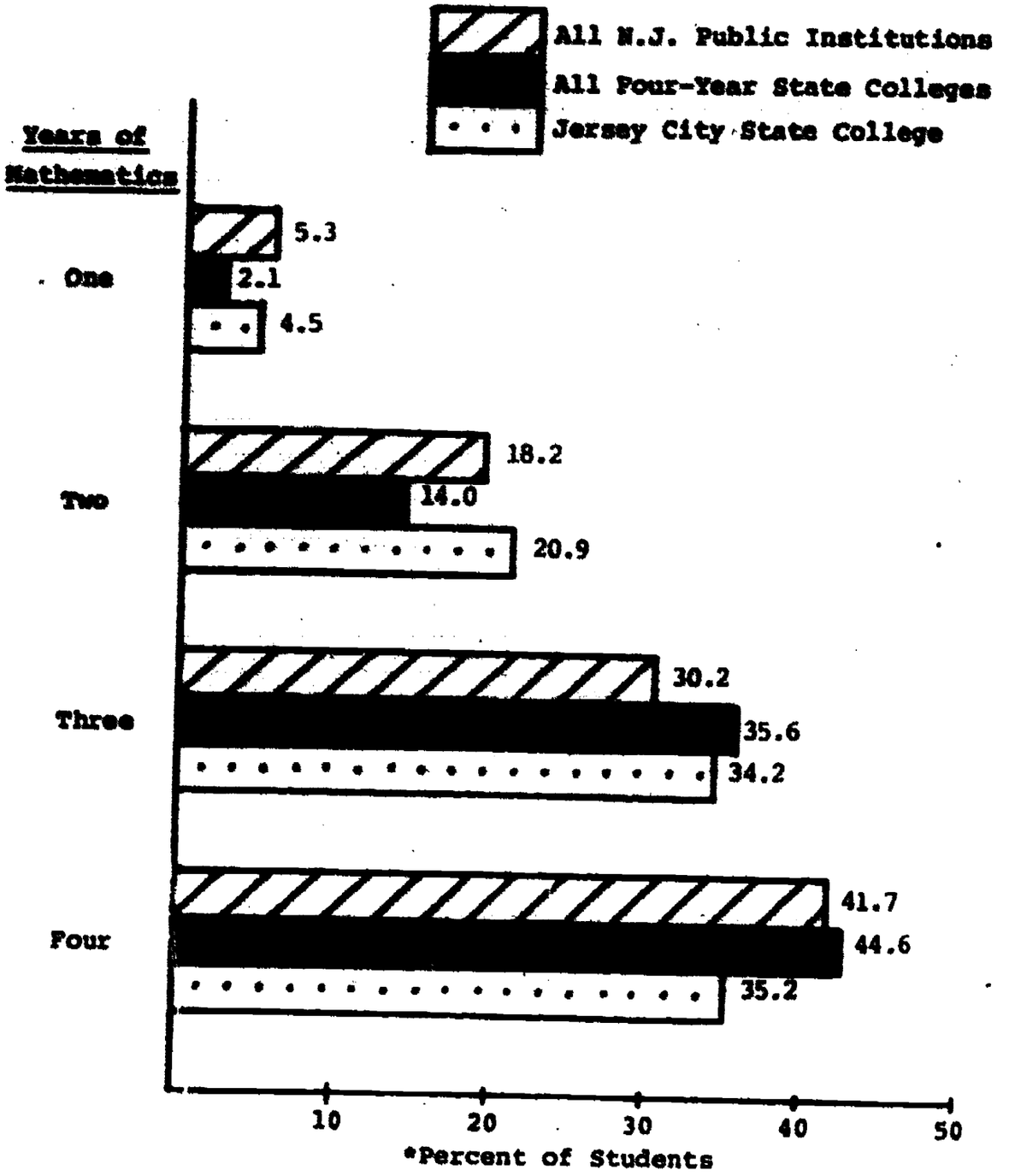


Figure 7. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of High Education Categorized by the Total Number of Years of Mathematics Studied in High School.

*Responses Not Totaling 100% Indicate "No Response."

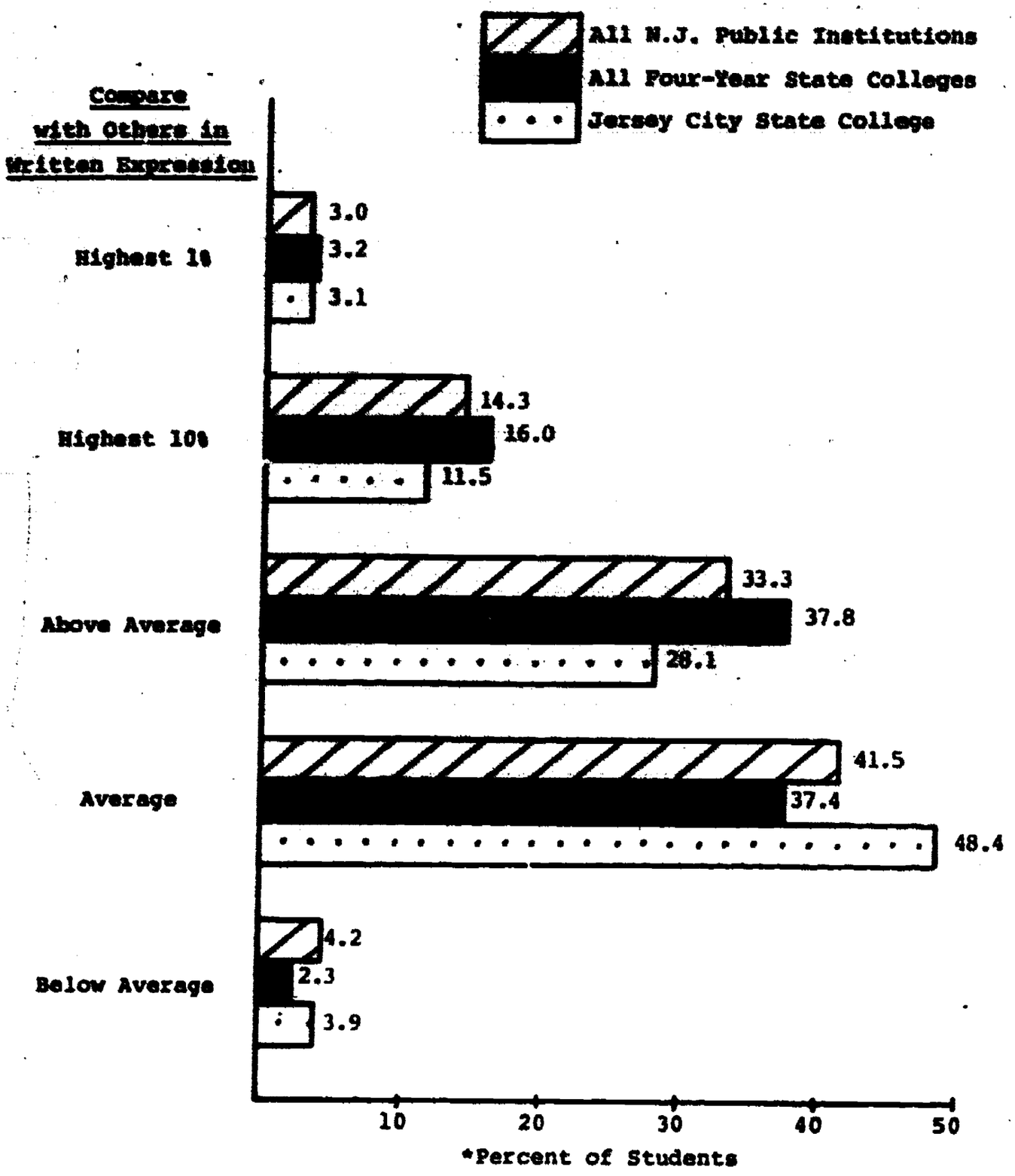


Figure 8. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Categorized by Their View as to How They Compare With Other Students in Their Ability to Express Themselves in Writing.

*Responses Not Totaling 100% Indicate "No Response."

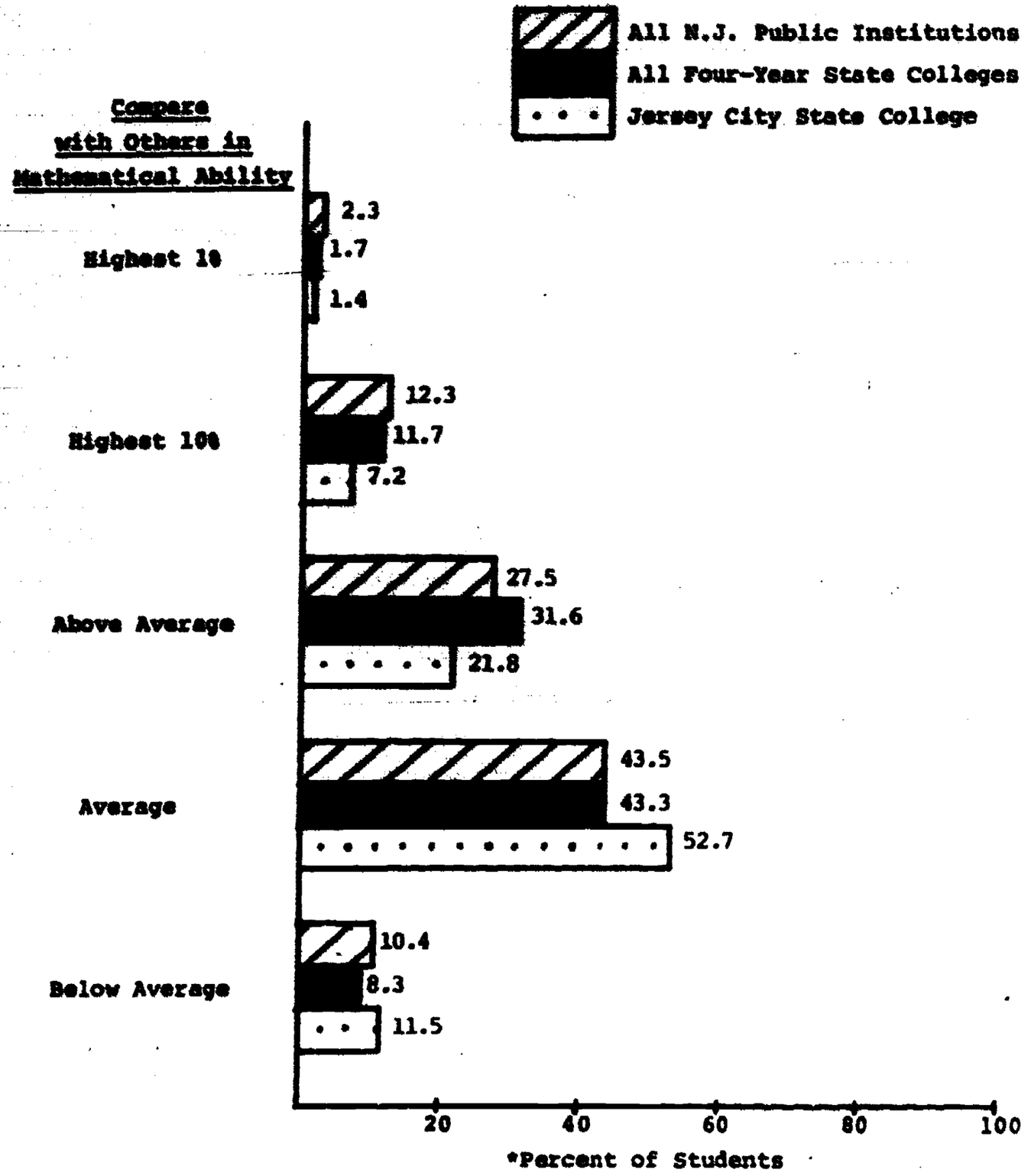


Figure 9. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Categorized by Their View as to How They Compare With Other Students in Mathematical Ability.

*Responses Not Totaling 100% Indicate "No Response."

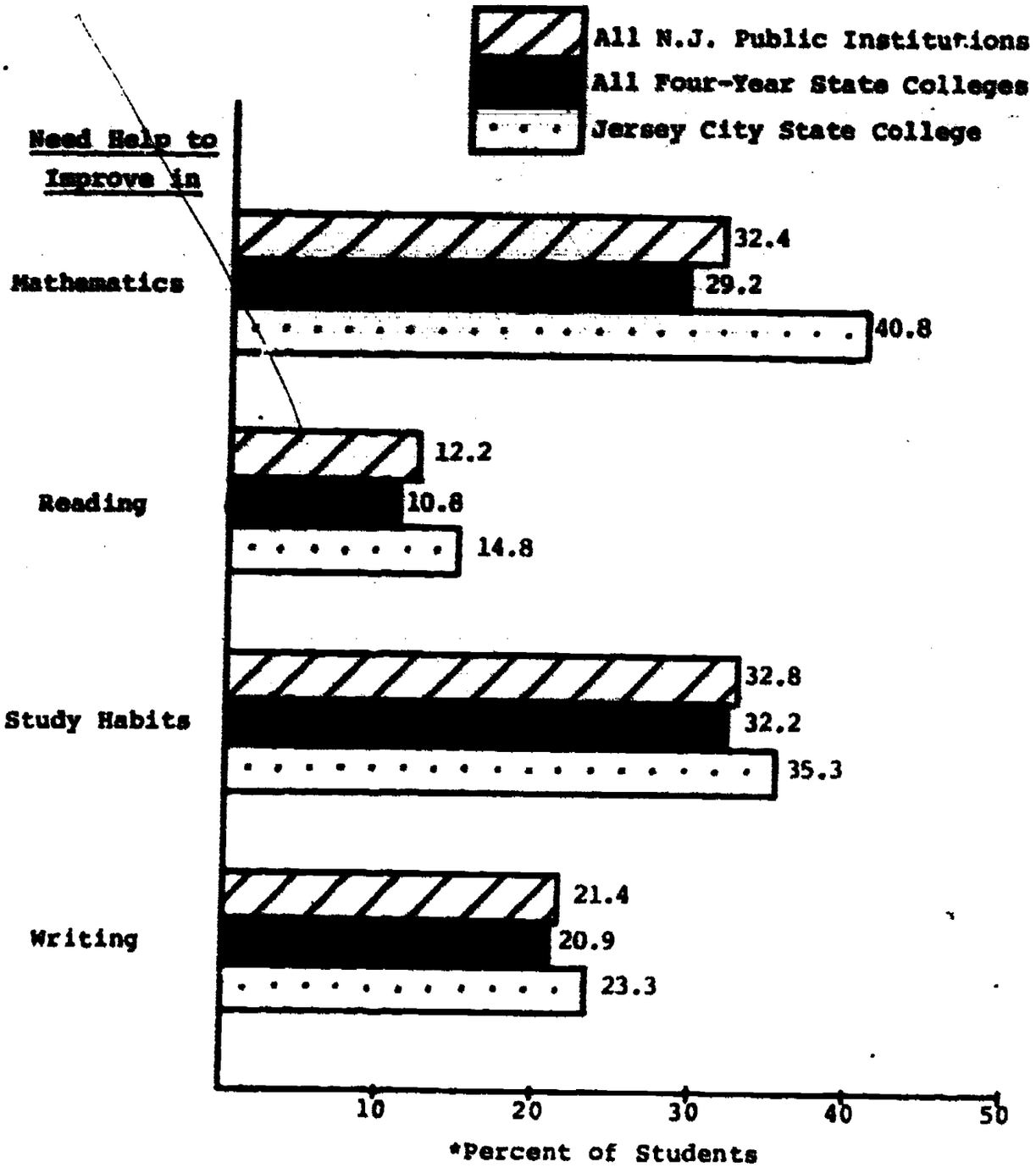


Figure 10. A Comparison of the Percentage of Freshmen Students Attending Various New Jersey Institutions of Higher Education Who Expressed the Need for Academic Help to Improve Their Skills.

*Responses Not Totaling 100% Indicate "No Response."

Table I : Responses of those 171 JCSC Students Who Took a Basic Reading Course(s) to Twenty Likert-Scale Attitudinal Statements Regarding Teaching/Learning Factors and Situations at JCSC

Attitudinal Statement	Percent of Students Who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
1. Most teachers seem to enjoy teaching.....	26.4	51.7	13.2	6.6	2.2
2. Teachers should spend more time at the beginning of a semester explaining and discussing the goals and objectives of the course.....	52.8	27.5	7.7	12.1	0.0
3. Most teachers are too lenient with regard to the grades they give the students in their classes.....	13.3	16.7	18.9	30.0	21.1
4. Some teachers tend to help only the student who is ahead of the rest of the class.....	11.0	12.1	14.3	28.6	34.1
5. Some teachers spend too much class time explaining material to just those few students who do not seem to be able to understand the material.....	6.6	14.3	18.7	30.8	29.7
6. Some teachers spend too much time explaining material over again for those students who have cut classes.....	10.0	10.0	8.9	25.6	45.6
7. Some teachers don't explain their subject in enough detail because they think the students know more about it than they really do.....	25.3	44.0	9.9	14.3	6.6
8. Some teachers should spend more time reviewing for major tests.....	64.4	21.1	4.4	5.6	4.4

Table I : (cont., page #2)

Attitudinal Statement	Percent of Students Who: Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
9. Some teachers are too concerned with their subject matter and not concerned enough about students.....	25.3	38.5	11.0	18.7	6.6
10. Most students really want to get the most out of their classes.....	40.7	25.3	19.8	9.9	4.4
11. Students are not able to learn in some classes because there are too many students enrolled in the class.....	15.4	19.8	13.2	29.7	22.0
12. Most students do not know how to take notes well enough to pass the course.....	27.5	36.3	19.8	12.1	4.4
13. Students who can't read sometimes hold back the rest of the class.....	21.4	28.1	18.0	14.6	18.0
14. At times, the way some students act in class keeps me from learning.....	12.2	36.7	10.0	22.2	18.9
15. There are enough good places on campus to study between classes.....	47.8	18.9	6.7	12.2	14.4
16. It is more difficult to learn in a class that meets for just one time a week than it is in a class that meets more than once a week.....	31.1	24.4	15.6	16.7	12.2
17. The reading level for most assigned textbooks is too difficult.....	13.3	22.2	23.3	23.3	17.8

Table I : (cont., page #3)

Attitudinal Statement	Percent of Students Who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
18. Each department should establish a study program to help tutor students taking courses in that department.....	56.2	25.9	11.2	5.6	1.1
19. I feel better about college now than when I first attended JCSC.....	41.1	28.9	13.3	7.8	8.9
20. The way things are going, I'll probably "drop out" of college before my senior year....	4.4	5.6	11.1	14.4	64.4

Table II: Responses of those 163 JCSC Students who Took a Basic Mathematics Course(s) to Twenty Likert-Scale Attitudinal Statements Regarding Teaching/Learning Factors and Situations at JCSC

Attitudinal Statement	Percent of Students who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
1. Most teachers seem to enjoy teaching.....	27.0	52.2	7.4	11.7	1.8
2. Teachers should spend more time at the beginning of a semester explaining and discussing the goals and objectives of the course.....	49.1	25.8	..8	15.3	3.1
3. Most teachers are too lenient with regard to the grades they give the students in their classes.....	8.0	20.4	19.1	32.1	20.4
4. Some teachers tend to help only the student who is ahead of the rest of the class.....	9.8	15.3	13.5	28.8	32.5
5. Some teachers spend too much class time explaining material to just those few students who do not seem to be able to understand the material.....	7.4	15.3	14.7	33.7	28.8
6. Some teachers spend too much time explaining material over again for those students who have cut classes.....	6.2	14.8	7.4	25.3	46.3
7. Some teachers don't explain their subject in enough detail because they think the students know more about it than they really do.....	25.3	42.0	9.9	16.7	6.2
8. Some teachers should spend more time reviewing for major tests.....	56.9	23.1	6.3	10.0	3.8

Table II: (cont., page #2)

Attitudinal Statement	Percent of Students who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
9. Some teachers are too concerned with their subject matter and not concerned enough about students.....	21.6	39.5	13.0	19.1	6.8
10. Most students really want to get the most out of their classes.....	40.4	26.7	14.9	13.7	4.4
11. Students are not able to learn in some classes because there are too many students enrolled in the class.....	16.1	20.4	14.8	26.5	22.2
12. Most students do not know how to take notes well enough to pass the course.....	26.5	36.4	16.1	14.2	6.8
13. Students who can't read sometimes hold back the rest of the class.....	19.4	23.8	20.0	18.1	18.8
14. At times, the way some students act in class keeps me from learning.....	13.0	36.0	8.7	22.4	19.9
15. There are enough good places on campus to study between classes.....	44.7	19.9	6.2	13.0	16.2
16. It is more difficult to learn in a class that meets for just one time a week than it is in a class that meets more than once a week.....	28.0	19.9	21.1	16.8	14.3
17. The reading level for most assigned textbooks is too difficult.....	9.9	22.4	16.2	29.2	22.4

Table II : (cont., page #3)

Attitudinal Statement	Percent of Students Who: Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
18. Each department should establish a study program to help tutor students taking courses in that department.....	59.4	26.9	8.8	3.8	1.3
19. I feel better about college now than when I first attended JCSC.....	37.9	28.6	14.3	9.9	9.3
20. The way things are going, I'll probably "drop out" of college before my senior year....	6.2	7.5	10.6	8.7	67.1

Table III: Responses of those 91 JCSC Students Who Took a Basic English Course(s) to Twenty Likert-Scale Attitudinal Statements Regarding Teaching/Learning Factors and Situations at JCSC

Attitudinal Statement	Percent of Students Who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
1. Most teachers seem to enjoy teaching.....	26.3	52.1	8.2	10.5	2.9
2. Teachers should spend more time at the beginning of a semester explaining and discussing the goals and objectives of the course.....	48.1	26.9	7.6	14.6	2.9
3. Most teachers are too lenient with regard to the grades they give the students in their classes.....	7.1	20.0	18.8	33.5	20.6
4. Some teachers tend to help only the student who is ahead of the rest of the class.....	10.5	15.8	12.9	28.7	32.2
5. Some teachers spend too much class time explaining material to just those few students who do not seem to be able to understand the material.....	7.6	15.8	14.0	34.5	28.1
6. Some teachers spend too much time explaining material over again for those students who have cut classes.....	6.5	14.1	7.1	26.5	45.9
7. Some teachers don't explain their subject in enough detail because they think the students know more about it than they really do.....	27.7	49.6	8.8	17.1	5.9
8. Some teachers should spend more time reviewing for major tests.....	54.8	25.6	6.0	10.1	3.6

Table III: (cont., page #2)

Attitudinal Statement	Percent of Students Who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
9. Some teachers are too concerned with their subject matter and not concerned enough about students.....	21.8	39.4	13.5	18.8	6.5
10. Most students really want to get the most out of their classes.....	39.4	27.7	14.7	14.7	3.5
11. Students are not able to learn in some classes because there are too many students enrolled in the class.....	15.9	18.8	15.9	28.8	20.6
12. Most students do not know how to take notes well enough to pass the course.....	26.5	37.1	17.1	14.1	5.3
13. Students who can't read sometimes hold back the rest of the class.....	19.1	26.8	18.5	17.9	17.9
14. At times, the way some students act in class keeps me from learning.....	13.6	36.1	8.9	23.1	18.3
15. There are enough good places on campus to study between classes.....	43.2	21.3	7.1	14.2	14.2
16. It is more difficult to learn in a class that meets for just one time a week than it is in a class that meets more than once a week.....	27.2	21.3	20.7	16.0	14.8
17. The reading level for most assigned textbooks is too difficult.....	10.1	22.5	17.2	29.0	21.3

Table III : (cont., page #3)

Attitudinal Statement	Percent of Students Who:				
	Agree Strongly	Agree Slightly	Are Undecided	Disagree Slightly	Disagree Strongly
18. Each department should establish a study program to help tutor students taking courses in that department.....	57.1	26.8	10.1	4.2	1.8
19. I feel better about college now than when I first attended JCSC.....	37.3	29.6	15.4	8.9	8.9
20. The way things are going, I'll probably "drop out" of college before my senior year....	6.0	7.1	9.5	11.3	66.1

Table IV: Competencies in Communication Which JCSC Faculty Who Are Teaching General Studies Courses Feel Are Needed by Marginal Students.

Competency in: COMMUNICATION	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:															χ^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37			
	Rating			Rating			Rating			Rating			Rating			
Student can:	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	p≤
1. receive information via oral and speech presentation	82	9	9	33	67	0	71	29	0	67	33	0	70	27	3	0.39
2. send information via speech	27	64	9	33	67	0	36	64	0	56	44	0	38	59	3	0.69
3. receive information from written materials	73	18	9	33	67	0	86	14	0	89	11	0	78	19	3	0.39
4. send information using written materials	64	27	9	33	67	0	79	21	0	89	11	0	73	24	3	0.42
5. receive information using numerical and graphic representations	64	27	9	0	0	100	36	57	7	14	57	23	38	44	18	0.04
6. send information using numerical and graphic representations	55	36	9	0	0	100	43	43	14	17	33	50	39	36	24	0.10

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table V: Competencies in Solving Problems which JCSC Faculty Who Are Teaching General Studies Courses Feel Are Needed by Marginal Students.

Competency in: SOLVING PROBLEMS Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:															x^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37			
	Rating			Rating			Rating			Rating			Rating			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	p≤
1. identify and define a problem.....	91	0	9	33	67	0	43	57	0	44	33	22	57	35	8	0.04
2. select approaches to solve problems.....	82	9	9	33	67	0	57	21	21	22	56	22	54	30	16	0.13
3. generate possible solutions, hypotheses or testable propositions.....	80	10	10	33	67	0	46	31	23	11	56	33	46	34	20	0.10
4. collect various forms of information (data) regarding proposed solutions with respect to a problem and its constraints.....	70	20	10	33	67	0	54	23	23	33	44	22	51	31	17	0.54
5. determine the logical consistency among the information obtained, the problem as defined, and the hypotheses or solutions proposed....	50	40	10	33	67	0	46	46	8	33	44	22	43	46	11	0.90
6. determine the solution to be implemented....	60	30	10	33	67	0	31	38	31	33	44	22	40	40	20	0.67

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table V (Cont.): Competencies in Solving Problems Which JCSC Faculty Who Are Teaching General Studies Courses Feel Are Needed by Marginal Students.

Competency in: SOLVING PROBLEMS Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:																x^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37				
	Rating			Rating			Rating			Rating			Rating				
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		p≤
7. propose or select procedures to evaluate the solution chosen for implementation.....	50	50	0	33	67	0	46	23	31	11	56	33	37	43	20		0.20
8. evaluate the process by which a problem was solved.....	60	30	10	33	67	0	38	46	15	11	44	44	37	43	20		0.26

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table VII: Competencies in Functioning Within Social Institutions Which JCSC Faculty Who Are Teaching General Studies Courses Feel Are Needed by Marginal Students.

Competency in: FUNCTIONING WITHIN SOCIAL INSTITUTIONS Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:															χ^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37			
	Rating			Rating			Rating			Rating			Rating			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	NS
1. explain the implicit and explicit restraints and freedoms within social institutions and can predict how degree of involvement places one in a conflicting or compatible state....	33	11	56	0	33	67	17	58	25	22	56	22	21	42	36	0.31
2. explain the principles of the development and change of social institutions.....	33	22	44	0	33	67	33	33	33	33	33	33	30	30	39	0.92
3. explain the reciprocal relationship between social institutions and individuals.....	33	11	56	0	33	67	15	54	31	13	87	0	18	48	33	0.06
4. describe the structures and functions that underlie social institutions.....	22	33	44	0	33	67	17	42	42	22	56	22	18	42	39	0.86
5. identify those activities and institutions which constitute the social aspects of culture.....	33	22	44	0	100	0	17	50	33	33	57	11	24	48	27	0.29

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table VIII: Competencies in Using Science and Technology Which JCSC Faculty Who Are Teaching General Studies Courses Feel Are Needed by Marginal Students.

Competency in: USING SCIENCE AND TECHNOLOGY Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:																		x^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37						
	Rating			Rating			Rating			Rating			Rating						
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3				
1. predict the consequences of the introduction of technology into a culture, including considerations of the scientific principles involved and of the environmental and cultural impacts of technique.....	67	22	11	0	50	50	33	50	17	25	50	25	39	42	19				0.46
2. explain the impact of technology on the individual and his/her culture.....	60	30	10	0	50	50	17	58	25	33	56	11	33	48	18				0.94
3. explain the impact of technology on the natural (physical and biological) environment in which it occurs.....	70	20	10	0	50	50	25	33	42	22	56	22	36	36	27				0.18
4. describe scientific concepts, laws or principles that underlie scientific/technological activities and products.....	56	22	22	0	0	100	33	41	26	22	33	44	34	31	34				0.33

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table VIII: Competencies in Using Science and Technology Which JCSC Faculty Who Are Teaching General Studies (Cont.) Courses Feel Are Needed by Marginal Students.

Competency in: USING SCIENCE AND TECHNOLOGY Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:												χ^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37			
	Rating			Rating			Rating			Rating			Rating			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
5. identify those activities and products which constitute the scientific/technological aspects of a culture.....	40	50	10	0	50	50	33	33	33	11	56	33	27	45	27	0.61

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table IX: Competencies in Understanding the Arts Which JCSC Faculty Who Are Teaching General Studies Courses Feel Are Needed by Marginal Students.

Competency in: UNDERSTANDING THE ARTS Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:															X^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37			
	Rating			Rating			Rating			Rating			Rating			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	p<
1. judge which of several artistic/humanistic expressions would be most congruent with those characteristics.....	22	33	44	67	33	0	33	11	56	22	67	11	30	37	33	0.15
2. explain the development of aesthetic awareness and theory from a number of perspectives.....	44	11	44	67	33	0	30	10	60	44	33	22	42	19	39	0.45
3. explain the impact of artistic/humanistic expressions on individuals.....	22	44	33	67	33	0	30	30	40	33	56	11	32	42	26	0.59
4. describe the elements (e.g., sensory, compositional, expressive, and substantive) that constitute artistic/humanistic activities and products.....	11	44	44	67	33	0	30	20	50	22	67	11	26	42	32	0.18

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

Table IX: Competencies in Understanding the Arts Which JCSC Faculty Who Are Teaching General Studies (Cont.) Courses Feel Are Needed by Marginal Students.

Competency in: UNDERSTANDING THE ARTS Student can:	Percent of Assigned Ratings* of "1", "2", or "3" by Faculty Teaching in the General Studies Areas of:																x^2
	Natural Sciences N=11			Performing/ Fine Arts N=3			Social Sciences N=14			Humanities N=9			All Faculty N=37				
	Rating			Rating			Rating			Rating			Rating				
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		p≤
5. identify those activities and products which constitute the artistic/humanistic aspects of culture.....	22	44	33	67	33	0	30	30	40	22	78	0	29	48	23		0.19

* 1 Competency needed to a great extent
2 Competency needed to some extent
3 Competency not needed at all

APPENDIX A

FACULTY QUESTIONNAIRE

TO: Arts and Sciences Faculty Teaching General Studies Courses

Attached are four pages of material which were distributed previously to Arts and Sciences faculty. Those faculty teaching General Studies courses were asked to complete the three-page questionnaire contained in the material and return it to Hepburn 319 by March 19th.

This present material which you are now receiving represents a follow-up request for the appropriate Arts and Sciences faculty who have not yet returned a completed questionnaire to complete the questionnaire and return it to Dr. Carter's office (Hepburn 319) by April 8th.

Because the first questionnaires were returned anonymously, these present materials are again being distributed to all Arts and Sciences faculty.

We appreciate your cooperation in this matter.

Attn:

TO: Arts and Sciences Faculty Teaching General Studies Courses

FROM: Dr. Larry G. Carter, Assistant Dean, School of Arts and Sciences
Dr. Ted Lane, Professor, Reading/Language Arts
Dr. Glenn Reeling, Professor, Psychology and Education

DATE: February 26, 1982

RE: "COMPETENCIES" NEEDED BY "MARGINAL STUDENTS" ENROLLED IN GENERAL STUDIES COURSES

It was noted in the February 19th issue of the College Bulletin that the the three of us named above recently initiated a study with the primary purpose of identifying those particular skills and competencies that both faculty and students feel are needed by marginal students in order for them to succeed academically at Jersey City State College.

Attached to this cover sheet is a list of competencies which some JCSC faculty and professional staff feel are needed by these students. "Competencies," in this case, are defined as specific areas of knowledge and/or skills which must be demonstrated by the student. The level of competence is defined by each faculty member according to the requirements of his/her course.

Another term that needs to be defined is "marginal students." Generally, this group of students would be viewed as those whose academic background and aptitude is such that their chances for academic success at JCSC are uncertain. This group of marginal students would not include those students who:

1. are probably going to succeed academically, regardless of ancillary services and instructional techniques utilized; and/or

2. are probably going to encounter academic difficulties and fail academically, regardless of ancillary services and instructional techniques utilized.

Empirically, these students could be described as those whose test scores on the New Jersey College Basic Skills Placement Test (for local norms) falls between the Mean and - 1 sigma unit—or the 50th and 16 percentile—on the various sub-tests.

This memorandum, then, represents a request that any faculty members who are teaching any General Studies courses indicate—on the three attached sheets—those student competencies which they perceive as being:

1. needed to a great extent;
2. needed to some extent; or
3. needed not at all

} in order for them to succeed academically

Directions regarding the manner in which the competencies should be rated are contained on the attached sheets, as are directions as to where (Dr. Carter's office H-319) and when (March 19, 1982) the list of rated competencies should be returned.

DIRECTIONS: Listed below are the competencies described on the cover sheet. Please indicate - for any General Studies course(s) you may teach - those competencies which you feel are:

No Name Necessary

1. needed to a great extent . . . . . (with a) 1
2. needed to some extent. . . . . (with a) 2
3. needed not at all. . . . . (with a) 3

If you teach different General Studies courses which you feel would require different ratings, feel free to make additional copies of these three sheets of competencies, and then assign the appropriate ratings to the competencies for each course. Also, please indicate - with a check mark ( ) - in the column on the right of the sheet whether you are presently teaching a particular competency.

Finally, indicate with another check mark (✓) below the General Studies area(s) in which your courses are taught.

Natural Sciences ____ Social Sciences ____ Other ____
Fine/Performing Arts ____ Humanistics ____ (Describe) ____

Return to Dr. Carter H-319 by 3/19/82

Competency	Rating (1,2,or3)	Teaching Competency Yes
I. Communication		
Student:		
1. can receive information from oral and media presentations	_____	_____
2. can send information via speech	_____	_____
3. can receive information from written materials. .	_____	_____
4. can send information using written materials. . .	_____	_____
5. can receive information from numeric and graphic. representations	_____	_____
6. can send information using numeric and graphic. . representations	_____	_____
II. Solving Problems		
Student:		
1. can identify and define a problem	_____	_____
2. can select approaches to solve problems	_____	_____
3. can generate possible solutions, hypotheses, or testable propositions.	_____	_____

(CONTINUED ON NEXT PAGE)

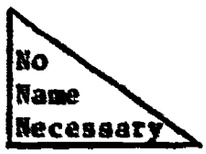
Competency	Rating (1,2,or3)	Teaching Competency Yes
4. can collect various forms of information (data) regarding proposed solutions with respect to a problem and its constraints		
5. can determine the logical consistency among the information obtained, the problem as defined, and the hypotheses for solutions proposed.		
6. can determine the solution to be implemented. . .		
7. can propose or select procedures to evaluate the solution chosen for implementation.		
8. can evaluate the process by which a problem was solved.		
III. Clarifying Values		
Student:		
1. can identify the major values, and issues usually faced, in daily adult life in one's own and other cultures.		
2. can assess a set of values for internal consistency		
3. can identify the major influences in the development of values in individuals.		
4. can analyze rationales for value choices.		
5. can infer personal values from behavior		
6. can analyze the implications of decisions made on the basis of values		
IV. Functioning Within Social Institutions		
Student:		
1. can explain the implicit and explicit restraints and freedoms within social institutions, and can predict how degree of involvement places one in a conflicting or compatible state.		
2. can explain the principles of the development and change of social institutions		

(CONTINUED ON NEXT PAGE)

Competency	Ratings (1,2,or3)	Teaching Competency Yes
3. can explain the reciprocal relationship between social institutions and individuals		
4. can describe the structures and functions that underlie social institutions.		
5. can identify those activities and institutions which constitute the social aspects of culture. . .		
V. Using Science and Technology		
Student:		
1. can predict the consequences of the introduction of technology into a culture, including considerations of the scientific principles involved and of the environmental and cultural impacts of technique.		
2. can explain the impact of technology on the individual and his/her culture.		
3. can explain the impact of technology on the natural (physical and biological) environment in which it occurs.		
4. can describe scientific concepts, laws or principles that underlie scientific/technological activities and products		
5. can identify those activities and products which constitute the scientific/technological aspects of a culture.		
VI. Understanding the Arts		
Given the characteristics of a culture, student:		
1. can judge which of several artistic/humanistic expressions would be most congruent with those characteristics		
2. can explain the development of aesthetic awareness and theory from a number of perspectives . . .		
3. can explain the impact of artistic/humanistic expressions on individuals.		
4. can describe the elements (e.g., sensory, compositional, expressive, and substantive) that constitute artistic/humanistic activities and products. .		
5. can identify those activities and products which constitute the artistic/humanistic aspects of culture		

APPENDIX B

STUDENT QUESTIONNAIRE



DIRECTIONS TO STUDENTS

The JCSC instructional staff is always attempting to improve its teaching techniques in order that our students can learn better.

The attached two-page questionnaire which you are now receiving contains 20 statements (to which you can either "Agree" or "Disagree") regarding teaching/learning factors and situations which take place, or which should take place, at JCSC.

You can indicate your degree of agreement/disagreement with each statement by placing an appropriate numerical response in the space which follows each statement.

It is not necessary to write your name on this questionnaire.

Finally, please check (✓) those courses listed below which you either have taken in past semesters and/or are taking this semester.

English

_____ 090 - College Writing

_____ 101 - Fundamentals of Communication I - Intensive

_____ 101 - Fundamentals of Communication I - Regular

_____ 101 - Fundamentals of Communication I - Honors

_____ 101 - Fundamentals of Communication I - ESL

_____ 103 - Open Writing Laboratory

_____ 104 - Communications Workshop

Mathematics

_____ 090 - Basic Developmental Math

_____ 110 - Developmental Math - Arith

_____ 111 - Developmental Math - Algebra

_____ - any other Math course

Reading

_____ 090 - Reading for College

_____ 104 - Critical and Efficient Reading

_____ 105 - Reading and Study Skills

_____ 106 - Speed Reading

_____ 109 - Learning Strategies

No Name Necessary

DIRECTIONS

Please use the following numerical responses to indicate your degree of agreement/disagreement with each of the following twenty statements:

1 - if you Agree Strongly
2 - if you Agree Slightly
3 - if you are Undecided
4 - if you Disagree Slightly
5 - if you Disagree Strongly

Statement	Response
1. Most teachers seem to enjoy teaching	_____
2. Teachers should spend more time at the beginning of a semester explaining and discussing the goals and objectives of the course.	_____
3. Most teachers are too lenient with regard to the grades they give the students in their classes.	_____
4. Some teachers tend to help only the student who is ahead of the rest of the class	_____
5. Some teachers spend too much class time explaining materials to just those few students who do not seem to be able to understand the material.	_____
6. Some teachers spend too much time explaining materials over again for those students who have cut classes.	_____
7. Some teachers don't explain their subject in enough detail because they think the students know more about it than they really do	_____
8. Some teachers should spend more time reviewing for major tests.	_____
9. Some teachers are too concerned with their subject matter and not concerned enough about students.	_____
10. Most students really want to get the most out of their classes.	_____
11. Students are not able to learn in some classes because there are too many students enrolled in the class.	_____
12. Most students do not know how to take notes well enough to pass the course	_____
13. Students who can't read sometimes hold back the rest of the class.	_____

(CONTINUED ON NEXT PAGE)

Statement	Response
14. At times, the way some students act in class keeps me from learning	_____
15. There are enough good places on campus to study between classes	_____
16. It is more difficult to learn in a class that meets for just one time a week than it is in a class that meets more than once a week	_____
17. The reading level for most assigned textbooks is too difficult	_____
18. Each department should establish a study program to help tutor students taking courses in that department.	_____
19. I feel better about college now than when I first attended J C S C	_____
20. The way things are going, I'll probably "drop out" of college before my senior year	_____

APPENDIX C

LETTER TO STUDENTS

State of New Jersey

JERSEY CITY STATE COLLEGE
JERSEY CITY, N. J. 07305

TO: Randomly-Selected Jersey City State College Students

FROM: Dr. Larry G. Carter, Assistant Dean,
School of Arts and Sciences

Dr. Glenn Reeling, Professor,
Psychology and Education

DATE: November 25, 1981

RE: HALF-HOUR INTERVIEWS

As one aspect of its continuing effort to improve the instructional program, Jersey City State College occasionally solicits comments from students as to how they--the students--feel various components of the instructional program can be improved.

Your name has been selected randomly as one of the thirty students whom we will attempt to contact via telephone within the next week (by December 3rd) with the hope that you will be able to spend approximately thirty minutes discussing JCSC instructional problems with a graduate student interviewer sometime during the week of December 7-11. The two graduate-student interviewers who will be contacting and interviewing you are Joy Lang and Henry Srednicki. An on-campus faculty member you can concact for additional information is Dr. Glenn Reeling, Professor of Psychology and Education (listed above). Dr. Reeling has an office in the Science Building, Room #434, and his telephone number is 547-3065.

We hope you will be able to participate in the project which should not only be beneficial to you, but to future JCSC students as well.

Thanks!

APPENDIX D

Student Interview Schedule

Questions for Students

1. How can the faculty at the college improve in their instructional methodology/techniques ?

2. What things could be missing from classes which might cause students not to do well ?

3. What things can the college do to help you succeed in your classes ?

APPENDIX E

Faculty Interview Schedule

Questions for Faculty

1. What factors do you consider when determining a student's grade? What weight do you give each factor?

2. What competencies do you teach in your course(s)?

3. Do you find skill deficiencies in writing, reading and/or mathematics seriously affecting student achievement in competencies?

4. Have your course requirements been seriously affected by students' skill deficiencies? If so, to what extent?

5. What are traits of students who passed your courses and those who didn't?

APPENDIX F

Verbatim Write-ups of Student Interviews

Interview #1

The students were critical of the scheduling of courses. Some felt that the same course should be offered more often, in addition to a greater variety of courses being offered. They also felt a strong need for better advisement. For some cases, it appeared that students had no advisement for their courses.

In general, there appeared to be a feeling of anger that the college was not coordinated. Students also seemed to have reservations about the requirement of remedial courses and the way in which it is applied to them.

The students preferred having more frequent testing because they felt that they would be able to assess their progress and learn the material more easily.

Interview #2

Once again, there was sharp, negative feeling about advisement. Some students felt that some advisors don't know how to select courses and don't correct students when they select the wrong courses. They also stated that not enough courses are offered and that sometimes they cannot find enough courses for their areas.

Students in this class didn't like three-hour sessions. They find them boring and a strain. However, many of them seem to feel that it depends on the subject being taught. They agreed that courses with music and science lend themselves to longer periods of time. Most prefer weekly quizzes in the other areas.

There were mixed feelings about the pace of their course. Some of the students declared that some professors go slowly during the early part of their courses and then place great pressure on them in order

to complete the content of those courses.

Other points that were made during the interviews were that some professors: (1) don't break their material dow adequately; (2) don't "test fairly" on the material; (3) cover too much material on tests; (4) don't go over the corrected tests; and (5) fail to use their assigned textbooks.

Interview #3

There was concern that some instructors don't explain their subject matter, don't have an interest in their courses, and rush through their material. In addition, it was felt that some of these professors place too much focus on tests with inadequate preparation for the tests. It was agreed that there should be more time for the taking of those tests.

Most of the students in the class don't like three-hour sessions and would prefer to have them broken up into more frequent periods involving smaller time allotments. They complained that the three-hour classes caused assignments which are too heavy, and they would like those broken up, too. The students would prefer a more effective use of their textbooks by some professors.

It was also suggested that there be a study area in each building.

Interview #4

These students stated that advisement could be better. They particularly objected to the Add/Drop system. The students disliked waiting in a line for hours.

In terms of their feelings towards courses, the class didn't like

long sessions. They found them boring. Also, some lof their courses needed better orgainzation and could have been planned better. The students would have liked to receive course outlines.

Most of the students, preferred objective tests.

Interview #5

Once again, there were negative feelings about advisement. Some of the students don't have regular advisors. They also disliked waiting in line for whatever advisor was available. Although they had appointments for advisors, there seems to have been some confusion. The students did not always get their advisors and felt that the system was not working.

There were also negative feelings about courses in terms of planning and organization. The students complained that some professors cram them with work and tests at the end of their courses and during holidays. Thet also wanted more frequent tests.

Complaints were made about: (1) SUB fees; (2) food being too expensive; (3) unreliable elevators; (4) inadequate number of computers for their assignments; (5) separate smoking area in the cafeteria; and (6) professors should set a good expample by not smoking in class.

Interview #6

Students in this class felt that three-hour periods can be boring. They agreed that three hours would be appropriate for an art-studio type of course. It was also agreed that there were not enough courses offered by the College, regardless of time periods.

The students suggested that more courses could be given at night and on Fridays.

There was some discussion about the need for better organization of some courses. More frequent testing was also suggested, particularly in technical subjects.

It was agreed that there is a need for more study space in the library and less noise when people are working. There is a need also for more computer terminals and better service in the cafeteria. Students also feel the Add/Drop line is too long, late registration is a difficult process and marks/grades are not kept by some professors.

Interview #7

Once again, there were sharp, negative statements about advisement. The students reported that some professors would sign advisement cards without looking at them, rush their advisees, and/or misadvise them.

The interviews further disclosed that students agreed that the desirability for three-hour sessions depends on the subject. They prefer the longer periods for technical or applied content. They also perfer more frequent tests for technical subjects.

Interview #8

There are student concerns regarding:

1. Three-hour block classes vs. one-hour periods on different days;
2. Registration procedures;
3. Advisement procedures;
4. ESL classes - Foreign students and concerns regarding lack of monitoring of basic requirements not taken before declaring a major;

5. Graduation requirements; and
6. Quizzes vs. comprehensive examinations.

Interview #9

Students are concerned by the lack of courses being offered that fulfill General Studies requirements (courses are not added, nor additional sections created for more popular courses at popular times). Also, Math Basic Requirements courses are often closed—therefore, students must put off taking courses they need and would like to take before major is started.

There is a lack of advisement in Majors (Economics was cited as one example). Students are allowed to take Micro economics before Macro, and students are not informed of prerequisites and do not have the background to be in the course they're taking.

Sequencing of Major courses is a problem—some students are not advised of proper order in which to take courses. There was expressed concern over teachers not teaching, but just assigning text work, and also lack of consistency between what material is then covered in class as opposed to material required on tests. For example: students are not taught certain material in class since professors sometimes become sidetracked. Yet, tests contain material only from the textbook (usually hardly covered in class) and not at all from class work or notes.

However, students often only study notes since texts are sometimes too difficult or have not been emphasized by the instructor.

Students feel that variable quizzes would help in this, as would teachers teaching from the text if it is to be used in testing.

Interview #10

Students were concerned with frequency of pop quizzes (one would assume that they are given with frequency in this course). While they preferred announced quizzes or even variable "pop" quizes (i.e.: every second or third week), they did not favor only mid-term or final exams without some earlier consistent testing.

Difficulty of textbooks also was an expressed concern. Some students felt they had difficulty readily reading and retaining technical material and language used in textbooks. They expressed a desire for writing courses to help with term papers.

Finally, they did not prefer three-hour block courses.

Interview #11

Students in this class were concerned mostly about advisement and testing.

The Business and Economics areas again were cited as an academic major where students are allowed to take courses that require prerequisites that they have not been informed about or are not ready to take.

Students were concerned with lack of teacher preparation in terms of compiling and distributing a syllabus to students within the first week or so of class.

Students are also not aware often of the scope of certain (general studies areas) courses and would like to have access to this information before Add/Drop period is over.

Also, students would have a better idea of how far the course will go and the depth in which subject matter will be covered, and if this course suits their needs.

In conclusion, the following topics were addressed in all classes to some extent:

1) Textbook difficulty;

2) Three-hour, as opposed to one-hour course time blocks;

3) Testing procedures; and

4) Registration/advisement problems.

However, additional topics which were expounded upon are discussed in the previous narrative.

Interview #12

Three-Hour Classes

The students in the class seemed to have the same belief that after the first hour, the three-hour classes are boring. And that they are only appropriate/beneficial for Art, Music and Media courses.

Advisement

Most of the students felt that the advisors don't take enough time with them. They feel that there are always lines, and they don't like the idea of changing advisors every semester. Some reported gross consequences of being ill advised (one boy's sister had come back from Greece for one course in order to get her diploma). Another student stated that she had taken extra electives and found herself short of required courses necessary for her major.

Organization of Courses

There were mixed responses to this topic. Some students felt courses were paced properly; others felt extreme pressure at the end of the semester A majority of the students seemed to feel that--for technical courses--more exams were necessary for effective learning; but, with easier courses, a mid-term and final exam were sufficient.

Facilities

Definite problems were expressed regarding the availability of computers—some students have waited in line for three hours. Other problems: (1) food in cafeteria (prices and quality); (2) smoking (cafeteria sections for non-smoking); (3) parking (too expensive); and (4) elevators (often inoperable).

Interview #13

Three-Hour Classes

Students felt a three-hour class is boring, and that the College doesn't offer enough one-hour courses.

Advisement

Students felt that, if there is not a good advisor in your area, you're lost unless you know requirements for your major. Also, advisors have an overload of students ("It's like an assembly line").

Organization of Courses

Again, students suggested that easier courses should have a mid-term and a final exam. More technical courses should have an exam every two weeks.

Facilities

Some students felt there's no place on campus to study. The library is crowded, and there is audible talking.

The computer room is usually crowded, and on many occasions, one has to wait in line—sometimes for two to three hours.

Students suggested that the Add/Drop procedure can require standing in line for hours, and that the College should consider devoting more days to this procedure.

Interview #14

Three Hour Classes

Students indicated that they felt tired after the first hour of a three-hour class, and that they learn more with three one-hour classes a week (excepting Music, Art and Media courses).

Advisement

Advisors are overloaded; they rush you and don't try to determine your personal needs.

Organization of Courses

Exams for technical courses should be given after every two chapters. Students also felt that there was too much pressure at the end of a semester by professors who were trying to squeeze in all the material they hadn't covered previously.

Facilities

Computer room usually has lines because there are not enough computers, and the room is not open enough hours.

Cafeteria food is bad and too expensive.

APPENDIX G

TEST RESULTS
FOR 1978, 1979, AND 1980
FRESHMEN STUDENTS

Table 1

COMPARISON OF STUDENT PERFORMANCE ON THE NEW JERSEY BASIC SKILLS PLACEMENT TEST-RAW SCORES[a]

FALL, FRESHMEN: 1978, 1979, 1980

Population	N	Read. Comp. (40 items) Mean	Logical Rel. (50 items) Mean	Sentence St. (35 items) Mean	Essay 78-79 (scores:2-8) 80 (scores:2-12) Mean	Computation (30 items) Mean	Algebra (30 items) Mean
JERSEY CITY STATE							
1978	937[b]	26.3	33.7	21.9	4.6	18.0	9.7
1979	1177[c]	26.5	35.1	22.9	4.6	16.2	8.4
1980	999[d]	27.9	35.6	24.1	6.7	17.3	9.2
FOUR-YEAR COLLEGES							
1978	10801	31.4	39.8	26.0	5.3	22.3	14.8
1979	11487	31.6	40.6	26.8	5.2	21.5	15.0
1980	10669	31.5	40.6	27.5	7.5	22.0	15.2
ALL STATE INSTITUTIONS							
1978	42775	30.6	38.7	24.7	5.1	21.2	14.0
1979	47725	30.2	38.9	25.1	5.0	20.1	14.0
1980	47951	30.1	38.7	25.7	7.2	20.4	13.9

a All test data, with the exception of the essay scores, are reported in terms of mean raw scores, i.e., the "average" number of items answered correctly by each population group. 1978 and 1979 essay tests were scored on a four-point scale; 1980 essay tests were scored on a six-point scale. The essay scores were obtained by adding the scores that were assigned independently by two readers.

b Scores of 77 ESL students included

c Scores of 100 ESL students excluded (not forwarded to ETS).

d Scores of 99 ESL students excluded
Scores of 65 students excluded from analysis - test scores misplaced by ETS.