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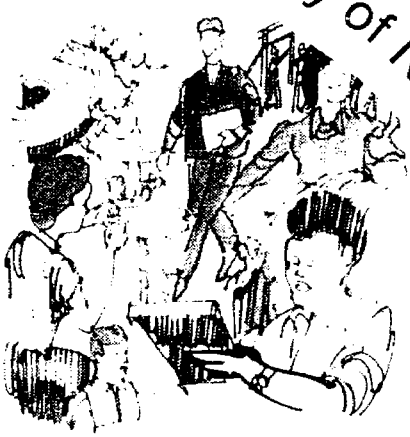
ABSTRACT

This volume consists of 29 appendixes. Included are: lists of local business contacts, largest employers and the local advisory committee; write-ups of program evaluations; enrollment statistics and follow up of graduates with regard to employment; dropout statistics and description; special counselor duties; and a statement regarding discrimination in career education. Statements of philosophy and goals are presented by various educational, vocational, business, and community sources. A job needs survey conducted in Dade County, Florida, is presented which includes nine tables giving supply-demand data. A booklet describing the Center for Occupational Education, Experimentation and Demonstration (Project COED) is included, as is a government pamphlet entitled "25 Technical Careers You Can Learn in 2 Years or Less." Also presented is the January, 1973, 27-page feasibility study regarding Newark career education program plans, programs, and needs which prompted the present report. (SC)

Volume 2

Career Education in Newark

A Report of the survey of Career Education in the City of Newark, New Jersey



Greater Newark Chamber of Commerce • June 1973

CAREER EDUCATION IN NEWARK

A Report of the Survey of Career Education in the City of Newark, New Jersey

Volume II - Appendices

Greater Newark Chamber of Commerce
Newark, New Jersey
June 1973

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Girls Trade School
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April 10, 1973

Introduction to Vocations, Employment Orientation, Health Occupation Programs

Contacts Made with Business, Industry, and Other Educational Institutions

September 1972 - April 1973

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7.	Hospital & Health Planning Council of Metropolitan New Jersey 2 Park Place Newark, N. J. 07102	Mr. William Lowery Mrs. Katherine Akers Mr. Milton Vieser
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15. Schrafft's Cafeteria Federal Building 970 Broad Street Newark, N.J. 07102	Mr. Andrew Sleboda
16. Singer & Co. Manufacturing Div. 321-1st Street Elizabeth, N.J. 07028	Mr. Sam Crawford
17. Cooper Sportswear Mfg. Co. 720 Frelinghuysen Ave. Newark, N.J. 07114	Mr. John Amato, Jr.
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Director, Guidance

CAREER EDUCATION PROGRAM AT WEEQUAHIC HIGH SCHOOL

AND PESHINE AVENUE SCHOOL

Re: Intensive Education Preparation

The Acting Superintendent is pleased to submit for your review and approval an after school, College Education Program at Essex County Community College. Approximately 80 seniors at Weequahic High School, who at this time in their educational career, have not expressed interest in college, have expressed definite interest in taking two of eight mini-courses at the Newark campus of Essex County Community College.

The eight mini-courses which will be offered are listed as follows:

Cycle I

Electrical Appliances Basics
Scientific Laboratory Procedures
Health Basics for Urban Survival
The Mathematics of Gambling

Cycle II

First Aid & Emergency Procedures
Calculators to the Rescue
Technical Instruments
People & Police

The courses in each cycle will last four weeks. Each student will attend one of the courses in each cycle for 12 classroom hours. A schedule will be developed so that each week every student will attend the mini-course three hours. To achieve the three required hours of class each week without overburdening the students, each class will be conducted for 1 1/2 hours on alternate days of the week. (Monday thru Thursday)

In order to enhance and further motivate the students into exploring this educational opportunity, both transportation and one (1) Essex County College credit will be provided. A bus will provide round-trip transportation for the 40 students who will be attending the college each day. Upon successful completion of course requirements, each student will receive one (1) Essex County College credit plus a

successfully complete the mini-course, a grade of no credit will be received.

The total monies for this program will be derived from the Career Education Program (P.L. 90 576). The monies to implement this program have been accrued through the above mentioned program and are available with approval of this program by the Newark Board of Education.

The anticipated budget is as follows:

Essex County College ($15.00 per student)	$ 2400.
Bus Transportation	2100.
	$ 4500.

1* The first cycle of this program will begin on February 13, (Tuesday) and end on March 8 (Thursday). The second cycle will begin on March 12 and end April 5 (Thursday). The students will be oriented at the high school by faculty members of the Essex County College.

As a result of this program, each participating student will have the opportunity of exposure and first hand acquaintance to the college atmosphere as well as gain worthwhile knowledge in various occupational fields.

* The Monday and Wednesday classes would be conducted from 3:00 thru 4:45 in order to account for the lost time due to the school holidays on February 19 and March 5, 1973.

Origin and Design by:

William McGuinn
Career Education Coordinator
Weequahic High School

Reviewed by:

Frank Esposito
Administrative Coordinator
Federal Assistance Programs

Reviewed by:

Therese S. David
Acting Assistant Superintendent
In Charge of Secondary Education

Reviewed by:

Wesley Danilow
Coordinator
Vocational Education and
Special Industrial Arts
Courses

Respectfully submitted by:

Edward I. Pfeffer
Acting Superintendent
of Schools

DEPARTMENT OF PRACTICAL ARTS
BOARD OF EDUCATION
31 GREEN STREET -:- NEWARK 2, N. J.

WILLIAM M. DEVONALD, DIRECTOR

February 23, 1972

Memorandum to: Dr. Edward I. Pfeffer
Deputy Superintendent

From: Wesley Danilow
Coordinator of Vocational Education
and Special Industrial Arts Courses

Re: Related Information concerning Industrial Arts
Curriculum Project

On May 4, 1970, in New Jersey Bell's auditorium in Newark, a group of ten 7th and 8th graders from two Junior High Schools in the city, with the help of their four teachers, presented an exciting demonstration and testimonial of their involvement and accomplishments in the new Industrial Arts Curriculum Project which began in those schools in September, 1968. The occasion was the monthly meeting of Newark's Business and Industrial Coordinating Council, attended by 75 business and community representatives. The businessmen were startled and surprised, but highly pleased and intrigued by what they saw. The community people stared in almost disbelief that this demonstrated progress could actually occur in Newark schools, and one representative even challenged the ability of white teachers to impart such enthusiasm and thirst for knowledge into minority youth, until one black 8th grader responded, "Man, don't stir up that stuff. We don't care what color our teacher is just as long as he teaches us what we want to know". The response from the audience was spontaneous applause.

What had been seen was a demonstration of teamwork in which students developed a topographical map by taking segmented measurements of the contour of a sandpile. They would use this map in estimating the cost of earth removal for a foundation planned for the sandpile. They also laid out boundary markers on a simulated plot of ground, thus demonstrating their appreciation of the role of an estimator, surveyor and engineer. They also walked through an assembly line process of making coat hangers, contrasting comparative costs and quality of hand versus an engineered layout. This process was also carried out in the manufacturing of a high intensity lamp. But the most impressive part was the confidence they showed in their capable fielding of questions from the audience.

cont.

This same group of students and teachers presented their story and demonstration to the Western Electric Co. staff at Kearny, N.J., and before the Company's Public Relations Conference at Morristown in June 1970. Again, there was a reaction of overwhelming approval and interest, even amazement and wonderment that "these ghetto! kids are getting something I wish my kid could get". The enthusiasm of the students, the dedication of the teachers, the excellent relationships between teacher and student, the ability of these young men to clearly explain not only what they were doing but the underlying purposes of the action, and the teamwork of the group were all readily apparent and recognized. The audiences were further impressed and quickly accepted reports of progress such as:

1. In the Experimental Reading Program utilizing the I.A.C.P. text as the standard reading text the tangible effect was the raising of the cumulative reading grade level during the one-year span, September 1970 through June 1971, from 5.1 to 6.57. Reading scores were established from the Nelson Reading Achievement Test. The test were administered at the beginning and end of the school year.

2. Discipline Improvement - the four I.A.C.P. teachers reported no disciplinary problems in their program during the school year as compared to seven discipline problems in the three remaining I.A. areas, metalworking and mechanical drawing. In other subject areas the disciplinary problems ran at a frequency of 3.5 for the control group to 1 occurrence for the I.A.C.P. group.

3. Student interest in I.A.C.P. (Attendance) in the evaluation of student attendance in the shop & reading class, the I.A.C.P. group attended both classes on the average of 4 days better per student in the area of illegimate* absences and 2 days better per student in the legitimate absence area.
   * (Cutting classes)

Finally, the interest and encouragement from business has prompted the school administration to plan for the expansion of this Project to all five of Newark's Junior High Schools beginning September 1971, reaching upwards of 2000 boys in the 7th and 8th grades.

It is no wonder, therefore, that businessmen who had evidenced little interest in the problems of Newark's schools, or even those who had never visited an urban school nor talked with teachers and students, are now showing a genuine desire to understand what this Project is all about and how it differs from the traditional Industrial Arts Program. They are even beginning to hope that there must be a means for developing a more realistic educational policy for urban youth.

WD:jlv

February 23, 1972

The following report reinforces the information in the I.A.C.P. booklet which was printed for distribution in the Newark Public Schools and the B.I.C.C. emphasis is placed on the correlation of the textbook material used in the I.A.C.P. at Webster Junior High School and the language arts curriculum for seventh and eighth grade boys.

As the Reading and English teacher involved with the World of Construction program (Part of the I.A.C.P. Curriculum) at Webster Junior High, I based the value of the program on seven (7) basic, related criteria; these are (1) behavior in class (2) class absenteeism--cutting (3) reading improvement (4) overall general attendance (5) attitudes toward learning (6) student-teacher rapport (7) preparation for class. These I judged both independently and in conjunction with one another.

To attempt such a judgment without the benefit of a control group would be fruitless, therefore, two separate and matched classes were established to illustrate this value of the program, either pro or con. Listed below are the criteria and the results which I have arrived at.

1. Behavior - As the I.A.C.P. project began there were many doubts as to its applicability in an urban situation such as Newark. It is a known fact that if the student cannot either identify the usefulness of a course or relate to it, then that student will lose interest in the subject and become a discipline problem. With this in mind, it was decided that for no other purpose than self-illumination, a record would be kept of those students in either class that became discipline problems.

   To make it equitable for all students the rules to define a discipline problem were established. Any child which had to be escorted from the room either for disturbing the class or for any other reason except upon request, that child would be considered a discipline problem.

   The group using the W.O.C. text behaved in the classroom setting significantly better in all areas than did the control group. For example, in the group using the W.O.C. text there were a grand total of 2 disciplinary problems for the entire academic year, as compared with a total disciplinary problem of 7 for the same length of time in the control group.

   If the cooperation and attention span of the students is to be considered as a significant factor in the evaluation, then there must, realistically, be either some substantial data or some other form of verification. Since there is no "cut and dried" measure of cooperation or attention, I offer instead an example of the typical day in class for each group.

The W.O.C. group came into class at the beginning of the period and went directly to their seats. Once attendance was taken, they were given the chapter number to read. After this, their only direction came from the first boy in each particular row. These books included the W.O.C. text and a dictionary. Once the boys received these they began working. This meant that they began reading the chapter, writing down the important parts of each chapter, and also writing down any words and their definitions which they may not have known.

The control group reacted in an entirely opposite manner. When they came into the room, they were loud and unruly. The only way they would do as they were told was if the teacher out-shouted them. When the bell for class to begin was rung, there was still the task of getting them seated and attendance taken before actual instruction began. This took at least an additional five minutes of class time. Once these necessary tasks were accomplished, the students had to be instructed to get their books, go to the succeeding chapter and begin reading. If they did this, then someone else had to be appointed to pass out the dictionaries. When this task was accomplished and paper and pencils handed to those that didn't have them (even though they were required in class), students still persisted in asking "What does this word mean?", or "How do you say this word?", or finally "What page do we turn to"?

All through the usual question and answer period the class still remained loud and unruly with a general undercurrent of useless noise. This class would definitely have no interest in reading whatsoever.

In short, the group using the project textbook had a great deal more incentive and interest in the classwork than did the class not involved with the class project.

As a personal judgment this phenomenon may be attributed to the fact that the student can see a definite tangible relationship, not only between the reading class and the shop class, but between the academic world and the world in which he is to survive. Morever, the student may also see this relationship as a potential route from which he may escape his present environment.

Whatever the reasons or relationship there may or may not be, the fact remains that something is inwardly compelling these students to take a deeper interest in the subject.

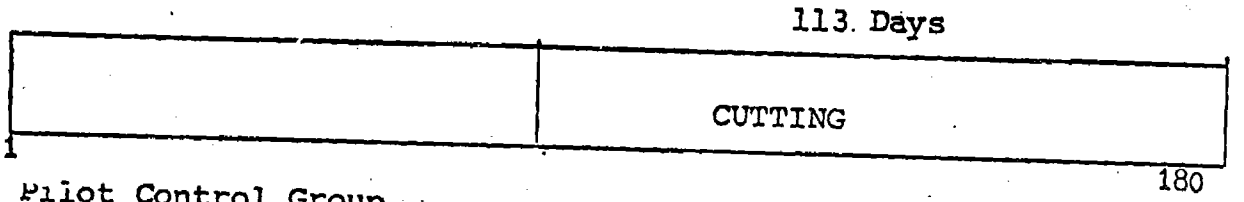
2. Class Absenteeism - (Cutting) - Since the initial summary was submitted some months ago, some careful reflection and research was given in regard to the project. In the initial report it was said "The control group had a very significant 50% "cut" percentage over the group using the W.O.C. text. Over a 60 day period the control group had a total of 24 illegitimate absences from class, whereas the group using the text had 16 absences over the same period of time". This is all true, but after further inspection of the record book it was found that this percentage increased drastically by the end of the academic year. The group using the W.O.C. had a total of 51 days of illegitimate absences from class, while our control group had a grand total of 113 days, and this does not include the time during the teacher's strike when classes were not conducted.

ILLEGITIMATE ABSENCES (CUTTING)

Group Comparison to a

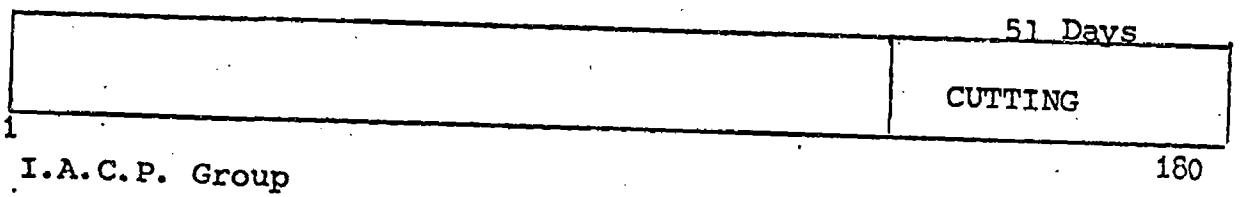
180 Day School Year

WEBSTER JR. HIGH SCHOOL 7th GRADE
1970-1971



Pilot Control Group

7.5 days/Student



I.A.C.P. Group

3.4 days/Student

3. Reading Improvement - The following tables and charts best illustrate the reading improvement based on the Nelson Reading Achievement Test. This test was administered to both groups in the beginning of the school year and at the end of the year.

Group using W.O.C. Text

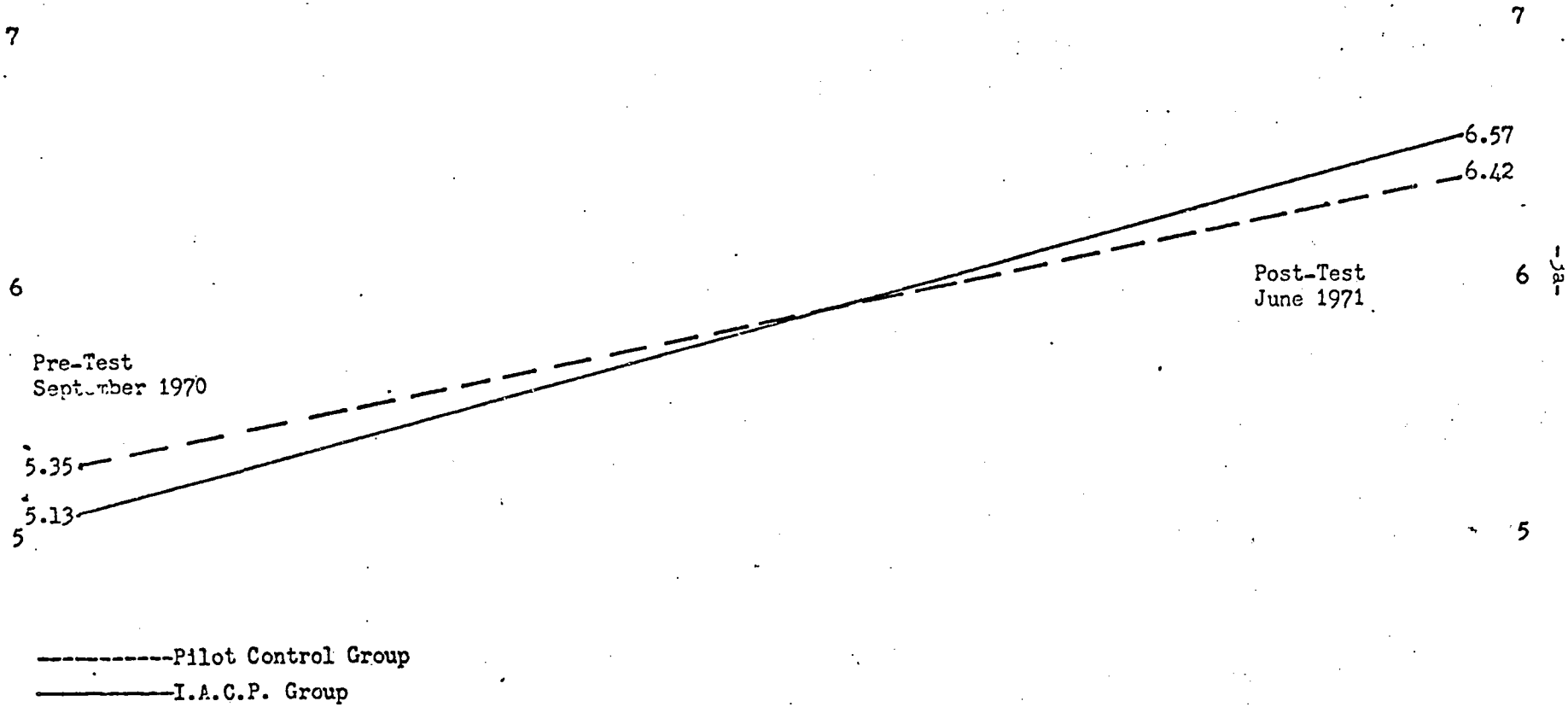
Nelson Achievement Test

Students	Pre-Test Administered Sept. 1970	Post-Test Administered June 1971
Donte Hinnant	5.8	6.3
Osker Kachrimanzade	5.7	6.6
Ronald Mann	5.5	8.2
Angel Morales	5.4	6.7
Juan Rodriguez	5.4	5.6
Luis Vega	4.6	5.2
Tom Vanoczky	6.3	8.7
Wiley Brown	4.5	5.0
Miguel Canales	5.2	6.1
James Gary	5.5	6.2
Russell Kidd	5.4	6.3
Marvin Jones	4.8	5.2
Anthony Nardone	5.2	9.2
Rocco Russomanno	3.2	6.2
Jose Curbello	5.7	7.0
Group not using W.O.C. Text control group		
Adam Thomas	4.6	4.4
Ricky Austin	4.8	5.9
Dwayne Clark	6.4	8.3
Charles Hall	4.9	5.5
David Harrison	5.7	6.5
Anthony Pucillo	4.6	6.6
Paul Spiers	6.3	7.3
Kevin Wynn	5.3	6.0
Herbert Chinnea	5.9	8.5
Harold Cook	4.5	4.3
Darryl Hynes	4.9	6.5
Tony Robinson	6.6	8.8
Zollie Williams	5.3	6.4
Anthony Woodward	5.5	5.8
Modesto Ramos	5.0	5.6

NELSON READING TEST COMPARISON

GROUP AVERAGE

WEBSTER JR. HIGH SCHOOL 7th GRADE
1970-1971



4. Overall General Attendance - Since one may easily assume that even the most troublesome student will become bored with being bored in school by out-dated and out-moded subjects, then it can be as easily assumed that those students who cause trouble or are troublesome because they either don't comprehend the subject or are totally bored by its presentation will eventually be absent from school. This will show up in the absentee reports as well as the end of term absentee summaries. Likewise, the converse will also be true. If there is interest in a subject then attendance will improve.

   This is not to say that all absences are due to this, but approximately ½ of all absences are.

   For the first two marking periods or a 60 day period, extra careful research was made into the absentees each day from the groups involved in the project. Each time a student in either group was absent, each of his teachers was contacted to check on his possible "cutting". The results are as follows: "The group using the W.O.C. text has again shown that the program is of value and of interest to the students as they have had 50% less absences then the control group. There were 54 days of legitimate absences for the control group to only 26 legitimate absences for the group using the W.O.C. text".

5. Attitudes toward Learning - Unfortunatley this section is more or less strictly a subjective section, since attitudes or emotions cannot be accurately measured by professionals in this field, let alone a layman in psychology such as a teacher. Yet the control group, based on their actions in class over the course of the academic year, were more rebellious, less industrious, and generally lack the incentive to want to learn the material being presented. The group using the W.O.C. text on the other hand, acted infinitely better in these areas. The group using the text were quite capable of being left to their own devices, to do independent research and use the teacher as another resource rather than have the instructor do all of the work. This the control group could not conceivably do, even at the end of the year.

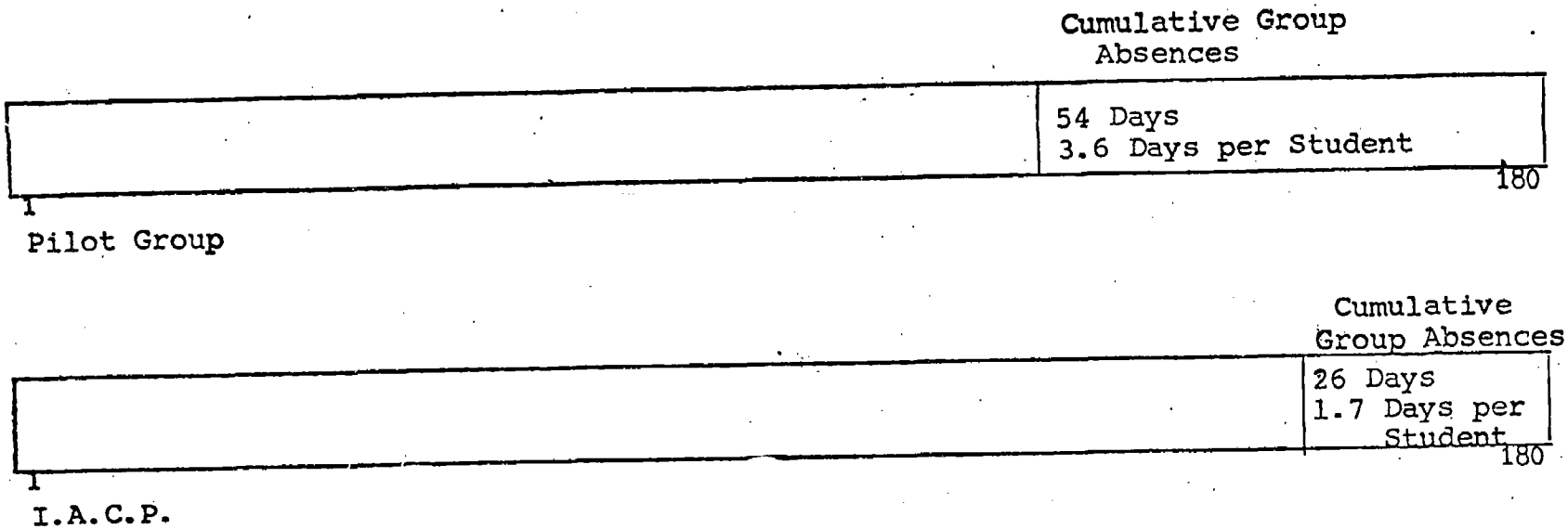
6. Student-Teacher Rapport - The control group has shown on numerous occasions that they tend to overly react to any situation major or minor. They were troublesome and hard to handle from the third day of class until the end of the school year, and they were infinitely more dependent upon the teacher as a source of direction and guidance than were the group using the W.O.C. text. The group using the W.O.C. book, after the initial marking period, began to look upon the teacher as an additional resource to clarify or explain that which they could not comprehend rather than as a direct source such as the book.

DAILY ATTENDANCE

Group Comparison To

180 Day School Year

WEBSTER JR. HIGH SCHOOL 7th GRADE
1970-1971



As was stated previously, the group using the W.O.C. text were quite capable of doing and were doing independent study from the time class began until it ended - daily. They were learning, and they seemed to enjoy it.

7. Student Preparation - The students in the control group were, almost without exception, totally unprepared to perform even the most basic daily tasks like taking notes from the blackboard or taking tests. When homework was assigned it was seldom, if ever, turned in, and what was done, was never complete. This is due to many things, but the chief contributors were the students own lack of initiative and extremely poor working habits. The group using the W.O.C. text however, were almost unanimously ready, willing , and capable of performing not only the basic tasks, but the more refined and demanding tasks such as independent note taking.

Recommendations: As one who has taught this course, I have just one recommendation to make as an "inner-city" teacher. The text itself seems entirely too difficult for the average inner-city or culturally deprived child to comprehend completely. Therefore, I believe that the context should be simplified to either a 5.5 or 6 grade reading achievement level without sacrificing the content. Perhaps it might even be structured upwards toward a grade 7 level.

Arnold E. Haight, Jr.
English and Reading Teacher
Webster Junior High School
Newark, New Jersey

Outline of courses currently available at:

Dallas, Texas	Wilmington, Delaware
Aviation Technology	Health Occupations
Business Education	Mass Media
Computer Science	Food Trades
Construction - Drafting	Construction
Electronics	Heating & Air Conditioning
Fashion Design	Data Processing
Interior Design	Transportation Service Repair
Medical Careers	Cosmetology
Dental Careers	Distributive Occupations
Horticulture	Draft & Design
Photography	Lab Occupation
Advanced Mathematics	Graphics
Advanced Science	Metal Processing
Air-Conditioning & Heating	Academic Skills
Art	
Beauty Culture	
Foreign Design	
Graphics - Printing	
Home and Child Related Science	
Metal Technology	
Music	
Plastics	
Social Science	
Administration of Justice	

BOARD OF EDUCATION
BARRINGER HIGH SCHOOL
90 PARKER STREET
NEWARK, NEW JERSEY 07104

PATRICK A. RESTAINO, PRINCIPAL

March 7, 1973

3/21
Mr. K. J. Kubicki,
Kearny Works
100 Central Avenue
Kearny, NJ 07032

Dear Mr. Kubicki:

I am herewith submitting the information you requested when your team visited Barringer High School.

	NUMBER OF STUDENTS ENROLLED			
	Data Processing		Distributive Education	
School Years	D. P. I	D. P. II	D. E. I	D. E. II
1972-73	76	14	40	14
1971-72	84	15	40	20
1970-71	95	18	38	20
1969-70	103			
1968-69	81			
1967-68	61			

The following students were placed on jobs by Mr. Sylvester, our Data Processing Coordinator:

1971-72: Sharon Armstrong, Nancy Brango, Michele Caraglia, Michael Carson, Janice Davis, Annette Greene, Grace Marano, Barbara Racioppi, James Ransom, Linda Reilly, Robert Segarra, Grace Toia

1970-71: Kathy Austin, Shirley Ciccone, Geneva Gordon, Donna Mullaney, Brenda Ponder, Michelle Purcell

1969-70: Annette Avalone, Angel Caliendo, Ruth Cramer, Antoinette Della Sandro, Edith Espinar, Olga Gonzolez, Anna Guiliano, Joanne Ross, Catherine Senica, Elaine Spivey, Yolanda Thomas, Sylvia Velez

1968-69: Alberta Bailey, Linda D'Argenio, Michele Londino, Michael Magliacano, Lorraine Matthewson, Linda Piacenza, Emil Stefanelli, Elverna Thatcher, Karen Ventola, Valois Younger

The following students were placed on jobs by Mr. Wichowski, our Distributive Education Coordinator:

1972-73: Jacqueline Allen (Bambergers),
Denise (Cunningham) Corpening (Martland Medical),
Sharon Galasso (Bams),
Ernest Giordano (Ridge Auto),
Maria Alcibar Gonzalez (Bams),
Debora McGibboney (Bams),
Roseann Morgan (Ohrbachs, Prudential),
Susan Petty (Grants, Bloomfield),
Carmen Rios (Bams),
Sidney Roberts (Bams),
Marilyn Rodriguez (Bams),
Paulette Wiley (Bams),
Joann Jankowski (Stuarts)

Dave Boykins (Stuarts),
Joseph Cannon (Burts, Newark),
Sharon Walker (Stuarts)

1971-72: All of the following were hired by Bambergers:

Donna Auriemma, Mary Brango, Marilyn Brudnicki, Joan Duffy, Carol Golson, Carol Gonzalez, Ethel Harper, Carlos Hernandez, Joanne Johnson, Gordon Maple, Mercedes Ramos, Rhonda Robinson, Ruth Rountree, Maria Sanchez, Pam Walker, Judy Williams.

I trust the above information will be helpful in the study you are making. Regards to your team members.

Yours very truly,

Nathan H. Kantor

Nathan H. Kantor, Chairman
Business Education Department

Approved:

P. A. R.

Pat A. Restaino, Principal

Division of Secondary Education
Department of Guidance
Board of Education
Newark, New Jersey
Beatrice G. Geller, Director

FOLLOW-UP OF GRADUATES 1972

TOTAL NUMBER OF GRADUATES 2,779

	FURTHER EDUCATION	
4 Year Colleges	1,036	37%
2 Year Colleges	336	12%
Technical, trade, vocational schools	242	9%
Total further education	1,614	58%
	EMPLOYMENT	
Professional, technical, managerial	9	0.3%
Clerical	400	14%
Sales	93	3%
Service	75	3%
Processing	12	0.4%
Machine Trades	31	1%
Bench Work	42	2%
Structural	15	0.5%
Miscellaneous	57	2%
Total Employment	735	26%
	OTHER	
Armed Forces	44	2%
Other Government Programs	4	0.1%
Homaking	66	2%
Unemployable	7	0.3%
Not Employed	161	5%
Unaccounted for	148	5%
Total Other	430	15%

DEPARTMENT OF ADULT EDUCATION
CARMEN J. ATTANASIO, DIRECTOR

K-9

SUMMARY OF MONTHLY STATISTICAL REPORTS

PROGRAM ABE FISCAL YEAR 1972-73

MONTH	No. on Register First Day of Month	New Enrollees During Month	Students Terminated During Month	No. on Register Last Day of Month	Cumulative No. of Students Terminated	Cumulative No of Students Enrolled
July						
August						
September	0	854	0	854	0	854
October	854	459	101	1312	101	1313
November	1312	219	130	1431	231	1662
December	1431	49	117	1480	348	1597
January	1597	173	169	1770	517	1943
February	1943	68	84	1927	601	1995
March	1995	184	90	2089	691	2273
April	2099					
May						
June						

FORM NO. 100 - 11

App. 8

Q-12

DEPARTMENT OF ADULT EDUCATION
CARMEN J. ATTANASIO, DIRECTOR

SUMMARY OF MONTHLY STATISTICAL REPORTS

PROGRAM H.S.E FISCAL YEAR 1972-73

MONTH	No. on Register First Day of Month	New Enrollees During Month	Students Terminated During Month	No. on Register Last Day of Month	Cumulative No. of Students Terminated	Cumulative No. of Students Enrolled
July						
August						
September	0	700	17	683	17	683
October	683	187	71	799	88	870
November	870	118	88	900	176	988
December	988	68	66	990	242	1056
January	990	134	157	967	399	1190
February	967	122	74	1015	473	1312
March	1015	226	70	1171	543	1538
April	1171					
May						
June						

FORM NO. 100 - 11

ESSEX COUNTY VOCATIONAL SCHOOLS
90 WASHINGTON STREET
EAST ORANGE, N. J. 07017

OFFICE OF
GUIDANCE AND PLACEMENT
TELEPHONE 961-7890

STEPHEN ANDRASKO
SUPERINTENDENT
ALBERT J. CICCONE
SECY. AND SCHOOL BUSINESS
ADMINISTRATOR

March 16, 1973.

Mrs. Mary C. Miquelli
Urban Affairs Supervisor
Chamber of Commerce Career Education Task Force
New Jersey Bell Telephone Co
540 Broad Street
Newark, New Jersey 07101

Dear Mrs. Miquelli:

In accordance with our conversation during your recent visit to this office, I am submitting to you and Mr. Boardman and Miss Jones data regarding our enrollment and placement as of January 31, 1973.

Class of 1972

	Sussex Avenue School	No. 13th. Street School
Total Number of Graduates -	89	270
Number available for placement -	45	191
Number employed in trade or related occupation -	17	172
Number employed out of trade	22	15
Number unemployed	6	3

Total enrollment in Evening and Part-time classes - 2159

Enclosed you will find a list of courses offered in the day schools and a bulletin describing our part-time and evening programs.

Please do not hesitate to call on me if I can be of any further assistance.

Sincerely,

Grace Basse

Grace R. Basse
Guidance and Placement Counselor

GRB:as

encls.

ESSEX COUNTY VOCATIONAL SCHOOLS
300 NORTH THIRTEENTH STREET
NEWARK, N. J. 07107

OFFICE OF
GUIDANCE AND PLACEMENT
TELEPHONE 485-5178

STEPHEN ANDRASKO
SUPERINTENDENT
ALBERT J. LICCONE
SECRETARY AND SCHOOL
BUSINESS ADMINISTRATOR

March 27, 1973

Mrs. Mary C. Miquelli
Urban Affairs Supervisor
Chamber of Commerce Career Education Task Force
New Jersey Bell Telephone Co.
540 Broad Street
Newark, New Jersey 07101

Dear Mrs. Miquelli:

In response to your request I am submitting herewith the latest data regarding the placement of the 1972 Graduates of our schools in Bloomfield and Irvington:

	Bloomfield School	Irvington School
Total Number of Graduates	113	89
Number Available for Placement	64	55
Number Employed in Trade or Related Occupation	39	31
Number Employed Out of Trade	25	23
Number Unemployed	0	1

I am also sending a copy of this letter to Mr. Boardman and Miss Jones.

Cordially yours,

Grace R. Basse
Guidance and Placement Counselor

GRB:as

Copy to Miss Linda Jones
Mr. Henry Boardman

Division of Secondary Education
Department of Guidance
Board of Education
Newark, New Jersey 07102
Beatrice G. Geller, Director

July 1, 1971

SUMMARY
REPORT OF DROPOUTS FOR TEN-YEAR PERIOD
Senior and Junior High Schools
(Based on Exit Cards Received from Schools)

Year	Total Enrollment	Total No. of Dropouts	Per Cent of Dropouts
1961-1962	16,554	1,367	8%
1962-1963	17,337	1,495	9%
1963-1964	18,286	1,504	8%
1964-1965	20,018	1,586	8%
1965-1966	19,725	1,576	8%
1966-1967	19,161	1,355	7%
1967-1968	19,355	1,065	5.5%
1968-1969	19,561	914	4.7%
1969-1970	19,485	1,193	6.1%
1970-1971	20,093	985	4.9%
1971-1972	20,932	1,075	5.1%
		14,115	

NOTES:

1. Statistics include summer dropouts.
2. Many students who have dropped out return at a later date to a regular day school or to Newark Evening High.
3. Some students drop out more than once; they are counted separately each time.
4. Students who withdrew from school for such involuntary reasons as illness or pregnancy are included in the numbers.

Division of Secondary Education
Department of Guidance
Board of Education
Newark, New Jersey 07102
Beatrice G. Geller, Director

SUMMARY
CENTRAL OFFICE REPORT OF SCHOOL LEAVERS
(Based on Exit Cards from Junior and Senior High Schools)
July 1, 1970 - June 30, 1971
School and Grade

Schools	Total Enrollment	Dropouts by Grades 12	11	10	9	8	7	Total Dropouts	Percent of Dropouts
Senior High									
Arts	652	3	3	1	-			7	1.1
Barringer	2,920	23	56	45	5			129	4.4
Central	1,476	25	32	57	28			142	9.6
East Side	2,126	1	21	15	12			49	2.3
South Side	1,476	35	30	51	28			144	9.8
Vailsburg	1,553	12	28	23	14			77	5.0
Weequahic	2,539	11	31	66	47			155	6.1
West Side	1,846	15	72	46	44			177	9.6
Total Sr. High	14,578	125	273	304	178			880	6.0
Jr. High									
Bruce	1,211				11	14	1	26	2.1
Clinton Place	1,560				19	8	-	27	1.7
Seventh Avenue	583				4	5	-	9	1.5
Webster	772				6	12	3	21	2.7
West Kinney	1,389				11	10	1	22	1.6
Total Jr. High	5,515				51	49	5	105	1.9
Grand Total	20,093	125	273	304	229	49	5	985	4.9

Division of Secondary Education
Department of Guidance
Board of Education
Newark, N.J. 07102
Beatrice G. Geller, Director

March 30, 1973

Profile of a Dropout

A. General Statements

1. Both school and society contribute to the production of dropouts by their failure to meet the needs of a significant number of school age youth.

2. Many of the problems that lead to dropping out of school are identifiable in the elementary grades.

3. The school dropout does not fall into a single pattern. His profile is a complex one, made up of a combination of many contributing factors.

4. On the basis of a large number of studies, it has been determined that he exhibits one or more of the characteristics listed below.

B. Characteristics of the School Dropout

1. Related to School

Subject failure
Excessive absence and truancy
Cutting classes
Excessive tardiness
Behavior problems
Reading below grade level
Lacking in basic skills
Overage for grade placement; has been held back in elementary or junior high school grades.
Language difficulty
Not achieving up to potential
Involved in discipline problems, attention-getting behavior
Lacking in interest; does not perceive academic subjects as related to real life; prefers to work.
Insecure in school environment
Learning difficulties
Poor relationships with teachers and/or fellow-students
Restive-unable to adjust in a formal classroom situation
Student not respected by teacher, because of low achievement or non-conformity.

2. Related to home and neighborhood
   Financial stress
   Broken home
   Foster home placement
   Death or physical disability of one or both parents
   Heavy home duties or responsibilities
   Incompatibility of parents
   Parents less likely to show interest in student's school experiences
   Parents lacking in control of student
   Student is mother or father of a child
   Friends are frequently persons outside of school, usually older drop-outs.
   Other members of family have dropped out of school
   No quiet place to study
   High degree of mobility

3. Related to personal-social factors
   Emotional problems
   Behavior problems
   Rejects school and self
   Failure syndrome
   Hostility toward others
   Poor work habits
   Lack of goals; seems to be floundering aimlessly
   Insecure; lack of self-condidence
   Poor relationships with peers and/or adults
   Non-conforming attitudes and behavior
   Temper outbursts
   Lack of insight into personal problems
   Lack of identification with suitable models
   Resentment of authority
   Low self-esteem.

C. Comments from records and interviews of dropouts

"Poor home relationships; plans to work, so that he can leave home"
"Father beats son; son refuses to attend school"
"Discipline problems started in elementary school"
"Disregard of school rules and regulations"
"Ashamed of repeating grade nine; drug abuse"
"Record of disrupting class-talking, yelling, singing, constantly moving around the room"
"Chronic truant and cutter; third time in ninth grade"
"Withdrawn; father aged 77, does not communicate with children. Boy wants to work and leave home"
"Poor attendance since early grades in elementary school; cutting"
"Attended four elementary schools; age 17 in 10th grade"
"Attended seven schools in Newark; cutting; behavior problems"
"Threw something at teacher"
"Disruptive, argumentative, does not get along with others"
"Flagrant disregard of school rules and regulations"

Continued Pg. 3 - C. Comments from records and interviews of dropouts.

"Alienated; says everyone is against him; refuses to attend classes; poor relationships with parents"
"Desires to work-wants freedom from academic disciplines.
"School failed to interest student as much as his job"
"Failed 10th grade at Essex County Vocational School; resents being 17 in 10th grade; prefers to work"
"Turned down by Essex County Vocational School; wanted trade; has attended five schools; earned no credits preceding year"
"Subject failure and retardation; truancy; has obtained job"
"Poor attendance resulted in subject failure; prefers to work; has obtained job"
"Entered Postal Academy; prefers informal atmosphere; can smoke in class"
"Long past history of retardation, failure and truancy in elementary school"

Division of Secondary Education
Department of Guidance
Board of Education
Newark, New Jersey 07102
Beatrice G. Geller, Director

DUTIES OF THE SPECIAL COUNSELOR

1. Work with the head counselor and teachers to help with all problems relating to school dropouts; keep close liaison with the Central Office Director and community agencies; develop in-service programs, etc.

2. In cooperation with counselors and teachers discover and identify potential dropouts and those vulnerable to failure as early as possible so that special assistance can be given. Maintain necessary records on each for instructional purposes.

3. Work closely with each of the students in this special group on a personal basis and, where necessary, arrange for tutoring and remedial help so that they can keep with the class and have successful school experiences. They should be assisted to know and to reach their full potential and to aspire to a worthwhile, dignified self-image. These students are to remain part of the class group as much as possible to avoid feelings of being different and inferior.

4. Hold many conferences with parents, going into the homes, if necessary, for interviews that will impress upon them the value of education and enlist their cooperation in helping to encourage and persuade students to continue education. Where needed, referrals should be made to community agencies for special assistance, with necessary follow-up.

5. Hold frequent individual interviews with students in this special group and maintain a friendly relationship with them so that they will feel that someone is personally interested and cares what happens to them. This personal attention, almost daily, will require considerable time.

6. Conduct group meetings and conferences for parents to discuss problems of their children, school progress, preparation for work, etc.

7. Through testing, teacher reports, and study of the cumulative folder data, appraise the capabilities, strengths and weaknesses of each to determine his educational needs. With the cooperation of the principal, arrange a modified school program that will suit individual requirements. With the recent residents, counselor will test and gather data as soon as possible, so that this appraisal can be done and cumulative folders developed.

8a. Help to develop an instructional program based on the needs of the individual student.

8b. In subjects like English and mathematics, consider the possibility of having an ungraded class with carefully selected, non-achieving students. Through group instruction each student would be permitted to proceed at his own pace. Counselor and teacher would work very closely on this . Instead of having these students distributed in a number of classes, they would be organized into one class with group type of instruction.

(over)

9. Conduct regular group guidance activities for students to help them develop constructive attitudes, improve study habits, prepare for work, learn how to make out application forms, etc. A homework study period could be maintained to assist in preparation of lessons. Orientation to self, school, home, work should be stressed.

10. Arrange to take students on trips into industry to see workers and what employers expect of them. Field trips of a cultural nature should also be arranged.

11. Arrange for representatives from the employment services and from industry to speak to students to discuss the kinds of jobs that they will be able to enter and how to prepare for them. They will be given valuable occupational information labor and manpower trends, etc. Interviews with successful workers in various fields should be arranged. Students would be helped with career planning and setting up realistic vocational goals. Counselors should work closely with the Youth Opportunity Center for occupational testing. job counseling, placement, and occupational information to give these students a realistic picture of the world of work.

12. Should not be responsible for discipline, but will work closely with the school's disciplinarian to achieve improved behavior and personal adjustment. Maintaining a friendly rapport and relationship between the counselor and the students is most essential for raising aspirations and for motivating students. The authoritarian role of the disciplinarian would work against this.

13. Arrange with the Youth Opporunity Center of the New Jersey Employment Service to have students tested and, where necessary, place students in part-time jobs. Some students can be encouraged to stay in school by the possibility of being placed in the work-study program. Upon graduation, they will be assisted with job placement and job counseling.

14. Arrange for students, on an individual basis, to participate in groups and extra-curricular activities. This will enable them to become part of the school and feel that they belong.

15. Assist in coordinating the day services with after-school evening counseling clinic service.

16. Keep a daily log of interviews, meetings, visits, and other activities. Have frequent evaluation of the progress and direction of the program in cooperation with the school staff and the Director of Guidance. Prepare monthly reports for the Central Office.

WORK-EXPERIENCE PROGRAM
IN DIVERSIFIED OCCUPATIONS
1971-1972

No. of Students: 252
No. of Employers: 112

Total Earnings $361,500.

Employer Ratings

Excellent	76
Good	129
Fair	27
Poor	7

Follow-up

Employed with coop. firm - 151
Employed with another firm- 15
Further education - 50
Armed Services - 2

No. of Dropouts - 4 (1.6%)

1 - Joined Armed Services
1-- Married
1 - Moved to North Carolina
1 - Unaccounted for

	1970-1971 (Before Program)	1971-1972 (During Program)	% Reduction
Days Absent	5544	4262	23%
Cycle Failures	1160	712	39%

EDUCATIONAL DIVISION ADVISORY CHAIRMEN

Allied Health Division

Dr. Hazle Blakeney

Business Division

Dr. Bernard Newman

Humanities Division

Professor A. Zachary Yomba

Natural and Applied Science Division

Professor Miles Macmahon

Social Science Division

Professor Spencer Holland

Continuing Education

Dr. Carmine Laffredo

ENROLLMENT STATISTICS
ESSEX COUNTY COLLEGE

Programs with HEGIS Codes	ECC Code	1972-73 Fiscal Year Summer N/A	FALL F/T	FALL P/T	Fiscal Years
Transfer					
Biology 0401	0601		56	30	
Bus. & Comm.	0199		195	109	
Education					
Gen. Elem. 0802	0201		194	82	
Gen. Sec. 0803	0202		45	14	
Phys. Edu. 0835	0899		53	10	
Bus. Educ. 0838	0101		30	11	
Engineering, general 0901	0399		52	48	
Fine Arts, general 1001	0401		40	8	
Music 1005	0409		34	11	
Math. 1701	0604		9	8	
Physical Sci.:					
Phys.gen.1902	0605		4	1	
Chem. gen.1905	0602		6	7	
Public Services:					
Recreation2103	0803		7	1	
Social Svcs. 2104	0710		158	44	
Law Enforce. 2105	0898		25	39	
Fire & Saf. Sci. 2199	0897		4	8	
Social Science					
Gen.Lib.Arts 2201	0799		221	67	
Black Stud. 2211	0712		4	0	
Urban Studies 2214	2901		15	9	
Humanities					
Gen.Lib.Arts [illegible]	0499		61	9	

ENROLLMENT STATISTICS
ESSEX COUNTY COLLEGE

	1972-73 Fiscal Year									Fiscal Year			
	Ec Codes	Summer N/A	FALL										
			F/T	P/T									
Career & Occupational													
Business:													
Bus. Career 5001	2099		32	12									
Acct. 5002	2001		44	41									
Secre. 5005	2004		48	28									
Off. Career Trng. 5005	3004		2	1									
Bus. Adm.0506	2005		63	39									
Data.Proc.Tech.:													
Data.Proc.gen. 5101	2003		19	8									
Keypunch op. 5102	3003		3	1									
Comp. op.Tech. 5103	2002		63	37									
Health Services:													
Para.Med.Tech. 5201	2199		4	1									
Radiol.Tech. 5207	2105		34	8									
Nursing 5208	2104		218	111									
Med.Rec.Tech. 5213	2102		5	4									
Med. Sec'y5214	2103		20	0									
Hosp.Unit Mgt. 5218	2101		3	2									
Phy.Ther.Asst. 5219	2106		12	3									
Engineer. Tech.													
Arch. Tech. 5304	2301		23	4									
Chem. Tech. 5305	2306		0	1									
Elec.Tech.5310	2307		22	5									
Indus.Tech.5312	2304		0	4									
Const.&Bldg Tech. 5317	2308		113	2									
Sci.Comp.Prog. 5103	2302		6	4									

ENROLLMENT STATISTICS

ESSEX COUNTY COLLEGE

		1972-73 Fiscal Year				Fiscal Year			
	FCC Code	Summer	Fall FT.	Fall PT.	Winter	Spring				
Special Students Nursing Applicants	6000		149	129						
RTC Applicants	6001		34	7						
Non-Matriculant for a degree	8000		198	37						
Project DEEP	8001		313	17						
New Careers	8004		27	22						
Cont. Education Extension	8006		29	220						
Non-Matriculant not intent for degree	8100		10	16						
Undecided	9999		507	186						
No Code	0000		68	77						
Total			3[illegible]	[illegible]						

COLLEGES THAT HAVE ACCEPTED E.C.C. GRADUATES
(AS REPORTED BY GRADUATES)
TABLE IV

	College	Number Accepted		College	Number Accepted
1.	American Academy McAllister Institute	1	18.	Newark College of Engineering	1
2.	Amherst	1	19.	Newark State College	26
3.	Bloomfield College	6	20.	New York University	1
4.	Boston University	1	21.	Pace College	2
5.	Bradley University	1	22.	Paterson State College	28
6.	El Camino Jr. College	1	23.	Rutgers State University	55
7.	Fairleigh Dickinson	18	24.	Saint Francis College	1
8.	Glassboro State College	3	25.	Saint Peters College	2
9.	Jersey City State College	25	26.	Seton Hall University	12
10.	Kent State College	1	27.	Stanislaus State	1
11.	Livingston State College	4	28.	State University of N.Y.	1
12.	Long Island University	2	29.	Strayer College	1
13.	Mansfield State	1	30.	Trenton State College	1
14.	Monmouth College	2	31.	U.C.L.A.	1
15.	Montclair State College	29	32.	Upsala College	4
16.	Morgan State College	1	33.	University of New Haven	2
17.	Mount Saint Mary's College	1	34.	West Virginia Institute of Technology	1

NOTES:

1) These figures include part-time and full-time acceptances.

2) This list does not include many colleges to which our students transferred prior to graduation. Also, at many of the above-named colleges, The Essex County College transfer student enrollment is larger than indicated. This is also due to the fact that many of our students transferred prior to graduation and are not included in this report.

DISTRIBUTION OF STUDY MAJORS OF ECC GRADUATES AT SENIOR COLLEGES
(AS REPORTED BY GRADUATES)
TABLE V

AREA OF STUDY	ENROLLEE
Elementary Education	30
Business Administration	30
Accounting	20
Psychology	18
Economics	17
Political Science	14
Sociology	14
History	12
Education	11
English	8
Liberal Arts	8
Physical Education	6
Management (Business)	6
Social Welfare	5
Early Childhood	5
Business Education	3
Marketing	3
Spanish	2
Theater	2
Zoology	2
Industrial Education	2
Biology	1
Education for the Mentally Retarded	1
Foreign Language	1
Funeral Director	1
Industrail Relations	1
Journalism	1
Mathematics	1
Mechanical Engineer	1
Music Education	1
Pharmaceutical Science	1
Philosophy	1
Secondary Education (Math)	1
Specialed	1
Speech Correction	1
Speech Pathology	1
Urban Education	1
Nursing	0

No students are majoring in Nursing at a senior college. This is because our Nursing Program is complete and the need to transfer exists only if a student wants to go into a highly specialized area that requires a Bachelors Degree. A survey of 54 students who successfully completed the ECC Nursing Program, revealed that 40.4% of them successfully passed the N.J. State Nursing Boards Examination on the first testing. An additional 24% passed the examination on the second testing. This means that 64.4% of these 54 students have successfully passed this required examination. This percentage is unusually high for an urban community college with an open-door policy. In fact, one [illegible]unity college of similar status, reported a percentage of 13% of their students [illegible]ng successfully passed this examination.

The survey was prepared by Mr. Scott Drakulich of the ECC Testing Division.

FULL-TIME EMPLOYMENT POSITIONS HELD BY GRADUATES
AS OF AUGUST, 1970
(JOB TITLES & SALARIES RECORDED AS REPORTED BY GRADUATES)
TABLE VII

JOB TITLE	MALE	FEMALE	TOTAL	AVERAGE WEEKLY SALARY
Account Executive	1		1	$165.00
Assistant Buyer		1	1	unspecified
Assistant Case Worker		2	2	$118.00
Assistant to the Art Director		1	1	unspecified
Assistant Credit Manager	1		1	$125.00
Administrative Assistant	1		1	$150.00
Bookkeeper	1	1	2	$100.00
Clerk	2	2	4	$112.58
Clerk-Typist	1	2	3	$ 82.03
Cost Clerk	1		1	$110.00
Draftsman	1		1	$100.00
Educational Advisors	1	2	3	$159.50
Engineering Systems Clerk	1		1	$108.50
Foreman	1		1	$100.00
Keypunch Operator		1	1	$100.00
Lift-truck Operator	1		1	$140.00
Mail Clerk	1		1	$ 92.00
Managerial Assistant	1		1	$125.00
Nurse	1	20	21	$160.20
Office Manager		1	1	$150.00
Platform Worker		1	1	$187.50
Postal Clerk	1	1	2	$178.00
Private Secretary		1	1	$135.00
Psychiatric Technician	1		1	$115.00
Receptionist		1	1	$ 98.00
Records Analyst		1	1	unspecified
Records Clerk		1	1	$ 87.00
Saleswoman		1	1	$ 63.00
Secretary		3	3	$125.00
Senior Clerk		1	1	unspecified
Soldier (U.S. Army)	1		1	unspecified
Stock Clerk	1		1	unspecified
Teacher	2	2	4	$152.50
Telephone Operator-Typist		1	1	$104.50
Truck Driver	1		1	unspecified
Hospital Unit Manager		1	1	$192.50
TOTALS	23	48	71	

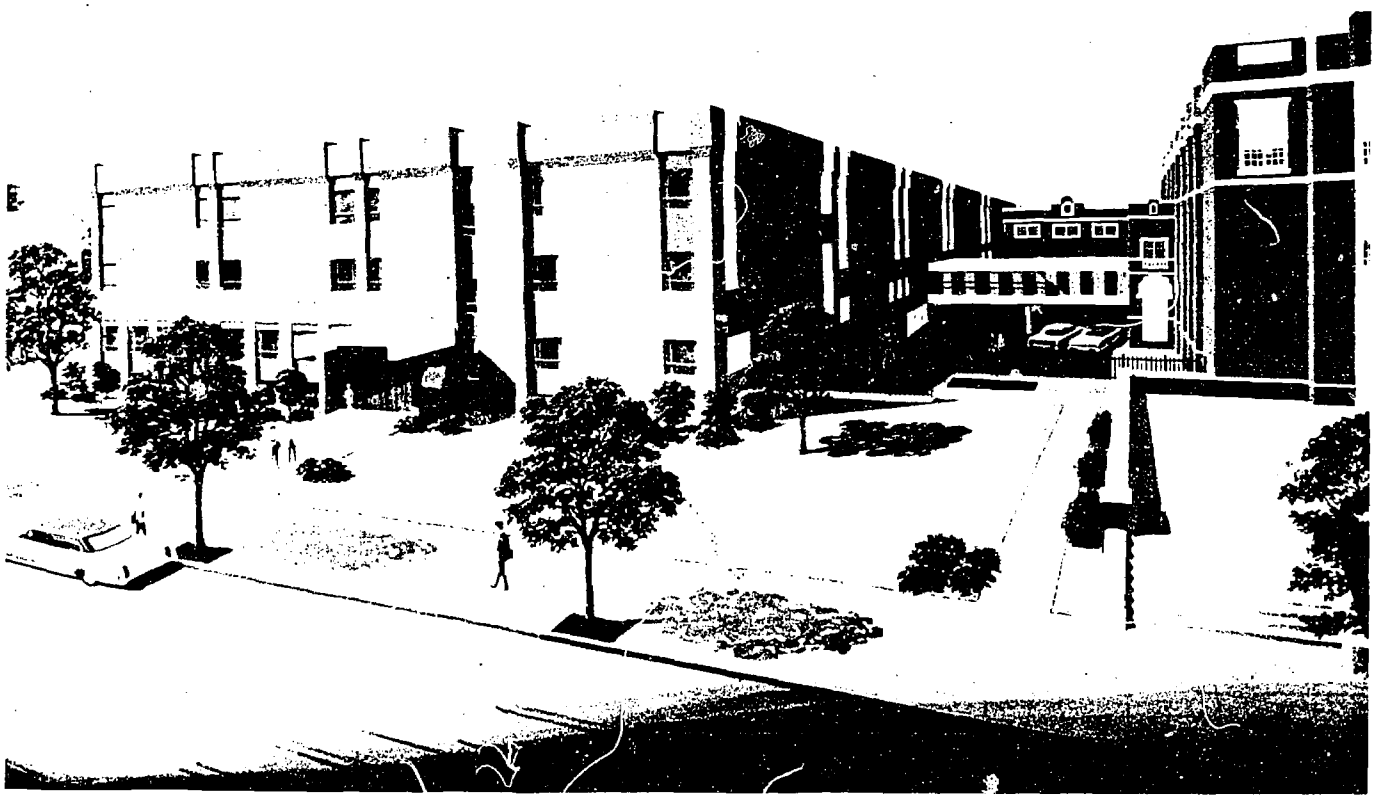
AVERAGE WEEKLY INCOME FOR:

All Graduates	$126.65
Male	131.53
Female	115.78

JOB PLACEMENT AND EDUCATIONAL FURTHERANCE PATTERNS FOR E.C.C. GRADUATES
AS OF AUGUST, 1970
TABLE VIII

QUESTIONS	RESPONSES					
	MALE		FEMALE		TOTAL	
	No.	%age	No.	%age	No.	%age
1) Respondents presently holding full-time positions	31	18.4	48	36.9	79	26.1
2) Breakdown of Respondents Holding Full-Time Positions						
a) Attending a senior college full-time	10	32.2	5	10.4	15	18.7
b) How respondents obtained positions						
1-Individual search	11	35.6	25	52.1	36	45.5
2-Personal contact	6	19.4	8	16.6	14	17.9
3-Relative or friend	6	19.4	2	4.1	8	10.1
4-Employment agency	5	16.1	1	2.1	6	17.5
5-Other	3	9.5	11	25.1	14	8
3) Respondents presently holding part-time positions	50	29.1	30	23.1	80	26.5
4) Breakdown of Respondents Holding Part-Time Positions						
a) Attending a senior college full-time	44	88	24	80	68	85
b) How respondents obtained positions						
1-Individual search	20	40	15	50	35	43.8
2-Personal contact	7	14.0	4	13.3	11	13.7
3-Relative or friend	15	30	1	3.3	16	20.0
4-Employment agency	0	0	0	0	0	0
5-Other	11	16	10	33.4	21	32.5
5) Respondents working but not continuing education	15	18.5	40	51.2	55	34.5

CENTER FOR
OCCUPATIONAL EDUCATION
EXFERIMENTATION AND DEMONSTRATION



Sponsored by

New Jersey Department of Education
Division of Vocational Education

In cooperation with

City of Newark Board of Education

CENTER FOR OCCUPATIONAL EDUCATION EXPERIMENTATION AND DEMONSTRATION

". . . is dedicated to in-school youth as they prepare for their roles in life - offering a diversity of occupational-educational opportunities through which they can realistically develop the knowledge, skills, and attitudes necessary to pursue their life careers."

AS IT IS . . .

Students and Schools in USA — 1971 . . .

850,000 elementary and secondary school students left school before graduation

750,000 "general curriculum" high school students did not attend college

850,000 high school students who entered college in 1967 did not complete the baccalaureate degree or an organized occupational program

put another way

22% of the secondary school students dropped out before graduation . . . 78% of the 10th graders actually graduated

75% of the secondary school students are enrolled in college preparatory or general curriculum programs . . . 25% are enrolled in occupational educational programs

17% of the secondary school students will graduate from college . . . 83% will not

Schooling and Jobs . . .

Economic success — $15,000 or more

22% less than high school education

70% less than college degree

31% college graduates

Present job openings . . .

17% require a 4 year college degree

50% require training beyond high school but less than 4 years of college

30% require high school level occupational training

3% allowance for shifting manpower demand-supply

Jobs and the Future . . .

. . . within less than two decades we have inverted the proportion of production occupations to service occupations from 70% to 30%

. . . an individual in today's work force can expect to change occupations **four** times before retirement

. . . a current high school graduate can be expected to make **seven** changes in his occupation before retiring

. . . today's kindergarteners in the work force of 2000 A.D. will find **one-third** of the jobs similar to those of today — the remaining **two-thirds** do not yet exist

. . . inventions, it is estimated, have not yet reached the mid-point . . . those yet to come will cause jobs to change more rapidly

Unemployment . . .

. . . unemployment is at the highest rate it has been in a decade - 5.9%, despite many skilled and technical jobs which are unfilled

. . . teenagers from 16 to 19 years of age are employed at the rate of **one out of five**

. . . high school graduates 18 to 24 years of age have an 24% unemployment rate . . . those with occupational training in this age group represent less than the national average - 5.2%

. . . unemployment among non-whites shows a ratio of almost 2 to 1

PROJECT COED

A cooperative educational endeavor between the New Jersey State Department of Education, Division of Vocational Education and the City of Newark, Board of Education.

Project COED will be devoted to eight hundred students from the Newark schools for the purpose of increasing the educational opportunities and options available to them. The Center will provide the occupational training on a half-day basis, while the students are pursuing their high school diploma.

Project COED Seeks . . .

. . . relevancy in the educational process

. . . coordination and correlation of occupational education with other curricular areas

. . . prescription of instruction toward individual achievement

. . . reduced student attrition

. . . increased alternatives and options for the student upon graduation

Project COED Will . . .

. . . identify the potential dropout, or otherwise unmotivated student

. . . select students based upon willingness and interest in becoming involved

. . . refer students based upon intense counseling including students interests and aptitudes

. . . prepare students through a diversity of occupational clusters which incorporates ladders and lattices

. . . coordinate and correlate basic skills subjects (communications and computations) with the occupational courses

. . . utilize self-pacing, individualized, instructional methods

. . . integrate guidance, counseling and placement into the instructional program

. . . provide interim and terminal work experiences as integrative activities for realistic self assessment

. . . utilize a progression system based upon individualized performance and achievement

. . . provide intensive counseling to reinforce occupational, educational and personal adjustment

. . . provide job referral and placement services

. . . conduct follow-up services for student and program assessment

Project COED will require the mobilization of . . .

. . . an unalterable committment to youth

. . . an intense desire to promote constructive change

. . . a cooperative, enthusiastic, and reinforcing administration

. . . the cooperation and dedication of COED staff

. . . informed and involved parents

. . . an informed and involved school community

. . . an informed and involved business and industrial community

. . . a desire on the part of all concerned to contribute to the fulfillment of Newark's educational potential

Project COED . . .

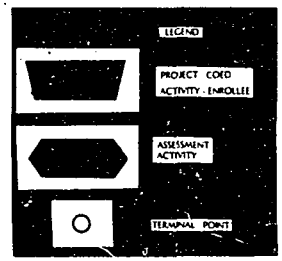
. . . is a REALITY

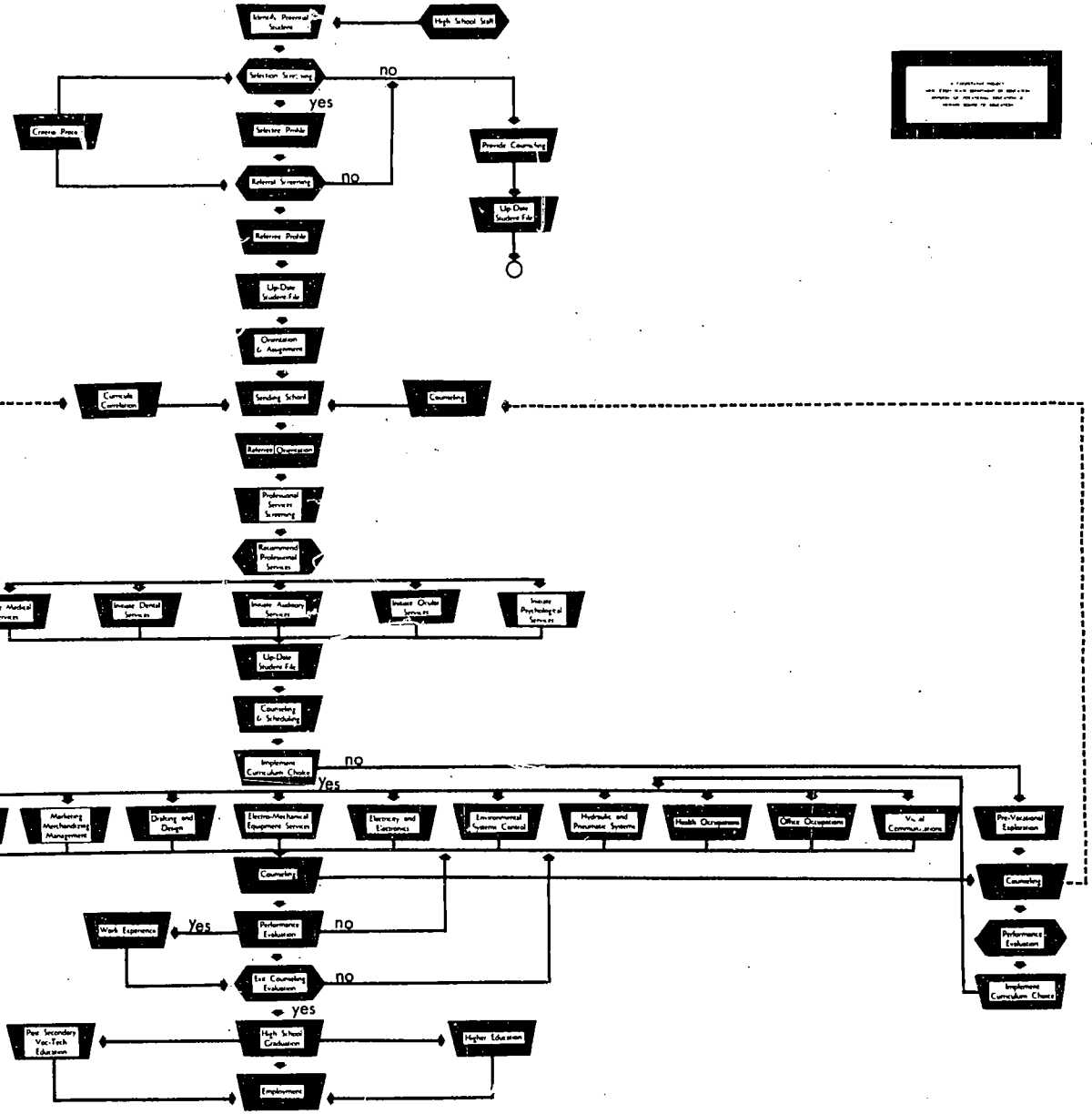
. . . is HERE

. . . is NOW

CENTER FOR OCCUPATIONAL EDUCATION – EXPERIMENTATION AND DEMONSTRATION

A SYSTEMS APPROACH TO INDIVIDUALIZED ACHIEVEMENT





DISCRIMINATION IN CAREER EDUCATION

In instituting a program like career education, which is focused primarily on entry into the labor market, there is a great potential for racial and sexual discrimination. For years minorities and women have been confined to a few jobs considered commensurate with their perceived level of ability. This discrimination has been fought against in recent years, primarily by the federal government. With the government's vigilance wavering, we in the city must be our own watchdogs and watchdogs over the schools.

The city and County schools in the past have practiced blatant sexual discrimination in the vocational area. Girls in a special vocational school had limited course offerings and an obsolete building; the boys in a comparable school had varied courses to choose from and a remodeled and well cared for building.

The Board of Education recently made moves to correct this situation. The two student bodies will be merged in the boys' school. This will give the girls equal opportunity with the boys.

It must be stressed, however, that mere merger of the student body doesn't mean that the girls will enroll in the areas traditionally reserved for men. The girls must be encouraged to enter whatever field they desire. They need to learn that women can do any job a man can and still retain their womenhood. This kind of change in attitude does

not come spontaneously on the part of the student. Everyone in the schools needs to adopt it and promote it.

The County vocational schools have, until now, promoted the same sexist attitudes. Their only concessions to the sexual discrimination clause in the Civil Rights Act of 1964 were to stop calling it North Thirteenth Street School and a nominal sexual integration which actually continued the three all-male (day) high schools. In addition to this segregation, the girls also suffer from limited course offerings. Despite the numerous changes in the job market over the years, the courses given at North 13th Street have not changed in at least twenty-two years.

Recently, the National Organization of Women (NOW) brought suit against the County schools to stop this discrimination. The court ruled that the schools have to be made coeducational, and the system must encourage girls to go to the formerly all-boys schools and vice-versa.

These two decisions by the Board and by the courts will help to insure that girls coming into these schools are not discriminated against and are encouraged to develop to their fullest potential. We cannot, however, let these decisions lull us into a sense of complacency. It must be kept in mind at all times that career education is for people and it must be used for the benefit of the people.

We must also act against racism in career education. We cannot allow Black and Puerto Rican students to be confined to low-paying jobs. This means that they must be allowed and encouraged to enter any field they wish whether or not the field has been confined to Whites in the past.

There is a need for more Black and Puerto Rican teachers and administrators in the County schools. Relative to the numbers of minority students, there are very few minority staff members. This means a lack of role models for the students. The County should make an effort, when looking for new teachers, to actively recruit Blacks and Latinos.

In short, institutional discrimination must be ended in the schools. In order to facilitate this, we offer the following recommendations:

1. Active recruitment of minorities and women as teachers.
2. Encouragement so that all students can develop to their fullest potential.
3. Career awareness so that all students are aware of the diversified job opportunities in Newark.
4. Keeping college open as an opportunity for any student. This will insure that the student can advance beyond his high school training if he so desires.
5. Opening up of the unions to minority workers. This will enable minority students to get jobs when they graduate. Such opening up requires active promotion by the business community.
6. The community must be involved in all planning for career education. They will help to insure that no student is discriminated against for any reason.

RACIAL COMPOSITION of the ESSEX COUNTY VOCATIONAL and TECHNICAL HIGH SCHOOLS

	Students		Full-time instructional staff	
Totals for the System	Number	Percent	Number	Percent
Black	1021	49.2	18	10.8
Spanish Surnamed	208	10.1		
Oriental	3	0.2		
Other	842	40.5	148	89.2
Total	2074	100.0	166	100.0
Sussex Avenue				
Black	415	90.2	9	22.5
Spanish Surnamed	38	8.3		
Oriental	0	0		
Other	7	1.5	31	77.5
Total	460	100.0	40	100.0
Irvington Center				
Black	307	61.3		
Spanish Surnamed	49	9.8		
Oriental	0	0		
Other	145	28.9	35	100.0
Total	501	100.0	35	100.0
North 13th Street				
Black	191	32.8	6	10.7
Spanish Surnamed	57	9.8		
Oriental	0	0		
Other	335	57.4	50	89.3
Total	583	100.0	56	100.0
Bloomfield Center				
Black	108	20.4	3	8.6
Spanish Surnamed	64	12.1		
Oriental	3	.6		
Other	355	66.9	32	91.4
Total	530	100.0	35	100.0

Figures compiled from the Fall 1972 Elementary and Secondary School Civil Rights Survey for the Essex County Vocational Schools, required under Title VI of the Civil Rights Act of 1964.

BOARD OF EDUCATION
DEPARTMENT OF PRACTICAL ARTS
31 GREEN STREET
NEWARK, NEW JERSEY 07102

EDWARD I. PFEFFER
ACTING SUPERINTENDENT OF SCHOOLS

JOSEPH RAM
ACTING DIRECTOR

WESLEY DANILOW
COORDINATOR OF VOCATION EDUCATION
AND SPECIAL INDUSTRIAL ARTS COURSES

May 2, 1973

Memo to: Mr. Richard Harclerode, Chairman
Career Education Working Committee

From: Joseph Ram, Acting Director
Practical Arts Dept. Newark Board of Education
Wesley Danilow, Coordinator of Vocational Education
Newark Board of Education

Re: Report to Working Committee

1. Statement of Philosophy and Goals

The Career Education Program in the Newark Public Schools would like to provide all pupils in the system (K-12) with exposure to classroom activities and materials that would relate and correlate curricular experiences to the "world of work". The final practical outcome of the program should be the development of attitudes and habits, as well as the acquisition of basic marketable skills that would make the pupil an employable, useful, and productive citizen.

If such a philosophy is to be successfully realized, it would require a concerted, cooperative effort by all involved;

a. It will be necessary to establish an inventory of employment opportunities available on a short term basis (6 months to one year projection) along with an inventory of skills for training or re-training.
b. It will be necessary to make available a number of definite opportunities by industrial and commercial interests for cooperative on-the-job training experiences. (part time job slots)
c. Provide opportunities for guided tours for both pupils and teachers (together and separately) through various industries and/or commercial establishments.
d. Provide possible part-time or summer employments for teachers and counselors so that they may be able to speak from experience as to what is required and expected of employees as service and/or production employees.
e. Provide for the use of modern equipment, either in school or on site, to provide training on a realistic and relevant basis.

2. Reaction to Organization Outline presented at the April 17 meeting.

The outlined plan of organization would seem to be a practical approach, in that it provides for an Advisory Board (Board of Directors) which provides for input from from all agencies involved. (schools, government, industry, commerce, labor, and the citizenry at large).

The broad over-all plan to be developed by this agency should be carried out by a full time paid Director of Career Education who would provide the liason between the Career Education Advisory Board and the educational authorities. He should be assisted by various committees as outlined to determine specific programs to be implemented.

If the plan is to operate, the Director must be in a position of authority to implement such plans. We suggest that the director be a paid executive of the Newark Board of Education. (Salary may be subsidized by outside commercial groups represented in the Career Education Advisory Board). Since the program envisioned would affect all areas of operation of the Board of Education, (elementary, secondary, special schools) it would seem advisable that recommendations of the Director, should be to the Board through the office of the Superintendent of Schools, or the Deputy Superintendent.

BOARD OF EDUCATION
NEWARK, NEW JERSEY 07102

EDWARD I. PFEFFER
ACTING SUPERINTENDENT OF SCHOOLS

E. ALMA FLAGG
ASSISTANT SUPERINTENDENT
IN CHARGE OF CURRICULUM SERVICES

May 3, 1973

Memorandum

To: Mr. R. W. Harclerode

From: E. Alma Flagg

Re: 1. Organizational Plans
2. Suggestions

1.

I am confused by the existence of an Advisory Board and an Advisory Committee. Two plans seem to be on the chart, and it is not clear to me. At what point does the Director come in and how does he function?

Duplication can be avoided if this organization directs it efforts mainly toward "field work" -- visitation and observation, job training, jobs -- all with the necessary advice to school people on numbers of personnel likely to be needed in various fields.

2.

a. The business community should double the number of students engaged in work-experience programs.

b. The labor community should democratize its practices of enrollment, training, referral, and support.

c. The government should provide a minimum of 500 positions in which students may have work-experience and learn about the practical problems of government service.

d. All participants -- business, labor, and government -- must constantly seek to get the best in attendance, attitudes, and productivity from their adult employees and must impress upon students the fact that habits and attitudes, speech and appearance, interest and industry are very important in the real world. They must see the incompetent weeded out and the competent rewarded.

EAF:vg

TO: Richard W. Harclerode, Study Team Chairman, Greater Newark Chamber of Commerce Career Education Task Force

FROM: Susan T. Wood, Essex County Career Education Coordinator

SUBJECT: Career Education philosophy goals

CAREER EDUCATION:

Career education is a process whereby the community, home, and school resources are focused so that each individual gains the necessary skills and understanding to achieve personal fulfillment, economic self sufficiency and capability for dealing with the world outside himself and within his value system.

A CONCEPT OF CAREER EDUCATION

Career education is needed by and intended for all people. It is a people-oriented concept which is responsible to public demand for both relevance and accountability. It is a lifelong process which extends from early childhood through adulthood. It is based upon the premise that all honest work and purposeful study is respectable. All types of occupational endeavor are contained within its parameters.

Career education provides the means by which the educational system can focus on career development, thereby expanding options for individuals and helping them achieve self-determined objectives. Career education will require significant changes in the total educational program. It provides a unifying core for the total educational enterprise, with intensive occupational preparation as a significant aspect. Therefore, vocational education is a key component and an intergral part of career education.

GENERAL OBJECTIVES

To provide a coordinated comprehensive program K-adult, to assist each person in reaching the level of attainment to which he

or she aspires and for which he or she possesses ability and

To create a meaningful cooperative effort between the County Vocational Technical Schools, the Newark Manpower Training Skills Center, the Project Center for Occupational Education Experimentation and Demonstration the County Community College and the Local School Districts for the purpose of developing, improving and expanding the vocational aspect of career education to meet the needs of all people.

SPECIFIC OBJECTIVES:

1. To provide for broad occupational awareness, and exploration at the elementary and secondary school level so as to increase student awareness of the range of options open to them in the world of work.
2. To provide for work experience, cooperative education and similar programs making possible a wide variety of offerings in many areas.
3. To provide the option for students to enroll in vocational programs so that they may receive specific training in job entry skills just prior to the time that they leave school, (some of these training programs might be very intensive and of short duration).
4. To provide for guidance and counseling for initial placement of all students at the completion of their schooling. Placement might be in a job or in continuing education.

Career education attempts to balance and synthesize the myraid components of the American education system into a sequential ladder of education stages known as:

Career awareness

Career exploration

Career preparation

Career placement

The following chart graphically illustrates this conceptual framework, as recommended by the Division of Vocational Education, State Department of Education, New Jersey.

TO: Richard W. Harclerode, Study Team Chairman, Greater Newark Chamber of Commerce Career Education Task Force

FROM: Susan T. Wood, Essex County Career Education Coordinator

SUBJECT: Expectation of business, government and labor

Advise the school administration on the type of offerings required to satisfy the preparatory as well as the retraining and upgrading needs of individuals of the community.

These functions can help the educator:

Determine and verify the need for training;

Provide tangible evidence that business, government and labor is supporting (the) program;

Review past accomplishments and forecast trends affecting training and employment;

Provide financial, legislative and moral support;

Guide students in relation to the world of work;

Provide accurate occupational information;

Find placement opportunities for students;

Determine criteria for evaluating student performance;

Develop cooperative work experience programs for students;

Provide a resource directory listing field trips, speakers, films, cassettes, etc.;

Establish a public relation program to promote car-

eer education and to interpret programs to the community, unions and to employers.

Business, government and labor should conduct occupational surveys that are designed to provide the following type of information:

The number of people in a geographic area currently employed in a given occupation, and additional members needed currently and through the next (usually) five years.

The occupation(s) in greatest demand.

The jobs within an occupation in which training is needed.

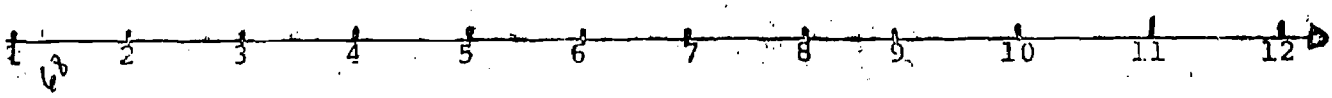
The number of graduates from school occupational education programs who might be accepted for employment in a community.

The need for supplemental training for people already employed.

New areas in which school preparatory or upgrading education and training are needed.

The education and training requirements of the occupation, job or industry which can be met by a school program.

THE CAREER DEVELOPMENT CONCEPT



CONTINUING GOAL ONE: to identify and assess interests, abilities, and opportunities as they relate to making meaningful career decisions through counseling and other services.

CONTINUING GOAL TWO: to explore and develop individual occupational potential through programs that assist in clarifying self-identity, in developing good attitudes, in expanding career knowledge and job skills leading to appropriate job placement and/or continuing education:

Elementary School Programs

A period of exploration and self-discovery. Opportunities for self-expression and coping with man-made environment contribute to the formation of individual behavior patterns and to an appreciation of the function of work in our civilization.

Middle School Programs

Vocational exploration on a more sophisticated level leading to greater specificity of goals based on expanded knowledge of individual skill potential and greater self awareness.

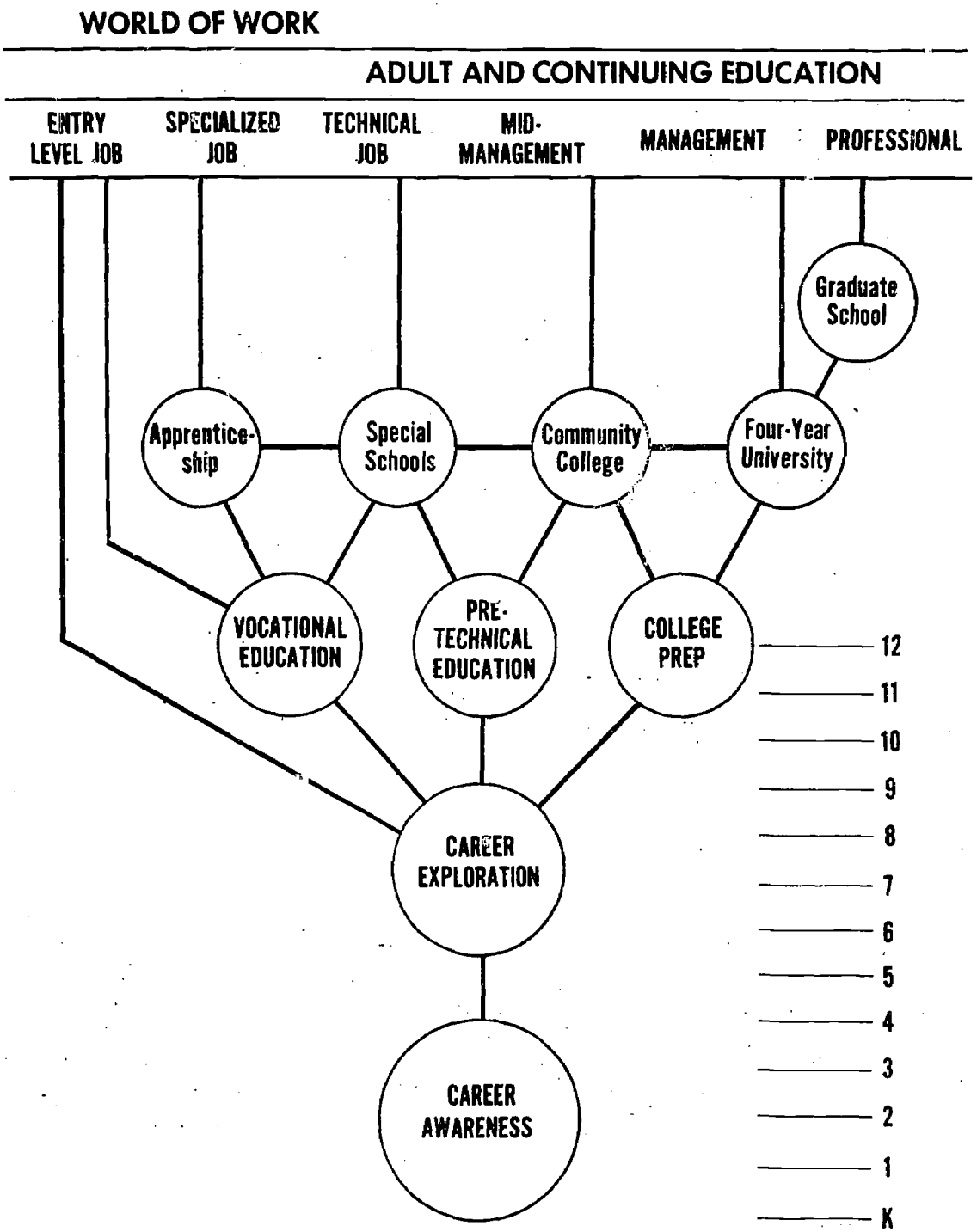
High School Programs

Study, evaluation, in-depths testing of tentative choices and expanded development of specific job skills in preparation for employment and/or continuing education.

OUTCOME: The cumulative effect of the Career Development Concept as exemplified through the elementary school, middle school, and high school experiences results in expanding the involvement between the student, the school, the home, and the employing community; this expanded involvement contributes to increased benefits and effectiveness in the use of their respective resources.

CAREER EDUCATION

ELEMENTARY SCHOOL THRU ADULTHOOD



TO: Mr. R. W. Harclerode
Career Education Task Force
Greater Newark Chamber of Commerce

FROM: Mr. George B. O'Connor

RE: Career Education Philosophy and Goals

Vocational education and vocational schools are of many kinds and grades. At the top we have our professional schools preparing people for such things as medicine, dentistry and engineering. At the other end of the scale we have training on the job by the foreman in simple skills such as running a very simple machine or tightening one or two bolts as part of an assembly job. In between these two extremes and not too far below the professions, we have the real skilled trades and the technical occupations. Our County Vocational and Technical High Schools offer preparation chiefly for the latter occupations.

The National Advisory Council on Vocational Education has pointed out that vocational education is still not reaching the great number of students who should profit from vocational education.

If the concept of career education is properly conceived and directed it could serve as the vehicle to bring vocational education to the vast majority of our students. However, it must never be assumed that career education is synonymous with vocational education and would serve the same need. Yet, the two are linked together.

There has been a tendency to push everyone through the same mol which is partly responsible for our obsession with a college education for all; and the resultant entrapment of students in general education courses. Career education should expand the variety of options open to ou young people.

Vocational education is but one part of career education, but it is a major and indispensable part. Vocational education is the skill training component which will most directly affect the majority of students in a career education program. If properly implemented the career education program should help to build a stronger and expanded vocational education program.

Predictions are that 80% of high school students could be influenced by a career education program. If this is true we foresee a tremendous expansion of vocational education which would include facilities as well as program offerings.

Our goals in vocational education remain basically the same; to provide that type of education which will fit people for profitable employment. The advent of career education should have no affect on our basic concepts other than to create more interest in pursuing training for a skill.

The following statistics, as reported by the U. S. Office of Education in December 1972, can only strengthening the argument for both career and vocational education.

Each year nearly 2.5 million students leave the formal education system of the U. S. without adequate preparation for careers. In 1970-71 850,000 elementary and secondary students became dropouts. Many found school completely irrelevant. In the same year 750,000 general curriculim high school graduates did not attend college and were ill-prepared for jobs. Also in the same year, 1970-71, 850,000 high school students who entered college in 1967 did not complete the baccalaureate or any organized occupational program.

As a result of the schools' failure to provide adequate education for employment, the Department of Labor spent nearly one billion dollars last year on remedial manpower programs to give 1.2 million trainees entry level skills.

Based on the above information and concepts we would make the following recommendations:

1. That Career Education be considered a part of a total concept rather than an individual program.
2. That the business community provide us with the areas of job opportunities which would assist schools in evaluating existing programs.
3. That business and industrial projected manpower needs be provided so that early planning may take place and changes can be projected in curriculum.
4. That county and local school districts concur on the basic concept that their institutions are providing education that is job oriented.
5. That lines of communication be established among educational institutions to prevent duplication of programs.

Essex County College
31 CLINTON STREET, NEWARK, NEW JERSEY 07102
201-621-2200

The attached is a statement of Essex County College's career education thrust, and expectations from other agencies as regards that area of concern. With our plans now being formulated for a strong career education effort, it must be realized that specifics outlined herein may be subject to change over the next few years.

Submitted 5/2/73 by

J. H. Hammel, Ph.D.
Assistant to the President

Career Education at Essex County College

Career education objective:

To offer a career program that provides a student with the knowledge, skills, and attitudesrequired by a specific field and insures his entry on a career ladder commensurate with his education.

Specific activities:

1. Identification, by an advisory committee of local employers, of short and long range manpower needs. Areas to be stressed will include aviation and shipping, medical and para-medical, and the Hackensack-Meadowlands Sports and Cultural Complex.

2. Provision, through trend analysis, of information useful to CHEN and other cooperating institutions in terms of comparative allocations of program resources.

3. Assessment of student and service population characteristics and needs in terms of program implication in relation to institutional resources and manpower data.

4. Assessment of community attitudes toward ECC in which potential recipients of ECC services might want new or different services rendered.

5. Provision of long or short range training or education, for upgrading and skill development, ideally for credit, including a remedial component, to local employers.

6. Support of internal staff development efforts of local employers jointly with their training staff.

7. Encouragement of cooperative education opportunities within employer's organization for ECC students to earn credit as part of ECC's Career Development efforts. These would either be paid or unpaid activities toward extending the instructional resources of the college into the local world of work environment.

8. Provision of a one or two semester career orientation and exploration course for credit for entering ECC students in order to provide them with a better assessment of career opportunities and a chance to assess personal desires and characteristics more realistically against aspiration and the potential job market.

X 9. Provision of career opportunity information to high school students.

X 10. Effort toward guaranteed placement

Involvement of other Agencies

To achieve the above-listed objectives, cooperation by other agencies--educational, business, government, labor, and others--is vital. Specifically areas of cooperation will include data gathering re manpower needs and trends, establishment of cooperative education programs, and of internal staff development programs, and in efforts toward success in achieving outside funding support. This cooperation among agencies will be of mutual benefit to all involved, resulting in more efficient allocation of resources, diminishing of duplication of effort, increased attractiveness to funding agencies, increased opportunities for youth and those seeking re training, and hopefully a general stimulation of industry and commerce in the Greater Newark Area.

The Greater Newark Chamber of Commerce may very well be the best vehicle to assure this cooperation.

REGISTERED

Waiters, Waitresses, Hotel, Motel Service Employees Union, Local No. 109, AFL-CIO

AFFILIATED WITH HOTEL AND RESTAURANT EMPLOYEES AND BARTENDERS' INTERNATIONAL UNION

17 LOMBARDY STREET, NEWARK, N. J. 07102

Telephones 622-3580-1-2-3

MY OBJECTIVES:

- promote understanding and cooperative relationships among labor, management, civil rights groups, and the academic community;
- strengthen human relations and equal opportunity programs in unions and industry;
- further inter-group learning, attitude change, race conflict resolution, and understanding of labor's role in community problem solving;
- help develop leadership skills and career opportunities for minority group workers and women trade unionists.

In conclusion, I think we should have 'Affirmative Action Programs' for white-collar as well as blue-collar workers at the Airport. Enclosed is a Human Relations Program I worked out with Essex County College.

Michael T. Doorley
President

Enclosure

Labor Studies - Human Relations Program

James Hirschinger

Basic Purpose: The basic purpose of this Human Relations program is to provide. The opportunity for participants to better understand the value systems, motivations and needs of themselves and others. Hopefully, this understanding will help people to avoid misunderstanding which occurs through faculty communication.

Structure: The Human Relations experience will be structured interactions which will occur in 90 minute blocks over a period of six weeks. An outline of the program is presented below. It is based on the concept that inner-examination or introspection in terms of looking at ones own value system is necessary before external evaluation of others can take place in a meaningful way.

SESSION #1

30-minutes/ Interviewing Process as a warm-up, patticipants pair-up and interview each other and then introduce the person interviewed to the group.

15 minutes/ Individual evaluation of past achievements utilizing evaluation form.

45 minutes/ Group discussion of individual past achievements and what it means in terms of a person's present activities and attitudes.

SESSION #2

60 minutes/ Origami Game -(Part 1)

This is a Need-Achievement exercise in which participants are involved in making products for an aircraft company. The products (mocnships) are constructed from paper and each participant must estimate his rate of production(goal) and then calculate the profit(achievement). The exercise is a highly involving experience which helps the pacticipants understand their individual patterns of goal setting and work attitudes.

Follow-up Discussion - 30 Minutes

SESSION #3/

60 minutes/ Origami Game -(Part 2)

The second part of this exercise involves the production of a new product. In this segment the participants will work in pairs of assembly teams.

30 minutes/Discussion/ The discussion will relate to the participants feelings about working as a unit.

SESSION #4

Case Study/ A case study of a company which is having personnel problems will be discussed in light of the goals, motivations and attitudes of the people in the study.

SESSION #5

Role-Playing/ The group will role-play a problem situation which may occur in a working environment. Participants will reverse roles in an attempt to understand the points of view of others

SESSION #6 - Wrap-up + Evaluation

Human Relations Program

Hirshinger

12 hrs.
17 students

Cost = Instruction:	$250
Materials =	75
Food costs =	35
~~total~~	$360

Roles Career Education Should Play as Viewed by the Community

1. For curriculum and/or program of Newark Schools to be geared toward serving all youngsters.

2. For each child to be well on his or her way to reaching their full potential when leaving, hopefully, the 12th -rade.

3. For Educators, Community-Business to work toward projecting a better Public School image -

    - Better Public Relations - Newark Magazine - school page
    - Company bulleti s - newsletters - include school information may be only real contact parent has.
    - More exposure to positive achievements

4. For better and more communication between Education-Business and Government Agencies.

    - Clearing house before new programs are launched - for better utilization or (more) free use of existing programs.
    - LPN course - Essex County - Manpower

5. For Business to be in touch and provide up-to-date data on what they are doing and how Educators can help prepare students to meet their (business) needs.

6. To push for federal guidelines for education achievement (re - grade level expose to specific materials, etc.)

MAYOR'S EDUCATION TASK FORCE
SUITE 204
972 BROAD STREET
NEWARK, NEW JERSEY 07102
(201) 624-0121

KENNETH A. GIBSON
Mayor

DR. JAMES A. SCOTT
Chairman
DONALD HARRIS
Executive Director

CAREER EDUCATION IN NEWARK

June 8, 1973

Prepared for: The Chamber of Commerce
Career Education Committee

GOALS FOR CAREER EDUCATION

1. Every student in Newark should read on grade level.
2. Every student should learn basic math and science concepts.
3. Every student should leave school with a marketable skill.
4. No student should be denied the opportunity to go to college.
5. Students should not be "tracked"; career education should involve all students and teachers.

ROLE OF THE CITY

1. The City can coordinate with business and labor in identifying existing and future jobs and careers.
2. The City can promote use of the computerized job bank run by the New Jersey State Employment Service.
3. The City and the Newark Economic Development Council could serve as a source of information regarding industrial and commercial development along with the Business and Industrial Coordinating Council and the Chamber of Commerce.
4. The City could explore the possibility and mechanics of interning high school students for short periods of time. These internships would give students knowledge about one aspect of City government and about possible careers.

ROLE OF BUSINESS

1. Business is the only group in the city that can provide motivation to the educational agencies in the city to change the present curriculum and teaching methods.

2. Business can use its influence with labor to integrate the unions.

3. Business could conduct a job needs survey for Newark and the surrounding area.

4. Business can coordinate with the schools on determining new course offerings and updating existing offerings so that students are trained for existing and developing jobs and careers.

5. Business can provide speakers, resource materials, and field trips for elementary and junior high school students.

6. Business can help keep teachers up-to-date in their fields by conducting short, annual workshops. These could be similar to those conducted by the National Alliance of Businessmen in the past.

7. Businesses might provide release-time so their employees could serve as part-time or occasional teachers.

8. Business should hire high school students who are being trained for jobs and are available half of the school day.

9. The business community and the schools can explore the possibility of using plants as classrooms during off-hours. This would cut down on the amount of money the schools must spend to keep their equipment up-to-date.

10. Newark businesses must commit themselves to hiring Newark residents.

ROLE OF LABOR

1. Labor unions must open up to minorities on an equal opportunity basis.

2. Labor unions must recruit and hire minority workers as apprentices.

3. Labor unions can help the schools to keep their curriculum current the job market.

4. Labor unions can provide speakers to the schools on the various careers the unions encompass.

ROLE OF THE COMMUNITY

1. The community must be involved in setting up goals.

2. The community must have a strong voice in setting up priorities for implementing career education and in the entire planning and evaluation process.

3. The community must watchdog other agencies and groups to insure that career education is not used to keep Newark's students down.

OCCUPATIONAL DEMAND, SUPPLY AND NEEDS IN DADE COUNTY 1970-1980

In the light of the available trend data and information from local sources, about the shape, configuration and dynamics of the Dade County economy and population and their imp lication for the future, estimates were constructed which project the expected annual demand for workers by occupational title up to 1980. The results were incorporated in Table 9, pages 31 to 39.

The methodology employed, in view of the unavailability of comprehensive official estimates from either federal, state, or local agencies, follows:

1. It was determined that Dade County has consistently over the past twelve years held about 22.5 percent of the Florida labor force.

2. Estimates from the Dade County Planning Commission provided a population estimate for the Miami SMSA for 1980.

3. Based on current labor force participation rates in Dade County an aggregate labor force figure was derived from the 1980 population estimate.

4. The 1970 census figures on occupational attachment of the labor force in Dade County by 41 major categories were compared to all Florida figures and adjustment factors were derived to compensate for differences in employment mix.

5. Projections of the all-Florida growth in employment to 1975 were obtained from the State Department of Commerce and the average annual rate of growth for the State was derived. These overall estimates were reduced by the 22.5 percent factor and internal adjustments were made in each of the 41 categories to arrive at the internal Dade County mix.

6. The annual average growth figure derived was then adjusted to fit the aggregate of the 1980 Dade County labor force to arrive at a more refined annual demand estimate.

7. As a check on this procedure the question was asked as to what the occupational configuration would be

if Dade County now were as large as expected in 1980. By adding the 1970 occupational mix in the Orlando area to that of the 1970 mix of Dade County, the desired aggregates were obtained. These were compared to the projection previously obtained from the State matrix and the results were remarkably similar, thus creating another degree of confidence in the Dade County projection.

8. To obtain more specific and detailed occupational estimates which would more closely correspond to Office of Education titles beyond the 41 categories originally employed, the national mix from Tomorrow's Manpower Needs was employed to proportion out the detailed occupations within each major group.

9. In order to obtain the need for replacement workers in addition to the new worker needs, national rates of withdrawal from each occupation were applied to the 1970 labor force. The withdrawal figures obtained for each occupation were then added to the net growth to obtain a total demand figure.

10. Following this the official output figures, by the Office of Education title, of the Dade County schools for 1971 were subtracted from the average annual demand figures in each of the corresponding occupational titles of the matrix and a figure of annual need was thus obtained for most of the categories listed.

The need figures presented in the attached matrix, Table 9, pages 31 - 39, can now serve as guidelines for the local vocational education planners as an aid in their planning the scope and direction of the Dade County program. It should be emphasized that these figures are basically estimates and will hold up only if current trends continue as they have in the past, and the judgments of the estimator as to the length and significance of these trends is accurate.

In respect to the projections presented here, it is suggested that the vocational education planners in the county familiarize themselves with current and projected occupational data programs now being produced by the U.S. Department of Labor, Bureau of Labor Statistics, with applicability to the State of Florida and to the Miami Standard Metropolitan Statistical Area, (SMSA). These programs can be summarized as:

1. The Occupational Employment Statistics Program -

This program will provide current data on employment by industry and occupation on a national, State and SMSA level to serve as a basis for projecting manpower needs by occupation. The first phase is based on a sample of manufacturing firms to be cycled every two years by a different industry sector such as services, trade, etc. Currently, the manufacturing employment sample for Florida and Dade County is nearing completion.

2. The Integrated National-State Industry Occupational Employment Matrix System

This program will provide a series of 51 State matrices, including the District of Columbia. BLS projection techniques will be applied to the 1970 census data and a uniform projection to 1985 will be developed by each of the State Employment Security Agencies working through regional computer centers established by BLS. Although the matrices will be originally State-wide only, provision can be made to develop local matrices if adequate funding is available.

In addition to the above programs BLS will have available a 440 title occupational/industry computer printout for each of the States and SMSA's, produced from 1970 census data. To obtain this for the Miami area a request should be made by the Florida employment security agency which is the local contact for BLS.

Finally, BLS will also produce a 2,000 title matrix from the same source.

For planning purposes it is significant to note that the "Not Elsewhere Classified" titles have been reduced to less than two percent of the total thus eliminating an annoying detail for those who work with the information.

When the information detailed above is available, within the early part of 1973, necessary refinements and adjustments can be made in the projections in Table 9, pages 31 - 39.

As can be noted in the table each of the occupations listed shows the percentage of current output to annual demand as a guide to the extent of the need for training. In addition, following the table is a discussion of the highlights in each of the major occupational categories.

For another presentation of the employment configuration and the relationship of supply to demand three tables are available in Appendix "A" together with a listing of the 440 occupations which will be enumerated soon in the forthcoming Census Publication, Florida - Detailed Characteristics of the Population, 1970.

TABLE 9

ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY 1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
ENGINEERING TECHNICIANS		5,119	339	1,251	(912)	269.0
Agriculture and Biological technicians, except health	Agriculture Science	97	6		6	
Aeronautical	Aeronautical Tech.	205	14		14	
Chemical	Chemical Tech.	133	9		9	
Civil	Civil Tech.	1177	78	15	63	19.2
Electrical and Electronic	Electrical Tech.	1551	103	121	(18)	117.5
Industrial	Industrial Tech.	328	22		22	
Mathematical*		*	*			
Mechanical	Mechanical Tech	732	48	9	39	18.8
Metallurgical	Metallurgical Tech.	41	3		3	
Mining	Mining Tech.	26	2		2	
Sales	Sales Tech.	256	17		17	
Technicians, N.E.C.	Technology Specialty	573*	37*	1,106	(1069)	2989.2
NON-DEGREE PROFESSIONAL AND TECHNICIANS, EXCEPT HEALTH AND ENGINEERING AND SCIENCE		3,737	248	258	(10)	107.0
Computer Programmers	Programmers		94	37	57	39.4
Designers	Commercial Art Occup.		50	65	(15)	130.0
Draftsmen	Drafting, Mechanical and Architectural		104	156	(52)	150.0
Photographers	Personal Services		33	- -	33	- - -
Radio Operators	Ground Operations		7	- -	7	- - -
Surveyors	Engineering Related Technology		17	- -	17	- - -
Tool Programmers, numerical Control	Engineering Related Technology					
Technicians, N.E.C.	- - - - - - - - - - - -		21	- -	21	- - -

OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY
1970-1980
(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
MEDICAL AND HEALTH TECHNOLOGIST AND TECHNICIANS		10,750	768	202	566	26.3
Dental Hygienist	Dental Hygiene		18	2	16	11.1
Clinical Laboratory	Medical Lab Assisting		100	- -	100	- - -
Dental Laboratory	Dental Lab Tech.		20	20	- - -	100.0
Nurses, Professional	Nursing (Assoc.Degree)		528	112	416	21.2
Radiologic	Radiological Tech.		63	13	50	20.6
Health technologists and technicians, N.E.C.	Medical and Dental Technology		39	55	(16)	141.0
MEDICAL, OTHER HEALTH WORKERS						
Dental Assistants	Dental Assisting		38	91	(53)	139.5
Health aides, except nursing; Nursing aides, orderlies, and attendants	Health Assistant; Nursing Assistants (aide)		634	425	209	67.0
Practical Nurses	Practical (vocational) Nursing		268	253	15	94.4
SALES WORKERS		60,402	3,485	3,001	484	86.1
Salesmen and sales clerks						
Manufacturing; Wholesale Trade	Industrial Marketing; Wholesale Trade, Other	12,954	696	58	638	8.3
Retail Trade	Retail Trade, Other	30,795	1,804	512	1,292	28.4
Services and Construction	Industrial Marketing	16,653	985	2,351	(1,366)	138.7

TABLE 9

ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY 1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
CLERICAL AND KINDRED WORKERS		130,783	8,042	4,440	3,602	55.2
Bank Tellers	Tellers	- - -	152	- -	152	- - -
Bookkeepers and Accounting workers	Bookkeepers	15,511	1,032	931	101	90.2
Cashiers	General Merchandise		515	- -	515	- - -
File Clerks and Office Machine Operators	File Clerks and Machine Operators		402	860	(458)	113.9
Bookkeeping and billing machine operators						
Calculating machine oper.						
Computer and console oper.						
Duplicating machine oper.						
Keypunch operator						
Tabulating machine oper.						
office machine oper.N.E.C.						
Receptionists	Reception and Information Clerks		*			
Secretaries	Secretaries	37,420	2,032	2,082	(50)	102.5
Shipping and receiving clerks	Shipping and Receiving Clerks					
Stenographers	Stenographers		/			
Stock Clerks and storekeepers	Stock and Inventory Clerks		*			
Teacher aides, except school monitors	Teachers Assistant		*			
Telegraph Operators	Communication Systems Clerk and Operators		*			
Telephone Operators	Communication Systems Clerk and Operators		*			

/ - included in secretary category

* - included in miscellaneous clerical workers

1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAMS Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
CLERICAL AND KINDRED WORKERS CONT'D						
Ticket, station, and express agent	Transportation		*			
Typists	Typists		/			
Misc. clerical workers	Office Occupations, Other	77,852	*3,909	567	3,342	14.5
CRAFTSMEN AND KINDRED WORKERS		91,623	4,285	2,455	1,839	57.3
Construction Craftsmen **	Construction & Maintenance Trades	27,098	1,412	- - -	- - -	- - -
Boilermakers	Construction & Maintenance Trades		2	- - -	- - -	- - -
Brickmasons and stonemasons	Masonry		86		86	
Cabinetmakers	Mill Work and Cabinet making		97		97	
Carpenters	Carpentry		468		468	
Cement and concret finishers	Masonry		35		35	
Cranesmen, derrickmen and hoistmen	Operation, Heavy Equipment		239		239	
Electricians	Industrial Elect.		229		229	
Excavating, grading and road machine operators	Operation, Heavy Equipment		162		162	
Floor layers, except tile setters	Construction & Maintenance Trades, Other		21		21	
Glaziers	Glazing		40		40	
Inspectors, construction	Construction & Maintenance Trades		105		105	

/ - included in secretary category
* - included in miscellaneous clerical workers
**- apprentices not included in supply figures

TABLE 9

ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY 1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
Painters, construction and maintenance	Painting and decorating		195		195	
Paperhangers	" " " " "					
Plasterers	Plastering		16		16	
Plumbers and pipe fitters	Plumbing & Pipe fitting		184		184	
Roofers and slaters	Roofing		30		30	
Stationary engineers	Stationary Energy Sources Occup.		113		113	
Structural metal craftsmen	Construction & Maintenance Trades, Other		42	34	8	81.0
Tile Setters	Masonry		16		16	
Metal Working Craftsmen	Metal Working	3,514	163	151	12	92.6
Machinists	Machine Shop		53	60	(7)	113.2
Sheet Metal workers and tinsmiths	Sheet Metal		95	91	4	95.8
Tool-and-die makers	Tool-and-die		15		15	
Mechanics and Repairmen	Trade and Industrial Occupations	26,249	1,099	1,486	(387)	135.2
Air conditioning, heating, and refrigeration repairmen	Air Conditioning		34	463	(429)	1361.8
Airplane Mechanics	Aircraft Maintenance		48	139	(91)	289.6
Automobile Body repairmen	Automotive Body		398	623	(225)	156.5
Automobile Mechanics	Mechanics					
Data Processing machine repairmen	Business Machine Maintenance		26		26	

ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL

OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY

1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
Mechanics and Repairmen cont'd						
Farm Implement	Agricultural Mechanics		9		9	
Heavy Equipment mechanics, incl. diesel	Maintenance, Heavy Equipment		46	40	6	86.9
Household appliance and accessory installers and mechanics	Appliance Repair		54	70	(16)	129.6
Loom fixers			18		18	
Office machine repairmen	Business Machine Maintenance		42	59	(17)	140.5
Radio and TV repairmen	Radio/Television		31	26	5	83.9
Railroad and car shop repairmen			10		10	
Misc. mechanics and repairmen			333	66	317	17.2
Printing Trades Craftsmen-	Graphic Arts Occup.	2,109	72	106	(34)	147.2
Other Craftsmen and Kindred Workers	Trade and Industrial Occupations	32,653	1,539	709	830	46.1
Automobile accessories installers	Specialization, other		12		12	
Bakers	Food Management, Production and Svcs		132		132	
Carpet Installers			60		60	
Decorators and window dressers	Advertising Service		15		15	
Electric Power linemen and cablemen	Lineman		132		132	
Furniture and wood finishers	Woodworking, Other					

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ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY 1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
Other Craftsmen and Kindred Workers cont'd						
Jewelers and watchmakers	Watchmaking & Repair		45		45	
Opticians, lens grinders, and polishers	Instruments (other than watches and clocks)		80	12	68	15.0
Shoe Repairmen	Shoe Repair		35		35	
Stonecutters and stone carvers	Masonry		39		39	
Upholsterers	Leatherworking		42	14	28	33.3
Craftsmen and kindred workers, N.E.C.	Trade and Industrial Occup. Other		1,026	683	343	66.6
OPERATIVES AND KINDRED WORKERS		98,660	4,630	1,350	3,280	29.2
Construction Operatives	Construction & Maintenance Trades, Other	8,175	376	10	366	2.7
Metal Working Operatives	Trade and Industrial Occup. Other	10,066	463	281	182	60.7
Precision Machine Operative drill press operative grinding machine oper. lathe and milling machine operatives precision machine operatives, NEC	Machine Tool Operation					
Punch and stamping press operatives	Machine Tool Operation					
Solderers	Brazing and Soldering					
Welders and flame cutters	Welding and Cutting		97	239	(133)	237.1
Misc. and not specified	- - - - - - - - - -					

ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY 1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
Transport Equipment Operative		24,731	1,121	90	1,031	9.0
Bus drivers			111		111	
Taxicab drivers and chauffeurs			162		162	
Truck drivers			492	90	402	18.3
Other, N.E.C.			356		356	
Semiskilled Textile Occup's	Textile Production and Fabrication Other	6,870	316	268	48	84.8
Dressmakers and seamstresses, except factory	Clothing Management		126		126	
Sewers and stitchers	Textile Production and Fabrication, Other		190		190	
Other Operatives		7,835	564	29	535	5.1
Assemblers	Trade and Industrial Occupations, Other		144		144	
Laundry and dry cleaning operatives	Personal Services		314	29	285	9.2
Meat cutters and butchers	Food Products		106		106	
Misc. and not specified operatives	- - - - - - - -		1,790	672	1118	37.5
LABORERS, EXCEPT FARM		24,124	1,070	19	1,051	1.8
FARMERS AND FARM MANAGERS	Agriculture	3,786	71	20	51	28.2
FARM LABORERS AND FARM FOREMEN	Agriculture Prod..					

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ESTIMATED AVERAGE ANNUAL NON-PROFESSIONAL OCCUPATIONAL DEMAND AND EXTENT OF UNMET NEEDS, DADE COUNTY 1970-1980

(By Occupational Title and Instructional Program)

OCCUPATIONAL CLASSIFICATION	OCCUPATIONAL PROGRAM Designed to qualify students for Entry Level Jobs	TOTAL 1980 LABOR FORCE	ANNUAL DEMAND	ANNUAL SUPPLY	ANNUAL NEED	PERCENT OF SUPPLY TO DEMAND
SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD		67,960	6,251	581	5,670	9.3
Cleaning Service Workers	Institutional and Home Management	16,778	2,942	168	2,774	0.6
Food Service Workers		28,579	2,516	250	2,266	9.9
Personal Service Workers		14,271	1,418	163	1,255	11.5
Protective Service Workers		8,332	1,109		1,109	
TOTALS		506,099	31,863	14,346	17,517	45.0

TO: Richard W. Harclerode, Study Team Chairman, Greater Newark Chamber of Commerce Career Education Task Force

FROM: Susan T. Wood, Essex County Career Education Coordinator

SUBJECT: New Jersey State Plan for career education coordination currently emerging in the Counties

COUNTY CAREER EDUCATION COORDINATORS AND COORDINATING COUNCIL

In 1966, the Division of Vocational Education established the position of County Career Education Coordinator with the appointment of three Coordinators to provide services to the Counties of Bergen, Camden, and Gloucester.

The County Career Education Coordinator Project was evaluated informally by the Division of Vocational Education in 1967 and was found to be successful in terms of stated objectives. A continuous evaluation of the coordinators will be provided by this Division.

The County Career Education Coordinators are staff members of the Department of Education, Division of Vocational Education, working out of the Office of the County Superintendent of Schools, who are responsible for creating, organizing, implementing, and evaluating a county-wide coordinated system of Career Education, K through Adult.

The impact of the Coordinators' services has been felt in the local districts through their guidance in developing and reviewing applications and procedures. They work closely with administrators--superintendents and principals--discussing problems, offering advice, and planning programs.

They are responsible for conducting detailed surveys of occupational programs, in each high school and canvassing local business and industries to determine the need for additional offerings in terms of Career Oriented programs or the expansion of existing programs.

One need only to look at the Federal legislation to realize the need for these positions. The Vocational Education Act calls for coordination of Occupational Education at the local level and the submission of each of the LEA's involved in Federal funding of a one-year and five-year plan. With the increased responsibilities of this Department and the Offices of the County Superintendents of Schools, it is most important that a professional who possesses the required expertise be assigned to the staff in the office of the County Superintendents of Schools.

In June of 1972, Carl L. Marburger, Commissioner of Education, approved the expansion of the County Coordinator Concept. The project expansion will provide 18 County Coordinators serving the 21 Counties. Implementation of the expanded concept will be completed by the end of the 73 Fiscal Year.

In addition, the title was changed from County Occupation Education Coordinator to County Career Education Coordinator to provide a more appropriate title clearly in line with National and State priorities.

To provide the mechanism for achieving the coordination of efforts among the various agencies concerned with Career

Education, at the county level, the Commissioner of Education, through the Division of Vocational Education, with the approval of the State Board of Education, should appoint and maintain a functioning Career Education Coordinating Council within each county.

County Coordinating Councils are at present the only viable structures working toward the coordination of a county wide effort to promote Career Education to local education agencies. These councils continuously review the educational programs and the needs within each county and recommended the initiation of new programs when and where needed. They develop an immediate and long-range plan for each county as required by the State Plan for Vocational Education. The councils work toward the development of sequential progression of Career Education programs from elementary exploratory experiences to the development of technical skills required in post secondary programs.

MEMBERSHIP ON COUNTY CAREER EDUCATION COORDINATING COUNCILS

Basic representation on the Council should include the following;

1. The County Superintendent of Schools.
2. The County Career Education Coordinator.
3. The Chief School Administrator of the County Area Vocational-Technical School.
4. A Representative from the Area County Community College.
5. A Representative from the Local Comprehensive Area Vocational-Technical Schools.
6. A. Representative from the County Superintendents' Roundtable.

As local needs warrant, a representative from one or more of the following groups may be considered for membership on the County Coordinating Council:

1. A Representative of the County Planning Board.
2. A Representative of the Local Employment Security Office.
3. A Representative of the County Adult Education Association.
4. A Representative of the Secondary Principals Association.
5. A Representative of the Elementary Principals Association.
6. A Representative of the County Guidance Association.

In addition, consultants and ad-hoc committees may be appointed to meet the specific needs of the County Coordinating Council in the execution of one or more of its activities.

Councils will familiarize themselves with the activities of all educational agencies within each respective county. They review existing educational programs, conduct educational, business, and industrial surveys, analyze occupational data, develop public information models and establish county resource centers for the collection, preparation and dissemination of career information materials. In addition they plan, organize and conduct informational and public relations programs involving business, industry and education.

At the present time, there are fourteen County Career Education Coordinators providing services to sixteen counties. The impact of the Coordinator's services has been felt in the local district through his guidance in developing and reviewing applic-

ations and procedures. The coordinator works closely with administrators, superintendents and principals--discussing problems, offering advice, and planning programs.

County Career Education Coordinating Councils

To provide a mechanism for achieving coordination among the various agencies concerned with Career Education, at the County level, the Commissioner of Education through the Division of Vocational Education, appointed a Career Education Coordinating Council in each county.

County Coordinating Councils are at present the only viable structures working toward the coordination of a county wide effort to promote Career Education to local education agencies. These councils continuously review the educational programs and the needs within each county and recommended the initiation of new programs when and where needed. They develop an immediate and long-range plan for each county as required by the State Plan for Vocational Education. The councils work toward the development of a sequential progression of Career Education programs from elementary exploratory experiences to the development of technical skills required in post secondary programs.

Basic membership on these County Coordinating Councils include the county superintendent of schools, the county career education coordinator, the chief administrator of the respective county area vocational-technical school, a representative of the county college, a representative of the comprehensive area vocational-technical schools and the county superintendents roundtable. The councils also may include in their membership representatives of the County Planning Boards, local employment security offices, Adult Education Associations, Secondary Principals Associations, Elementary Principals Associations and Guidance Associations. In addition, consultants and ad-hoc committees may be appointed to meet the specific needs of individual Councils.

Councils will familiarize themselves with the activities of all educational agencies within each respective county. They review existing educational programs, conduct educational, business, and industrial surveys, analyze occupational data, develop public information models and establish county resource centers for the collection, preparation and dissemination of career information materials. In addition they plan, organize and conduct informational and public relations programs involving business, industry and education.

At the present time, there are thirteen County Career Education Coordinators providing services to fifteen counties. The impact of the Coordinator's services has been felt in the local district through his guidance in developing and reviewing applications and procedures. The coordinator works closely with administrators, superintendents and principals--discussing problems, offering advice,

and planning programs.

The County Career Education Coordinators are staff members of the Division of Vocational Education, working out of the office of the County Superintendent of Schools, who are responsible for creating, organizing, implementing, and evaluating a county wide coordinated system of Occupational Education, kindergarten through adult levels.

Coordinators are responsible for conducting detailed surveys of occupational programs in each high school and canvassing local businesses and industries to determine the need for additional offerings in terms of occupational programs or the expansion of existing programs.

LARGEST EMPLOYERS IN NEWARK

1.	City of Newark	12,667
2.	Prudential Insurance Co. of America	9,607
3.	United States of America	6,538
4.	N. J. Bell Telephone Company	4,959
5.	Western Electric Company	3,600
6.	Public Service Electric & Gas Co.	3,581
7.	Bamberger's	3,500
8.	College of Medicine & Dentistry of N.J.	2,700
9.	County of Essex	2,655
10.	State of New Jersey	2,261
11.	P. Ballantine & Sons	2,000
12.	Westinghouse Electric Corp.	1,640
13.	Anheuser-Busch, Inc.	1,518
14.	Engelhard Minerals & Chemicals Corp.	1,506
15.	Weston Instruments	1,318
16.	Mutual Benefit Life Insurance Co.	1,268
17.	Rutgers, The State University	1,200
18.	The Evening News Publishing Co.	1,100
19.	Federal Pacific Electric Co.	1,000
20.	Hahne & Company	950
21.	Fireman's Fund Insurance Co.	850
22.	J. Wiss & Sons Company	800
23.	Wagner Electric Corp.	700
24.	General Instrument Corp.	600
25.	Celenese Plastics Company	561

25 technical careers you can learn in 2 years or less.

Produced and distributed through a cooperative effort by the
U.S. OFFICE OF EDUCATION, THE CONFERENCE BOARD and THE MANPOWER INSTITUTE

How far can you go without four years of college?

A lot of people think that careers are meant for college graduates—jobs are for everybody else.

Ten years ago, they may have had a point.

But something's happened recently to change all that. A revolution in science and technology.

You've seen men land on the moon—heard of heart transplants—read of planes that will cross the Atlantic in just two hours. Every field of science has had a comparable breakthrough.

What does all this have to do with you? Simply this.

The scientific and technological revolution is creating career opportunities—literally by the millions. The demand for people with technical skills is growing twice as fast as for any other group, while jobs for the untrained are rapidly disappearing. There aren't enough applicants to fill technical positions open now. Yet the U.S. government estimates well over 1,000,000 more will open by 1975.

If you have a good scientific or technical education, you're all but guaranteed work. Exciting, meaningful work—at double the salary of the average high school graduate.

And you no longer need four years of college to start out on a scientific or technical career.

You can break into any field—from medicine to computers to engineering to the space program—with only a year or two of education. Just become a technician.

What is a technician?

Roughly speaking, technicians are people who work directly with scientists, engineers and other professionals in every field of science and technology.

Technicians' duties vary greatly, depending on their field of specialization. But in general, the scientist or engineer does the theoretical work. And the technician translates theory into action.

The best-known technicians right now are probably the ones who work with computers. But there are many other kinds.

Look below. You'll find a list of the types of technicians now in the most demand—along with a brief description of the kind of work they do.

A word to the ladies. While most of the technician jobs traditionally have been filled by men, these traditions are beginning to break down. Therefore, the time has come to follow your interests and aptitudes. You cannot be expected to be employed at men's jobs (so-called) unless you are trained for them.

Types of technicians:

AERONAUTICAL AND AEROSPACE—Work on design of space vehicles, missiles, supersonic aircraft. Help solve air traffic control problems. Help explore space. The aeronautical and aerospace field is growing so quickly, these are just a few examples of the work this technician does.

AIR CONDITIONING AND REFRIGERATION—Help in the design of future astrodomes, spaceships, sea laboratories, ultramodern homes and cities under domes-the air-conditioning, refrigerating and heating systems of the future.

AGRICULTURAL—Work on the scientific production and processing of food and other things that grow. Act as consultant on farm machinery, agricultural chemicals and production techniques.

ARCHITECTURAL AND CONSTRUCTION—Work on projects to rebuild our cities. Develop new building techniques, and new materials for building. Through city planning, help with the sociological problems that plague our inner cities.

AUTOMOTIVE—Assist in the design of new traffic control systems. Help in the planning of tomorrow's cars, especially smog control devices, automatic guidance systems, and new safety features. Work on the problems of mass transport.

CHEMICAL—Work in new fields of chemistry, especially biochemistry, chemical engineering. Help develop new materials from chemicals, especially new plastics, new foods, new fertilizers, new anti-pollution agents.

CIVIL ENGINEERING—An important field with several branches. Among them: 1) **Structural technology:** work with computers to find new building techniques for skyscrapers, bridges, docks and related structures. 2) **Highway technology:** you'll be

working not only on roads, but on automated transportation, airports and ports. 3) **Surveying technology:** help map and develop unconquered territory in all parts of the world.

COMMERCIAL PILOT — Pilot airplanes and helicopters. Act as cabin crews in commercial aircraft. (These careers call for experience after your 2-year educational program.)

ELECTRICAL — Work with new electrical devices — like portable power systems for use in remote areas, fuel cells for use in spaceships, sea labs. Help design electrical systems for tomorrow's homes, factories, etc.

ELECTRONIC — Work in new electronic fields like miniaturization, solid-state devices. Work along with scientists in new bioengineering systems. Work on fourth-generation computers, teaching machines, etc.

ELECTROMECHANICAL — Help design new information systems, new computers. Work on artificial hearts, other human organs in the new field of biomedical technology. Work on automated production equipment.

ELECTRONIC DATA PROCESSING — Process and analyze business and scientific data using new generation computers. Develop new systems analysis to solve storage and retrieval problems. Help develop new teaching machines.

FIRE PROTECTION — Develop new fail-safe systems for supersonic transports, sea labs and other artificial environments to make them safe for human habitation.

FORESTRY — Help care for, protect and harvest forests. Develop and conserve wildlife and recreational resources.

HEALTH SERVICE — Work with medical teams as assistant or nurse on the new frontiers of medicine. Work on bioengineering techniques to save and prolong life. Work in dentistry and oral surgery.

INDUSTRIAL PRODUCTION — Help design new production methods — particularly automated systems — and new materials, machinery, and control systems to make industry even more productive.

INSTRUMENTATION — Work on the instruments that have brought about space exploration, new medical techniques, automation, pollution control and other modern miracles.

LIBRARY AND INFORMATION SCIENCE — Work with professionals in acquiring, processing and circulating information materials; in organizing materials for use; and in assisting patrons in locating materials. Public or special libraries and information centers, school library media centers.

MARINE LIFE AND OCEAN FISHING — Develop new procedures for harvesting food from the ocean. Help discover new minerals beneath the sea. Work on conserving the ocean's natural resources.

MECHANICAL DESIGN — Work on producing new kinds of machines for tomorrow's manufacturing plants, hospitals, homes.

METALLURGICAL — Help develop and produce new "miracle" metals and metal alloys for use in construction, machinery, medicine, etc.

NUCLEAR AND RADIOLOGICAL — Help research, develop and produce nuclear devices and atomic power plants. Use radio isotopes in industrial and health fields.

OCEANOGRAPHY — Explore the ocean's chemistry, geography and mineral resources. Develop ways to use them. Develop manned underwater sea labs.

OFFICE SPECIALISTS — Accounting, financial control and management. Scientific, legal, medical or engineering secretaries.

POLICE SCIENCE — Work on new, scientific methods to detect and prevent crime.

SANITATION AND ENVIRONMENTAL CONTROL — Help improve man's environment and protect natural resources by scientific means. Help prevent or control air and water pollution. Inspect and prevent contamination of food. Control waste disposal.

How to become a technician.

You can qualify for some technical positions with just one year of study after high school. Most take two years. Some require a degree that's called an A.A.S. (Associate in Applied Science).

Three kinds of schools have programs for technicans.

1. TECHNICAL INSTITUTES. These give intensive courses concentrating almost entirely on what you will need to know in your career. Since technicians must understand why things work as well as how they work, technical institutes give some courses on scientific theory and mathematics. But these are held to a minimum.

2. JUNIOR AND COMMUNITY COLLEGES offer programs similar to a technical institute's, but with more emphasis on theory—and also some courses in liberal arts. If you decide to continue your education and get a 4-year degree, you can often transfer credits you earn to most 4-year colleges. This holds true, not only for junior colleges, but for technical institutes, as well.

3. AREA VOCATIONAL - TECHNICAL SCHOOLS. The subjects they teach are geared to work available in the area where the school is located. Area schools have one-year as well as two-year programs. They also offer some courses on the high school level and some adult education courses. Admission requirements are liberal.

All three types of school are primarily for high school graduates. If you're not a graduate, don't worry. Most of these schools can help you arrange to complete your high school education. Special work in high school science and mathematics also helps. If you're still in school, check with your counselor.

What about money?

Private industry, state governments and the Federal Government all sponsor scholarship programs for technical students. Scholarships, of course, are limited in number. Even if you don't get one, there are still many student-loan programs for people who want to become technicians.

Most technical schools can also arrange part-time work in your field of specialization. In fact, this may even speed your career. You'll be getting actual practical experience of what you're studying in the classroom and laboratory.

Your high school counselor can tell you about scholarships and student-loan programs in your area. Once you choose a technical school, the staff there can fill you in on part-time jobs.

If you're a veteran, the G.I. Bill could pay for your technical education. Check with the Veterans Administration. Finally, many companies will pay for technical courses taken by qualified employees. So check with your boss, as well.

How to find out about technical schools near you.

There are four places you can write for nationwide directories of accredited schools that offer technical education. These directories cover most or all of the fields described in this booklet.

E.C.P.D.*
Guidance
345 East 47th Street
New York, N.Y. 10017

National Association of Trade and Technical Schools
1601 18th Street, N.W.
Washington, D.C. 20009

Accrediting Commission for Business Schools
United Business Schools Association
1730 M Street, N.W.
Washington, D.C. 20036

Occupatioanl Education Project
American Association of Junior Colleges
One DuPont Circle
Washington, D.C. 20036

You can also study to be a technician at home. For a list of accredited home-study schools, write:

National Home Study Council
1601 18th Street, N.W.
Washington, D.C. 20009

For information on state or community schools, and ratings of the schools in your area, see your high school counselor. Since he knows your abilities and interests, he can also help you pick the field to specialize in.

The local office of your State Employment Service keeps up on the technical schools near your home. They can help you pick your special field through vocational testing.

There may be community organizations with youth-counseling services, as well.

If you want more detailed information about any of the following areas of specialization, here's where to write:

Library and Information Science:

Library Education Division
American Library Association
50 East Huron Street
Chicago, Illinois 60611

Chemical:

American Chemical Society
1155 16th Street, N.W.
Washington, D.C. 20036

Health Service:

National Health Council
Health Careers Program
1740 Broadway
New York, N.Y. 10019

Electronic Data Processing:

American Federation of Information Processing Societies
201 Summit Avenue
Montvale, N.J. 07645

*Engineers' Council for Professional Development—in association with the American Society of Engineering Education and the Engineering Manpower Commission.

No matter what kind of technician you decide to be...

You're all but guaranteed work: There aren't enough people to fill the technical positions open now—yet well over 1,000,000 more will open in the next few years.

You'll have a meaningful career—not an ordinary job. Technicians are at work right now on every advanced project—from the space program to 4th-generation computers to cancer research. You'll have interesting work—and the knowledge that you're responsible for building the world of tomorrow.

With two short years of schooling—you can make double the salary of the average high school graduate. Technicians make $120-200 a week right out of school. And you just might double that salary within five years. Start planning for a technical career today.

This booklet has been prepared as a public service under the guidance of the U.S. Office of Education, The Conference Board, The Manpower Institute and The Advertising Council with funds made available by the following organizations:

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General Electric Company
General Motors Corporation
General Telephone & Electronics Company
Honeywell, Inc.
Ingersoll-Rand Company
Inland Steel Company
International Business Machines Corporation
International Telephone and Telegraph Corporation
Litton Industries
Lockheed Aircraft Corp.
National Cash Register Company
North American Rockwell Corporation
Olivetti Underwood Corp.
PPG Industries, Inc.
Chas. Pfizer & Co., Inc.
Sperry Rand Corporation
Standard Oil Company of New Jersey
TRW, Inc.
Western Electric
Westinghouse Electric Corp.
Xerox Corporation

Career Education

A Feasibility Study of the Programs, Plans and Needs of City, County and State Agencies Serving Newark School Students

Greater Newark Chamber of Commerce-Career Education Task Force

R. W. Harclerode - Study Team Chairman
D. Harris, Executive Director, Mayor's Education Task Force
J. Krauskopf, Executive Director, Office of Newark Studies
Rutgers University
D. Rinsky, Vice President, Greater Newark Chamber of Commerce
R. Roper, Mayor's Education Task Force

January 1973

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INTRODUCTION

The beginning of this study occurred as a result of Newark's Mayor Kenneth Gibson in July 1972, asking to see the development of career training alternatives to the public schools. He sought a solution to this problem over the next two years.

As a direct result of this message, the Greater Newark Chamber of Commerce created a Career Education Task Force to study and prepare findings for Chamber review. The study was conducted by a five member team composed of representatives of the Mayor's Educational Task Force, The Greater Newark Chamber of Commerce, Rutgers-Office of Newark Studies, and the New Jersey Bell Telephone Company.

The task force requested and received assistance from the business and governmental community through the Office of the Greater Newark Chamber of Commerce. When the vast resources of the governmental, educational, and business sectors are combined, it is agreed that procedural and organizational structure can be strengthened. This combination will also assist in the search for methods to improve career educational opportunities for the students of Newark schools.

A direct dependency exists between the business - governmental and educational sectors in providing career education for Newark's students. A major goal of the educa-

tional process is to turn out employable graduates. Achieving this goal depends upon the match made between programs and the need for employees. What better way is there to achieve this than to have an ongoing balance between projected demand and current programs? The yokeing of business, governmental and educational expertise identified a number of factors necessary to assure an efficient and effective program for career education:

1. Clear, concise, well formulated statements of policy which take into account the existing organizational structure, community variables, quality of supervision and the allocation of performance responsibilities.
2. A well balanced organization where internal coordination is effective and where external coordination is systematic.
3. Sound written procedures which provide useful controls, recognize overall problems, and encourage suggestions for improvement from operating personnel.
4. Effective utilization of time and talent of administrator, staff and students.
5. Comprehensive and readily available performance standards which deal with quality and economy of operation.
6. An appraisal program utilizing results, data observations, inspections, etc.

7. Adequate facilities - money, people, modern equipment, space, etc.

Within the time available and the limits of this feasibility study, the survey team used these factors as guides for the review of Career Education plans and programs of City, County and State Agencies involving Newark School Students.

DEFINITION OF CAREER EDUCATION

There is no single agreed upon definition of Career Education. Only in an operational sense can statements be made which include and exclude those factors which apply to Career Education.

In 1971 U. S. Commissioner of Education, Sidney P. Marland, Jr., stated that a restructuring of the elementary and secondary school curricula should occur.

> ...to familiarizing youngsters with basic information about occupations in the primary grades, to help them get exposure to real work situations in the middle years, and to prepare them in senior high school either to enter their chosen field with a marketable skill at graduation or sooner, or to go on for technical or professional training at the college level.

Associate U. S. Commissioner Robert M. Worthington described Career Education in 1971 as in part:

> ...a bold new design for education that will effect a blend of academic, general, and work skills learning so that individuals passing through the system will be ready for economic self-sufficiency, for a personally satisfying life, for new learning experience appropriate to career development and vocational interests.

Several states have worked out their own operating objectives: As an example the State of Arizona adopted seven legislative objectives in 1971 concerning Career Education:

1. Insure 40% high school students involved.
2. Provide testing and counseling.
3. Adopt "World of Work" program.
4. Plan for teacher retraining.

5. Participate in pre-apprenticeship programs.

6. Intensify on-the-job training opportunities.

7. Conduct in-service workshops statewide.

Roman C. Pucinski, U. S. Representative, 11th District of Illinois, stated his philosophy of career education:

> The existing categories of curriculum - general, vocational, and college preparatory - do not meet the individual and changing needs of today's students. It is important that every student learn the skills he will need to live by. Whether these skills are academic is beside the point. We will have to move away from the present vocabulary and go back to the basic premise that education is a preparation for life.

Other factors are included in the concept: career education is not another name for vocational education; career education is a K-12 process; career education should not track people into fixed careers, rather it should prepare a student to enter the world of work through business skills or through preparation for advanced education; career education requires that students know and practice many things required in the world of work such as the work ethic, good citizenship, competent communication, manipulation skills, etc.; career education places a heavy reliance on knowing what present and anticipated job needs exist and upon an ongoing relationship between school and the business community so that curriculum and facilities are kept current with the world of work, etc.

In order to crystalize its thinking, the task force came to an agreement that a good operating goal for Career Education in Newark goes as follows:

Career Education for Newark requires that school aged students be involved in educational programs of occupational awareness, exposure, and preparation so that each graduate may have a marketable skill and an increase in his options ranging from a technician to a professional rather than limited options offered by traditional vocational education which focus toward a one-way given goal. This requires active participation in the process by the educational, business, government, and labor sectors of Newark. The success of a program in Newark can be measured by performance. The continued success depends upon a plan to establish an on-going evaluation of the programs.

METHODS OF STUDY

The decision to undertake this first step has had the support of all education agencies involved. This wholehearted support and cooperation with such a broad study reflects credit upon the Newark Superintendent of Schools; the Superintendent of Vocational Schools, Essex County; the Associate State Director of Vocational Education; and the President of Essex County College. This cooperation along with the support from the Chamber and the Mayor's Education Task Force have been instrumental in this report's preparation.

The report is a summary of the findings made from visiting three of the four public school agencies involved in preparing school students with job and career abilities. A survey was made of the public school program, the programs occurring at the four Essex County Technical-Vocational Schools and at the State operated Multi-Skill Center. The fourth center, Essex Community College was not visited since at the inception, this survey restricted itself to public school aged students.

In our visits to these agencies we also received complete cooperation. All staff which we visited were helpful in providing answers needed for this work. At no time was any effort made to influence the task force in its work, rather all agencies tried to provide information which would be useful for our purpose.

Within the short time period available for investigation we are the first to recognize that our findings may change as more complete details are gathered. This was recognized in the plan. We set out to make a feasibility survey, to organize our findings, and to relay them to the Chamber for a go-ahead to extend the detail and formulate a series of recommendations for the development of an overall plan for "Career Education" for Newark students.

In addition to working with the local school persons, the task force has been in direct contact with county, state and federal career education persons. We have become aware on a first - hand basis of career education in New Jersey, in New York City, Philadelphia, Washington, D. C., Dallas, Texas, and Wilmington, Delaware. Our survey of written material has been extensive and can be found in the bibliography.

Findings of these visits and consultation resulted in enhancing our insights into career education models which appeared to have high workability or low potential for Newark. Our preliminary decision found that the "school-based" model (education occurs at a school setting) had the highest potential for Newark. We rejected as less appropriate the "employer-based" model (education occurs at the employer's premises) since other cities had experienced both high costs and limited employer capacity to accommodate more than a small amount of students.

EXISTING ORGANIZATIONS INVOLVED IN CAREER EDUCATION

There are currently three public agencies, the city, the county, and the state, which provide some sort of "career education" for school aged people in Newark. In magnitude, the County Vocational Education system services Essex County students of which 1736 are Newark 9th, 10th, 11th, and 12th grade students. These students are located in the four county schools.

Bloomfield Vocational School - 288

Irvington Vocational School - 391

Newark Vocational School - 460

Thirteenth Street Vocational School - 597

The city public schools have a series of programs which cover at one time or another an estimated 60% of K-12 pupils in some form of career awareness.

Other programs include:

World of Work - Construction and Manufacturing

Cooperative program - Distributive Education, Industrial Arts

Industrial Arts - Carpentry, electronics, metal shop, etc.

The Multi-Skill Center concentrates on training unemployed and underemployed adults and persons not in school. This is the largest agency of this type, is state operated, and is located at 187 Broadway, Newark. Since 1965, 6000 persons have completed training at this location.

CURRENT PLANS TO INCREASE THE AMOUNTS OF CAREER EDUCATION FOR NEWARK STUDENTS

City Schools:

The schools have extended the two year junior high school level "World of Work" to all schools. Plans are currently being laid to develop a program of this sort where girls will also participate.

A World of Transportation proposal is currently being studied by the schools. A report on this survey is expected by June 1973.

A large number of federal programs exist in Newark. These programs by-in-large are dropped as their funding expires. As an example, one of the larger programs, the "Career Education" trial at Peshine-Weequahic, will expire June 1973 without any current plans to provide continued funding.

County Vocational Schools:

An Essex County Technical Career Center is currently being built. This center expects to serve 1000 persons on a open type of program. (School dropouts,returning servicemen, housewives, job upgrades, underemployed persons, etc.). The public schools are hoping that some portion of the center can be made available to public school students.

The County schools are ready to receive some 100 shared-time students from Barringer High School. These students will participate in vocational programs half-day while remaining resident in their home high school for the other half day.

Essex County College:

An understanding has been reached to provide some mini courses at the College for the Peshine-Weequahic "Career Education" project. It is expected that 40 students will participate in this trial this year.

Newark Manpower Training Skills Center:

Plans are being prepared to send students to the Multi-Skill Center in the Spring of 1974. While final plans are not firm, the center plans to be able to take 800 Newark students on a shared time basis. Current plans call for the program called "COED" to provide 12 occupational clusters ranging from distributive education to health occupations. This means that students spend half a day at their public schools getting the academic education. The other half day will be spent at the center for occupational training. A four million dollar building addition is now underway. The Center's ability to agree to take 800 shared-time Newark High School students is a fortuitous one made possible by the working together of State and local school people anxious to increase career education positions and to operate on a demonstration basis.

1. PLANNING FOR CAREER EDUCATION

While the study team found cordial relations between the four agencies involved in career education for Newark's students, it failed to observe a working structure that laid out a fundamental plan for Career Education. We found this the overpowering observation of our survey. While incidents of cooperation were observed, most of these were largely of a serendipitous nature.

We felt that a basic problem impinging on the lack of overall planning is the independent nature of the four educational agencies. Inter-responsibility between agencies has not been defined and has therefore been largely non-existent. Yet from a practical point of view there is no reason to seek a radical solution to this four legged career educational structure. To do anything that unhinges the existing structure would require substantial legislative reform. We believe there is the need, desire and capability within each agency to work under an overall plan with the other agencies. The important factor here is how such a plan can be developed and how each agency can work under its design while maintaining its own administrative and policy making governing body.

Our investigations of working models in other urban cities suggest that the active participation of business-industry in career education is required, can be obtained, and is beneficial to the community.

Our findings seek an in depth look into the need for an overall plan and intc the various alternative available to establish working coordination between education and business-industry.

2. JOB SURVEY NEED

We discovered that two agencies are currently planning job surveys and each is unaware that the other has plans to make a similar study. A job survey seeks to identify present and future job needs so that they may be translated into training needs. Knowing employer needs requires that there also be a knowledge of the training capacity of public and private training agencies. We did not find any information of this type.

We were unable to find any recent job surveys or for that matter any old job surveys. Without such data it would appear that schools, while aware of some job needs, would be unaware of the overall and future need. This lack of full knowledge seems to be a fundamental requirement without which a plan to match education with jobs would be impossible.

A need exists to see that job surveys are planned and carried out on a regular basis so that a high meld may occur between education and jobs. How this should be done should be determined by a deeper review of the overall needs of each agency.

3. FINANCING ACTIVITIES

Two agencies compete directly for state funds made available through State and Federal Vocational Education funds. We saw no coordination of effort in this process which determines how many "bucks" are available for approved programs.

The city schools received $650,000 of vocational education funds in 1972-73. Next year the request is for $1.2 million. Newark city schools see a contradiction in the fact that they receive 2.4% federal money made available to New Jersey yet they enroll 5% of the New Jersey's students. Further, Newark has the highest unemployment rate in New Jersey.

In the matter of non-local funding, requests for money require that certain local, state and federal guidelines are adhered to in preparing, augmenting and evaluating programs. Frankly, our review disclosed major problems in getting programs started on time and showed that many programs after a two year run are dropped. This does not assure an efficient and thorough use of non-local money. Problems in this sector are both conceptual ones where a better federal plan would help Newark, and operating ones where bureaucracy and approval authority slow down the process.

The County Vocational Schools do not seek funds unless they know of their availability. This is an accommodation to the lack of staff necessary to do the leg work in funding. This approach may be counter productive to obtaining outside funds.

One of the several dilemmas faced by the County Vocational Schools is the preparation of curriculum at the new technical career center. The Economic Development Administration money was made available for construction of the new center. The center, expected to open in September 1973 has no money with which to plan curriculum.

The other dilemma occurred as a result of a construction bid lower than expected, in fact one million dollars less than approved by E.D.A. Building specifications were issued without alternatives,a loss which might have provided a basement for the new center.

There is a need to examine the fiscal arena - do the Newark schools secure a fair share of state federal funds - what ways are there to coordinate funding efforts - are operations similar enough to utilize some of the expertise in the public school for vocational school fiscal assistance - what might be done to qualify for federal funding without the necessity of breaking the educational continuity - considering the funding available, how does this relate to performance, to obtaining jobs, etc.

3. RELATIONS BETWEEN THE EDUCATIONAL AND BUSINESS COMMUNITIES

When we identified ourselves as Chamber of Commerce representatives we were more often met with a look of astonishment. Most educators do not have any working relationship with the Chamber.

While educators must form advisory committees as a legal requirement to obtain vocational education money, we found no evidence of any formal Chamber involvement. The County Vocational School has had a single advisory group for some years. This was formed through the business-labor contacts that existed in the schools.

The public schools have a series of advisory committees. The most recent one formed in January 1973. Again the Chamber was not a group consulted for membership suggestions.

While the Chamber members provide many representatives for these committees, few are recruited under the aegis of the Chamber. We found little evidence of any sustained Chamber activity in Vocational Education or for the new concept Career Education.

As a result of this limited relationship, a great loss appears to have occurred between educators and the Chamber. As an example, educators may be looking for job information and must go piecemeal from one industry or business to another for help. Chamber members may find that Newark graduates are unable to read or compute or maintain good attendance yet they have no

regular and formal communications link with the schools. These are brief examples of actual conditions which we observed.

Perhaps most importantly, the joint support that could be gained by both parties, both at a local and state level are lost in the missed formal relationship. Education and jobs go hand in hand. It would appear prudent to establish and formalize the relationship between educators and the Greater Newark Chamber of Commerce.

5. PROGRAM DUPLICATION

That there would be program duplication between public and vocational school is easily understood since each agency operates independently of the other. Neither system is aware of what the other is doing in other than an informal way. Public School people would like to have more information about vocational programs.

We found that our questions about program duplication of courses in things such as auto mechanics, machine shop, etc., were answered on the basis of the vocational schools having a more intensive program. The study team felt that program duplication should be avoided unless there is a clear indication of career need since it will affect personnel, program, and equipment expenditures.

As more job needs are identified there is an additional reason to see that program duplication is avoided. Public school educators and vocational school educators should have full knowledge and concurrence with each other's plans.

The emergence of other educational facilities - the Skill Center, the College and the Career Center offer abundant evidence that program duplications should be avoided.

Actual program duplication should be identified and a determination made to reduce duplication based upon the fundamental plan for Career Education for Essex County.

6. OUTDATEDNESS OF FACILITIES AND PROGRAMS

Our survey disclosed that most of the sustaining programs are aged, some as old as 25 years. So also is some of the equipment.

At the vocational school, plans are currently being followed to change certain programs. We believe that a fundamental look is required of all programs. Our ability to evaluate this area rests largely upon the lack of evidence of specific job placement.

We became aware of the work of the advisory committee in their recent study of facilities and the successful updating of equipment. Nearly 1 1/2 million dollars was spent to provide up-to-date equipment.

Our findings at the public school suggested a similar need to look at existing equipment and programs. Statistics were not available to make a full evaluation of program effectiveness.

One of the members on the newly created Career Education Advisory Board of Public Schools told us "let's get rid of general education and replace it with career education - it can take the place of the old general subjects which shuts off our kids." Is it possible that new career choices not available in the day school be offered in their place: nursing, child care, sports and recreation, data processing, government civil service, banking and insurance, police-fireman's training, etc.

Our investigation of this area of career offerings and curriculum preparation showed that the course development necessary for the new Essex County Technical Career Center is estimated to cost in excess of $250,000. While unlikely, it is possible that the center will be completed without course materials being prepared.

A more detailed investigation of this area is required to ascertain curriculum, program and facilities needs.

7. PERFORMANCE MEASUREMENTS

Considering the fundamental objective of career education to prepare students for options ranging from technicians to professionals, few performance statistics are available.

Public school educators provided us with a 1970 study of high school graduates. Fifty-seven percent of the sample are attending college or advanced educational institutions. We were unable to locate studies of the other forty-three percent. While we are certain that such studies must be available, their lack of visibility suggests that their importance is less than the advanced education statistic.

The latest follow up study available at the County Vocational School was 1966-67. These statistics disclose that 86% of graduates available for work were employed. Yet the report is outdated-nearly six years old. We could not find employment statistics by school or by trade. The lack of statistical information may inhibit an analysis of the course suitability as to student selection, curriculum, instruction, placement, advisement, etc. It also does not allow a school by school analysis of performance effectiveness.

Data prepared at our request for one vocational school for the 1971-72 school year showed 51% students available for work vs. 70% available 1966-67. Statistics also show that whereas 86% were employed in the trade in 1966-67, only

35% were so employed in 1971-72. Meaningful analysis requires regularly prepared performance statistics.

40% absenteeism exists among students in one of the trades. This compares unfavorably with any industrial standard. If our information is correct, a major problem exists for students in the school. As important, students with such records, despite trade excellence would be expected to have castastrophic difficulties holding a job or succeeding in advanced education.

This confirmed a finding established in our research and visitations. Most employers expect skill competence and most times get it. All employers need regular attendance to produce their product. Where this does not occur, persons no longer hold jobs.

Managerial styled performance measurements must be regularly available to school executives. One way to obtain these statistics is to have the respective board require the Superintendent to make a regular report on the status of education judged by performance standards. This would enable the Superintendent to have data of this sort available to him at all times and to recommend appropriate action. Without such data, little but good guessing can provide constantly improving programs.

8. RECOMMENDATIONS AND SUMMARY

There have been seven areas selected upon which the study team has taken a point of view. Fundamental to all of these is a need to collect the energies of business - industry - education - and government to get the educational-employment job done for the urban center. These needs have been observed in other urban communities and solutions have been offered, tried and evaluated. These programs, under constant business-education evaluation are currently working.

The open question is will all factions work together, take the hard steps toward educational reform, include the business community in the process, and provide an organizational structure that will enable a drastic change in the output of the career education facilities available to Newark students?

Newark has identified the need to take action and has made a preliminary step toward it. Newark can provide a plan as other urban communities have also created plans. These plans are working and they are beneficial to their communities.

Our fundamental recommendations for Newark follow:

1. Establish an overall plan for Career Education. This requires all agencies to work together to develop and implement the plan.
2. Find out what the current job needs are and keep this updated so that education matches job needs.

3. See that funding efforts are coordinated between agencies. See also that the type of funding will insure thorough and efficient education.
4. Formalize the educator - Chamber of Commerce relationship. Both planning functions and on-going relationship need the assistance from both groups.
5. See that duplication in programs is avoided. Where there is a need for duplication see that the best use is made of common resources - staff, facilities, employers, etc.
6. Analyze the career programs - do they meet today's needs - are there enough programs in job areas unprepared for in the schools - should some of the general education courses be replaced, etc.
7. Establish and maintain performance statistics. Use these as evaluation tools to keep the system in balance.
8. Provide manpower to complete the study and to see that its recommendations are accepted and implemented.