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ABSTRACT

The Work Experience Career Exploration Program (WECEP) is a prevocational exploratory program designed for educationally disadvantaged ninth grade students, emphasizing the cultivation of individual talents, development of social skills, and the recognition of the student as an individual with social and economic worth. In order to evaluate WECEP, a post-test only control group design was followed. Based on data collected from school records, interviews with students, and employer ratings, the major finding of the evaluation was that the WECEP students showed significant improvement in behaviors and attitudes such as cooperation, completion of tasks, and pride in work. Included in this report are recommendations and program cost data. (JS)

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Work Experience Career Exploration Program (WECEP) Advisory Committee Report

EVALUATION

AND

RECOMMENDATIONS

June, 1972

MINNEAPOLIS PUBLIC SCHOOLS
SPECIAL SCHOOL DISTRICT No. 1
Minneapolis, Minnesota 55413

INTRODUCTION

The Work Experience Career Exploration Program (WECEP) Advisory Committee was established the same year the program was initiated. In his letter of appointment, Nathaniel Ober charged the committee as follows: "The function of the committee will be four-fold:

a. Evaluation of the project

b. Recommendations for the future of the project

c. Changes for program and curriculum

d. Recommendations for future advisory committee."

Pursuant to this charge the WECEP Advisory Committee prepared a brief preliminary report (First Year Report, 1969-70) which was simply a cataloging of comments from employers.

This year, the final year of the three-year pilot, a far more extensive evaluation was undertaken. Paul Muller arranged for a research grant from the Division of Vocational Education, State Department of Education. With Dr. Richard Faunce's assistance, Dr. Rene Dawis of the University of Minnesota was engaged to assist in development of evaluation design. Dr. Dawis in turn engaged a staff of graduate students and under his direction this plan was implemented.

At the same time Dr. Dawis' work was underway, the Advisory Committee met with non-WECEP school personnel from the nine participating schools (classroom teachers, counselors, social workers, administrators, etc.). This activity was organized by Bruce Gilmer of the Minneapolis Gas Company.

A third, concurrent activity was the preparation of cost analysis data on WECEP by Paul Muller of the Department of Vocational Education, Minneapolis Public Schools.

These efforts, of Dr. Dawis, Mr. Gilmer and the committee and Mr. Muller are contained in Appendices A, B, and C respectively.

In evaluating the WECEP program, the Advisory Committee attempted to examine the following dimensions:

1. Measurable student performance, in terms of school-related activities (grades, attendance, etc.)
2. Behavioral and Attitudinal change in students, as perceived by school personnel, employers and independent interviewers.
3. Cost analysis of WECEP as compared to average secondary program of Minneapolis Public Schools.
4. Business and Labor involvement in the educational program of the schools.

The evaluation is based upon an examination of the 1969-70 and 1971-72 WECEP and control groups of students. It should be noted that our evaluation leaves some questions unanswered, notably a follow-up of those students no longer in school from the WECEP and control groups of 1969-70. This shortcoming was due to a lack of both time and funds, but would constitute a very worthwhile topic for future investigators.

SCHOOL-RELATED PERFORMANCE

We note school-related measures of performance of WECEP enrollees either remained

constant (grade point average) or improved significantly (attendance and punctuality) when compared to their control group counterparts. When WECEP students' pre and post ratings (morale, courtesy), etc. were compared, WECEP students showed significant positive change. This change was most dramatic in terms of behavioral and attitudinal improvement. We agree with Dr. Dawis' conclusion that WECEP has been effective in improving attitudes and behaviors of a large number of its enrollees, and that "There is no doubt.... that, according to the evaluation, WECEP has been beneficial to the participating students...".*

SCHOOL PERSONNEL PERCEPTIONS

Seeking more direct feedback (though somewhat less objective in nature,) the Advisory Committee met at Franklin School with academic teachers, counselors and assistant principals familiar with the program. The reports we received from this group were that WECEP: works for students; is a most valuable and effective program; should be expanded both to more 9th graders and to senior high school.**

COST ANALYSIS

WECEP, when compared on a gross per pupil cost basis with other "special" programs for ninth graders, or when compared on a net cost basis to average secondary per pupil expenditures in the Minneapolis Public Schools, compares very favorably. It is important to remember that, while concerning ourselves with the economics of a school program, WECEP is an educational/social program and judgment should be made on this basis. It is a sound

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* See Dawis Report, Appendix A

** See Gilmer Report, Appendix B

investment of educational dollars if students become tax producers instead of tax consumers. The relative costs to society of welfare or incarceration, and the subsequent waste of human resources, far out-shadow the costs of WECEP. ***

BUSINESS AND LABOR INVOLVEMENT

The Advisory Committee would conclude that WECEP constitutes a most valid and unique vehicle for business and labor involvement in the educational effort. Not only have we contributed resources (over $80,000.00 in student wages this school year) but, more importantly, we have had input into the school program through direct dailey contact with students and coordinators and meetings with other school staff.

UNMEASURABLE BENEFITS

Throughout our deliberations many points have come up which are impossible to handle in a formal evaluation such as those conducted by Dr. Dawis or Paul Muller. We would mention a few of these. Many WECEP students have been started on an upward cycle. Jobs and wages have dramatized to the student his social and economic worth. This has led to higher self-esteem and improved relations with peers, parents, school staff, employers and fellow employees. This, in turn, has led to improved performance on the job, and in school. The Dawis report on attitudinal and behavioral change supports this conclusion.

As of May 1 of this year, WECEP enrollees placed 16% of gross earnings ($11,604.00)

*** See Muller Report, Appendix C

in savings accounts, collectively. Young people cannot develop thrift habits without money. The savings program is an integral component of the WECEP program.

WECEP enrollees have provided invaluable inputs into academic classrooms. One math teacher reported to us his class gained an added dimension in reality and relevance when a WECEP'er brought his income tax forms to the math classroom for assistance and it became a class project.

Youngsters in WECEP have developed long-term ties with coordinators, fellow employees and supervisors. While this is difficult to measure, we wish to make note of the fact that former enrollees do return to visit employers, go fishing, out to dinner, etc. with former supervisors, and seek counsel of former coordinators after leaving the program for senior high school.

Above all, WECEP has provided an opportunity for these youngsters to taste of success. Many of the boys and girls enrolled in WECEP have had precious little experience with success; are, in fact, failure avoiders, as opposed to success-seekers. Hopefully, having some experience with the components of success in a real, adult setting will better equip these youngsters to move into "the system" successfully.

RECOMMENDATIONS

1. WECEP be continued in its present form. The program has established its effectiveness and has earned acceptance of business, labor, parents, students and school personnel.

2. WECEP be expanded. The requirement of having control groups expires August 1, 1972. Each school with one WECEP unit could feasibly have two or more units. Those schools without a WECEP unit should be canvassed to determine need.

3. If additional WECEP units are added receiving schools should provide a portion of the staff position from that receiving schools' staff allocation. WECEP, and other special programs should be, in part at least, a redirection of existing resources rather than an additional expenditure.

4. A goal of 15 or 16 enrollees per WECEP unit should be set for 1972-73 and thereafter. This would improve the cost effectiveness of the program, without dilution of the program's impact.

5. Efforts should be made to improve continuity between WECEP and programs in the high schools.

6. WECEP has profited from Advisory Committee review and input, and this should continue. It will not need to be as intensive in the future.

6/21/72
sa

Report

on the Evaluation of

the Work Experience/Career Exploration Program

Prepared by

Rene' V. Dawis

Submitted to

The Minneapolis Public Schools

June 1972

SUMMARY OF FINDINGS

Ninth grade students improved significantly in behaviors-attitudes as a result of being in WECEP.

This was the major finding of an evaluation of WECEP conducted recently.

Comparison of beginning and end of year ratings by academic teachers showed sizable gains in neatness (personal grooming), courtesy, student's morale, completion of class assignments, cooperation with teacher, getting along with co-students, initiative in school work, taking part in class discussions, and careful use of books, supplies and facilities.

Similar significant gains, though not as large, were recorded for beginning vs end of year ratings by job supervisors of WECEP trainees in neatness, courtesy, honesty, acceptance of constructive criticism, cooperation with supervisors and co-workers, pride in work, initiative, completion of assigned tasks, understanding of job procedures, working well without supervision, ability to follow directions, accuracy in work, observation of rules, and proper use of equipment and supplies.

No comparable gains in teachers' ratings were observed for a control group of ninth grade students of similar backgrounds but who were not in WECEP.

Other evaluation measures showed WECEP students as superior to their control counterparts in school attendance (fewer absences and less frequently tardy), attitude toward school and self-esteem.

However, WECEP students were less future-oriented than the control group students. Also, WECEP students did not improve at the end of the year in supervisor ratings for attendance. Neglecting to inform the company when ill was the complaint most frequently

reported by WECEP job supervisors (but only 15% of the supervisors.)

The evaluation also found that WECEP had little impact on school performance as reflected in the comparison of grades in English and Mathematics for WECEP and control group students. (There was actually some advantage to the WECEP group in Mathematics, especially for boys.) This is not surprising since WECEP was not designed to influence school performance directly, but rather indirectly, through improved attitudes toward school and school work.

The evaluation found, furthermore, that the advantage held by the 1969-70 WECEP students at the end of ninth grade (according to an earlier evaluation) was not maintained to the eleventh grade. A follow-up of 1969-70 WECEP trainees and their control-group counterparts found them almost exactly alike on almost every measure: absences, tardiness, grades in English and Mathematics, citizenship ratings, attitude toward school, and evaluation of school experience. The most significant finding of this follow-up, however, was that WECEP "alumni" had greater (higher) self-esteem than their control group counterparts. One might infer, with reason, that this could be due to the experience of success while in WECEP.

The conclusions from the follow-up evaluation of the 1969-70 WECEP trainees are weakened somewhat by the lack of information on the students (both WECEP and control group) who were no longer in the Minneapolis Public School system. It is strongly recommended that a follow-up of such "dropouts" be undertaken. It is quite conceivable that "dropouts" who were in WECEP are doing better than their control group "dropout" counterparts as a result of the WECEP experience.

In brief, WECEP's impact is to be found not in school grades, but in the behavior-attitude area (including school attendance, punctuality, and attitudes toward school and work, teachers and employers, co-students and co-workers, and the like). For those WECEP students remaining in the Minneapolis Public Schools, favorable attitudes toward school and WECEP, and positive self-esteem, are manifested in the eleventh grade. But the major finding of the evaluation is: WECEP is given high marks by both academic teachers and employers with respect to behavior-attitude changes observed in the WECEP students.

RVD:sa
6/21/72

Introduction

Dr. Bettye Caldwell, noted educator, calls this the period of consolidation for special educational programs (Caldwell, 1970). We have been through a period of enthusiasm and optimism, when hopes were high, expectations unrealistic and claims slightly exaggerated; and then through a period of skepticism and disillusionment, when evidence for effectiveness was not forthcoming. Dr. Caldwell wisely calls for a sober new period of consolidating what we have learned and building upon it.

Alternatively, we might call the new period the period of accountability. No longer can we justify programs solely on the basis of need; we must demonstrate effectiveness. According to the new view, program evaluation is not merely desirable; it is mandated.

There are many benefits to evaluation. Properly designed and conducted, evaluation (especially continuous evaluation) can provide the necessary connective feedback to help program participants improve program procedures and better approximate program goals. Evaluation can also serve to give much needed encouragement to those who have worked very hard to make the program a reality. There are also many risks to evaluation. It would not be so bad if evaluations result in completely accurate conclusions, that is, if programs adjudged by evaluation as poor were in fact poor and those adjudged as good were in fact good. But evaluations, too, can err, or at least provide a not-wholly-correct picture of the program. Two types of errors can ensue; (a) a program that is in fact effective is shown by the evaluation to be ineffective, or (b) a program that is in fact ineffective is shown by the evaluation to be effective. In the case of the former, the error is disastrous to program proponents,

but more so to the students in need who might have been served by the discontinued program; in the case of the latter, the error is detrimental to school administrators who have to make decisions concerning funding and answer for the way such decisions turn out. There is reason to believe that in the most carefully designed evaluations the first type of error is made much more frequently than the second type of error, as will be explained below.

The classic design for evaluation is known as the pretest-posttest control-group design (Campbell & Stanley, 1966). This design calls for two groups, an experimental group (which is provided with the special program) and a control group (which is not). Both groups are assessed before introduction of the program (pretest) and after termination of the program (posttest). A difference on posttest in favor of the experimental group is taken as evidence for the effectiveness of the program. (The pretest is a check on the assumption that the two groups were equivalent to begin with, and allows the use of such statistical techniques as gain score and covariance analyses.)

One of the important requirements of the classic design is that subjects be assigned randomly to experimental and control groups. If this is done, a pretest can be dispensed with and the design is then known as the posttest only control group design (Campbell & Stanley, 1966).

In both designs, the logic of the statistical test is the same: the hypothesis under test is that there is no difference between the two groups, experimental and control (the so-called null hypothesis). If the probability of such an hypothesis is less than a selected value (ordinary practice ordains a value of .05), the hypothesis is rejected

as false and the alternative hypothesis that there is a difference between groups is accepted. It should be noted that if the null hypothesis is not rejected, it is not thereby confirmed. The logic of the statistical test only allows for disconfirmation of the null hypothesis, and the alternative outcome is failure to disconfirm rather than confirmation.

Expressed in other words as applied to evaluation: the null hypothesis is a statement of ineffectiveness of the program. A significant finding (rejecting this hypothesis) is a finding in favor of effectiveness of the program. The opposite finding (failure to reject the hypothesis) can only be interpreted as failure to find evidence for effectiveness. It can not be interpreted as confirming the ineffectiveness of the program. (The same outcome could result from faulty design, faulty experimental technique or faulty instrumentation. For example, the instruments used could be inappropriate or not sensitive enough.)

This logic notwithstanding, it has been customary (following the practice of scientific research) to prefer to reduce the error or incorrectly rejecting the null hypothesis. Stated alternatively, conventional practice dictates that an extremely low probability of error in rejecting the null hypothesis be reached before rejecting it, usually .05 or .01. It can be seen, therefore, that in terms of evaluating a program, the premise held is that the program is ineffective until proven otherwise, and that the evidence for proving otherwise has to reach very stringent levels before the premise of ineffectiveness is discarded. This is the basis for the belief that evaluations following the designs described above will probably result in more errors of the type where actually effective programs are found ineffective than errors of the type where actually ineffective programs are found effective.

The preceding, which is admittedly a very conservative position on evaluation, is to be contrasted with the ex post facto design, probably the most common approach to evaluation. In the ex post facto design, the evaluation is designed and implemented after the program has been conducted. Attempts are made retrospectively to identify an appropriate "control" group, thereby to simulate an experiment and take advantage of the logic of the experiment. The reader is referred to a growing literature on the insurmountable technical difficulties and inherent fallacious reasoning underlying the ex post facto design (Campbell & Stanley, 1966; Meehl, 1969). Suffice it to say that such designs tend to favor overwhelmingly errors of the type where actually ineffective programs are found effective. One could even say with justification that the present climate of skepticism was brought about in no small part by the indiscriminate use of the ex post facto design during the period of enthusiasm and optimism.

While there is no question that experimental designs are greatly to be preferred to ex post facto designs, the realities of the situation in most instances militate against complete implementation of true experimental designs. Four problems are worth singling out in this connection. First, randomization is almost always not possible for social action programs. (For an extended discussion of this point see Evans and Schiller, 1970 and Campbell and Erlebacher, 1970.) Second, there is the problem of experimental mortality. That is, the dropping out of subjects during the course of the program might be related to being in, or not being in, the program. Third, there is the problem of selection at the posttest. That is, the availability of subjects at the posttest measurements might be affected by factors which differ for experimental and control groups. The fourth problem, the

regression artifact, is a problem that arises when dealing with groups at the extremes of the population distribution. Depending on the circumstances, the statistical phenomenon of regression toward the mean could work to the spurious advantage or disadvantage of the experimental (or control) group.

It is within the context described above that the WECEP evaluation described herein is best examined.

Design and Implementation

The Work Experience Career Exploration Program (WECEP) is best described as a prevocational exploratory program for educationally disadvantaged ninth grade students. A cooperative venture involving the US Department of Labor-Child Safety Division, The Minnesota Department of Vocational Education, the Minneapolis Public Schools and participating employers, the Program is designed to be "success oriented, emphasizing cultivation of individual talents, developing skills necessary for an active and meaningful life in society, and geared to the recognition of the student as an individual with social and economic worth, operating on the hypothesis that experience of a positive, concrete and relevant nature can arouse aspirations and alter young lives constructively." (Muller, 1970) A key part of WECEP is a work experience program, conducted with the cooperation of over a hundred employers, in which ninth grade students are given the experience of holding paid, hourly rated jobs, 3-4 hours per day, 5 days a week, in an actual business establishment. This experience, together with an employability-skills seminar and regular academic course work, is coordinated and monitored by a WECEP Teacher-Coordinator in each participating school. The Teacher-Coordinator is the key person in each school WECEP unit. In

addition to the role of teacher, coordinators serve as representatives of the project and the Minneapolis Public Schools in contacts with business and labor leaders, families of the participating students, neighborhood, community, governmental agencies, and the faculty of their schools. Most important is their role as adviser to the WECEP student.

The major objectives of WECEP are to be reflected in two sets of outcomes (Muller, 1970): (a) in improvement in school performance measured in terms of grades, scores on standardized tests, attendance and puntuality, and (b) in positive changes in behavior and attitude as reflected in their own, staff and employer, evaluations. The evaluation design described below was designed with these outcomes as its central focus.

The Design

The research design used in this evaluation was the posttest only control group design as described in Campbell and Stanley (1966). This design involves the comparison of experimental and control groups at the end of the program. An additional dimension was added to the design by the inclusion of two grades for study: a current WECEP group of ninth grade students with its cooresponding control group; and a group of eleventh grade students who were in WECEP as ninth graders in 1969-70, with its corresponding control group. Thus, the evaluation was able to look at the relatively longer-term effects of the program.

It is worth noting that the evaluation design was incorporated into the program in the planning of WECEP. In this respect, WECEP is to be commended; it is in the rare company of the few social action programs in which evaluation was planned for ahead of time and not as an afterthought. The present evaluation is, therefore, definitely not ex post facto.

Setting aside for the moment any personal stake the author may have in this evaluation, it is also worth noting that WECEP hired a presumably

disinterested third party to undertake the evaluation. In doing so, and in preplanning the evaluation, WECEP has minimized certain biases which might have easily entered into the evaluation to its own advantage.

The Dependent Variables

The dependent variables in this evaluation are the variables which were used to assess the effects[1] of WECEP. These can be divided into two sets (reflecting the major objectives of WECEP): (a) school performance variables, which included absences, tardiness, grade point average, citizenship ratings and school (teacher) evaluations (data on standard achievement tests were not available at the time of the evaluation study); and (b) behavior-attitude ratings. The latter included ratings on such behaviors as "completes class assignments," "cooperates with teacher," and "shows initiative in schoolwork," and such attitudes as morale, attitude toward school and self-esteem.

The Instruments

Appendix A shows copies of the instruments used in this evaluation study. They include the following:

1. The School Evaluation rating form completed by the mathematics or english teachers at the beginning of the first semester and at the end of the school year. A 5-point scale is used in rating the student on: Neatness (personal grooming); Courtesy; Student's morale; Completion of class assignments; Cooperates with teacher; Gets along with co-students; Shows initiative in schoolwork; Takes part in class discussions; and Careful use of books, supplies and facilities. This form is completed for students in both the Experimental and Control groups.

[1] "effects" is used here in the technical, analysis of variance sense, as in "main effects".

2. The Employer's Evaluation rating form completed by the student's supervisor at his/her place of employment. The form is filled out approximately two weeks after the student starts on the job and at the end of the school year. A 5-point scale is used in rating the student in: Neatness (personal grooming); Courtesy; Honesty; Attendance; Accepts constructive criticism; Cooperates with supervisors and co-workers; Takes pride in work; Shows initiative; Completes assigned tasks; Understands job procedures; Works well without supervision; Able to follow directions; Accuracy in work; Observes rules; and Uses equipment/supplies properly. This form is completed only for students in the Experimental group. The two preceding forms were designed by the U. S. Department of Labor before the program was initiated and were intended specifically for use in an evaluation of WECEP.

3. The Student Survey interview schedule was used as the interview guide and recording form in the interviews conducted with ninth and eleventh grade students in both Experimental and Control groups. The form yields five quantified variables in the form of ratings made by the interviewer: Attitude toward school (Item 1); Satisfaction with school (Item 4); Future orientation (Item 6); Evaluation of school experience (Item 8); and Self-esteem (Item 11).

4. The WECEP Questionnaire, sent to supervisors of ninth grade students in the Experimental group. The questionnaire had checklists of changes observed in the WECEP trainees and current characteristics of the trainees; ratings of adjustment to the company, job, fellow employees and supervisor; ratings on the

reception accorded the student; and ratings on the coordinator's effectiveness in working with the student. Other items asked for suggestions for improving the program.

The latter two instruments were designed during the evaluation study at the time of data collection specifically to meet the objectives of the evaluation and to fulfill the terms of the contracts which called for follow-up, by means of interview, of the alumni of the 1969-70 WECEP program and their controls, and interviews with current participants and employers in the program.

The Students

A total of 413 students constituted the target samples for the evaluation. The ninth grade students totalled 229, consisting of 113 students in the Experimental group and 116 in the Control group. The Experimental students were those in the WECEP program at the time of the evaluation (May 1) and who had been in the program for at least 30 days. The Control students were those chosen as Controls at the beginning of the school year. There were 72 males and 41 females in the Experimental group, 74 males and 42 females in the Control group. The 229 students came from nine junior high schools.

There were initially 184 students in the eleventh grade group, of which 94 were in the Experimental group and 91 in the Control group. At the time of the evaluation, 41 Experimentals and 28 Controls were no longer on the rosters of the Minneapolis Public Schools, leaving a total of 53 in the Experimental group and 63 in the Control group. Of the Experimentals, 30 were male and 23 were female; of the Controls, 39 were male and 24 were female. These eleventh grade students were located in nine senior high schools and the Work Opportunity Center.

The students in the WECEP program were selected by a procedure which is described in Appendix B.

The Hypotheses

In a posttest-only control group design such as is being used in this evaluation, the optimal statistical test is the t test (Campbell & Stanley, 1966). It is possible to use "blocking" on subject variables or covariance analysis but this is not necessary. (In the present situation, no subject variables such as test scores were available, anyhow.) Therefore, all hypotheses under test in this evaluation are of the form, "There is no difference between Experimental and Control groups concerning----", with each dependent variable being used in its turn to fill in the rest of the hypothesis. The probability of each hypothesis is given in the tables of results so that the reader may set his/her own level of significance.

The preceding hypothesis (hypotheses) can be tested validly only if assignment to Experimental and Control groups was done at random. In making assignments for the WECEP program, the educationally disadvantaged candidates were initially paired as closely as possible by sex, race, academic performance and family status. Members of each pair were then to be randomly assigned to Experimental and Control groups. Random assignment was not possible in all instances, however. For a variety of reasons, assignment to the WECEP program for several pairs tended to fall on the more disadvantaged of the pair, thus biasing the Control group in the direction of having a slight initial advantage (Muller, 1970). For the purposes of this evaluation, however, the assumption of random assignment will be made.

Data Collection

Data on absences, tardiness, school grades and citizenship ratings were taken from school records.[2]

School Evaluation and Employer's Evaluation forms were completed by teachers and supervisors, respectively, at the beginning and at the end of the school year. It is worth noting that the end-of-year ratings were completed without referring to the beginning-of-year ratings. That is, the end-of-year ratings were made independently of the beginning of year ratings.

The interviews with students were conducted by five graduate students in counseling psychology. Each interviewer was briefed carefully on the use of the Student Survey Form. He/She was provided with a list of students in a given high school and instructed to go down the list, interviewing each student in the sequence given in the list. Experimental and control students were randomly sequenced on the list so that the interviewer would not be aware of the group membership of the interviewee until possibly Question 9, when the interviewee was asked about special programs helpful to the student in preparing for work. The interviewer was not told that the purpose of the interview was to collect data in connection with an evaluation study. Instead the project was represented to the interviewer as an opinion survey. As far as the interviewer was concerned, he was interviewing a list of selected students. He had no knowledge that Experimental and Control groups were involved. These procedures were adopted to prevent interviewer bias from entering into the ratings.

Because of limits on the time available to interview students, lists for each school were divided into blocks, with each block having approximately equal numbers of Experimentals and controls. Thus it was possible to halt

[2]This was done very efficiently by Shirley Affeldt.

the interviewing at any point and still have a technically adequate random sample of both Experimental and Control groups. As it turned out, this was unnecessary. The problem was rather that many students, both Experimental and Control, were not available for the interviews. This constituted a form of "experimental mortality" discussed earlier. Whatever factors were involved in the selective availability of students, these might exert some influence on the outcomes. However, to the extent that these factors differed from school to school, from day to day, and from class period to class period, to that extent they would tend to "cancel out" in terms of net effect. Thus there is reason to believe that the main effect (Experimental vs. Control) was not obscured by the effects of these selective factors.

Neither would the use of several interviewers affect the main effect under study. If an interviewer had a particular rating bias (e.g., leniency), it would presumably be applied equally to Experimentals and Controls since he was interviewing approximately equal numbers of both groups. Thus interviewer rating biases may shift the observed mean values one way or the other, but the shift would apply equally to Experimentals and Controls and would <u>not</u> affect the difference between groups. It is when the interviewer bias affects the difference between groups that such bias becomes a problem. The convoluted procedures for interviewing which were adopted were designed precisely to prevent such from happening.

Finally, the WECEP Questionnaire was mailed out to supervisors of the trainees. Because of time constraints, no attempt was made to follow-up the first mailing to increase response rate. The data reported are therefore biased by the propensity to fill out and return mail questionnaires.

Results

The results of the analyses are presented in Tables 1-9.

Table 1 shows the data for the school performance of the ninth grade students, separately for Experimentals and for Controls. Without normative data for comparison, it is not possible to interpret these data *vis a vis* the average Minneapolis Public School ninth grader. However, Table 1 shows that the Experimentals were significantly absent less frequently and tardy less frequently than their Control group counterparts. On grade point averages and citizenship ratings, the two groups do not differ. The Experimentals did tend toward slightly better grades in Mathematics than the Controls.

(The probability values shown are probabilities for the null hypothesis, under a one-way analysis of variance F-test, which is equivalent to the t-test in the two-group case. The values are for a two-tailed test. If the reader wishes to convert these values into a one-tailed test, in the expectation that the alternative hypothesis should be that the Experimentals are better off than the Controls, then the values should be halved, e.g., a reported value of .10 would be .05 under the one-tailed test.)

Appendix C shows the data separately for males and females. Table C-1 presents the school performance data for the male ninth graders, while Table C-2 presents the data for the female ninth graders. The better showing of the Experimentals over the Controls in their absence and tardiness records and in their mathematics grade point average is more pronounced for the boys than for the girls.

Table 2 shows the data for the School Evaluation ratings for the ninth graders. Mean ratings are generally between 2 (Fair, low quality, student

not achieving at his level of capability) and 4 (Very Good, high quality, good level of achievement for individual student. A rating of 3 is good, satisfactory quality, staisfactory level of achievement). The best ratings of the Experimentals were for Neatness, Courtesy, Student's Morale, Cooperates with teacher, Gets along with co-students, and Careful use of books, supplies and facilities. Their lowest ratings were received for: Shows initiative in schoolwork, and Takes part in class discussions. On almost every rated variable (with the exception of Courtesy and Careful use of books, supplies and facilities), Experimentals were rated lower, in some instances significantly lower, than Controls at the beginning of the school year. In every instance without exception, Experimentals were rated significantly higher than Controls at the end of the school year.

These same data are presented in a different way in Tables 3 and 4. In these tables, one each for Experimental and Control groups of ninth graders, the average ratings at the beginning and at the end of the year are contrasted. It can be seen that on every rated variable, the Experimentals significantly improved their means at the end of the school year. In contrast, the Controls showed few gains at the end of the year.

The school evaluation data for males and females separately are presented in Tables C-3 and C-4 of Appendix C. The same beginning vs end-of-year patterns as described in the preceding paragraph are found for both sexes, but the pattern is more pronounced for the males than for the females.

Table 5 shows the interview data for the ninth grade students. Between 60% and 70% of the students were interviewed, slightly more Experimentals than Controls. Because of the procedures used, these interviewed students may be taken as highly representative of their respective groups. On two

variables, Mention of school program and Attitude toward school, the differences between groups were significant in favor of the Experimentals. The differences approached significance for two other variables, Future Orientations and Self-esteem. The Controls were rated as slightly more oriented toward the future than the Experimentals, while the Experimentals were given higher ratings of self-esteem than the Controls.

On Attitude toward school, Satisfaction with School, and especially Self-esteem, both Experimentals and Controls had means which were above the neutral midpoint on the rating scale (which was 5 on a 9-point scale). On Evaluation of School experience and Future Orientation, both groups had means below the scale midpoints (which was 5 for Evaluation of School experience and 2.5 for Future orientation). Mention of school program is expressed in proportions, which can be translated into percentages. Thus, 68% of the Experimentals, but only 8% of the controls mentioned specific school programs as helpful in preparing them for work. Of the 49 Experimental Group students who mentioned a school program, all mentioned WECEP, 48 of them in a positive manner and one negatively. Other programs mentioned by the Experimentals included Student Support Program (2 mentions), NYC (2 mentions) and Upward Bound (1 mention). Five Control Group students mentioned the following programs: WECEP (4 mentions), WOC (5 mentions), Student Support Program (2 mentions), Work Program (2 mentions), NYC (1 mention).

Appendix C, Tables C-5 and C-6, show the interview data for each sex group. Among the ninth grade boys, the Experimentals had better attitudes toward school than the Controls. Among the ninth grade girls, the Experimentals were less satisfied with school, but had higher self-esteem ratings, than the Controls.

Tables 6 and 7 show the employer data on the ninth grade WECEP trainees. On Table 6, the ratings given at the beginning and at the end of the work experience are compared. In almost every instance (the exception being Attendance) a highly significant improvement in the ratings was observed. Almost all of the mean ratings were above 3 (Good, satisfactory quality and level of performance). Thus, on the Employer's Evaluation form, supervisors on the average expressed satisfaction with the WECEP trainees.

Table 7 shows the percentage of supervisors who attribute specific characteristics to the WECEP trainees. For example, Accepts more responsibility was a characteristic seen in WECEP trainees by 64% of the supervisors. The first eight items (Accepts more responsibility, to Has improved in grooming) represents supervisor perceptions of changes in the WECEP trainee. In most respects (with the exception of initiative, reliability, and grooming) a majority of the supervisors reported changes for the better in the WECEP trainee.

On items 10 through 20 supervisors were asked to indicate the characteristics which applied to their trainees. A majority of supervisors reported favorable characteristics such as: Able to do job without direction or supervision; Eager to do a good job; Performs like a regular employee; Gets along well with other employees; and Can be relied on to do his/her job. Ten percent or less of the supervisors reported unfavorable characteristics such as: Can't handle independence, can't work alone; Has gained little in terms of skills; Has lost interest in the job. Fifteen percent of the supervisors checked Neglects to inform company when ill.

The rest of the items (21 to 26) pertaining to the student were ratings of student adjustment. In all instances, the mean rating was above 3 on

a 4-point scale (3=well, 4=very well). Likewise, supervisor ratings of coordinator effectiveness in working with the student and with the supervisor were on the average between 3 and 4 on a 4-point scale (3=effective, 4=very effective).

Tables 8 and 9 show the data for eleventh grade students who were in the WECEP Experimental and Control groups in 1969-70.

Table 8 presents data comparing Experimentals and Controls on school performance (Absences, Tardiness, Grade point averages, Number of credits earned, and Citizenship ratings). These data were obtained from school records. As Table 8 shows, no significant differences were observed between the two groups. Grade point average in English and Citizenship ratings in English approach significance. In the case of the former, the Control group had the higher mean; in the case of the latter, the Experimental group had the higher mean. Otherwise, both groups were quite equivalent, with total grade point averages close to 2.00, and slightly higher grades for Mathematics than for English.

Tables C-7 and C-8 in Appendix C show the school performance data for each sex group separately. These tables show that the female eleventh grade Experimentals were significantly more absent and tended toward more tardiness than their Control counterparts. The male eleventh grade Experimentals on the other hand, tended to be absent and tardy less frequently than their Control counterparts although these differences were not statistically significant. There were no significant differences in grades between Experimentals and Controls for either sex. However, male Experimentals tended to have lower Citizenship ratings in Mathematics, while female Experimentals tended to have Lower Citizenship ratings in English.

Table 9 shows the interview data for the eleventh grade students. The two groups are quite similar in Attitude toward school, Satisfaction in the school, Future orientation, and Evaluation of school experience. The Experimentals had significantly higher Self-esteem ratings than the Controls, and as expected mentioned specific school programs as helpful much more frequently.

Tables C-9 and C-10 show the same data for each sex group. Except for Mention of school program, no differences between Experimentals and Controls were found for males (male Experimentals did tend to have higher Self-esteem ratings). However, for female eleventh graders, the Experimentals were rated as being significantly more satisfied with school and more future oriented, in addition to mentioning specific school programs more frequently. Likewise, they tended to have higher Self-esteem ratings.

With respect to mention of specific school programs, 23 Experimentals and 8 Controls referred to school programs. Among the Experimentals, 20 mentioned WECEP, all but one positively; 7 mentioned Work Programs, 6 positively; 4 mentioned NYC, 3 of these negatively; and 2 mentioned Occupational Relations, 1 positively. Among the Controls, 4 mentioned WECEP, 3 of these positively, 6 mentioned NYC, 4 positively; 4 mentioned Work Programs, 2 positively; and one each mentioned JA, NAB and candy striping, mostly with a neutral evaluation.

An interesting final comparison could be made between Tables 1 and 8, and between Tables 5 and 9. These comparisons are between ninth graders and eleventh graders on the same variables. It can be seen that there are few significant differences between ninth and eleventh graders in school performance (Table 1 vs Table 8), but there are distinct differences in the

interview data between the two grades in favor of the eleventh grade. Since the same set of interviewers interviewed both grades, this difference is not due to interviewer bias. It could be due to a selective bias ("experimental mortality") in that the students who persist to the eleventh grade (or at least remain in the Minneapolis Public School system) are generally more favorably disposed to school and have slightly better attitudes. Since the difference was noted for both Experimental and Controls, the difference may not be attributed solely to WECEP. However, to the extent that WECEP helps a disadvantaged group keep on par with its peers, it has shown a significant effect and played a significant and constructive role in the lives of the trainees.

Conclusions and Recommendations

Three major conclusions emerge from this evaluation:

1. The impact of WECEP is to be found not in school grades but in the behavior-attitudinal area (including attendance, punctuality, and attitudes toward school and work, teachers and employers, co-students and co-workers, and the like). WECEP is given high marks by both teachers and employers with respect to the behavior-attitude changes observed in the WECEP students.

2. For those WECEP students remaining in the Minneapolis Public Schools, favorable attitudes toward school and WECEP, and positive self-esteem tend to be manifested in the eleventh grade.

3. However, the ninth grade advantage of the 1969-70 WECEP students (in terms of school performance) over their control group counterparts was not maintained to the eleventh grade.*

The first conclusion can be made with much confidence. The data on this point are persuasive. It might be noted that, after the fact, the findings "make sense"--WECEP was designed to influence behaviors-attitudes directly and only indirectly to influence grades (hopefully as a result of improved behaviors-attitudes).

The 2nd and 3rd conclusions cannot be made with as much confidence as the first. The validity of the second and third conclusions are contingent on the representativeness of the eleventh grade students, for whom data were obtained, as samples of the original (1969-70) groups. There is no reason to doubt that dropping out of school is selective and influenced by certain factors. However, on an apriori basis, equally strong cases can be made for the position that the net effect of such factors is to weaken the WECEP impact as for the position that the net effect strenghtens the impact of WECEP. It could just as plausibly be argued that it is the "better" WECEP

*See Muller, P., First Year Report of the Work Experience Career Exploration Program (WECEP), Minneapolis, Minneapolis Public Schools, 1970

trainees who are dropping out to take jobs as that it is the "better" trainees who remain in school. This impasse can only be resolved by gathering follow-up data on the WECEP trainees to find out exactly what has happened to each one of them.

Three recommendations can be made with respect to evaluation:

1. Evaluation should include the follow-up of WECEP trainees who have left the school system in order to ascertain what actually happened to them, whether they are living socially useful as well as individually fulfilling lives. Without follow-up, the "selective dropout" question cannot be answered and to that extent evaluation will be incomplete. If cost is a consideration, sampling techniques can be used to advantage to ensure validity of conclusions.

2. Evaluation should be undertaken on a regular, periodic, short-time interval (e.g., yearly), basis. If this is done, much better change data will be obtained and it is conceivable that the cost of follow-up (as recommended above) will be lessened.

3. Evaluation should be designed not just to assess outcomes (as in the present evaluation) but also to provide "feedback" by which the program can be modified to suit changing circumstances and changing student populations. As an illustration, the responses of supervisors to the question "If you were to develop a work program such as WECEP for next year, what should the employers do differently?" are given in Appendix D. These were the responses of 20 supervisors out of 61 who completed the mail questionnaire (and may not be representative of the more than one hundred supervisors of WECEP trainee). Similar questions, and questions of even more specific nature, could be put to students and teacher-cordinators as well as to supervisors to provide this useful "feedback" function.

Is WECEP worth it? The preceding evaluation and analysis speaks to the benefits that accrue from the program. There is no doubt in the present author's mind that, according to the evaluation, WECEP has been beneficial to the participating students (and possibly to the participating employers as well).

References

Caldwell, B. M. Introduction: Period of consolidation. In Hellmuth, J. (Ed.), Compensatory education: A national debate, Volume 3, Disadvantaged child. New York: Brunner/Mazel, 1970.

Campbell, D. T. & Erlebacher, A. Reply to the replies. In Hellmuth, J. (Ed.), Compensatory education: A national debate, Volume 3, disadvantaged child. New York: Brunner/Mazel, 1970.

Campbell, D. T. & Stanley, J. C. Experimental and quasi-experimental designs in research. Chicago: Rand McNally, 1966.

Evans, J. W. & Schiller, J. How preoccupation with possible regression artifacts can lead to a faulty strategy for evaluation of social action programs: A reply to Campbell and Erlebacher. In Hellmuth, J. (Ed.), Compensatory education: A national debate, Volume 3, disadvantaged child. New York: Brunner/Mazel, 1970.

Meehl, P. E. Nuisance variables and the ex post facto design. Reports from the Research Laboratories of the Department of Psychiatry, University of Minnesota, 1969. (mimeographed)

Muller, P. First year report of the Work Experience Career Exploration Program (WECEP). Minneapolis: Minneapolis Public Schools, 1970.

Table 1

Means and Standard Deviations for School Performance Data on Current Ninth Grade Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Absences	13.4	12.8	113	17.8	13.6	112	15.6	13.4	225	.01
2. Tardiness	9.9	13.9	113	16.7	16.7	113	13.3	15.7	226	.001
3. Grade point average, Total	1.73	0.75	112	1.72	0.94	112	1.72	0.85	224	.95
4. Grade point average, Mathematics	1.89	0.92	106	1.71	0.91	108	1.80	0.92	214	.17
5. Grade point average, English	1.59	0.86	111	1.55	1.04	107	1.57	0.95	218	.76
6. Citizenship, Mathematics	2.02	0.33	106	2.06	0.42	108	2.04	0.38	214	.52
7. Citizenship, English	2.05	0.38	111	2.10	0.44	107	2.07	0.41	218	.56

Table 2

Means and Standard Deviations for School Evaluation Data on Current Ninth Grade Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Neatness, Beginning	2.68	0.87	109	2.69	0.88	104	2.68	0.87	213	.91
2. Neatness, End	3.46	0.86	108	2.90	0.91	105	3.18	0.93	213	.001
3. Courtesy, Beginning	2.62	0.99	109	2.56	0.95	104	2.59	0.97	213	.63
4. Courtesy, End	3.36	0.90	108	2.77	1.06	105	3.07	1.02	213	.001
5. Student's morale, Beginning	2.31	0.85	108	2.67	0.95	104	2.49	0.92	212	.004
6. Student's morale, End	3.38	0.92	107	2.74	1.07	105	3.07	1.04	212	.001
7. Completion of class assignments, Beginning	2.07	0.88	109	2.34	1.10	103	2.20	1.00	212	.049
8. Completion of class assignments, End	3.04	0.99	108	2.40	1.24	105	2.72	1.16	213	.001
9. Cooperates with teacher, Beginning	2.37	0.94	109	2.58	0.99	104	2.47	0.97	213	.110
10. Cooperates with teacher, End	3.29	0.96	108	2.72	1.14	105	3.01	1.09	213	.001
11. Gets along with co-students, Beginning	2.62	0.89	109	2.76	0.83	104	2.69	0.86	213	.250
12. Gets along with co-students, End	3.44	0.86	108	2.95	0.94	105	3.20	0.93	213	.001
13. Shows initiative in school work, Beginning	2.03	0.81	109	2.25	1.01	104	2.14	0.92	213	.074

--continued next page--

Table 2, continued

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
14. Shows initiative in schoolwork, End	2.95	1.04	108	2.34	1.18	105	2.65	1.15	213	.001
15. Takes part in class discussions, Beginning	2.08	0.83	109	2.29	1.04	104	2.18	0.94	213	.107
16. Takes part in class discussions, End	2.95	1.08	108	2.40	1.25	105	2.68	1.19	213	.001
17. Careful use of books, supplies, and facilities, Beginning	2.64	0.99	109	2.55	1.01	104	2.60	1.00	213	.500
18. Careful use of books, supplies, and facilities, End	3.25	0.91	108	2.70	0.99	105	2.98	0.99	213	.001

Table 3

Means for School Evaluation Data on
Current Experimental Group of Ninth Grade
Students, Beginning vs End of Year Reports

Variables	Beginning M	Beginning N	End M	End N	P(diff)
1. Neatness (personal grooming)	2.69	110	3.48	109	.001
2. Courtesy	2.64	110	3.37	109	.001
3. Student's morale	2.33	109	3.40	108	.001
4. Completion of class assignments	2.08	110	3.05	109	.001
5. Cooperates with teacher	2.37	110	3.29	109	.001
6. Gets along with co-students	2.64	110	3.45	109	.001
7. Shows initiative in schoolwork	2.04	110	2.97	109	.001
8. Takes part in class discussions	2.09	110	2.96	109	.001
9. Careful use of books, supplies, and facilities	2.65	110	3.26	109	.001

Table 4

Means for School Evaluation Data on
Current Control Group of Ninth Grade
Beginning vs End of Year Reports

Variables	Beginning M	Beginning N	End M	End N	P(diff)
1. Neatness (personal grooming)	2.69	104	2.90	106	.10
2. Courtesy	2.56	104	2.76	106	.14
3. Student's morale	2.67	104	2.74	106	.66
4. Completion of class assignments	2.34	103	2.40	106	.73
5. Accepts constructive criticism*	2.33	104	2.59	106	.044
6. Cooperates with teacher	2.58	104	2.72	106	.66
7. Gets along with co-students	2.76	104	2.95	106	.11
8. Shows initiative in schoolwork	2.25	104	2.34	106	.56
9. Takes part in class discussions	2.29	104	2.40	106	.50
10. Careful use of books, supplies, and facilities	2.55	104	2.70	106	.28

*Not found in Experimental Group form.

Table 5

Means and Standard Deviations for Interview Data on Current Ninth Grade Students, by Group

Variable	Group									
	Experimental			Control			Total			
	M	SD	N	M	SD	N	M	SD	N	P(diff)
1. Attitude toward school	5.82	1.65	72	5.17	2.13	65	5.51	1.91	137	.04
2. Satisfaction with school	5.26	2.18	72	5.52	1.97	65	5.39	2.08	137	.53
3. Future orientation	2.25	0.74	69	2.48	0.95	63	2.36	0.85	132	.12
4. Evaluation of school experience	4.83	2.53	72	4.51	2.52	63	4.68	2.52	135	.54
5. Self-esteem	6.43	1.58	72	5.94	2.11	64	6.20	1.86	136	.12
6. Mention of school program	0.68	0.47	72	0.08	0.27	64	0.40	0.49	136	.001

Table 6

Means and Standard Deviations for Employer's Evaluation Data on Current Ninth Grade Experimental Group Students

Variable	Initial			End			P(diff)
	M	SD	N	M	SD	N	
1. Neatness	3.02	0.83	105	3.50	0.85	106	.001
2. Courtesy	3.25	0.83	105	3.74	0.84	106	.001
3. Honesty	3.72	0.90	104	4.12	0.91	105	.002
4. Attendance	3.58	1.03	104	3.77	1.09	105	.18
5. Accepts constructive criticism	3.26	0.91	105	3.69	0.83	106	.001
6. Cooperates with supervisors and co-workers	3.51	0.87	105	3.93	0.86	106	.001
7. Takes pride in work	3.19	0.91	105	3.70	0.85	106	.001
8. Shows initiative	2.97	0.89	105	3.45	0.94	106	.001
9. Completes assigned tasks	3.25	0.87	105	3.65	0.91	106	.002
10. Understands job procedures	3.17	0.89	105	3.67	0.91	106	.001
11. Works well without supervision	3.06	0.94	105	3.56	0.94	106	.001
12. Able to follow directions	3.31	0.82	105	3.70	0.90	106	.002
13. Accuracy in work	3.18	0.84	105	3.63	0.87	106	.001
14. Observes rules	3.41	0.76	105	3.74	0.85	106	.004
15. Uses equipment/supplies properly	3.41	0.85	105	3.73	0.85	106	.007

Table 7

Means and Standard Deviations for Employer Mail Questionnaire Data on Current Ninth Grade Experimental Group Students

Variable		%	N
1.	Accepts more responsibility	64	61
2.	Is more mature	50	61
3.	Has more self-confidence	72	60
4.	Exercises more initiative	48	61
5.	Social adjustment is better	51	61
6.	Has improved in job skills	66	61
7.	Has become more reliable	33	61
8.	Has improved in grooming	28	61
9.	Trainee did not need to improve	04	61
10.	Able to do jobs without direction or supervision	55	61
11.	Needed better pre-job orientation	04	61
12.	Eager to do a good job	50	61
13.	Can't handle independence, can't work alone	10	61
14.	Has made many friends	40	61
15.	Has gained little in terms of skills	10	61
16.	Performs like a regular employee	56	61
17.	Has lost interest in the job	05	61
18.	Gets along well with other employees	82	61
19.	Neglects to inform company when ill	15	61
20.	Can be relied on to do his/her job	61	61

--continued next page--

Table 7, continued

Variable	M	SD	N
21. How well has the student adjusted to the company?	3.21	.61	60
22. How well has the student adjusted to his/her job?	3.23	.67	60
23. How well has the student adjusted to his/her fellow employees?	3.37	.64	59
24. How well has the student adjusted to his/her supervisor?	3.20	.59	59
25. How was the student received by other employees at the outset?	3.20	.58	60
26. How is the student received by other employees currently?	3.34	.52	52
27. How effective has the coordinator been in working with the student?	3.33	.61	57
28. How effective has the coordinator been in working with the supervisor?	3.39	.63	51

Table 8

Means and Standard Deviations for School Performance Data on Eleventh Grade Students (1969-70 Group) by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Absences	19.3	16.2	52	16.2	15.1	61	17.6	15.6	113	.30
2. Tardiness	15.6	16.6	50	15.0	16.1	57	15.3	16.2	107	.85
3. Grade point average, Total	1.99	0.88	41	2.04	0.83	46	2.02	0.85	87	.77
4. Number of credits	1.32	0.49	53	1.31	0.51	63	1.31	0.50	118	.96
5. Grade point average, Mathematics	2.19	2.03	8	2.17	0.89	8	2.18	1.51	16	.98
6. Grade point average, English	1.81	0.97	42	2.18	0.94	38	1.99	0.96	80	.08
7. Citizenship, Mathematics	1.91	0.85	8	1.86	0.27	8	1.89	0.61	16	.87
8. Citizenship, English	1.99	0.38	38	1.86	0.38	44	1.92	0.39	82	.11

Table 9

Means and Standard Deviations for Interview Data on Eleventh Grade (1969-70 Group) Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Attitude toward school	6.00	2.65	29	6.22	1.83	45	6.14	2.17	74	.67
2. Satisfaction with school	6.62	2.13	29	5.98	2.62	44	6.23	2.44	73	.27
3. Future orientation	2.93	0.65	29	2.71	0.76	45	2.80	0.72	74	.20
4. Evaluation of school experience	5.41	3.07	29	5.53	3.02	45	5.49	3.02	74	.86
5. Self-esteem	7.59	1.48	29	6.80	1.98	44	7.11	1.83	73	.07
6. Mention of school program	0.79	0.41	29	0.18	0.39	45	0.42	0.50	74	.001

Appendix A

Copies of Evaluation Instruments

wecep-6

3 copies (First copy for ESA through State Coordinator; second copy for State Coordinator; third copy for Teacher-coordinator.)

To be completed by teacher-coordinator

STATE _____

DATE _____

DUE JUNE 15, 1972

SCHOOL EVALUATION

(For WE/CEP Experimental Students)

Name of Student _____ School _____

Age _____ Sex _____ Teacher-coordinator* _____

Social Security Number _____ Industry _____

Disadvantaged _____ Handicapped _____ Occupation _____

	Beginning of School Year (Approximately two weeks after start of school)	End of School Year 1971-72
Neatness (personal grooming)		
Courtesy		
Student's morale		
Completion of class assignments		
Cooperates with teacher		
Gets along with co-students		
Shows initiative in school work		
Takes part in class discussions		
Careful use of books, supplies, and facilities		

Code:
- 5 Excellent - very high quality, high level of achievement for individual student
- 4 Very good - high quality, good level of achievement for individual student
- 3 Good - satisfactory quality, satisfactory level of achievement for individual student
- 2 Fair - low quality, student not achieving at his level of capability
- 1 Poor - poor quality, student achieving far below level of capability

*The teacher-coordinator completes this form; however, opinions of other teachers involved may be obtained.

wecep-5

3 copies (First copy for ESA through State Coordinator; second copy for State Coordinator; third copy for teacher-coordinator.)

STATE _____

DATE _____

DUE JUNE 15, 1972

EMPLOYER'S EVALUATION

(For WE/CEP Experimental Students on the Job)

Name of Student _____ School _____

Age _____ Sex _____ Teacher-coordinator _____

Disadvantaged _____ Handicapped _____ Industry _____

Occupation _____

_____

Name and address of company

_____ Name and title of authorized representa-

_____ tive making evaluation

	Initial Report (Should be filled out approximately two weeks after student starts job)	End of School Year 1971-72
Neatness (personal grooming)		
Courtesy		
Honesty		
Attendance Punctual		
Calls in when absent		
Accepts constructive criticism		
Cooperates with supervisors and co-workers		
Takes pride in work		
Shows initiative		
Completes assigned tasks		
Understands job procedures		
Works well without supervision		
Able to follow directions		
Accuracy in work		
Observes rules		
Uses equipment/supplies properly		

Code: 5 Excellent - Very high quality, high level of performance for individual student
4 Very good - high quality, good level of performance for individual student
3 Good - satisfactory quality and level of performance
2 Fair - low quality, student not performing at his level of capability
1 Poor - poor quality, student performing far below level of capability

1972 Student Survey
Minneapolis Public Schools

Student: _____
School: _____
Interviewer: _____
Date: _____
Time Started: _____

[Introduce self. General statement of purpose. Emphasize short interview: interested in your opinions about school.]

1. How are you getting along in school?

1	2	3	4	5	6	7	8	9
S-		M-		N		M+		S+

2. What do you like about school?
Prime: Anything more you'd like to add?

_____
_____
_____
_____
_____

3. What don't you like about school?
Prime: Anything more you'd like to add?

_____
_____
_____
_____
_____

4. Do you think school meets your needs?

1	2	3	4	5	6	7	8	9
S-		M-		N		M+		S+

Needs met: _____
_____
_____
_____
_____

Needs not met: _____
_____
_____
_____
_____

5. What is the most important thing in your life right now? _____
_____

6. What do you think will be the most important thing in your life in the future, 5 or 10 years from now? _____
_____

Future orientation: 1. None 2. Slight 3. Some 4. Much

7. How about work? What do you see yourself doing when you get out of school? (What kind of job?) _____

8. Do you think your school experience is helping prepare you for this?

1	2	3	4	5	6	7	8	9
S-		M-		N		M+		S+

9. Have you had any special programs in your school or in junior high that you think are/were helpful in preparing you for work? (Explore each: in what way was it helpful?) _____

10. If you could do anything you wished to do but still had to work for a living, what would you really want to be doing when you get out of school?

_____

11. Do you think you'll make it? What makes you think so?/why not? (Explore self-concept, self-esteem)

SE:

1	2	3	4	5	6	7	8	9
S-		M-		N		M+		S+

Comments: _____

12. Do you have any questions you'd like to ask me about the survey?

_____

[Thank the student]

Time ended: _____

WECEP QUESTIONNAIRE

Company Name _____

Respondent _____

WECEP Trainee _____

1. Thinking back to the first few days in the job, what changes, if any, do you see in your WECEP trainee? Check as many as apply.
   - ___accepts more responsibility
   - ___is more mature
   - ___has more self-confidence
   - ___exercises more initiative
   - ___social adjustment is better
   - ___has improved in job skills
   - ___has become more reliable
   - ___has improved in grooming
   - ___trainee was ok to start with, did not need to improve

   Other comments: _____

2. Which of the following is true of your WECEP trainee? Check as many as apply.
   - ___is able to do jobs without direction or supervision
   - ___needed better pre-job orientation
   - ___eager to do a good job
   - ___can't handle independence, can't work alone
   - ___has made many friends
   - ___has gained little in terms of skills
   - ___preforms like a regular employee
   - ___has lost interest in the job
   - ___gets along well with other employees
   - ___neglects to inform company when ill
   - ___can be relied on to do his/her job

   Other comments: _____

3. How well has the student adjusted to the company?
   ___poorly ___not so well ___well ___very well

   to his/her job?
   ___poorly ___not so well ___well ___very well

   to his/her fellow employees?
   ___poorly ___not so well ___well ___very well

3. cont.
to his/her supervisor
___poorly ___not so well ___well ___very well
Comments: _____

4. How was the student received by other employees at the outset?
___poorly ___not so well ___well ___very well
how is the student received by other employees currently
___poorly ___not so well ___well ___very well
Comments: _____

5. How effective has the coordinator been in working with the student?
___ineffective ___not so effective ___effective ___very effective
with the supervisor?
___ineffective ___not so effective ___effective ___very effective
Comments: _____

6. In what ways might the coordinator be more effective?
_____

7. Have you participated in other school work programs in the past?
___yes ___no
Currently? ___yes ___no
If yes:
How does WECEP compare with the other programs?
___very unfavorably ___unfavorably ___favorably ___very favorably
Comments: _____

8. If you were to develop a work program such as WECEP for next year, what should the employers do differently? _____

9. Overall, what grade would you give the WECEP project? Circle one.
F D- D D+ C- C C+ B- B B+ A- A

10. Any final comments? _____

_____

_____

_____

Thank you for your cooperation!

Appendix B

STUDENT SELECTION FOR SPECIAL NEEDS WORK PROGRAMS

= = = = = = = = = = = = = = = = = = = =

Objectives:
1. Sharpen Focus on Target Group
2. Improve Cost-benefit Ratio
3. Strengthen Accountability

= = = = = = = = = = = = = = = = = = = =

Phase I

Describe to Pupil Personnel Team those students most likely to profit from your program:

A. TYPICALLY GEARED TO THE CONCRETE & THE PRACTICAL,

B. DISADVANTAGED WHEN CALLED UPON TO RESPOND TO THE ABSTRACT, CATEGORICAL & RELATIONAL PROPERTIES OF OBJECTS, BUT GIFTED WHEN CALLED UPON TO RESPOND TO THE CONCRETE, TANGIBLE, IMMEDIATE AND TANGIBLE PROPERTIES,

C. TRAINED THROUGH EXPERIENCES IN HOME, SCHOOL & COMMUNITY, OF REPEATED FAILURES, TO BE FAILURE-AVOIDERS RATHER THAN SUCCESS-SEEKERS,

D. UNABLE TO FULLY PERCEIVE THE RELEVANCE OF EDUCATION TO ADULT LIFE, and

E. POSSESSING LOW SELF-ESTEEM & POOR SELF-IMAGE.

Give each member of pupil-personnel team a roster of students. (PP team includes counselor, social worker, asst. principal, police-liaison officer, etc.)

Phase II

A. EACH MEMBER OF P.P.T. NOMINATES STUDENTS FOR PROGRAM FROM ROSTER INDEPENDENTLY.

B. TEACHER-COORDINATOR TALLIES NOMINATIONS.

C. TEACHER-COORDINATOR CHECKS RECORDS OF NOMINEES WITH HIGHEST NUMBER OF NOMINATIONS, FOR G.P.A., ABILITY, ATTENDANCE & TARDINESS, DEPORTMENT, PERFORMANCE ON STANDARDIZED TESTS, ETC.

D. INTERVIEW CANDIDATES (BY TEACHER-COORDINATOR).

Note: Students selected should be experientially oriented, within normal ability range, likely to drop out of school prior to graduation, unable to relate school to life, displaying poor attitudes about work, school and society, likely to be able to make worthwhile gains on your program which are measurable.

Appendix C

Table C-1

Means and Standard Deviations for School Performance Data on Current Ninth Grade Male Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Absences	12.7	11.9	72	17.1	13.5	72	14.9	12.9	144	.04
2. Tardiness	7.9	13.7	72	16.0	16.5	72	11.9	15.7	144	.002
3. Grade point average, Total	1.67	0.71	71	1.55	1.02	72	1.61	0.88	143	.59
4. Grade point average, Mathematics	1.90	0.90	67	1.56	0.96	71	1.73	0.95	138	.04
5. Grade point average, English	1.48	0.77	71	1.31	0.97	70	1.40	0.88	141	.25
6. Citizenship, Mathematics	2.00	0.33	68	2.11	0.38	71	2.06	0.36	139	.06
7. Citizenship, English	2.05	0.39	71	2.17	0.44	70	2.11	0.42	141	.08

Table C-2

Means and Standard Deviations for School Performance Data on Current Ninth Grade Female Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Absences	14.6	14.2	41	19.3	13.9	40	16.9	14.2	81	.13
2. Tardiness	13.5	13.6	41	17.9	17.1	41	15.7	15.5	82	.19
3. Grade point average, Total	1.82	0.82	41	2.03	0.67	40	1.92	0.76	81	.22
4. Grade point average, Mathematics	1.88	0.94	40	2.00	0.73	37	1.94	0.84	77	.53
5. Grade point average, English	1.75	0.97	41	2.00	1.04	37	1.87	1.01	78	.29
6. Citizenship, Mathematics	2.05	0.34	39	1.95	0.48	37	2.00	0.41	76	.30
7. Citizenship, English	2.06	0.36	41	1.96	0.42	37	2.01	0.39	78	.24

Table C-3

Means and Standard Deviations for School Evaluation Data on Current Ninth Grade Male Students, by Group

Variable	Group: Experimental M	SD	N	Control M	SD	N	Total M	SD	N	Prob.(t)
1. Neatness, Beginning	2.63	0.85	71	2.69	0.86	67	2.66	0.85	138	.72
2. Neatness, End	3.34	0.80	70	2.75	0.89	68	3.05	0.89	138	.001
3. Courtesy, Beginning	2.63	1.05	71	2.51	0.93	67	2.57	0.99	138	.54
4. Courtesy, End	3.33	0.90	70	2.66	1.00	68	3.00	1.00	138	.001
5. Student's morale, Beginning	2.39	0.93	71	2.75	0.93	67	2.57	0.94	138	.03
6. Student's morale, End	3.39	0.97	70	2.69	1.03	68	3.04	1.05	138	.001
7. Completion of class assignments, Beginning	2.07	0.93	71	2.22	1.08	67	2.14	1.01	138	.62
8. Completion of class assignments, End	2.96	1.01	70	2.18	1.20	68	2.57	1.17	138	.001
9. Cooperates with teacher, Beginning	2.38	0.99	71	2.52	0.96	67	2.45	0.97	138	.60
10. Cooperates with teacher, End	3.29	0.95	70	2.62	1.11	68	2.96	1.08	138	.001
11. Gets along with co-students, Beginning	2.56	0.94	71	2.72	0.92	67	2.64	0.93	138	.66
12. Gets along with co-students, End	3.40	0.89	70	2.84	0.96	68	3.12	0.96	138	.001

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Table C-3, continued

Variables	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
13. Shows initiative in schoolwork, Beginning	2.06	0.84	71	2.09	0.95	67	2.07	0.89	138	.82
14. Shows initiative in schoolwork, End	2.94	1.06	70	2.18	1.11	68	2.57	1.15	138	.001
15. Takes part in class discussions, Beginning	1.99	0.85	71	2.16	0.95	67	2.07	0.90	138	.25
16. Takes part in class discussions, End	2.89	1.00	70	2.18	1.12	68	2.54	1.12	138	.001
17. Careful use of books, supplies, and facilities, Beginning	2.58	1.04	71	2.42	0.96	71	2.50	1.00	138	.65
18. Careful use of books, supplies, and facilities, End	3.17	0.95	70	2.47	0.94	68	2.83	1.00	138	.001

Table C-4

Means and Standard Deviations for School Evaluation Data on Current Ninth Grade Female Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Neatness, Beginning	2.79	0.92	39	2.70	0.94	37	2.75	0.93	76	.67
2. Neatness, End	3.72	0.94	39	3.16	0.90	37	3.45	0.96	76	.01
3. Courtesy, Beginning	2.65	0.90	39	2.65	1.01	37	2.64	0.95	76	.97
4. Courtesy, End	3.44	0.91	39	2.97	1.14	37	3.21	1.05	76	.05
5. Student's morale, Beginning	2.21	0.70	38	2.54	0.99	37	2.37	0.87	75	.10
6. Student's morale, End	3.42	0.86	38	2.84	1.14	37	3.13	1.04	75	.01
7. Completion of class assignments, Beginning	2.10	0.79	39	2.56	1.11	36	2.32	0.97	75	.04
8. Completion of class assignments, End	3.21	0.92	39	2.81	1.22	37	3.01	1.09	76	.11
9. Cooperates with teacher, Beginning	2.36	0.84	39	2.68	1.06	37	2.51	0.96	76	.15
10. Cooperates with teacher, End	3.31	0.98	39	2.92	1.19	37	3.12	1.10	76	.12
11. Gets along with co-students, Beginning	2.77	0.81	39	2.84	0.65	37	2.80	0.73	76	.69
12. Gets along with co-students, End	3.54	0.79	39	3.16	0.90	37	3.36	0.86	76	.05

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Table C-4, continued

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
13. Shows initiative in schoolwork, Beginning	2.00	0.76	39	2.54	1.07	37	2.26	0.96	76	.01
14. Shows initiative in schoolwork, End	3.03	1.04	39	2.65	1.25	37	2.84	1.16	76	.15
15. Takes part in class discussions, Beginning	2.28	0.76	39	2.51	1.17	37	2.39	0.98	76	.31
16. Takes part in class discussions, End	3.10	1.21	39	2.81	1.37	37	2.96	1.29	76	.67
17. Careful use of books, supplies, and facilities, Beginning	2.79	0.89	39	2.78	1.08	37	2.79	0.98	76	.96
18. Careful use of books, supplies, and facilities, End	3.41	0.82	39	3.14	0.95	37	3.28	0.89	76	.18

Table C-5

Means and Standard Deviations for Interview Data on Current Ninth Grade Male Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Attitude toward school	5.98	1.55	50	5.21	1.91	42	5.63	1.75	92	.03
2. Satisfaction with school	5.76	1.86	50	5.48	2.04	42	5.63	1.94	92	.51
3. Future orientation	2.23	0.73	47	2.40	0.96	40	2.31	0.84	87	.64
4. Evaluation of school experience	4.86	2.52	50	4.39	2.43	41	4.65	2.47	91	.63
5. Self-esteem	6.52	1.47	50	6.49	1.83	41	6.51	1.64	91	.92
6. Mention of school program	0.70	0.46	50	0.10	0.30	41	0.43	0.50	91	.001

Table C-6

Means and Standard Deviations for Interview Data on Current Ninth Grade Female Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Attitude toward school	5.48	1.81	23	5.09	2.52	23	5.28	2.18	46	.56
2. Satisfaction with school	4.22	2.45	23	5.61	1.88	23	4.91	2.27	46	.03
3. Future orientation	2.26	0.75	23	2.61	0.94	23	2.43	0.86	46	.17
4. Evaluation of school experience	4.83	2.57	23	4.73	2.73	22	2.78	2.62	45	.90
5. Self-esteem	6.26	1.79	23	4.96	2.25	23	5.61	2.11	46	.03
6. Mention of school program	0.65	0.49	23	0.03	0.21	23	0.35	0.48	46	.001

Table C-7

Means and Standard Deviations for School Performance Data on Eleventh Grade (1969-70 Groups) Male Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Absences	14.5	13.1	29	18.4	17.1	39	16.7	15.5	68	.32
2. Tardiness	14.5	14.9	27	15.5	17.0	35	15.1	16.0	62	.81
3. Grade point average, Total	1.82	0.67	22	1.86	0.78	26	1.84	0.72	48	.85
4. Number of credits	1.29	0.49	30	1.21	0.52	39	1.24	0.51	69	.52
5. Grade point average, Mathematics	1.57	0.55	5	1.93	0.76	5	1.75	0.65	10	.59
6. Grade point average, English	1.83	0.84	22	1.97	0.84	21	1.90	0.83	43	.61
7. Citizenship, Mathematics	2.26	0.43	5	1.78	0.32	5	2.02	0.44	10	.08
8. Citizenship, English	2.06	0.35	20	1.97	0.27	26	2.01	0.31	46	.64

Table C-8

Means and Standard Deviations for School Performance Data on Eleventh Grade (1969-70 Groups) Female Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Absences	25.0	18.3	22	12.3	9.7	23	18.5	15.8	45	.006
2. Tardiness	17.1	19.0	22	13.8	14.6	23	15.4	16.8	45	.53
3. Grade point average, Total	2.28	1.02	18	2.27	0.83	21	2.28	0.91	39	.98
4. Number of credits	1.41	0.41	23	1.52	0.43	24	1.46	0.42	47	.62
5. Grade point average, Mathematics	1.34	0.94	2	2.42	0.96	4	2.06	1.02	6	.26
6. Grade point average, English	1.88	1.06	19	2.42	0.98	18	2.15	1.05	37	.11
7. Citizenship, Mathematics	2.00	0.00	2	2.00	1.00	4	2.00	0.00	6	--
8. Citizenship, English	1.92	0.43	17	1.72	0.46	19	1.81	0.45	36	.17

Table C-9

Means and Standard Deviations for Interview Data on Eleventh Grade (1969-70 Groups) Male Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Attitude toward school	6.29	2.11	17	6.17	1.87	29	6.22	1.94	46	.83
2. Satisfaction with school	6.22	1.99	18	6.41	2.34	29	6.34	2.19	47	.77
3. Future orientation	2.83	0.71	18	2.79	0.73	29	2.81	0.71	47	.85
4. Evaluation of school experience	5.22	2.86	18	5.28	3.16	29	5.26	3.02	47	.95
5. Self-esteem	7.50	1.58	18	6.76	2.21	29	7.04	2.01	47	.22
6. Mention of school program	0.83	0.38	18	0.21	0.41	29	0.45	0.50	47	.001

Table C-10

Means and Standard Deviations for Interview Data on Eleventh Grade (1969-70 Groups) Female Students, by Group

Variable	Group: Experimental M	Experimental SD	Experimental N	Control M	Control SD	Control N	Total M	Total SD	Total N	P(diff)
1. Attitude toward school	6.00	3.13	11	6.31	1.82	16	6.19	2.39	27	.74
2. Satisfaction with school	7.27	2.28	11	5.13	3.00	15	6.04	2.88	26	.06
3. Future orientation	3.09	0.54	11	2.56	0.81	16	2.78	0.75	27	.07
4. Evaluation of school experience	5.73	3.50	11	6.00	2.78	16	5.89	3.03	27	.82
5. Self-esteem	7.73	1.35	11	6.87	1.51	15	7.23	1.48	26	.14
6. Mention of school program	0.73	0.47	11	0.13	0.34	16	0.37	0.49	27	.001

Appendix D

Responses of Supervisors to the Question:

"If you were to develop a work program such as WECEP for next year, what should the employers do differently?"

1. No changes ("Working okay as is; it is a good program; has been very successful and has been handled very well..."). (8 mentions)
2. Orientation of new employees would be more helpful.
3. Orientation of fellow employers as to program and age of students.
4. More helpful if employer knew more about student beforehand. Understanding of his interests, skills goals and why he is having difficulty in schoolwork would be helpful in dealing with student.
5. Set up a formal duty schedule (schedules with too much latitude lead to spare time).
6. A planned and written program for the development of the trainee would be beneficial; it should outline progress goals specific to trainee's work; this would encourage continued effort after trainee has achieved average competence.
7. Spend more time with students
8. Should work with clinical instructor at least one week.
9. Spend more time talking with student to get his views on working.
10. Student should spend half of school year at one job, then change.
11. Broaden students' responsibilities and thus make them feel more needed.
12. More hours and better salary.
13. Employers could do more character building as well as skill training.

WECEP ADVISORY COMMITTEE
SUMMARY OF JOINT MEETING WITH
NON-WECEP STAFF, 9 PARTICIPATING SCHOOLS

Prepared by Bruce Gilmer
Minneapolis Gas \Company

Report on Joint Meeting, January 27, 1972
and
Summary of Mail Questionnaire Responses

In an effort to obtain a broader perspective for the program evaluation, a meeting was held with key personnel from the schools participating in the WECEP program. These teachers, counselors, or assistant principals were selected because of their familiarity with the WECEP program and their close relationship with the WECEP students. It was hoped that by meeting with these people an unbiased appraisal of the program would be obtained. Every effort was made to keep the informal discussion as objective as possible. The following is a synopsis of that meeting. We, the advisory committee, felt that to summarize or condense the entire meeting would result in the loss of objectivity. For this reason we have either quoted directly or paraphrased the comments of school personnel. Only catagorizing, marking the comments either negative or positive, has been done. Any conclusions as to the overall worth of the program must be drawn by the reader.

The following remarks made by school personnel were interpreted as positive:

"I constantly hear; I need a job! Jobs and their result, money, are a definite part of the teen subculture. WECEP helps the student participate or be accepted into that subculture."

"The program has been effective in improving attendance in seven of my eight participating students."

"Non-WECEP students have improved. By doing this, they feel they might get on the program."

"Of the special programs at our school, WECEP is the best because of its close coordinator supervision and good job placement."

"I don't know of another program with as high a success ratio."

"If they are on the program (WECEP), they are in school every day."

"Most are problem kids (WECEP students) who could not have made it without the program." Most were disciplinary problems.

"Fifteen of nineteen participants at our school would not be in school without WECEP."

"The biggest mistake that could be made is to discontinue the program." (WECEP)

"These students learn more in their three hours of school and at work than they did in their previous six hour day."

Let's remember that their grades have improved in math and English, which are required subjects; that speaks for itself."

"Of the programs we have participated in, WECEP is best overall."

"Kids get enthused about the program and even go so far as to brush up on the skills necessary for their job."

"Come in and look at the WECEP students' records and you will see the improvement yourself."

"The kids self image improves greatly. For the first time they feel successful."

"The close student-coordinator contact is what makes the program go over."

"The ratio of students to coordinators is very low, which makes for closer supervision and guidance."

"The job can be used as leverage to keep the kids in school."

"WECEP teaches pratical things; kids learn what it's like to be laid off because of a sluggish economy."

The following were interpreted as negative comments:

"We cannot get enough kids on jobs."

"Some students have asked "Do I have to be a problem student to get a job?" The program may appear to reward the bad."

"We have had work opportunity center students who asked to be enrolled in WECEP."

"In some instances, students have been placed on the wrong type of job."

"Many students are lost when they go to high school. There should be a WECEP program in high school for carry on. We have difficulty explaining why there is no such program."

"From a pure taxpayer's standpoint 'A horribly expensive program.'"

"I feel some of the kids would have been able to make it even without the program."

"In a couple of instances, coordinators have been gun shy about placing a problem student on a job for fear of alienating the company and losing the job slot."

"In some instances marginal losers have been picked over apparently pure losers."

"The program is too narrow in scope; it is hitting only a small portion of those who could be helped."

"A girl lost her WECEP job and consequently lost her interest in school; she is now attending in name only." In this case, the effects of the program were not long lasting.

Several comments were made which were neither negative nor positive, but should be mentioned for their worth:

"The program is educational and any appraisal should be performed in relation to the student's performance and conduct in school rather than on the job."

"I personally feel that if one kid stays in school and graduates because of WECEP, it is a success."

"If you have to get more coordinators, fine! -- but get more kids into the program."

"If wonder if the kids can go on alone after WECEP, or if we should possibly furnish additional aid such as a high school WECEP program."

The following responses were obtained from the WECEP Appraisal Questionnaire;

Of those who completed the ratings on the special programs, all except one rated WECEP either first or second in relation to the student's academic performance, deportment, grooming, social adjustment, and attitudes.

Many voiced the same opinions on the WECEP Questionnaire as they did at our meeting of January 27, 1972:

The coordinator is the key to their problems
Grades have improved, but this may be related to reduced academic load
A senior high WECEP is needed

WECEP students experience a lack of association with school peers
Coordinators are apprehensive about placing high risk students
There is a shortage of job stations

Have a non-WECEP school person on the advisory committee
Get non-WECEP teachers more involved with the participating students

MECEP Appraisal

1. List the special programs offered in your school that you are familiar with.

   1.

   2.

   3.

   4.

   5.

   6.

2. Please rank program in relation to its effectiveness in dealing with the following. (Rate the best program number 1, second best 2, etc.)

Program	Academic Performance	Deportment	Grooming	Social Adjustment	Attitude

3. What is the single most positive aspect of the [illegible]

4. What is the single most negative aspect of the WECEP program?

5. What suggestions could you make to improve the program?

COST ANALYSIS

Minneapolis' WECEP has been funded cooperatively with the State Department of Education, Division of Vocational Education. As a three-year pilot, state and federal funds have reimbursed 80%, 75%, and 65% of the costs of this project, respectively. The reimbursement level will be 50% in F Y '73 and will continue at that level in subsequent years, as is the case for all other regular vocational education programs in Minneapolis Public Schools.

In determining per pupil costs in WECEP, the program must be broken into two components; academic and WECEP. Students enrolled in WECEP continue to receive two hours of regular academic coursework, math and English. This constitutes 2/6 of a normal school program.

While it is difficult to assess educational costs accurately for the category of students enrolled in WECEP, it is reasonable to assume students meeting the educational disadvantagement guidelines of the State Plan demand and receive a disproportionate share of school resources when left in the normal school setting and program. It therefore follows that using school district averages of secondary student expenditures for comparison purposes works to the disadvantage of the WECEP project. However, as this effect has not been assessed averages will be used.

The total WECEP budget for F Y 1972 was $184,627, or $1,478 per enrollee. As WECEP enrollees remain in the regular school program for math and English classes (2 hours per day), an amount equal to 1/3 of the normal secondary per pupil expenditure (.33 x $980 = $327) should be added to the cost of WECEP. This results in an average

per pupil cost estimate of $1,805 per WECEP enrollee. This figure compares well with per pupil expenditures in other special programs for similar groups of students.

However, much of this cost is off-set by State and Federal Vocational Education reimbursements. The actual allocation of budget to WECEP by Minneapolis Public Schools for F Y '73 is $70,000, or $560 per WECEP enrollee. Adding $327 for the academic component results in a total Minneapolis Public Schools cost of $887 per WECEP enrollee. This compares very favorably with average secondary per pupil costs to Minneapolis Public Schools ($980).

It should be noted that the preceding cost estimates for WECEP enrollees do not take into account the contributions made to the program by participating employers, (supervisor's time and wages) which are considerable.

PM:sa
6/9/72

An Equal Opportunity Employer

Minneapolis Public Schools

SPECIAL SCHOOL DISTRICT NO. 1
SCHOOL ADMINISTRATION BUILDING
807 Northeast Broadway Minneapolis, Minnesota 55413
Telephone 332-4284

NATHANIEL OBER
Associate Superintendent of Schools for Secondary Education

March 16, 1970

Mr. J. C. Mull
Supervisor of Printing
Northern States Power Company
414 Nicollet Mall C
Minneapolis, Minnesota 55402

Dear Mr. Mull:

I would like to take this opportunity to express the schools' appreciation for your participation in the WECEP pilot program. As a pilot project we are in need of the advice and counsel of participating business and labor leaders. It is in this context in which I write this letter to you.

Please accept this invitation to serve on the initial WECEP Advisory Committee through June, 1970. The function of the committee will be four-fold:

a. Evaluation of project
b. Recommendations for the future of the project
c. Changes for program and curriculum
d. Recommendations for future advisory committee

In general terms, this will focus on a cataloging of your comments on all facets of the project.

Please advise my office of your willingness to serve in this capacity.

Yours very sincerely,

Nathaniel Ober
Associate Superintendent of Schools
for Secondary Education

NO:mm
cc: Raymond Nord
Paul Muller
William Lundell
Sterling Peterson

June 1, 1972

Mr. Nathaniel Ober
Minneapolis Public Schools
807 Northeast Broadway
Minneapolis, MN 55413

Dear Mr. Ober:

We are writing in behalf of the WECEP Advisory Committee. Pursuant to your charge to the committee when it was established, we are now in the final stages of preparing an evaluation of WECEP for you.

Paul Muller arranged for a research grant from the Division of Vocational Education. With Dr. Faunce's help, Dr. Rene Dawis of the University of Minnesota was engaged to assist in development of an evaluation design. Dr. Dawis, in turn, engaged a staff of graduate students and under his direction our plan has been implemented.

Our findings, conclusions and recommendations will be ready for presentation on or about June 9th. At that time we would like to meet with you and present our report. It is our hope you will include at that meeting any persons on your staff you deem appropriate.

We feel this study, and this report, are of major import to our schools, far beyond the implications for WECEP. Few school programs, if any, undergo the close scrutiny we have given this program. We feel this evaluation could serve as a model for similar evaluations of other school programs.

May we hear from you on this?

Sincerely,

Jack Bolger, Bolger Publications
Jack Mull, NSP Company
Co-chairmen
WECEP Advisory Committee

JB:JM/sa