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ABSTRACT

A group of interested and academically qualified female Aid to Families with Dependent Children recipients was identified to participate in the assessment of a demonstration program to train female Work Incentive Program (WIN) participants. Training for electronics technicians was conducted at DeVry Institute of Technology (Chicago) and Ohio Institute of Technology (Columbus). Data was gathered for a baseline description of the 270 women participants--133 assigned to training and 137 to the comparison group--through an interview soon after enrollment. The average woman was thirty years old, black, a mandatory WIN participant, no longer living with her husband, and had one or two children. Most had considerable labor force experience in jobs primarily in low-skill categories. Almost half had training to upgrade skills for low-skill category occupations. For most, the current episode on welfare was their only one. Students liked the curricular structure of the program, but cited difficulty of coursework and racial and sexual imbalance and prejudice as dislikes. Other problems were related to finances, transportation, and lack of family support. Issues of concern in program functioning were a 59% attrition rate and poor attendance and performance. (YLB)

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ASSESSMENT OF A WIN QUALITY TRAINING DEMONSTRATION PROJECT

Phase I Report: Characteristics of Participants

Richard N. White

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16. Abstract

This document presents a baseline description of the 270 women taking part in the assessment of a highly innovative demonstration program to train female WIN participants to become skilled electronics technicians eligible for high-paying jobs in private industry. Information is presented on the personal and family characteristics of the women in the study, and on their job, training and welfare histories. Some preliminary information on the experiences of the women in the training, labor force activities of the comparison group (137 of the study participants, found to be interested and qualified for this training but not chosen in a random selection process) and observations on the functioning of the program by school, WIN and BSSR staff are also presented.

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FOREWORD

This report covers the first phase of BSSR's activities in the evaluation of a highly innovative WIN Quality Training Demonstration Project in which small groups of female welfare recipients are being given high-skill electronics technician training over a period of two years. The primary purpose of this first report is to present an in-depth portrait of the participants in the study. In addition, some preliminary and therefore tentative observations about the training experience and program functioning are also presented. The report incorporates the collective efforts of persons at BSSR and in the field.

At BSSR, John Waldman was chiefly responsible for the planning and supervision of all Phase I activities. In this report, he contributed the analysis of the data pertaining to training experiences and client attitudes (Chapters VI and VII). Katherine Swartz analyzed the data on participant job and training histories and the labor force activities of the control group (Chapters V and VIII). In addition to supervising field operations, Miriam Baiutis contributed to the data analysis of participants' demographic characteristics (Chapter IV). The final report was written by Richard White.

Among those outside BSSR who made major contributions were Howard Rosen and Gordon Berlin of the Employment and Training Administration. Dr. Rosen was the originator of the demonstration project; his efforts in securing resources and his unflagging enthusiasm and determination have sustained the project. Mr. Berlin's interest and support as

well as his assistance in solving administrative problems have helped the research effort immeasurably. The administrators and counselors of the Bell & Howell schools in Chicago and Columbus, the Bell & Howell Education Group and the personnel of the local WIN and SAU offices have provided valuable information and insight on the progress and problems experienced by the study participants.

Laura Sharp
Principal Investigator

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ASSESSMENT OF A WIN HIGH-QUALITY TRAINING DEMONSTRATION PROJECT
PHASE I REPORT: CHARACTERISTICS OF PARTICIPANTS

Executive Summary

This study was begun in 1978 to assess the feasibility and effectiveness of training women AFDC recipients to become electronics technicians. Training sizable numbers of welfare recipients for a high paying occupation of this type represents a radical departure from earlier training efforts: the costs are high, both because of the duration of the training periods (a minimum of twenty months) and the high tuition cost, but the possible pay-offs in terms of job opportunities and salary schedules are exceptionally high. This type of program is being considered to address the initial job placement, long-term job retention and economic self-sufficiency needs of female heads of households, the largest WIN target population, but a group for whom WIN has experienced great difficulties in meeting these goals. This program allows the examination of a number of innovations in WIN-provided training, including:

- High skill training, with high labor market pay-off potential;
- Long-term training;
- Training for an occupation in which men predominate; and
- The use of existing, private training institutions with proven placement records, tightly structured instructional formats, remedial training and special support services.

The two schools selected to conduct this training are the DeVry Institute of Technology in Chicago and the Ohio Institute of Technology in Columbus. Both are operated by the Bell & Howell Education Group, a subsidiary of the Bell & Howell company.

The training being conducted for this demonstration prepares graduates for careers as electronics technicians who perform skilled maintenance and servicing of a variety of electronics products. The training familiarizes the student with theoretical and practical knowledge about radios, television sets, computers, and a variety of other electronic devices and testing equipment. A remedial program was available for students who needed additional preparation in mathematics and physical sciences. The WIN clients are fully integrated into the student body, which is predominantly male and white. With the exception of the provision of a special WIN student counselor, additional tutoring and lower admission standards, there has been no modification of the school's basic program for the WIN clients. All of the students are receiving extensive counseling in the techniques of job hunting, and most can be expected to participate in on-campus interviewing with company recruiters. The schools have an excellent placement record. Their graduates are placed predominantly in private industry and starting salaries are high. During 1979, the average base starting salary for graduates was close to $13,000.

An experimental design is being used for the evaluation of this demonstration project. A group of interested and academically qualified WIN participants was identified, and members of this training-eligible population were randomly assigned to trainee and comparison groups. Specifically, the opportunity to enroll in the training was publicized by the local WIN offices, and WIN clients were interviewed to ascertain their interest in training and in training for nontraditional fields. Those who expressed an interest were given a set of tests, and those who passed this initial screening were given further information about the training, and were sent to the local Bell & Howell school for further testing and orientation.

Those who passed this second screening constituted the pool of training-eligible candidates. The actual selection of those clients who would take part in the training or be assigned to the "comparison" group was carried out by random assignment. All clients had previously been informed that this training opportunity was a demonstration program, that only half of those found qualified could be selected for training, and that this selection was to be made at random. A total of 270 women were found to be interested and eligible. Of these, 133 were assigned to training (57 in Chicago and 75 in Columbus) and 137 were assigned to the comparison group (61 in Chicago and 76 in Columbus).

Data are being gathered for the evaluation through a variety of means. The major source is a series of three interviews with both training participants and the comparison group soon after the participants enrolled, when the participants graduate and twelve months after graduation. Participants who drop out of the training program are given an additional interview at that time. The interviews are supplemented by reports from school counselors, interviews with WIN and school officials, and by BSSR staff observations.

This first report is based on the first of the interviews and presents descriptive information on the participants and comparison group to establish an image of the people involved in the training and to serve as a baseline for comparison with information gathered at the time of graduation and afterwards. Because the interviews took place some time after the training began, information was also gathered about the school experiences of the participants, the activities of the comparison group and on the functioning of the program.

Personal and Family Characteristics

The average woman in this study is thirty years old, black, a mandatory WIN participant, was married at age 19 but is no longer living with her husband, had her first child at age 19, has had one or two children, but expects to have no more. She has completed eleven and a half years of schooling in a general high school curriculum and left school eleven years ago. Most study participants have no one with whom they can share child-care responsibilities, but many feel that ordinarily no childcare is necessary. An indicator of general ability and aptitude is the score achieved on the GATB Aptitude Tests. The average score for the women in this study was slightly above that established for the average American worker.

Comparison of the women in this study with AFDC women and WIN women in other studies indicates that this group is more highly qualified on characteristics presumed to be important for success in training programs such as years of education. In some ways, this demonstration project presents a "best case" example of the potential of AFDC recipients for high quality training.

Job Histories

The WIN participants in this study have had considerable labor force experience. Ninety-four percent have held a job at some time. They were employed at their longest-held job for an average of 35 months and those employed in the year before the training program began had held that job for 14 months. The jobs held were primarily

in low-skill categories, were full-time, and paid an average of one and one-half times the prevailing minimum wage. Factors most often mentioned for voluntarily leaving employment were health, pregnancy and low pay. In many cases, job separations were involuntary.

The women have experienced little upward mobility in the labor force. A comparison of the job held for the longest period of time with the more recent job in the year before this training shows that most had stayed the same or moved down with respect to skill level, and earned fewer dollars for their work, when allowance is made for inflation.

Training Histories

Almost half of the participants in this study had taken part in previous training to upgrade their skills, but most of the training was for low-skill category occupations. About half of those who undertook previous training completed the program and almost two-thirds of the completers were employed afterwards. However, most of these jobs were low paying, averaging 140 percent of the prevailing minimum wage. The training also did little to increase their security in the labor market. Being laid off, doing temporary work and being fired joined pregnancy and lack of transportation as the most common reasons for leaving these jobs.

Welfare Histories

For most of the women the current episode on welfare is their only one. The average length of time on public assistance was 41 months before entering WIN. In one of the two program sites, many of the women in the study entered the WIN program only after the electronics technician training program was announced, an indication of the appeal of this type of program for nonmandatory WIN clients when they are aware of the opportunity.

The average combined length of time on public assistance and WIN was 49 months. This statistic and the lengthy work experience of the women suggest that many were earning incomes so low they remained eligible for public assistance.

Participants' Experiences with the Training Program

When asked what they liked most about the electronics technician training program, students mentioned the curricular structure of the program most often. Difficulty of coursework, racial and sexual imbalance and prejudice, and the absence of women's restrooms were the most frequently mentioned dislikes. The students found the coursework as difficult as they had expected but more demanding of their time.

Students reported that finances and timeliness of support payments were serious problems for their continued participation in the training. Other problems were transportation and various domestic contingencies, especially the need to attend to sick children. Those who had dropped out of the program by the time of the first interview (26% of the original participants) listed health and emotional problems with family and friends as additional problems. This latter finding suggests the importance of support from family and friends for maintaining enrollment in nontraditional training. Other data suggest a strong relationship between persistence in the program and the perceived quality of the client's relationship with her children. Of those still enrolled in the program who noticed a change, over two-thirds felt the program was having a positive effect on their relationships with their children, while 60 percent of the dropouts felt their participation in the program was having a negative effect.

Attendance has been a problem in the performance of most students. Although school officials have stressed to students the need for regular attendance in order to complete the program, students in this study have missed many more classes than is compatible with good performance. The most often mentioned reasons for missing classes are illness of the student or a family member and lack of transportation.

Self-Esteem and Work Attitude

Measures of self-esteem and work orientation were included in the first interview to assess the reciprocal impact on attitudes of accomplishments in school and on the job. The initial measures indicate the self-esteem and work attitude scores of the women in this study to be comparable with those of WIN participants in other studies.

Labor Force Activities of the Comparison Group

The data suggest that most comparison group members' lives were not significantly affected by their eligibility for the Bell and Howell program and subsequent nonselection. Most had not been employed between their nonselection and the time of the first interview. Those who were employed held jobs similar to those held by participant and comparison group members earlier in their employment history, i.e., full-time, low skill, and paying about one and one-half times the minimum wage.

Those who were in training were in programs similar to those in which participant and comparison group members had participated earlier, with the exception of those who found their way into electronics technician programs at Bell & Howell and other schools.

Observations on Program Functioning

A major issue of concern has been the attrition rate from the training. As of March 31, 1980, 59 percent of the original student population had dropped out (an increase of 23% from the time the interviews were completed 12 months earlier). However, the electronics technician training program is long and difficult. School officials report that they anticipate that only 25 percent of their non-WIN students who start in the remedial course and 35 to 50 percent of those who start in the regular course will graduate, and that the attrition for the WIN students at this point in the program is actually lower than for non-WIN students. The graduation of four women from the Chicago school is a clear indication that the program as it exists works for some of the women and that there exists a segment of WIN participants who are capable of taking advantage of the training. However, the attrition rate is troubling to local WIN officials, increases the already high cost per graduate, and may hinder the wider acceptance of similar programs.

A number of factors have been suggested by our analysis as contributing to the attrition rate. Some resulted from the decision to launch the demonstration on short notice and from the need to identify a sufficient number of qualified WIN clients to form sizable participant and comparison groups. These demands strained the feeder system, resulting in poor delivery of services, inadequate screening, possible pressuring of clients and the lowering of admissions standards.

Poor attendance is another factor which leads to attrition. The schools have a rigid attendance policy which can lead to termination for excessive absences. Poor attendance is felt to be related to poor grades, which can lead to probation and termination. Student and family member

health and other personal problems, inadequate transportation, inadequate coordination between public support agencies (resulting in late checks and eligibility controversies), financial problems and unsatisfactory childcare, especially emergency arrangements, are all factors found to be related to poor attendance.

Some elements of the training program itself, most notably the remedial course, an additional trimester of class work to upgrade the mathematical skills and science knowledge of those scoring low on admissions tests, also appear to have contributed to poor student performance. The self-paced modules used only during the remedial phase are said to have been related to poor attendance and unrealistic views of the effort required for the actual program. The absence in the Columbus school of bench training to allow the women to become familiar with the tools and vocabulary of electronics work has also been suggested as a shortcoming.

One possible solution to the problems leading to poor attendance and performance has been more rigid screening of applicants in order to recruit only those who are most free of health, childcare and marital problems, and who are truly able and interested in the training. Another alternative is the provision of increased support services. A third alternative, which at present seems the most workable, is an increase in the flexibility of the training program. The highly structured, rigidly attendance-based program, although said to be an important part in the acculturation of students to the world of work, seems unrealistic for mothers who have a minimum of resources at their disposal to cope with the many crises in their lives. At present, the only flexibility allowed is gained through course repetition or through leaving and re-enrolling in the program. The first alternative has been used by many of the participants, and this considerably prolongs the total training period. A

more versatile approach to flexibility offered by other educational institutions has been effective for other women who faced similar problems of reconciling study needs and family responsibilities.

Although it is too early to predict the long-run outcome of the demonstration program, the problems experienced by the students raise questions about the realism of programs which seek to place young welfare mothers into attendance-demanding, male-modeled jobs without also implementing massive support to provide childcare and home maintenance services the mothers themselves provided previously. Those students who remain in the program look forward to well-paying new careers and to the end of welfare dependency, but it will remain to be seen what the ultimate training completion rates will be, whether the graduates of the program will be able to replace daycare and other support services currently provided through public agencies, whether they are able to deal with the costs of the services and--perhaps most important--whether they can accept the changes in lifestyle and role concept which their new careers will require.

I. INTRODUCTION

The mandate of the Work Incentive (WIN) Program is to help employable welfare recipients find jobs and thereby achieve economic independence. A variety of services has been made available to clients to accomplish this goal, ranging from help with medical or child-care problems and counseling to placement services, training in public and private schools, placement in on-the-job training (OJT) or public service employment positions. A major ETA-sponsored study evaluating the impact of the WIN Program in 1974-75 makes it evident that net gains and cost-effectiveness are generally quite limited for participants who received only placement services but are substantially greater for those given classroom training.[1]

Low-income families headed by women, especially black women, have the poorest chance of moving permanently out of poverty. Many female heads of households work but, as a result of their low levels of skills and education, cannot command high enough salaries in relation to the number of people in their families to become independent of welfare and other publicly subsidized services.[2] Analyses of WIN Program results indicate that initial job placement, long-term retention and achievement of economic self-sufficiency remain most problematic for female heads of households, the largest WIN target group.

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[1] Schiller, Bradley R., 1976. The Impact of WIN II: A Longitudinal Evaluation. Berkeley: Pacific Consultants.

[2] Goodwin, Leonard, 1977. The Work Incentive (WIN) Program and Related Experiences. R&D Monograph 49. U.S. Department of Labor, Employment and Training Administration. Washington, D.C.: U.S. Government Printing Office.

Together, these findings suggest the need to investigate further the role that training can play in achieving employability and self-sufficiency for women on welfare who are household heads. The demonstration project which is the subject of this study is designed to allow the assessment of a number of innovations in WIN-provided training, including:

1. High-skill training, in this case as electronics technicians (DOT professional and kindred: 003.181);
2. Long-term training, lasting from twenty to twenty-four months;
3. Training for an occupation in which men predominate; and
4. Use of a training institution characterized by:
   a. tightly structured instructional formats;
   b. a remedial education program for those with substandard reading or mathematics skills;
   c. special counseling and support services for program participants; and
   d. a proven placement record of 90 percent in the target occupation selected explicitly because there is an expanding demand for labor in the occupation and an expected starting annual wage in excess of $12,000.

The only programs previously conducted which to some extent shared the orientation of this effort were voucher programs, carried out in connection with the Denver/Seattle Income Maintenance Project and the WIN Program in Portland, Oregon. However, these programs did not emphasize high-skill training or the use of training vendors with documented placement records.

To launch this demonstration, the Employment and Training Administration (ETA) of the Department of Labor awarded grants in June 1978 to two schools to conduct electronic technician training for WIN clients. The two schools, the DeVry Institute of Technology in Chicago and the Ohio Institute of Technology in Columbus, are operated by the Bell & Howell Education Group, a subsidiary of the Bell & Howell Company, which operates a total of seven training institutes throughout the country. The training program is described in Chapter III.

The first students to enter the electronics technician training program enrolled in Chicago in July 1978. Larger groups of students entered in Chicago and Columbus in October 1978. The description of the personal characteristics of the study population and differences between the Chicago and Columbus groups begins with Chapter IV.

As shown in Table I-1, a total of 270 women constitutes the study population; 133 of them were enrolled as trainees at the two Bell & Howell Schools (57 in Chicago and 76 in Columbus); the others were equally eligible but in a random assignment process were not selected for training and became the comparison group for the study. Screening, testing, selection and assignment procedures are discussed in detail in Chapter II. The extent to which the participant and comparison groups differ with respect to various demographic and socioeconomic characteristics is evaluated in Appendix A. Because no stratification procedures were used and the number of cases is small, it is not surprising that the two groups were not identical with respect to each of the variables of interest to this study. Overall, the differences are not extensive, and insofar as they exist, can be statistically controlled in the final outcome analysis.

TABLE I-1

ORIGINAL STUDY POPULATION

Site	Participant Group	Comparison Group	Total Study Population
Chicago I			
Enrolled July 1978 and corresponding comparison group	22	31	53
Chicago II	57	61	118
Enrolled October 1978	35	30	65
Columbus			
Enrolled October 1978	76	76	152
Total	133	137	270

By the time the interviews for this report were completed (April 1979) some participant group members had dropped out of the training program. Of the 57 original members of the participant group in Chicago, 15 (26%) had dropped out, and of the 76 participant group members in Columbus, 20 (26%) had dropped out. Since the interviews were completed, some of the dropouts have re-entered the training program, while during the same period other students have been dropping out. As of September 1, 1979, 58 percent of the original Chicago participants and 46 percent of the Columbus participants were enrolled in the training program.

The evaluation of this program seeks to answer a number of questions:

- Is there a pool of female WIN clients who can meet eligibility criteria for high-quality skill training and who would be interested in accepting such training if it were offered?
- What is the retention power of such a program? What proportion of the clients drop out over time, and what are the reasons for dropping out?
- What are the job market outcomes for those clients who complete the program?

A variety of data sources is being used to answer these questions. Personal interviews with all members of the study population, whether they were assigned to the participant or comparison group, are the principal source of information. A first round of interviews was completed shortly after the dates the training programs began. Subsequent rounds are planned for the time when participant group members complete the training and again twelve months after the time of graduation. Those who drop out of the training program are being given an additional interview at the time they leave the training. We are also drawing on the records of the training schools and local WIN offices, observations and staff interviews to round out the picture.

This report is based on information from the first phase of data collection, the responses to the first round of interviews conducted from January through March of 1979. Our success in contacting respondents for these interviews is discussed in Appendix B. These interviews were concerned with background information about the demographic characteristics of the study participants, their work and welfare history, and some measures of attitudes towards themselves and work. The purpose of these

interviews was to establish a baseline for the analysis of the outcomes of the training for the participant group and of other activities for the comparison group. Since this first round of interviews took place some time after training began for participant group members, some information about the training process and other relevant events is available from the reports of counselors and from staff observations. This information makes possible preliminary discussion of the impact of certain aspects of the program on student performance and ability to stay enrolled in the training.

II. THE PROCESS OF SELECTION

Selection Procedures

The process of selection of individuals who were qualified for training began with the local WIN offices. So that the program would get under way as quickly as possible after site selection, a small group of WIN clients was selected for July enrollment in Chicago. The procedures for screening and selection were developed for this group and, with only minor modification, were used for selecting October enrollees at both sites. The detailed guidelines that were developed were sent to WIN staff at each site.

In brief, selection involved several stages. First, there was an announcement of the program which invited interested persons to contact the local WIN office. In Columbus the program was publicized through television, radio and newspaper spots and through mailings and phone calls to all WIN participants and eligible AFDC recipients. In Chicago there was a half-hour television program on this opportunity, but, unlike Columbus WIN, the Chicago WIN offices otherwise limited direct dissemination of information about the program to current mandatory WIN participants.

Both local WIN offices then began a screening process. Clients were interviewed by their WIN counselors to determine their interest in training as opposed to direct job placement. Those interested in training were asked about their interest in training for nontraditional careers for women, particularly electronics, welding, and automobile mechanics. Those who expressed such an interest were tested at the WIN office using the

Employment Service's GATB test battery. This particular instrument was chosen because Chicago WIN personnel felt that it was the least culturally biased of the vocational aptitude tests readily available to them. (At the Columbus office the GATB tests were preceded by BOLT tests to insure that the clients had sixth-grade academic functioning ability so that their GATB results would be valid.)

All clients who obtained GATB:G (general learning ability) scores above one of two pre-established cutoff points (either 90, or 80 for clients who had both completed high school and expressed an interest in the specific training being offered at the Bell & Howell schools[3]) were given further information about the Bell and Howell program. It was emphasized that the training was long term, taking a minimum of 20 months to complete, but that the pay-off would be a profession that would allow the graduate to get a high-paying job which would provide a self-supporting income and independence from welfare. They were also told that in addition to the regular course of study and school services, WIN clients would receive additional support services, including extra counseling, study and career orientation courses, tutoring, a preparatory trimester for those who needed remedial training, and placement upon graduation. Clients were also informed that an orientation session and additional testing at the local Bell & Howell school were required and they were given an arithmetic review booklet to help them prepare. Finally, it was emphasized to the

[3]The original cutoff point of 90 was modified because local WIN offices were not identifying enough interested clients who scored above 90 to fill both the participant and comparison groups. Toward the end of the selection period for the October group, some clients were sent to Bell and Howell for testing without first taking the GATB test battery, because of the short time available for selection.

clients that this was a demonstration program, and that only half of those who attended the orientation session and qualified on the Bell & Howell tests could be selected for the training. The final selection was to be made at random, so each fully qualified client had a 50-50 chance of being selected. In addition, clients were told that regardless of program status, all eligible clients would be asked to participate in the research to assess the program.

The orientation session at the local Bell & Howell school lasted approximately three hours and included a film and slides on the electronics field, specifics about the school and its program, a tour of the facility, individual screening and testing, and lunch. School academic and attendance policies were stressed, as were placement opportunities. During the session, clients were given a 25-question arithmetic test developed by Bell & Howell and the Stanford Advanced Reading Achievement Test, the same tests routinely given to all applicants for the electronics technician training program. All clients answering at least nine of the arithmetic questions correctly were considered qualified for enrollment. For clients scoring below this level on the arithmetic test, those whose reading level on the Stanford Achievement Test was at least ninth grade were also considered qualified. (This last standard is lower than that for non-WIN students.) In Chicago, all clients received both tests; in Columbus, only those who did not qualify on the arithmetic test were also tested on reading ability.

The final selection of eligible clients for enrollment at the Bell & Howell school or assignment to the "comparison" group was the responsibility of BSSR. As clients were determined to be qualified, their names were submitted to BSSR by phone. There was no apparent ordering of the names either alphabetically or by test scores. BSSR had recommended

postponing the final selection process until the names of all qualified clients were available, but the local WIN offices urged BSSR to make the assignments as groups of qualified clients were identified because of the need to arrange childcare and complete other paperwork for the clients who would be entering the Bell & Howell program. As the names were phoned in, they were numbered consecutively and then half of them were selected for training by means of a table of random numbers. The names of the individuals thus selected were phoned to the appropriate WIN office and later a check was made to see that the clients who entered training were indeed the ones selected by BSSR. During the selection of the second group in Chicago in October 1978, the process was modified. The pool of qualified clients was stratified according to regional WIN offices within Chicago to ensure proportional representation for the clients of each office.

Some of the clients selected for training chose not to enroll. They became members of the comparison group. Their replacement was not always random. In some cases, another name was selected at random from a list of those who were qualified for the training. In a few instances, the recommendation of a local WIN representative with respect to which client should be substituted was taken. The substitutions made in this manner tended to be either highly qualified or highly committed clients who had taken the trouble to contact their WIN counselor after learning of their initial nonselection. In other instances, replacements were selected on the basis of ethnicity, e.g., an Hispanic client was added in Chicago.

It should be stressed that no attempt was made by BSSR to stratify the population by such characteristics as test scores or years of education completed before the assignment to the participant or comparison groups was made. It was postulated that these factors were not necessarily good predictors of potential success in the training program, given the non-traditional nature of the clientele (i.e., females in a male-dominated field, minorities in a majority-dominated field). In addition, the aptitude tests used in the selection process had not been standardized for minority populations. While only the final results of this study will indicate which, if any, of these characteristics are actually important in predicting the success of an individual in this program, early analyses indicate that there is little correlation among these factors. Of the tests used by the local WIN offices to determine which clients to send to Bell & Howell for further testing, the GATB:N test for numerical aptitude turned out to be the best predictor of performance on the Bell & Howell arithmetic test and thus qualification for the program. However, the correlation between these tests is only .45 for the Chicago I group, .42 for the Chicago II group and .45 for the Columbus group. The correlation between the number of years of schooling completed and test performance was even lower. It was highest with the arithmetic test at .27 and with the GATB:V test of verbal ability at .19. Because of the low correlation among these factors, it seems unlikely that all of them will be found to be strongly linked to success in the program, but at this time it is difficult to determine which, if any, should have been controlled for to ensure their equal distributions and thus equal distributions of characteristics leading to success in both the participant and comparison groups.

With the exception of the nonrandom replacement of dropouts, differences in the distribution of characteristics among the participant and comparison populations may be attributed to the probabilities of the occurrence of such distributions when making random selections without stratification. The impact of these differences on our ability to effectively evaluate the program will remain unknown until the completion of the program and the determination of the relative importance of such factors for success in the training program and later on the job. If appropriate, the data analysis will incorporate statistical techniques, such as regression, which correct for nonmatching distributions. On the whole, the comparison and participant groups appear well matched on all of the characteristics mentioned in this study. Those differences which do exist are presented and discussed in Appendix A.

An Estimate of the Pool of WIN Clients for High-Quality, Nontraditional Training

Looking ahead to the possible adoption of a high-quality training component in the regular WIN program, we felt that it would be helpful for policy makers to have some estimate as to the total proportion of WIN clients who have the necessary academic qualifications to become eligible for participation and who would be interested in making a commitment to this type of training. Although we have attempted to collect the relevant data for this analysis since the beginning of the project, this has been a very difficult task for the following reasons:

1. An unknown quantity is the potential pool of voluntary clients. We know from our earlier work with WIN vouchers[4] that the availability of

[4] Richardson, Ann, 1977. Vouchered Skill Training in WIN: Program Guidelines and Selected Empirical Findings. Washington, D.C.: Bureau of Social Science Research.

attractive training options results in the enrollment of substantial numbers of well qualified volunteers. This has been again confirmed in Columbus in connection with the current high-quality training program.

2. WIN offices follow widely varying practices with respect to their "backlog" of mandatory clients. Most of the information we have been able to gather about interested and eligible clients is limited to "new intake."

3. The availability of other training opportunities, including those available under CETA, reduced the number of persons who sought to establish eligibility for the Bell & Howell program, either because counselors had already made other arrangements for some clients, or because the clients had already become committed to another type of training. Therefore, we have reason to believe that the figures shown in Table II-1 represent an understatement, especially for Chicago where only a limited effort was made to publicize the program. As shown in this table, which summarizes the statistics which were furnished by the two WIN offices:

- Only between 10 and 15 percent of mandatory clients seek training, although this low number may reflect WIN emphasis on placement rather than the free expression of client preference; and
- Under "outreach" conditions, the proportion of voluntary clients seeking training is considerably higher, perhaps on the order of 20 to 25 percent.

TABLE II-1

INTAKE AND INTEREST IN TRAINING, SEPTEMBER 1978, CHICAGO AND COLUMBUS

	Chicago		Columbus	
	(N)	%	(N)	%
Total WIN intake September 1978	(1,570)	100	(4,395)	100
Mandatory	(1,256)	80	(879)	20
Voluntary	(314)	20	(3,516)	80
Participants seeking training	(240)	15	(959)	22
Mandatory	(192)	15	(192)	10
Voluntary	(48)	15	(767)	22
Number of clients from earlier months' intake seeking training	NA		(101)	100
Mandatory	NA		(21)	21
Voluntary	NA		(80)	79

Tables II-2 and II-3 summarize the results of the selection process for the electronics technician program. It should be noted that information for voluntary vs. mandatory clients is not available for Chicago. The information is also somewhat unclear with respect to the number of clients tested by WIN; for example, some WIN clients were apparently tested although they were not interested in the Bell & Howell program--some Chicago regional offices test all new registrants as part of the standard intake process. But overall, the data suggest the following:

1. In Chicago, over half of the clients (most of them mandatory) who participated in counseling sessions about the Bell & Howell program were interested in high-quality training for nontraditional occupations. In Columbus, the number was much lower (24%) among both mandatory and voluntary clients. Conceivably, the explanation lies in the greater availability of training alternatives in Columbus.

2. Interested clients were more likely to receive passing GATB scores in Columbus than in Chicago; similarly, in Columbus, those with passing GATB scores were more likely to pass the Bell & Howell entrance test.

3. The end result is that in both sites, roughly the same proportion of clients who expressed an interest in the high-quality training program qualified for acceptance into the program. This proportion was 16 percent in Columbus and 19 percent in Chicago. However, the Chicago figures vary sharply from Wave I to Wave II, with only 5 percent of Wave I, but 33 percent of Wave II potential candidates qualifying for admission. These results suggest that screening for Wave II was more selective, since only half as many WIN clients participated in the "counseling on nontraditional careers" during Wave II as was the case during Wave I.

TABLE II-2

ENROLLMENT IN HIGH-QUALITY TRAINING: ATTRITION POINTS - COLUMBUS

	Mandatory (N)	%	Voluntary (N)	%	Total (N)	%
Total number of clients counseled on nontraditional careers	(192)	100	(767)	100	(959)	100
Of those counseled, the number interested	(47)	24	(185)	24	(232)	24
Number referred to WIN for testing	(76)	40	(303)	40	(379)	40
Number actually tested	(47)	24	(185)	24	(232)	24
Number who received scores which qualified them for referral to Bell & Howell	(35)	18	(140)	18	(175)	18
Number actually tested by Bell & Howell	(33)	17	(131)	17	(164)	17
Number who qualified for Bell & Howell	(31)	16	(123)	16	(154)	16
Number enrolled in Bell & Howell program	(16)	8	(60)	8	(76)	8

Note: All percents based on "total number of clients counseled on nontraditional careers."

TABLE II-3

ENROLLMENT IN HIGH-QUALITY TRAINING: ATTRITION POINTS - CHICAGO

	June - July Intake (Wave I) (N)	%	Sept. - Oct. Intake (Wave II) (N)	%	Total Chicago Intake (N)	%
Total number of clients counseled on nontraditional careers	(440)	100	(215)	100	(655)	100
Of those counseled, the number interested.	(241)	55	(125)	58	(366)	56
Number referred to WIN for testing	(293)	67	(98)	46	(391)	60
Number actually tested.	(263)	60	(98)	46	(361)	55
Number who received scores which qualified them for referral to Bell & Howell	(118)	27	(112)	52	(230)	35
Number actually tested by, Bell & Howell	(82)	19	(98)	46	(180)	27
Number who qualified for Bell & Howell admission.	(52)	12	(70)	33	(122)	19
Number enrolled in Bell & Howell program	(24)	5	(37)	17	(61)	9

Note: All percents based on "total number of clients counseled on nontraditional careers."

What can we conclude from these data as to the potential pool of WIN clients for high-quality training for nontraditional occupations? In the first place, a high proportion of clients, who may or may not have the necessary academic qualifications, had no interest in a program of this type. We do not know the reason. The nontraditional nature of the program, the length of the training period, and the assumed difficulty of the study course have all been mentioned locally as possible reasons why clients did not wish to be considered for such training. But of those who are interested, the majority can actually meet the entrance requirements stipulated by the training program, as shown in Table II-4. While only about 4 percent of all new WIN clients in September 1978 established eligibility for the electronic technician program, this proportion is low because the great majority of clients either did not seek any training at all or were not interested in this particular program. Of all those interested in training, 16 percent in Columbus and 29 percent in Chicago established eligibility; of those interested in the particular program, 66 percent in Columbus and 56 percent in Chicago established eligibility. Voluntary clients were no more likely to qualify than mandatory participants. The limited data now available suggest that there exists indeed a pool of academically qualified WIN clients who would be eligible for high-quality training.

TABLE II-4

HIGH-QUALITY TRAINING IN NONTRADITIONAL OCCUPATIONS: INTERESTED AND ELIGIBLE CLIENTS
(Based on September 1978 Data)

	Columbus			Chicago		
	Mandatory	Voluntary	Total	Mandatory	Voluntary	Total
Total intake	879	3,516	4,395	1,256	314	1,570
Number seeking training. . . .	192	767	959	48	192	240
Number interested in electronics technician program.	47	185	232	-	-	125
Number tested by Bell & Howell	33	131	164	-	-	98
Number eligible for electronics technician program.	31	123	154	-	-	70
Percent of total intake eligible for electronics technician program	4%	3%	4%	-	-	4%
Percent of those seeking training eligible for electronics technician program.	16%	16%	16%	-	-	29%
Percent eligible among those interested in electronics technician program.	66%	66%	66%	-	-	56%

III. THE ELECTRONICS TECHNICIAN TRAINING PROGRAM

Selecting the Training Institution

A number of criteria were considered by the Department of Labor during the process of selecting a training institution for the assessment of the effectiveness of high-quality training for WIN women. Foremost among these was finding an institution which trained students for an occupation which paid a high enough wage so that the graduate would become economically self-sufficient, and one for which there was and would continue to be a demand in the marketplace. In order to find such a training program, it was necessary to consider programs which differed greatly from those previously offered to women through WIN, training programs which were rigorous and demanding, took a substantial amount of time to complete, and which were for occupations which were nontraditional for women. From such programs, it was decided to select one for the demonstration which was as challenging and difficult as WIN participants could be expected to successfully complete, to "bite off as much as we thought they could possibly chew." Finally, it was also decided to look for training that was provided by a private institution, accredited and respected by employers of its graduates, one which had a proven record of placement success, experience in educating disadvantaged students, and which was willing to provide special counseling and remedial training for those WIN clients who needed it. After considering a number of different institutions offering training in a variety of occupations, the demonstration project was awarded to the Bell & Howell Education Group (a subsidiary of the Bell & Howell Company) to train WIN women to become electronics technicians.

To allow those familiar with other WIN training programs to make comparisons between this training and that provided in earlier training programs, and to acquaint the general reader with the nature of the training provided by the Bell & Howell Education Group, this chapter presents a description of the program and the schools in which it was offered.[5]

Program Description

> The graduate of the Electronics Technician Program is prepared for careers that emphasize the skilled maintenance and servicing of sophisticated electronics products of many kinds, including radio, television, communications systems, computers, controls and instrumentation. The graduate has prepared for such careers as: communications technician, computer technician, electronic systems technician, production test technician. . . . Graduates from the Electronics Technician Program work primarily with the maintenance and operations of equipment. This requires troubleshooting to locate problems, and then repairing, calibrating and adjusting the equipment.[6]

Basic Curriculum

The electronics technician curriculum is a five-trimester program which extends over 20 months. Each trimester is 15 weeks long. Twenty-two hours of class and laboratory work are required each week. The typical curriculum as described in the school catalog is as follows:

First Trimester (TECH 1).--

Electricity I: basic concepts of electricity and electrical circuits.

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[5] The electronics technician program offered by the Bell & Howell Education Group undergoes constant revision to reflect changes in electronics technology and in job market conditions. For example, radio and television are currently receiving less attention in the curriculum to reflect the declining employment opportunities in these fields. For clarity of presentation, the curriculum is described as it was when the students first enrolled in 1978. Some changes in this description have already been made and experienced by the WIN students, and future changes may also be implemented. Not every student, therefore, will have experienced the same curriculum, as the students entered the program at different times, are taking varying lengths of time to complete the program, and are enrolled in two separate schools which are adopting changes at different times.

[6] Ohio Institute of Technology, Academic Catalog 1977-1978, p. 9-10.

Basic Electronics I: survey of the field of electronics, and a study of electronic devices such as transistors and printed circuits.

Mathematics I: equations and formulas, graphs, ratios, trigonometric ratios.

Technician Electronics Laboratory: practice with various devices and circuits, reading schematic diagrams, fabrication of circuits, use of basic test equipment, troubleshooting of circuits and units, fabrication of a testing instrument.

Second Trimester (TECH 2).--

Electricity II: continuation of Electricity I with emphasis on AC circuits including: frequency effects in RLC circuits, impedence matching, passive waveshaping and modulation principles.

Basic Electronics II: integrated circuits, low-frequency and high-frequency amplifiers, oscillators, multivibrators, and clippers and clampers.

Mathematics II: right triangles, monomials and polynomials, logarithms.

Technician Electronics Laboratory: practical exercises, fabrication or breadboarding of electronic circuits, use of oscilloscope, troubleshooting.

Third Trimester (TECH 3).--

Digital Circuits and Systems: digital logic and switching circuits, computer memories.

Digital Computers: study of the digital computer as a system, computer trouble isolation techniques, computer structure and organization.

Computer Interface: computer communications, transmission codes, digital-analog and analog-digital convertors.

Technician Electronics Laboratory: practical exercises related to digital circuits and computers, troubleshooting.

Communications Skills: written communication skills, grammar, spelling and punctuation. Papers are written in which classroom and laboratory subjects are discussed. (This course may be offered in any of the first three trimesters.)

Fourth Trimester (TECH 4).--

Two-Way Radio: study of various two-way radio circuits and systems.

Consumer Audio-Radio Systems: basic AM and FM receivers, audio amplifiers.

Special Communication Systems: functional systems which are a part of radio communication including regulated power supplies, transmission lines and antennas, microwave devices and applications are also discussed.

Technician Electronics Laboratory: practical exercises to develop familiarity with radio systems and the skill to effectively test, troubleshoot and service communications hardware.

Fifth Trimester (TECH 5).--

Television Signals and Signal Circuits: basic television principles.

Television Control, Power Supply, and Audio Circuits: theory and practical aspects of the control, power supply and audio circuits of a TV receiver.

Industrial Controls: measurement principles, transducers, instrumentation amplifiers, motors and generators, and four-layer control devices.

Technician Electronics Laboratory: exercises to demonstrate principles of TV reception, to develop familiarity with TV receivers and TV test equipment and skills in testing, troubleshooting, servicing and repairing representative television receivers.

As can be seen from the description of the electronics technician curriculum, the coursework required familiarity with mathematical concepts and skills. In the early 1970's the school developed a remedial training program called "preparatory studies" for those students who were inadequately prepared in this respect as determined by the entrance examination scores. These students were required to successfully complete the remedial course before being allowed to enroll in the first trimester of the regular technician course. The "Prep" course added an additional trimester to the normal five-trimester sequence. The distribution of the women in this study as "Prep" or "Tech" starts is presented in Table III-1.

TABLE III-1

ASSIGNMENT OF PARTICIPANT GROUP MEMBERS TO PREPARATORY AND TECHNICIAN I COURSES, BY SITE
(In Percentages)

	Chicago	Columbus	Total
"PREP STARTS"*	72	57	63
"TECH STARTS"**	28	43	37
Total % (N)	100 (57)	100 (76)	100 (133)

*Required to enroll in the remedial program (low score on entrance arithmetic test).

**Admitted directly to the technician program (high score on entrance-arithmetic test).

The preparatory studies curriculum was as follows:

Mathematics: develops mathematical skills in arithmetic including: whole numbers, factors, fractions, decimals and percentages.

Science for Electronics: basic physical science including: motion, energy, atomic structure, vibrations and waves, sound, electrostatics, magnetism and heat.

Communications Skills: basic features of standard English: noun plurals and possessives, making subjects and verbs agree, punctuation, spelling.

Program Characteristics

Compared to most WIN sponsored training programs, the technician program is long and rigorous. School officials estimate that 35 to 50 percent of all students admitted into the technician program graduate. During the training, students experience time demands and requirements for self-discipline that school administrators feel resemble those existing in the working world. The administrators argue that the resulting socialization gives students the values and self-discipline that they need to succeed and for which employers are looking in new employees.

The schools have a number of rules and regulations regarding performance and attendance because it is believed there is a relationship between regular attendance, good grades and program completion. Each student is expected to attend every class, and is responsible for the work missed and for contacting the instructor about make-up work. If a student misses a given number of hours in a course, she is placed on probation or suspended.[7] A student is placed on academic probation if her cumulative grade point average falls below a 2.0 average (out of a possible 4.0). If the student's grade average for the next term does not exceed 2.0, or if her cumulative average is still below 2.0 after two terms on probation, she is suspended from the school and may not reapply for one trimester. A student who fails a course must repeat it, and both the old and new grades will appear on the student's transcript. A student may not repeat a course more than twice.

During the technician program, classes tend to be large, especially in the first trimesters. Conventional lecture classes range in size from 40 to 70 students. Classes using other teaching methods such as team teaching or modularized instruction may reach 130 students per class.

Laboratory sessions account for 20 to 30 percent of instructional time and also tend to be large, but there are faculty and faculty assistants available (one to every 20 students) to help the students with their assignments. Within the laboratories are individual student work spaces. Each space has basic electronic equipment such as an oscilloscope, power supply and a volt meter. Also in the lab are a sheet metal shop, a printed circuit etching facility, sweep alignment equipment, digital trainers, analog and digital computers, a TV system, microwave and servo mechanical

[7] Probation results from the equivalent of missing one week's classes, suspension from missing the equivalent of two weeks' classes.

trainers, and industrial electronic devices. Laboratory assignments are given to two-person student teams. As part of the course materials, each student receives half of the parts necessary to conduct the laboratory exercises. School officials argue that this arrangement gives students lessons in group dynamics and the skills necessary to be an affective member of a work team.

The Schools

An effort has been made to create a collegiate atmosphere at the two Bell & Howell Education Group schools taking part in this study. Both have attractive, new facilities with considerable space devoted to student lounges, dining areas and game rooms. A wide range of student activities is available including a student senate, theater, chess and amateur radio clubs, intramural and varsity athletics, and school dances.

In addition to the electronics technician program, the Bell & Howell Education Group also offers a seven-trimester Associate Degree program and a nine-trimester Bachelor's Degree program in electronics engineering technology. The student body at DeVry numbers 2,500, with 1,200 in the Electronics Technician Program. At the Ohio Institute of Technology in Columbus, the numbers are 2,300 and 1,065 respectively.

The faculty and the non-WIN students are predominantly male (94%) and white (67%). Eighty percent of the regular student body is in the college age group, 18 to 21. About two-thirds have had some exposure to electronics and have an interest in it. About 70 percent of the students are from "noncollege" families, and many might not be enrolled in post-secondary education if not admitted to a Bell & Howell school.[8]

[8] Mills, Virginia, 1977. "From School to Work: The Experiences of Bell and Howell Schools in Matching Graduates to Careers," Paper presented at the Labor Market Intermediaries Conference, National Commission for Manpower Policy, Washington, D.C.

About 50 percent of those admitted in 1978 came from families with incomes of $15,000 or less. Forty-four percent had been in a general high school program, while 33 percent had been in a college preparatory high school program. Nearly all (98%) of the non-WIN students hold a high school degree or G.E.D. at the time of admission. During their time as students, about 85 percent hold a part-time job, averaging 20 to 25 hours per week.

Placement Services

Students are given extensive preparation and counseling for finding a job. From early in the program they are given descriptions of the kinds of jobs they will be qualified to hold upon graduation. At the start of the student's last term, placement sessions begin which cover the formulation of career goals, resume preparation and interviewing techniques and etiquette. Individual interviews with the placement office staff are scheduled for all students, and all resumes are reviewed by the staff. The placement office also works to attract employers to the school and its graduates, and encourages employers to send recruiters to the campus. In 1979, representatives from 58 companies visited the Ohio Institute of Technology in Columbus and 54 visited the DeVry Institute of Technology in Chicago. The placement office also prepares a weekly job lead package of companies which are interested in interviewing graduates off campus and contacts those students who have expressed an interest in these positions. The placement office closely monitors the activities and success of each graduate, helping those who encounter problems. Of those students who asked for assistance in 1979, the Bell & Howell Education group placed 96 percent within 60 days of graduation.

In 1979, the average base starting salary was $13,032 per year for technician graduates in Chicago, and $12,588 for graduates in Columbus.

Modifications of the Program for WIN Clients

The WIN women who entered the Electronics Technician Program in 1978 entered with characteristics which differed from those of the average non-WIN student. For one thing, they were on the average academically weaker. A higher proportion did not hold a high school diploma or a G.E.D. certificate on admission. Also, many more of those who qualified for admission did so with admission test scores which were lower than the class average. The proportion of WIN students who tested into the "Prep" program was much higher than that of non-WIN students. The WIN women entering the program also differed in the degree of family responsibility. Nearly all were single heads of households and had one or more children to care for. They were also dependent on public assistance programs to provide the means for this care and it was necessary for them to continually interact with a variety of agencies to maintain their level of support.

There has been little modification of the basic technician program on the behalf of the WIN students. There have been no changes in the structure or scheduling of the program or of the level of difficulty of the coursework. The WIN women are fully integrated into the student body and take no classes or lab sessions as a special group. Some provisions have been made for the special academic needs of the WIN students, however. More tutoring and supplementary instruction are available to the WIN students than to the rest of the student body.

Additional faculty assistants have been hired especially to help the WIN students in the laboratories. The laboratories have been made available to the WIN students in the evenings and on weekends for extra work. Supervised study periods have also been set up. In addition, a number of faculty members have donated their own time to conduct classes and review sessions for WIN students who express an interest.

To help the WIN students become familiar with the kinds of careers for which they are being prepared, a number of special activities were held for them. These included guest speakers from companies which employ electronics technicians and tours of companies where they could view the kinds of jobs and work settings which they might experience in their own careers.

A major modification of the program has been the hiring of a special counselor by each school to work exclusively with the WIN students. The counselor's major duty has been to help the students overcome any problems which might interfere with staying in school, doing well in their classes, or getting a good job after graduation. A major responsibility is to be available to listen to the students' personal problems, sometimes leading to intensive individual counseling, and where possible, to help students take action to solve their own problems, or to make arrangements to solve problems beyond the scope of the students' capabilities. This has led to frequent talks with WIN, SAU and welfare counselors, and an advocacy role for the rights of students. The counselors also refer students to other agencies and sources of aid for their legal, physical, and domestic problems.

Another important aspect of the counselors' activities has been to provide informal emotional support for the women; to share in their successes and their worries. This has involved, for example, going to court with a student involved in a child custody case, taking a student to the hospital, or helping a student find a place to live safe from an abusive ex-husband. The counselors also work informally to help the women build their own peer support networks.

The counselors have also worked to help the women function successfully in school. They have monitored student grades and attendance and arranged for special tutoring or other services when they spot a potential problem. They provided academic counseling to help the women see how their own behavior might be contributing to their problem, to alert them to behavior which could lead to probation or to dismissal, and to encourage them to take the initiative in using school resources to their fullest advantage. The counselor's official duties also include reporting on student attendance and performance to the local WIN office.

The counselors have planned and conducted seminars for the WIN women. Initially, the seminars were intended as a vehicle for building peer support networks and for giving help in understanding the workings of the school. The purposes of the seminars has expanded to providing overall support services related to academic performance, program completion and successful job placement. Among the types of seminars which have been conducted are:

1. School related seminars covering such topics as: organization, schedules, regulations, study skills, "math anxiety," and advice from more advanced students on what to expect in future classes and how to cope with them.

2. Seminars related to personal growth and the development of interpersonal skills such as: assertiveness training through role playing, advice on how to cope with stress, effective listening, communication skills, and the development of effective strategies for dealing with instructors.

3. Job related seminars such as: industrial tours, talks with company representatives, talks by previous women graduates, mock interview sessions.

4. Group solidarity functions such as: Christmas parties, incentive awards presentations, women's dinners.

5. Public agency related topics including help with: WIN procedures, food stamp eligibility, childcare services, emergency food services, and legal aid.

IV. PERSONAL AND FAMILY CHARACTERISTICS OF THE STUDY POPULATION

This chapter describes the personal and family characteristics (i.e., age, marital and family status, ethnic background, schooling and geographic mobility) of the women selected to take part in this study. The characteristics of both the participant and comparison groups have been examined, and on most of the characteristics of interest in this study, no statistically significant difference was found. For clarity of presentation, the findings discussed in this chapter refer only to those women actually enrolled in the training, the participant group. The characteristics of comparison group members, insofar as they differ from those of training participants, are discussed in Appendix A.

WIN Status

On some of the characteristics described below, significant differences were found between participants in Chicago and Columbus. It is not surprising that the groups of study participants in the two sites do not have identical characteristics, as the populations served by the two WIN offices are not identical. Another key is the differences in the recruitment procedures used by each local WIN office as described in Chapter II. As a result, the proportions of mandatory and voluntary WIN participants differ between the two sites. As shown in Table IV-1, there are proportionately more WIN volunteers in the Columbus study population than there are in the Chicago study population.

TABLE IV-1

WIN REGISTRANT STATUS OF TRAINING PARTICIPANTS, BY SITE
(Percentages)

Registrant Status	Chicago	Columbus	Participant Group TOTAL	All WIN Registrants 1978[a]	WIN Job Entrants 1978[a]
Voluntary	9	79	57	17	18
Mandatory	91	21	43	83	82
Total % (N)	100 (57)	100 (76)	100 (133)	100	100

Chi Square = 61.4
Degrees of Freedom = 1
Probability = 0.00

[a]Source: WIN 1968-1978: A Report at 10 Years, The Work Incentive Program, Ninth Annual Report to Congress, U.S. Dept. of Labor, U.S. Dept. of HEW, Washington, D.C., 1979.

Note: Succeeding tables will be broken down by site only when significant differences between sites were found.

For most women, the determination of WIN status is based on the age of their children. Those with children under age six are usually voluntary participants, while those whose children are six or older are usually mandatory participants unless they are not the head of a household. As the age of their oldest child is highly correlated (.74) with the age of the women in this study, and as the Columbus training program has a higher proportion of voluntary WIN participants (Table IV-1), it is not unexpected that the groups of women at the two sites differ with regard to characteristics related to their ages or to those of their children.

Age

The average age of the women in the participant group at the time of the first interview was 30. Twenty-six percent were younger than 26, 55 percent were between the ages of 26 and 34, and 19 percent were 35 and older. This distribution is not unlike that for all WIN registrants who entered jobs during fiscal year 1978. As anticipated from the differences in WIN status in Chicago and Columbus, Columbus participants are younger than Chicago participants (Table IV-2).

Marital and Family Status

Most of the women in the participant group have been married at one time but are now either divorced (34%) or not living with their husbands (26%). Usually, they were first married between the ages of 18 and 20; the average age was 18.8. This average is somewhat younger than the national median age of women at the time of their first marriage, which over the last 30 years has fluctuated between 20.2 and 21 years of age.[9] The largest portion of the women in the participant group also had their first child between the ages of 18 and 20; the average age was 19.1, and a large minority became mothers at age 17 or younger (Table IV-3).

[9] U.S. Bureau of the Census, Statistical Abstract of the United States: 1978, (99th edition), Washington, D.C., 1978.

TABLE IV-2

AGE AT THE BEGINNING OF THE STUDY, BY SITE
(Percentages)

Age at the Beginning of the Study	Chicago	Columbus	Participant Group Total	WIN Registrants 1978[a]	WIN Job Entrants 1978[a]
Under 20 years	0	4	3	9	8
20 to 21 years	4	7	5	6	7
22 to 24 years	13	23	18	10	12
25 to 29 years	31	36	33	20	24
30 to 39 years	47	23	33	34	34
40 to 44 years	2	1	2	10	8
45 to 54 years	4	7	5	10	7
55 to 64 years	0	0	0	2	1
65 years and over	0	0	0	0	0
Total % (N)	101 (55)	101 (75)	99 (130)	101	101

Chi Square = 17.3
Degrees of Freedom = 6
Probability = .008

[a]Source: WIN 1968-1978: A Report at 10 Years, The Work Incentive Program, Ninth Annual Report to Congress, U.S. Dept. of Labor, U.S. Dept. of HEW, Washington, D.C., 1979.

Note: In this and succeeding tables percentages will not always total to 100 due to rounding error.

TABLE IV-3

MARITAL AND FAMILY STATUS OF TRAINING PARTICIPANTS
(In Percentages)

	Percentages
Which of the following best describes your current marital status?	
Married, living with husband	4
Married, not living with husband	26
Divorced	34
Widowed	0
Never married	36
Total %	100
(N)	(129)
How old were you when you were first married?	
17 years old or younger	29
18 to 20 years old	51
21 years old or older	20
Total %	100
(N)	(82)
How old were you when your first child was born?	
17 years old or younger	28
18 to 20 years old	49
21 years old or older	23
Total %	100
(N)	(126)

How many children do you have?	Training Participants	Female Heads of Households with Children Nationwide[a]
One	29	38
Two	32	29
Three	22	17
Four or more	17	15
Total %	100	99
(N)	(130)	

[a]Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1978 (99th Edition), Washington, D.C.

All of the women in the participant group have had at least one child, and half have had more than one. Judging from Census data, the women in this study have slightly larger families than do all U.S. female heads of households who have children (Table IV-3).

Most of the women in the participant group said they did not expect to have any additional children during their lifetime, and the majority of the others expect only one more child. Reports of a number of pregnancies since the program began suggest that the women in this program may not in fact have chosen to defer planned pregnancies until after the training is completed, although unplanned pregnancies are of course an alternative explanation (Table IV-4).

Childcare

Most of the women in the participant group have no other adults with whom they can share childcare responsibilities. Each of the 24 women who said they did have another adult to help them had only one other person, and their mother was the person most often mentioned (Table IV-5).

TABLE IV-4

HOW MANY MORE CHILDREN DO YOU EXPECT TO HAVE IN YOUR LIFETIME?

	In Percentages
None	71
One	21
Two or more	8
Total %	100
(N)	(128)

TABLE IV-5

AVAILABILITY OF ADULT HELP WITH CHILDCARE

Are there any adults who share with you the responsibility for taking care of these children? Include anyone who is 18 or older.

	In Percentages
Yes	22
No	78
Total %	100
(N)	(107)

If Yes, who would that be?

	Number of Times Mentioned
Mother	11
Husband	6
Sister	3
Brother	1
Grandmother	1
Boyfriend	1
Close Female Friend	1

A variety of arrangements were made to care for the children of the women in this study, but overall the largest group of respondents reported that childcare was not necessary, either because their children were old enough to look after themselves or because their children were in school during the same hours they were. The arrangements for childcare differed between the Chicago and Columbus groups, reflecting the greater provision of daycare by WIN in Columbus and the differences in age of the children. The Columbus group, which had more voluntary WIN participants and thus more young children, was more likely to use day-care facilities and "other" arrangements. Chicago participants were more likely to take their children to the home of a friend or feel that no childcare arrangements were necessary (Table IV-6).

TABLE IV-6

WHAT ARE YOUR CHILDCARE ARRANGEMENTS FOR THIS CHILD?
(In Percentages)

	Chicago	Columbus	TOTAL
Child taken care of in home of respondent by relatives . . .	13	9	11
Child taken care of in home of relative.	5	4	5
Child taken care of in home of friend.	22	11	15
Daycare.	7	21	15
No childcare necessary	40	29	34
Other.	13	25	20
Total %	100	99	100
(N)	(55)	(75)	(130)
Missing Data	(2)	(1)	(3)
Total (N)	(57)	(76)	(133)

Chi Square = 10.7
Degrees of Freedom = 5
Probability = .05

WIN usually bore the cost of childcare arrangements, and as a result, most respondents paid nothing or very little for whatever childcare arrangements they made (Table IV-7).

TABLE IV-7

HOW MUCH DO YOU PAY PER WEEK FOR THESE CHILDCARE ARRANGEMENTS, IN ADDITION TO WIN PAYMENTS?
(In Percentages)

	Chicago	Columbus	TOTAL
No cost	40	91	70
$20 or less	44	5	21
More than $20	16	5	9
Total %	100	101	100
(N)	(43)	(64)	(107)

*Chi Square = 32.5
Degrees of Freedom = 2
Probability = 0.00

Ethnic Background

The majority of the women participating in the study are minority group members. The ethnic composition of the groups selected to take part in the training varies by site. Eighty-one percent of the Chicago participants reported they were black, 9 percent white, and 10 percent mentioned other ethnic groups. At Columbus, 47 percent said they were black, 51 percent said white, 2 percent mentioned other groups. Compared to the national figures for WIN registrants and job entrants, blacks are over-represented and whites and other ethnic groups are under-represented in both the Chicago and Columbus groups (Table IV-8).

TABLE IV-8

OF WHAT RACIAL OR ETHNIC GROUP DO YOU CONSIDER YOURSELF A MEMBER?
(In Percentages)

Ethnic Group	Chicago	Columbus	Participant Group TOTAL	All WIN Registrants 1978[a]	WIN Job Entrants 1978[a]
White, not Hispanic	9	51	34	56	66
Black, not Hispanic	81	47	61	39	30
Hispanic	6	0	2	5	4
American Indian or Alaska Native	4	1	2		
Other	0	1	1		
Total %	100	100	100	100	100
(N)	(53)	(75)	(128)		
Missing Data	(4)	(1)	(5)		
Total (N)	(57)	(76)	(133)		

Chi Square = 27.5
Degrees of Freedom = 4
Probability = 0.00

[a]Source: WIN 1968-1979: A Report at 10 Years, The Work Incentive Program, Ninth Annual Report to Congress, U.S. Dept. of Labor, U.S. Dept. of HEW, Washington, D.C., 1979.

Schooling

The average member of the participant group came close to completing high school. The mean number of years completed is 11.5. Of the 133 participant group members, 55 percent had completed a high school education or more. This compares with a figure of 42 percent for all WIN registrants in 1978 and 49 percent for WIN registrants who entered jobs through the WIN program, suggesting that the women participating in the Bell and Howell training are among the most highly qualified WIN registrants (Table IV-9).

The majority (71%) of the women assigned to the participant group who had completed at least some high school had been enrolled in a general high school program rather than a vocational or academic program (Table IV-9).

Half of the women assigned to the participant group had been out of school for eleven years prior to the start of this study in 1978. The median year for the end of formal schooling was 1967 (Table IV-9).

The participant group members in Columbus tended to have finished schooling more recently than those in Chicago, corresponding to the differences in age and WIN status reported earlier. However, the differences were not found to be statistically significant at the .05 level.

Geographic Mobility

A rough indicator of the geographic mobility of study participants is available from the interview item regarding the state in which the participant last attended school. Since on the average 11 years have elapsed since the women last attended school, the women in the study do not appear to be highly mobile, at least across state lines. Ninety-eight percent of the Chicago group last attended school in Illinois and 87 percent of the Columbus group in Ohio.

TABLE IV-9

SCHOOLING COMPLETED BY TRAINING PARTICIPANTS
(In Percentages)*

	Training Participants	All WIN Registrants 1978[a]	WIN Job Entrants 1978[a]
Years of Schooling Completed			
Less than high school	45	58	51
High school	38	34	39
More than high school	17	8	10
Total %	100	100	100
(N)	(129)		
Type of High School Program			
General	71		
Academic	11		
Vocational	18		
Total %	100		
(N)	(126)		
Year Finished Formal Schooling			
Prior to 1960	12		
1960 - 1969	41		
1970 - 1978	47		
Total %	100		
(N)	(130)		

*Source: WIN 1968-1978: A Report at 10 Years, The Work Incentive Program, Ninth Annual Report to Congress, U.S. Dept. of Labor, U.S. Dept. of HEW, Washington, D.C., 1979.

Aptitude Test Scores

During the process of selection for participation in this study, all of the participants were given a battery of the GATB aptitude tests and an arithmetic test designed by the Bell & Howell Education Group. The GATB test was used as a preliminary screening device to avoid referring large numbers of unqualified candidates to Bell & Howell for further testing. The cut-off point was a score of 90, 80 for those who had completed high school and expressed an interest in electronics testing. The scores for participants are shown in Table IV-10.

The GATB test scores are among the variables on which the participants from the two sites differ, with the Columbus subjects scoring higher on every exam, as shown in Table IV-11.

For the Bell & Howell arithmetic test, which was used to determine actual program eligibility, potential students had to correctly answer 9 out of 25 items (36%) to be considered qualified for training by the schools. (Students who scored lower than this standard but who had at least a ninth grade reading ability were also considered qualified. The participants in this study scored lower as a group than do other applicants to the Bell & Howell Education Group schools. As on the GATB tests, Columbus participants scored higher than Chicago participants (Table IV-12).

The literature on the GATB tests indicates that 100 is the average score for the general working population, with a standard deviation of 20.[10]

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[10] U.S. Department of Labor Manpower Administration, Development of USTES Aptitude Test Battery for Electronic Technician, U.S. Training and Employment Service Technical Report S-293R, June 1970.

TABLE IV-10

DISTRIBUTION OF SCORES ON GATB APTITUDE TEST BATTERY FOR ALL TRAINING PARTICIPANTS

	Percentage Whose Scores Were:				Mean Score	S.D.
	87 or Lower	88-100	101-112	113 or Higher		
GATB: G General Ability (N=127)	5%	35%	34%	26%	104	12
GATB: V Verbal Aptitude (N=127)	9	25	33	33	106	12
GATB: N (N=127)	9	19	43	29	106	12

TABLE IV-11

GATB TEST SCORES BY EXAM TYPE AND SITE, TRAINING PARTICIPANTS

	(N)	Percentage Whose Scores Were: 87 or Lower	88-100	101-112	113 or Higher	Mean Score	Standard Deviation	
GATB: G (General Ability)								
Chicago	(51)	10%	43%	31%	16%	101	12	Chi Square = 9.72
Columbus	(76)	1	30	36	33	107	12	Degrees of Freedom = 3 Probability = .02 GAMMA = .30
GATB: V (Verbal)								
Chicago	(51)	12%	22%	37%	29%	106	11	Chi Square = 2.2
Columbus	(76)	7	28	30	36	108	13	Degrees of Freedom = 3 Probability = .54 GAMMA = .07
GATB: N (Numerical)								
Chicago	(51)	16%	29%	37%	18%	102	17	Chi Square = 12.9
Columbus	(76)	5	12	46	37	117	11	Degrees of Freedom = 3 Probability = .01 GAMMA = .47
Total N for Each Table	(127)							
Missing Data	(6)							
Total Experimental Population	(133)							

TABLE IV-12

SCORES ON THE BELL & HOWELL ARITHMETIC TEST, BY SITE

	Chicago	Columbus	TOTAL
Percent of Questions Answered Correctly:			
Mean percent correct	47	54	51
Standard Deviation	21	18	19
Percent of Applicants who Answered Correctly:			
73 percent or more of the questions. . . .	12%	13%	13%
64 - 72 percent " " "	16	26	23
44 - 60 percent " " "	32	32	32
43 percent and fewer of the questions. . .	40	29	33
Total %	100	100	101
(N)	(57)	(76)	(133)

Chi Square = 2.9
Degrees of Freedom = 3
Probability = .40

It is also suggested that persons working in electronics technician occupations like those for which these participants are being trained score 5 to 15 points higher than average. The tests and standards have not been normed for members of minority groups. The average scores for the women designated as qualified for the Bell & Howell training in this study were higher than the average of 100 for the general working population and close to the range for electronic technicians.

Summary

The average woman in our study population is 30 years old, black, a mandatory WIN participant, married at age 19 but no longer living with her husband, had her first child at age 19, has had 1 or 2 children but expects to have no more, and has completed eleven and a half years of schooling in a general high school curriculum.

The women selected for this study have clearly been "creamed." They are highly qualified with respect to the characteristics presumed to be important for success in training programs compared to the general WIN population. In some ways the demonstration project being assessed in this study presents a "best case" example of the potential of AFDC recipients for high quality training. On each background characteristic, however, there is considerable variation among the members of the study population, which will allow the measurement of the impact of different combinations of background characteristics on success in the program and employment.

V. JOB, TRAINING, AND WELFARE HISTORIES

This chapter describes the employment history of study participants prior to beginning the Bell & Howell Training Program. Training programs in which the participants have previously participated are also discussed, as is their welfare experience. As in the previous chapter, most of the specific figures presented describe those women enrolled in the Bell & Howell programs, the participant group. However, differences between the participant and comparison groups have been examined and, where relevant, are discussed in Appendix A.

Job Histories

Virtually all (94%) members of the study population reported that they had held a job at some point in their lives, and a surprisingly large number (19%) had held jobs related in some way to electronics. By the time the opportunity for enrollment in Bell & Howell training was announced, almost all (90%) of the respondents were unemployed and had been unemployed for more than six months. Those who were working fell within the category of low-wage and/or part-time workers who earn so little that they remain eligible for WIN services (Table V-1).

The design of the interview schedule used during the first round of interviews allows us to examine two aspects of the employment history of study participants--the job held for the longest time and the job held in the year prior to the start of the training program.

TABLE V-1

EMPLOYMENT STATUS OF PARTICIPANTS AT TIME TRAINING PROGRAM ANNOUNCED

	In Percentages
Employed	10
Unemployed	90
Total %	100
(N)	(130)
Length of Time Unemployed	
0 months	10
1 - 6 months	20
More than 7 months	70
Total %	100
(N)	(130)

Job Held for the Longest Period of Time

Table V-2 shows the distribution of job titles classified by occupational category. Seventy-six percent of the participant group worked full-time (40 hours or more) at the job they held for the longest time, averaging 154 percent of the minimum wage established for the year in which they left this job. The year in which participants left this job ranged from 1945 to 1979, with most leaving in 1974 through 1976 when the minimum wage ranged from $2.00 to $2.30. The average wage not corrected for inflation was $2.84 per hour. The average wage corrected for inflation and expressed in 1967 dollars was $2.01 per hour (Table V-3).

TABLE V-2

OCCUPATIONAL CATEGORY OF JOB TITLE FOR LONGEST JOB EVER HELD BY PARTICIPANTS, BY SITE
(In Percentages)

Occupational Category of Job Title	Chicago	Columbus
Professional	2	2
Sub-Professional and Technical	0	2
Managerial, Administrative and Proprietary	4	2
Higher Clerical	4	12
Lower Clerical	35	25
Foreman, Craftsman and Kindred	2	3
Operative and Kindred	23	9
Service Workers	31	46
Total % (N)	101 (52)	101 (68)

Most members of the study group were employed at locations convenient to their residence. More than half lived within 9 miles of their place of work, spent 30 minutes or less commuting by mass transit or personal car, and spent less than $5 per week for transportation. Respondents mentioned that transportation had been a problem only when specifically asked about this factor, and then only 14 percent said transportation had been a problem at the time they left this job (Table V-4).

TABLE V-3

CHARACTERISTICS OF THE LONGEST JOB EVER HELD
BY TRAINING PARTICIPANTS
(In Percentages)

	In Percentages
Hours Worked Per Week	
20 hours or less	7
21 to 39 hours	17
40 hours	59
41 hours or more	17
Total % (N)	100 (121)
Hourly Wage	
$1.50 or less	11
$1.51 - 2.00	15
$2.01 - 2.50	24
$2.51 - 3.00	17
$3.01 - 4.00	17
$4.01 or more	15
Total % (N)	99% (104)
Percentage Earned of Minimum Wage Then Effective	
0 to 75%	4
76 to 100%	13
101 to 125%	22
126 to 150%	11
151 to 200%	36
201% or more	14
Total % (N)	100% (103)

TABLE V-4

TRANSPORTATION TO LONGEST JOB EVER HELD
(In Percentages)

Distance		Type of Transit Used		Time Spent Commuting		Cost Per Week of Transit	
Less than 2 miles.	37%	Mass transit	53%	Less than 15 minutes. .	28%	Free	17%
3 - 9 miles.	31	Own car.	20	16 - 30 minutes	30	$1 - 5	47
10 - 15 miles.	19	Car pool	13	31 - 45 minutes	12	$6 - 10.	27
More than 16 miles	13	Walk	11	More than 46 minutes. .	30	$11 - 15	6
		Other	3			More than $16.	4
Total % (N)	100% (106)		100% (108)		100% (107)		101% (103)

The means of transportation to the job held for the longest time varied by site, reflecting the availability of mass transit in each city. Seventy-seven percent of the Chicago participants used mass transit, compared with 33 percent of those in Columbus. Conversely, in Chicago 17 percent of participants used their own car or car pooled, while in Columbus 46 percent used a private car. As a result, Chicago participants spent more time in transit (66% spent more than 30 minutes) than Columbus participants (77% spent less than 30 minutes).

The most common means for finding their longest held job was through friends or relatives and through self-initiative. Thirty-six percent found the job through friends or relatives at the firm, 22 percent simply walked into the employer's office and 10 percent answered newspaper advertisements (Table V-5).

Members of the participant group were employed on their longest job ever held for an average of 35 months. (The median was 24 months.) Only 10 percent stayed 6 months or less at the job, while 48 percent stayed more than 2 years. This evidence of job stability is in sharp contrast to widely held beliefs about the work experience of welfare recipients, and suggests that this select group of women have the potential to become regular members of the labor force (Table V-6).

Participants in this study were asked about their reasons for leaving their longest job in two ways. First they were asked to list their main reasons for leaving. Those who had not already mentioned these factors were then asked whether health, childcare, pregnancy or transportation had been problems at the time they left the job. Pregnancy stands out as the main reason for which the participants left their job, followed by such factors as health, moving, the job being only temporary and being laid off (Table V-7).

TABLE V-5

HOW LONGEST JOB WAS FOUND
(In Percentages)

	In Percentages
Friends/relatives at job	36
Walked in to employer's office	22
Newspaper advertisement	10
Friends/relatives not at job	8
School counselor	6
State employment agency	4
Private employment agency	2
Job training program	1
Other	11
Total % (N)	100 (108)

TABLE V-6

LENGTH OF TIME EMPLOYED AT LONGEST JOB
(In Percentages)

	In Percentages
1 - 6 months	10
7 - 12 months	17
13 - 18 months	11
19 - 24 months	14
25 - 36 months	14
37 - 48 months	13
49 - 60 months	6
More than 61 months	15
Total % (N)	100 (104)

TABLE V-7

REASON FOR LEAVING LONGEST JOB EVER HELD
(In Percentages)

	Main Reason Mentioned Without Prompting	Additional Percent Mentioning Reason With Prompting	Total Percentage Mentioning This Reason
Quit: Pregnant.	17	27	44
Quit: Health.	9	18	27
Quit: Daycare	6	15	21
Quit: Transportation.	0	14	14
Quit: Respondent moved. . . .	9	(Not Probed)	9
Job temporary.	7	(Not Probed)	7
Laid off	6	(Not Probed)	6
Quit: Dispute	6	(Not Probed)	6
Quit: Pay too low	6	(Not Probed)	6
Fired.	4	(Not Probed)	4
Quit: Company moved/failed. .	4	(Not Probed)	4
Quit: Family problem.	4	(Not Probed)	4
Quit: Didn't like job	2	(Not Probed)	2
Quit: Poor working conditions	1	(Not Probed)	1
Quit: Other reasons	14	(Not Probed)	14
Other.	6	(Not Probed)	6
Total % (N)	101 (108)		175[a] (108)

[a]Percentages sum to more than 100 due to multiple responses.

Job Held in Year Prior to the Training Program

Forty percent of participant group members held a job in the year prior to the training program, as did 36 percent of the comparison group. The distribution of job titles by occupational category is shown in Table V-8. Most study participants were employed in low-skill positions.

Sixty-nine percent worked full-time at this job, for which they received, on the average, 136 percent of the minimum wage established for the year in which they left the job. Most respondents who were working in the year prior to the training program left this job in 1978 when the minimum wage was $2.65 per hour. The average hourly wage reported was $3.53[11] (Table V-9).

Informal job finding means were the most usual ones, as was the case for the longest held job, with self-initiative and contacts through friends and relatives accounting for the bulk of these placements (Table V-10).

Training participants had spent an average of 14 months (the median was 8 months) on the job they held in the year prior to the beginning of the program (Table V-11). Being fired, having health problems, and receiving low pay were the most common reasons volunteered for leaving this job. When specifically asked, additional participants mentioned that health, childcare, pregnancy and transportation had been problems (Table V-12).

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[11] Expressed in 1967 dollars the average hourly wage was $1.95 per hour, somewhat less than the average of $2.01 per hour for the longest job ever held.

TABLE V-8

OCCUPATIONAL CATEGORIES OF JOB TITLES FOR THE POSITIONS HELD BY PARTICIPANT GROUP MEMBERS EMPLOYED IN THE YEAR PRIOR TO THE BEGINNING OF THE BELL & HOWELL TRAINING PROGRAM
(In Percentages)

Occupational Category of Job Title	In Percentages
Professional	0
Sub-professional and Technical	0
Managerial, Administrative and Proprietary	4
High Clerical	16
Low Clerical	16
Foremen, Craftsmen and Kindred	2
Operative and Kindred	10
Service Workers	51
Total % (N)	99 (49)

TABLE V-9

CHARACTERISTICS OF JOB HELD IN YEAR PRIOR TO TRAINING PROGRAM
(In Percentages)

Hours Worked Per Week	In Percentages
Less than 20 hours	15
21 - 39 hours	15
40 hours	50
More than 41 hours	19
Total % (N)	99 (52)
Hourly Wage*	
$2.00 or less	8
$2.01 - 2.50	10
$2.51 - 3.00	25
$3.01 - 4.00	31
$4.01 or more	25
Total % (N)	99 (51)
Percentage Earned of Minimum Wage in Then Effective	
0 to 75%	8
76 to 100%	10
101 to 125%	35
126 to 150%	16
151 to 200%	16
201% or more	14
Total % (N)	99 (49)

*These figures are not adjusted for inflation.

TABLE V-10

HOW JOB HELD IN YEAR PRIOR TO THE PROGRAM WAS FOUND
(In Percentages)

	In Percentages
Walked into employer's office	25
Answered newspaper advertisement	21
Friends/relatives at the job	19
Friends/relatives not at the job	12
State employment agency	6
Job training program	4
School counselor	2
Union	2
Private employment agency	0
Other	10
Total %	101
(N)	(52)

TABLE V-11

LENGTH OF TIME EMPLOYED AT JOB HELD IN YEAR PRIOR TO TRAINING PROGRAM
(In Percentages)

Length of Time on Job	In Percentages
1 - 6 months	42
7 - 12 months	25
13 - 18 months	10
19 - 24 months	8
25 - 36 months	4
37 - 48 months	4
49 - 60 months	4
More than 61 months	2
Total %	99
(N)	(48)

TABLE V-12

REASON FOR LEAVING JOB HELD IN YEAR PRIOR TO THE TRAINING PROGRAM
(In Percentages)

	Main Reason Mentioned Without Prompting	Additional Percent Mentioning With Prompting	Total Percentage Mentioning This Reason
Quit: Health	12	22	34
Quit: Transportation problems	0	31	31
Quit: Day care	4	24	28
Quit: Pregnant	8	18	26
Fired	14	(Not Probed)	14
Quit: Low pay	10	(Not Probed)	10
Job was temporary	8	(Not Probed)	8
Quit: Didn't like job	8	(Not Probed)	8
Laid off	4	(Not Probed)	4
Quit: Dispute	4	(Not Probed)	4
Quit: Company moved/folded	2	(Not Probed)	2
Quit: Respondent moved	2	(Not Probed)	2
Quit: Other	12	(Not Probed)	12
Other reasons	12	(Not Probed)	12
Total % (N)	100 (50)		195[a] (50)

[a]Percentage totals to more than 100 due to multiple responses.

Movement in the Labor Force

For 24 percent of the members of the participant group who held jobs in the year prior to beginning training, this job was also the longest job they had ever held. For the remaining 48 participants, however, it is possible to compare the longest job ever held to the more recent job to get a feeling for their movement in the labor force. A comparison of various characteristics of the two jobs for these individuals is presented in Table V-13.

TABLE V-13

COMPARISON OF ASPECTS OF THE LONGEST JOB EVER HELD AND THE JOB HELD IN THE YEAR PRIOR TO THE PROGRAM FOR THOSE FOR WHOM THESE WERE DIFFERENT JOBS

	(N)	%
Movement in Occupational Category of Job Title		
Had higher skill level on most recent job.		27
Stayed the same.		33
Moved down in skill level (85% of these moved to the lowest skill category).	(33)	39
Wages Per Hour (Standardized to 1967 Dollars)		
Made a higher wage on more recent job.		32
Made a lower wage on more recent job	(31)	68
Hours Per Week		
Worked longer hours on most recent job		30[a]
Worked the same hours (86% of these worked 40 hours) .		39
Worked fewer hours (half of these reduced their hours to 40/week).	(36)	30[b]

[a]From part-time to full-time jobs.

[b]From full-time to part-time jobs or from very long hours to a 40-hour week.

Overall, there has been little advancement in terms of the skill level of their occupations; the largest portion of those who changed job titles actually moved downward into the lowest skill category. The reported wage increase is largely an artifact of inflation. In terms of stable (1967) dollars, 68 percent experienced a decline in earnings. The hours worked shifted towards a 40-hour work week, either moving from a part-time to a full-time job or moving from working very long hours to a more customary 40 hours per week.

In addition, a comparison of Tables V-7 and V-12 shows that on the more recent job, childcare rather than pregnancy became a major problem.

Training Program Histories

For 45 percent of the participants, the Bell & Howell training program was not the first training program in which they had enrolled. The most common types of jobs for which participants had been trained in earlier vocational programs were clerical and service occupations such as medical aide, beautician, and bakery helper (Table V-14).

The programs undertaken by 39 percent of the participants were at least partially sponsored by the federal government. Twenty-two percent had taken vocational education courses and 24 percent adult education courses. Only 10 percent had taken part in a formal training program offered by a company in the private sector (Table V-15).

Payment for the training came from a variety of sources, most often from an employer and seldom from the participant or a family member (Table V-16).

Fifty-seven percent of the participants completed their previous training program. There was no relationship between the skill level of the job being trained for and the likelihood of completing the training. The primary reasons listed for leaving these training programs were boredom, pregnancy and a large "other" reasons category. Medical problems were not mentioned as reasons for leaving (Table V-17).

TABLE V-14

OCCUPATIONAL CATEGORY FOR WHICH PARTICIPANTS WERE TRAINED IN MOST RECENT TRAINING PROGRAM

	In Percentages
No training reported	55
Training reported	45
Total %	100
(N)	(130)
Of Those Receiving Training, Occupational Category of Training	
Professional	2
Sub-Professional and Technical	10
Managerial, Administrative and Proprietary	4
High Clerical	25
Low Clerical	35
Foreman, Craftsmen and Kindred	0
Operative and Kindred	7
Service Workers	18
Total %	101
(N)	(57)

TABLE V- 15

TYPE OF MOST RECENT TRAINING PROGRAM
(In Percentages)

	In Percentages
Adult education	24
Manpower Development and Training and CETA	21
Government financed apprenticeship	16
Vocational education-private school	14
Private company formal training	10
Vocational education in high school	5
Vocational education in a community college	5
Job training	2
Job Corps	2
Union apprenticeship	2
Total %	101
(N)	(58)

TABLE V-16

SOURCE OF PAYMENT FOR MOST RECENT TRAINING
(In Percentages)

	In Percentages
Employer	18
CETA	16
Federal Government, unspecified	11
WIN	9
Manpower Development and Training	9
Respondent	9
State government, unspecified	7
Public aid, unspecified	7
Basic Education Opportunity Grant	4
Other	9
Total %	99
(N)	(58)

TABLE V-17

MAIN REASON FOR LEAVING MOST RECENT TRAINING PROGRAM GIVEN BY THOSE WHO FAILED TO COMPLETE IT

	In Percentages
Bored, program wasn't for me	20
Pregnant	12
Wanted full-time work	8
Reorganization, training opportunity curtailed	8
Started WIN Program	4
Closed profession, little opportunity to break in or little promotion opportunity	4
Felt discriminated against	4
Afraid to take bus at night	4
Disliked school/classes	4
Medical	0
Other	32
Total %	100
(N)	(25)

Of those who completed a previous training program, 62 percent were employed afterwards. An additional 28 percent sought work but were unable to find a job. Seven percent did not look for a job because of such problems as poor health or pregnancy. Only 2 percent of program completers did not work because they were not interested in working at that time (Table V-18).

The characteristics of the jobs found differed little from those of the longest job ever held or the job held in the year prior to the Bell & Howell training, suggesting that the previous training undertaken did little to change the position of completers in the labor market. Most of the jobs found were in low skill categories and averaged 140 percent of the minimum wage which prevailed at the time (Tables V-19 and V-20).

One difference between the job found after previous training and the other jobs discussed is the means by which the jobs were found. State employment agencies were more of a factor and walking into the employer's office less of a factor than had been the case with the other jobs described (Table V-21).

Most of the jobs found after training lasted a short period of time, more than half lasting less than a year. The fluctuations of the labor market were more important factors in the clients' leaving this job than were such factors as health or pregnancy. Apparently, in spite of whatever increases in skills they had gained through training, the clients were not able to find a secure position in the labor force and were still at the mercy of fluctuations in the labor market (Tables V-22 and V-23).

TABLE V-18

WORK STATUS AFTER COMPLETION OF MOST RECENT TRAINING PROGRAM
(In Percentages)

	In Percentages
Employed	
Working while in training, stayed at same job.	17
Already had job lined up at time of completion	7
Sought job after completion, found one related to training . .	24
Sought job after completion, found one not related to training	14
Unemployed	
Sought job after completion, did not find job.	28
Not interested in a job at that time	2
Did not seek a job for other reasons	7
Total % (N)	99 (58)

TABLE V-19

OCCUPATIONAL CATEGORY OF TITLE OF JOB HELD AFTER COMPLETING MOST RECENT TRAINING PROGRAM
(In Percentages)

	In Percentages
Professional	10
Sub-Professional and Technical	0
Managerial, Administrative and Proprietary	0
High Clerical	15
Low Clerical	25
Foreman, Craftsman and Kindred	0
Operative and Kindred	10
Service Workers	40
Total % (N)	100 (20)

TABLE V-20

CHARACTERISTICS OF JOB HELD AFTER COMPLETING MOST RECENT TRAINING PROGRAM
(In Percentages)

	In Percentages
Hours Per Week	
0 - 20 hours	25
21 - 39 hours	0
40 hours	75
More than 40 hours	0
Total % (N)	100 (20)
Wage Per Hour*	
$1.50 or less	19
$1.51 - 2.00	5
$2.01 - 2.50	29
$2.51 - 3.00	19
$3.01 - 4.00	14
$4.01 or more	14
Total % (N)	100 21
Percentage Earned of Minimum Wage Then Effective	
0 to 75%	10
26 to 100%	0
101 to 125%	24
126 to 150%	43
151 to 200%	14
201% or more	10
Total % (N)	101 (21)

*These figures have not been adjusted for inflation. The year in which they were earned ranges from 1962 to 1978. The average unadjusted wage was $2.68. The average wage expressed in 1967 dollars was $1.84.

TABLE V-21

HOW JOB WAS FOUND AFTER MOST RECENT TRAINING
(In Percentages)

	In Percentages
Newspaper advertisement	19
State employment agency	19
Friends or relatives at the job	14
Friends or relatives not at the job	14
Walked into employer's office	10
School counselor	10
Job-training program	5
Other	10
Total %	101
(N)	(21)

TABLE V-22

LENGTH OF TIME JOB WAS HELD AFTER MOST RECENT TRAINING PROGRAM
(In Percentages)

	In Percentages
1 - 6 months	45
7 - 12 months	18
13 - 18 months	0
19 - 24 months	4
25 - 36 months	9
37 - 48 months	0
49 - 60 months	0
More than 61 months	23
Total %	99
(N)	(21)

$\bar{X}$ = 18 months
(One person is still employed at this job.)

TABLE V-23

REASONS FOR LEAVING JOB FOUND AFTER MOST RECENT TRAINING
(In Percentages)

	Main Reason Mentioned Without Prompting	Additional Percentage Mentioning With Prompting	Total Percentage Mentioning
Laid off	24	(Not Probed)	24
Quit - pregnant	5	15	20
Quit - transportation	5	15	20
Quit - Daycare	0	9	9
Job was temporary	9	(Not Probed)	9
Quit - company folded or moved	9	(Not Probed)	9
Fired	9	(Not Probed)	9
Quit - health	5	0	5
Quit - pay too low	5	(Not Probed)	5
Quit - respondent moved	5	(Not Probed)	5
Quit - family/personal problems	5	(Not Probed)	5
Quit - other	14	(Not Probed)	14
Other reasons	5	(Not Probed)	5
Total % (N)	100 (21)[b]		139[a]

[a]Percentages sum to more than 100 due to multiple responses.

[b]One person is still employed at this job.

WIN and Welfare History

The longest time a Chicago participant had been enrolled in the WIN program was nine years, and among Columbus participants, four years. However, most of the members of the participant group have only been in WIN for a short time, averaging eight months. In fact, in Columbus, more than 70 percent of the participants joined WIN only after the Bell & Howell training opportunity was announced. This reflects the different means used in the two sites to advertise the training opportunity, and the different mixes of mandatory and voluntary participants resulting from the recruiting efforts. It may also reflect the appeal of such a program for nonmandatory clients who are eligible for WIN benefits but are not attracted by the usual opportunities available through WIN (Table V-24).

Prior to entering the WIN program, the women had been on public assistance for an average of 41 months (the median was 36 months). The Chicago women tended to have been on public assistance longer but the differences between the sites were not statistically significant. The average total time on some form of public support at the time this program began was thus 49 months, a remarkably long time when the employment histories of the participants are also considered.[12]

For most of the women, their current episode on public assistance was the only one, and few had been on public assistance more than once before (Table V-25).

Almost all of the participants are eligible for and receiving food stamps and Medicaid (Table V-26).

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[12] Undoubtedly, many of these participants had received welfare supplementation while employed in low-paying jobs; the extent to which this was the case cannot be determined on the basis of the currently available data set.

TABLE V-24

MONTHS IN WIN PRIOR TO START OF BELL & HOWELL TRAINING
(In Percentages)

	Chicago	Columbus	Participant Group Total
0 months (joined WIN when this program began)	12	40	28
1 month	19	32	27
2 to 6 months	31	13	20
7 to 12 months	8	4	6
13 to 24 months	12	8	9
More than 24 months	19	3	9
Total %	101	100	99
(N)	(52)	(75)	(127)

Chi-Square = 25.29
Degrees of Freedom = 5
Probability = .0001

MONTHS ON PUBLIC ASSISTANCE BEFORE WIN

1 to 6 months	18	18	18
7 to 12 months	16	22	19
13 to 36 months	9	23	18
37 to 60 months	24	15	18
More than 60 months	33	22	26
Total %	100	100	99
(N)	(55)	(73)	(128)

Chi-Square = 6.7
Degrees of Freedom = 4
Probability = .15

TABLE V-25

NUMBER OF TIMES ON PUBLIC ASSISTANCE
(In Percentages)

	In Percentages
1 time	59
2 times	24
3 times	10
4 times	5
More than 5 times	2
Total % (N)	100 (130)

TABLE V-26

FOOD STAMP AND MEDICAID STATUS
(In Percentages)

	Food-Stamp Status	Medicaid Status
Eligible and receiving	95	92
Eligible, not receiving	2	0
Not eligible	3	8
Total % (N)	100 (128)	100 (124)

Summary

Nearly all of the participants in this study had considerable previous work experience, usually in a low-skill, low-paying position. Even though most had been working full-time, they had not earned enough, considering the size of their families, to raise them above the poverty level. Some of the women used welfare and other public resources to supplement insufficient earnings, while others were relatively recent recipients of public support. Although they held their longest job for almost three years on the average, pregnancy, poor health, child-care problems and being laid off or fired led to loss of continuous employment.

Many of the participants had exhibited the motivation to escape dead-end situations by upgrading their skills in training programs previous to the one being assessed in this study. These programs usually trained them for clerical and service positions; furthermore, some of the programs, in particular adult education, provided few direct placement opportunities and little articulation with the labor market.

Alternative WIN programs generally place women in service, clerical and sales occupations, the categories in which more than two-thirds of fiscal 1979 WIN job placements for women took place.[13] The average wage for women who gained employment through WIN in 1979 was $3.24 per hour, and among male and female WIN clients placed in jobs in 1979, nine in ten remained eligible for welfare supplementation.[14] WIN placements are measures in terms of jobs

[13] "WIN Provides 297,124 Jobs for Registrants," ETA Interchange, Vol. VI, Nos. 1 and 2, January-February, 1980, p.8.

[14] Ibid.

lasting 30 days or more, hardly a guarantee of a career. The high-skill demonstration program seeks to identify the most capable female WIN clients and to provide them with the opportunity to achieve economic self-sufficiency so as to become totally independent from welfare. It remains to be seen whether a significant number of this well qualified group of welfare recipients can complete this program, and whether the program with its promise of well paying jobs will lead to more successful outcomes than earlier training efforts or the more usual services provided by WIN.

VI. CLIENTS' EXPERIENCES WITH THE BELL AND HOWELL TRAINING PROGRAM

The interviews to gather baseline information on study participants were administered some months after training began. Thus, we were able to gather some information about the trainees' early experiences with the Bell & Howell training program. It should be noted that this information is preliminary and tentative, being predominantly a description of early impressions. Included are: (1) the things about the program that clients liked most and least, (2) their assessments of the extent to which various aspects of the training met pre-enrollment expectations, (3) problems encountered by clients in completing the program, and (4) factors related to poor attendance.

At the time the interviews were conducted, a total of 35 trainees had left the program; there were 15 dropouts in Chicago and 20 dropouts in Columbus. Throughout this chapter, information will be reported separately by site and program status.

Feelings Toward the Program

The aspects of the training program that clients liked most are reported in Table VI-1. The most frequently mentioned "likes" had to do with aspects of the curricular structure of the training program, namely, the laboratory exercises and the instructors. Classroom work was mentioned less often than the labs by all categories of clients. For those clients enrolled in the program, Columbus students, as compared with their Chicago counterparts, responded that they liked the instructors more frequently (40% vs. 10%) and the labs less frequently (27% vs. 54%). Very similar patterns occurred for dropouts at both sites. Interestingly, roughly a quarter of all four groups indicated that they liked the general opportunity for learning and obtaining career preparation best.

TABLE VI-1

WHAT CLIENTS LIKE MOST ABOUT THE BELL & HOWELL TRAINING PROGRAM, BY SITE
(In Percentages)

	In Program		Dropout	
	Chicago (N=40)	Columbus (N=53)	Chicago (N=15)	Columbus (N=19)
Labs	54	23	27	16
Instructors	10	17	40	53
Career Preparation	17	17	13	16
Enjoy Learning	10	7	13	0
Classes	5	14	0	5
Self-paced Instruction in "Prep"	2	9	7	5
Other	0	9	0	5
Nothing	2	4	0	0

Table VI-2 shows what clients liked least about the Bell & Howell training program. Among clients still in the program, "difficulty of classes" was most often mentioned (by 45% of those in Chicago and 28% of those in Columbus). Roughly a quarter of the dropouts at both sites also singled out this aspect of the training. Two other program enrollee dislikes stand out in Table VI-2, namely, the race and sex imbalance of classes and the absence of women's restrooms at both schools. This suggests that these WIN clients perceive the Bell & Howell program to be geared primarily toward males, especially white males, and that this orientation is somewhat problematic. Note, however, that the dropouts do not mention either of these factors--their responses are far more general and cover a range of more or less idiosyncratic dislikes as shown by the frequency of "other" responses from dropouts at both sites (40% in Chicago and 30% in Columbus).

Fulfillment of Expectations

Another way of looking at clients' experiences with the training program was to ask the extent to which various aspects met pre-training expectations. The findings from these questions are shown in Table VI-3. The majority of students in all categories found the difficulty of the coursework to be as they had expected. Those whose experience differed from their expectations found the coursework more difficult than anticipated. This was especially true among the Columbus dropouts.

The major area in which the students' expectations were not met was in the demands on their time. Most of the students found studying and homework took more time than they had expected. In Columbus, a higher percentage of dropouts than of those still enrolled in the training found their expectations of the time demanded of them exceeded.

TABLE VI-2

WHAT CLIENTS LIKE LEAST ABOUT THE BELL & HOWELL TRAINING PROGRAM, BY SITE
(In Percentages)

	In Program		Dropout	
	Chicago (N=40)	Columbus (N=55)	Chicago (N=15)	Columbus (N=20)
Difficulty of classes	45.0	27.3	26.7	25.0
Race, sex imbalance, prejudice	25.0	27.3	-	-
Absence of restrooms	17.5	21.8	-	-
Teachers, administrators	7.5	7.3	6.7	15.0
Physical inconvenience, travel	5.0	14.5	13.3	-
No place to study	-	-	-	10.0
Finances	-	-	-	5.0
Other	-	1.8	40.0	30.0
No dislikes	-	-	13.3	15.0

TABLE VI-3

PROGRAM EXPERIENCES AS COMPARED WITH PRE-PROGRAM EXPECTATIONS, BY SITE
(In Percentages).

	In Program		Dropout	
	Chicago (N=40)	Columbus (N=55)	Chicago (N=15)	Columbus (N=20)
Is the coursework in the training program more difficult, less difficult, or just about as difficult as you had expected?				
More difficult	25	28	13	40
As expected	63	50	67	50
Less difficult	12	22	20	10
Total	100	100	100	100
Do studying and homework seem to take more time, less time, or about as much time as you had expected?				
More time	56	40	54	55
As expected	39	39	33	35
Less time	5	21	13	10
Total	100	100	100	100
In general, do you feel the teachers have been more helpful, less helpful, or about as helpful as you had expected?				
More helpful	22	64	33	58
As expected	51	21	40	26
Less helpful	27	15	27	16
Total	100	100	100	100
Do you feel your fellow non-VIN students have been friendlier, not as friendly, or about as friendly as you had expected?				
Friendlier	34	52	20	70
As expected	66	43	60	15
Less friendly	0	5	20	15
Total	100	100	100	100

Well over half of both the enrolled and dropout groups in Columbus found the teachers at the school more helpful than expected. Interestingly, in Chicago, those who dropped out of the program were slightly more likely to report finding the teachers more helpful than anticipated than were those still enrolled.

The non-WIN students at Columbus were reported to be friendlier than expected by both the enrolled and dropout groups, with 70 percent of the dropouts reporting this impression. Chicago WIN students were less enthusiastic about their fellow students, but almost all found them to be at least as friendly as anticipated.

Problems in Program Completion

Clients in both sites experienced several problems that were sufficiently serious to endanger their chances for completing the Bell & Howell program, as shown in Table VI-4. The most serious problem for all clients was personal finances. Half of the Chicago clients still enrolled as compared with 13 percent of their counterparts in Columbus felt that finances were a "serious problem." Of the dropouts, 27 percent in Chicago and 45 percent in Columbus also identified finances as a "serious problem." From staff field visits to both sites, it was also apparent that the timeliness of payments was a recurring problem.

Transporation to the local Bell & Howell school was also a "serious problem" for substantial numbers of clients in both sites, especially Columbus dropouts (55%). Another problematic dimension of the nonacademic support system was childcare arrangements. Almost half of the Columbus and one-fourth of the Chicago dropouts cited this as a serious problem.

Two other problems cited relatively frequently by dropouts were emotional problems with family members or friends (40% of Chicago dropouts and 25% of Columbus dropouts) and health (33% of Chicago dropouts).

TABLE VI-4

PROBLEMS OF CLIENTS, BY SITE
(Percent Responding "Serious Problem")

	In Program		Dropout	
	Chicago (N=40)	Columbus (N=55)	Chicago (N=15)	Columbus (N=20)
Finances	50.0	12.7	26.7	45.0
Transportation	25.0	9.1	13.3	55.0
Childcare arrangements	15.0	9.1	26.7	45.0
Emotional, family or friends	7.7	9.1	40.0	25.0
Health	-	7.4	33.3	5.0
Right clothes to wear	25.0	5.5	13.3	5.0
Difficulty of studies	10.0	5.5	13.3	20.0

This latter finding suggests the importance of support from family and friends for maintaining enrollment in this type of nontraditional training program. The data in Table VI-5 suggest a strong relationship between program persistence and the perceived quality of the client's relationship with her children for those clients who indicated that the training program did have an effect on the relationship (over half of both groups of clients at each site). More than two-thirds of those still enrolled in the Bell & Howell school at each site felt that their participation in the training program was having a positive effect on their relationship with their children (children were either doing better in school or more respectful, or the client was getting along better with them). For dropouts, on the other hand, 62 percent felt that their participation in the training program was having a negative impact (e.g., they did not have as much time for their children as they would like and children were unhappy).

Factors Related to Poor Attendance

Attendance at classes is essential for successful completion of the Bell & Howell program. In fact, as described in Chapter III, there is a strict attendance policy at the schools in both sites. The clients at both sites have tended to miss more classes than is compatible with keeping up with class work. Virtually all of the clients in Columbus and over 70 percent of the Chicago clients have missed some classes. Table VI-6 shows the numbers of classes missed, and Table VI-7 shows the reasons given by clients as the main causes of absence. It is important to note that absence from class is particularly striking for Columbus clients: 38 percent of those still enrolled and all of the dropouts missed at least 16 classes during the first six months of training.

TABLE VI-5

TRAINING PROGRAM'S MAIN EFFECT ON CLIENTS' RELATIONSHIPS WITH CHILDREN, BY SITE
(In Percentages)

Do you think taking this training program has affected your relationships with your children in any way? (IF YES:) In what way?	In Program		Dropout	
	Chicago (N=22)	Columbus (N=34)	Chicago (N=8)	Columbus (N=13)
Positive Effects				
Children doing better in school, more respectful	45	47	13	23
Client getting along better with children	23	23	-	15
Other (positive)	-	-	25	-
Total Percent Reporting Positive Effects	68	70	38	38
Negative Effects				
Not as much time for children, children unhappy with arrangement	32	30	50	62
Other (negative)	-	-	12	-
Total Percentage Reporting Negative Effects	32	30	62	62

TABLE VI-6

CLASSES MISSED, BY SITE
(In Percentages)

	In Program		Dropout	
	Chicago (N=32)	Columbus (N=53)	Chicago (N=7)	Columbus (N=19)
1 - 5 classes	28.1	18.9	28.6	-
6 - 9 classes	21.9	20.8	28.6	-
10 - 15 classes	31.3	22.6	14.3	-
16 or more classes	18.8	37.7	28.6	100.0

From Table VI-7, it is apparent that the primary reason given for absence from class is illness, either of the client herself or of a family member. This finding is interesting, since relatively few of the Columbus clients cited health as a "serious problem" in completing the program as shown in Table VI-4. Perhaps these clients are not as fully aware as they should be either of the consequence of missing classes or of the effects of illness on their attendance.

Also interesting from Table VI-7 is the finding that a quarter of the enrollees in Columbus cited transportation as the main reason for missing classes. Of the Columbus enrollees, 80 percent either drive themselves or car pool for a trip of 45 minutes or less, as compared with Chicago where 83 percent take public transit (most for a trip of more than 45 minutes). Apparently, the Chicago clients are either more willing or more accustomed to traveling long distances.

Table VI-8 shows the average number of classes missed according to the reason respondents gave as their main reason for being absent. If one interprets this as the number of classes a person experiencing this problem is likely to miss, problems in the area of personal security and home repairs appear to be major ones in compiling a successful attendance record, in addition to transportation difficulties and illnesses suffered by the student or her family.

TABLE VI-7

WHAT WAS THE MAIN CAUSE OF YOUR ABSENCE? BY SITE
(In Percentages)

	In Program		Dropout	
	Chicago (N=34)	Columbus (N=55)	Chicago (N=11)	Columbus (N=19)
Client's illness	26.5	43.6	27.3	26.3
Family member's illness, other problem	35.3	16.4	54.6	36.8
Transportation	11.7	27.3	-	10.6
Weather, lack of warm clothing	14.7	-	-	-
Other	11.7	12.7	18.2	26.3

TABLE VI-8

AVERAGE NUMBER OF ABSENCES FROM CLASS ARRANGED ACCORDING TO THE MAIN REASON GIVEN BY RESPONDENTS FOR MISSING CLASSES
(Mean Number of Classes Missed)

Reason	Mean Number of Classes Missed By Women Listing This As Their Main Reason for Absences
Vandalism, harassment, other personal problems.	30
Maintenance problems at home	22
Illness - family member.	21
Illness-- respondent	20
Transportation - snow, car breakdown, ride didn't show, etc. . . .	15
Other family/child related problems.	12
Weather.	12
Lack of warm clothing.	10
Transportation finances.	10

Summary

The women taking part in the electronics technician training program have responded positively to the curricular aspects of the program. The students indicate that the nonschool aspects of their lives may be causing their major difficulties. This is particularly true for handling emotional tensions within the family, for arranging satisfactory child-care situations, for coping with the occasional illness of the clients or the family members, for transportation to and from training, and for personal finances. Just what--if any--modifications to the support system, the recruitment process, or the training program should be made is not clear at this point in our assessment. For example, should increases in support services be provided or should the training program be made more flexible so that the women may make up classes missed while solving their problems? If a student's child is ill, should WIN furnish funds for a babysitter, furnish funds to pay other family members to care for the child, arrange for the mother to take make-up classes, or arrange for extra tutoring? Or should WIN attempt to screen out clients who have children prone to illnesses?

VII. SELF-ESTEEM AND WORK ATTITUDES OF STUDY PARTICIPANTS

As part of the overall design for the evaluation of the demonstration program, information about clients' self-esteem and work attitudes was gathered both during the process of determining their qualification for admission to the training, and as part of the first interview. The ten items of the Rosenberg Self-Esteem Scale (RSE)[15] were used, as were nine items from Goodwin's[16] extensive study of welfare clients' work attitudes. Each item was scored on a four-point scale, with a score of four indicating a positive work attitude or self-esteem response. Since these attitudinal items were included in the study for the purpose of assessing the reciprocal impact of accomplishments (both in the training program and in post-training jobs) on attitudes in the long run, the responses gathered during the first months of training are primarily of interest as benchmarks for comparison with those to be gathered in later interviews.

Examination of the self-esteem and work attitude items in Tables VII-1 and VII-2 reveals that there were few major differences in attitudes between the groups at each site at the time of the determination of the applicants' qualifications for the training. There was only one self-concept item for which the distribution of early scores of dropouts and those still enrolled at the time of the first interview were significantly different:

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[15] Rosenberg, Morris, 1979. Conceiving the Self. New York: Basic Books.

[16] Goodwin, Leonard, 1972. Do the Poor Want to Work? Washington, D.C.: The Brookings Institution.

Chicago persisters were considerably more likely than dropouts to disagree strongly with the item, "I wish that I could have more respect for myself." Dropouts also tended to be considerably more likely than those still enrolled to agree with the item: "A woman can't really think well of herself unless she has a job." Perhaps the dropouts at both sites were more job- than training-oriented.

The overall scores tended to confirm the lower self-esteem and greater work orientation of dropouts. Those who were to drop out by the time of the first interview were somewhat lower on self-esteem than those who would remain in school or who were assigned to the control group, while their work attitude scores were somewhat higher. Although these differences are small, it may be that, combined with other correlates of persistence in the training, such scores may be useful in targeting applicants most likely to complete the training.

While our ultimate analytical interest in these scores is in relation to individual change over time, we have attempted to compare these data with information yielded by other studies, although exact comparisons cannot be made. In a previous study of WIN participants,[17] conducted in Portland, Oregon, six of the ten items of the Rosenberg scale were used as a measure of self-esteem. Table VII-3 presents a comparison of the scores for the participants in the present study on the same six items, categorized into high, medium and low self-esteem. The table shows that more Chicago than Columbus WIN participants could be classified as having high self-esteem, that the participants in this study at both sites were more likely to be categorized as having high or medium self-esteem than were the Portland WIN participants, and that there had been a general increase in self-esteem between the time when clients were tested for the training program (T1) and the time of the first interview (T2).

[17] Dunning, Bruce B., 1977. Posttraining Outcomes: Experiences with the Portland WIN Voucher Training Program. Washington, D.C.: Bureau of Social Science Research, Inc.

TABLE VII-1

MEAN ATTITUDE SCORES[a] MEASURING SELF-ESTEEM FOR CONTINUING PARTICIPANTS, DROPOUTS AND NONPARTICIPANTS, BY SITE

Questionnaire Items Measuring Self-Esteem	At Time of Determination of Qualifications					
	Chicago			Columbus		
	Participants (N=42)	Dropouts (N=15)	Nonparticipants (N=41)	Participants (N=56)	Dropouts (N=20)	Nonparticipants (N=76)
On the whole, I am satisfied with myself	2.71	2.73	2.75	2.72	2.85	2.74
At times I think I am no good at all (-)[b]	3.17	3.27	3.27	2.89	3.00	3.01
I feel that I have a number of good qualities	3.42	3.53	3.56	3.53	3.50	3.53
I am able to do things as well as most other people	3.39	3.40	3.45	3.47	3.30	3.40
I feel I do not have much to be proud of (-)	3.34	3.13	3.35	3.24	3.10	3.07
I certainly feel useless at times (-)	2.71	2.53	2.74	2.64	2.47	2.66
All in all, I am inclined to feel that I am a failure (-)	3.49	3.60	3.53	3.33	3.30	3.33
I wish I could have more respect for myself (-)	3.03	2.40	3.12	2.96	2.63	2.58
I take a positive attitude toward myself	3.39	3.40	3.49	3.20	3.15	3.29
I feel that I am a person of worth, at least on an equal plane with others	3.46	3.53	3.47	3.44	3.60	3.45
SCALE SCORE: ten item sum	32.11	31.53	32.76	31.02	30.90	31.06
	At Time of First Interview					
On the whole, I am satisfied with myself	3.15	2.73	2.88	3.02	3.05	2.94
At times I think I am no good at all (-)[b]	3.15	3.33	3.54	3.04	3.05	2.96
I feel that I have a number of good qualities	3.60	3.53	3.48	3.42	3.50	3.42
I am able to do things as well as most other people	3.58	3.40	3.41	3.26	3.60	3.39
I feel I do not have much to be proud of (-)	3.43	3.27	3.42	3.46	3.35	3.39
I certainly feel useless at times (-)	3.00	2.80	2.73	2.98	2.70	2.65
All in all, I am inclined to feel that I am a failure (-)	3.43	3.27	3.41	3.42	3.30	3.39
I wish I could have more respect for myself (-)	3.03	2.80	3.19	3.04	2.95	2.68
I take a positive attitude toward myself	3.03	3.27	3.56	3.22	3.35	3.27
I feel that I am a person of worth, at least on an equal plane with others	3.43	3.40	3.36	3.27	3.25	3.35
SCALE SCORE: ten item sum	33.23	31.80	32.98	32.11	32.10	31.44

[a]The responses to these items were made on a 4-point scale, where a score of 1 meant there was strong disagreement with the item, and 4 meant strong agreement with it. Larger numbers indicate greater self-esteem. The responses did not cluster at any point on the scale. The standard deviations of the means, although somewhat smaller, were comparable with those found in studies by Rosenberg and previous SSSR studies of WIN participants.

[b]The items followed by a minus sign (-) were reverse scored.

TABLE VII-2

MEAN ATTITUDE SCORES* MEASURING WORK ATTITUDES HELD BY CONTINUING PARTICIPANTS, DROPOUTS AND NONPARTICIPANTS, BY SITE

Questionnaire Items Measuring Work Attitudes	At Time of Determination of Qualifications					
	Chicago			Columbus		
	Participants (N=42)	Dropouts (N=19)	Nonparticipants (N=61)	Participants (N=56)	Dropouts (N=20)	Nonparticipants (N=76)
Getting recognition for my own work is important to me	3.46	3.46	3.59	3.61	3.65	3.57
A woman can't really think well of herself unless she has a job	2.15	2.02	2.18	2.34	2.60	2.34
To me, it's important to have the kind of work that gives me a chance to develop my own special abilities	3.89	3.91	3.64	3.65	3.75	3.62
Work is a good builder of character	3.40	3.27	3.32	3.44	3.35	3.32
To me, gaining the increased respect of family and friends is one of the important rewards of getting ahead in an occupation	3.10	3.00	3.15	3.09	3.10	3.22
To me, it's important in an occupation that a person be able to see the results of her own work.	3.38	3.46	3.44	3.55	3.60	3.42
Success in an occupation is mainly a matter of how much you know	2.72	2.91	2.79	2.90	2.85	2.63
Success in an occupation is mainly a matter of how much you put into it.	3.52	3.46	3.53	3.61	3.70	3.69
Success in an occupation is mainly a matter of hard work	3.21	3.18	3.21	3.22	3.50	3.28
SCALE SCORE: nine item sum	28.71	29.47	28.85	28.91	30.10	29.09
	At Time of First Interview					
Getting recognition for my own work is important to me	3.60	3.47	3.65	3.68	3.90	3.48
A woman can't really think well of herself unless she has a job	2.11	2.07	2.12	2.09	1.90	2.05
To me, it's important to have the kind of work that gives me a chance to develop my own special abilities	3.63	3.67	3.42	3.46	3.65	3.46
Work is a good builder of character	3.33	3.20	3.28	3.35	3.40	3.34
To me, gaining the increased respect of family and friends is one of the important rewards of getting ahead in an occupation.	2.92	2.80	2.74	2.89	3.05	3.18
To me, it's important in an occupation that a person be able to see the results of her own work	3.58	3.47	3.47	3.96	3.55	3.42
Success in an occupation is mainly a matter of how much you know	2.93	2.68	2.80	2.55	2.70	2.67
Success in an occupation is mainly a matter of how much you put into it	3.45	3.13	3.38	3.36	3.70	3.42
Success in an occupation is mainly a matter of hard work	3.33	2.93	3.18	3.13	3.25	3.06
SCALE SCORE: Nine item sum	28.78	27.34	28.04	27.92	28.70	28.02

*The attitudes were rated on a 4-point scale, where a score of 1 indicated that the respondent strongly disagreed with the statement and a score of 4 indicated strong agreement with it. Larger numbers indicate greater agreement with the work ethic, i.e., attitude toward work, self-development as an occupational goal, and the belief that one's efforts control success. The scores for three of the items, the ones mentioning development of special abilities, seeing the results of one's work and work as a builder of character, clustered at the "strongly agree" end of the scale. The standard deviations in all items were somewhat smaller than those found in studies by Goodale.

TABLE VII-3

DISTRIBUTION OF SELF-ESTEEM OF STUDY POPULATION AT TIME OF DETERMINATION OF QUALIFICATIONS (T1) AND TIME OF FIRST INTERVIEW (T2), BY SITE
(In Percentages)

Self-Esteem	Chicago						Columbus						WIN Participants in Portland 1977[b]
	Participants		Dropouts		Nonparticipants		Participants		Dropouts		Nonparticipants		
	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	
High[a]	32	35	33	47	40	44	22	24	25	25	19	30	31
Medium	51	60	60	40	45	41	65	57	55	70	65	47	39
Low	17	5	7	13	15	15	13	19	20	5	15	23	31
Total % (N)	100 (41)	100 (40)	100 (15)	100 (15)	100 (55)	100 (41)	100 (54)	100 (54)	100 (20)	100 (20)	99 (72)	100 (66)	101 (148)

[a]Self-esteem was scored on a basis of 1 for strongly disagree to 4 for strongly agree on the six items measuring self-concept that were used in the present study and in a previous study of female WIN participants in Portland. The ranges of scores out of a possible 24 for each category were: High = 22 to 24, Medium = 18 to 21 and Low = 1 to 17. The six items used were: "I take a positive attitude toward myself," "I feel that I have a number of good qualities," "I am able to do things as well as most people," "I feel that I'm a person of worth, at least on an equal plane with others," "Sometimes I think I am no good at all" (reverse scored), and "I feel I do not have much to be proud of."

[b]Source: Dunning, Bruce B., 1977. Posttraining Outcomes: Experiences with the Portland WIN Voucher Training Program. Bureau of Social Science Research, Washington, D.C.

In Table VII-4 the attitudes toward work scores have been compared with those investigated by Goodwin in his 1972 study of poverty populations. His scale consisted of 15 items. While we have used only 9 of these items, a rough comparison of the two sets of scores shows the WIN participants in the present study to have somewhat less positive attitudes towards work than did WIN women at the time of Goodwin's study, some ten years ago. The attitude scores of the present participants most closely resemble those of long-term welfare mothers, those who had been on welfare an average of 16 years at the time of Goodwin's study. Although few of the participants in the present study had been on welfare for that length of time, it may be that their low scores reflect their welfare experience.

After seeing a rough draft of this chapter, Goodwin has suggested[18] another explanation for the differences in scores. He has pointed out that we have changed one of his original items from "A man cannot really think well of himself unless he has a job" to "A woman cannot really think well of herself unless she has a job." This change was made to make the question more applicable to the women in our study and their feelings about their employment. However, Dr. Goodwin feels that the two items are clearly not comparable, that the ratings given our item are considerably lower than on his and that by including this item in our average score in Table VII-4 we arrive at an average that is lower than it would be if the original item were substituted. While we cannot go back and change the item asked, we can recompute our averages without this item. As shown in the corrected mean of means column of Table VII-4, the new averages are higher and bring the scores of the women in our study closer to those found by Goodwin in his earlier work, although the scores for the women in our study remain lower than for those in Goodwin's.

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[18] Goodwin, Leonard, 1979. Personal communication.

TABLE VII-4

COMPARISON OF WORK ATTITUDES AMONG THE FEMALE WIN PARTICIPANTS IN THE PRESENT STUDY WITH THOSE HELD BY WOMEN INTERVIEWED BY GOODWIN IN 1970

Group	Mean of Means on Individual Items in the Work Attitude Scale[a]	Corrected Mean of Means on Individual Items in the Work Attitude Scale[d]
Goodwin's Sample (1970)		
WIN Women	3.45	
Long Term Welfare Mothers[b]	3.21	
Short Term Welfare Mothers[c]	3.28	
Chicago (1978-79)		
Participants - Time 1	3.19	3.32
Participants - Time 2	3.20	3.33
Dropouts - Time 1	3.27	3.33
Dropouts - Time 2	3.03	3.16
Comparison Group - Time 1	3.20	3.33
Comparison Group - Time 2	3.12	3.24
Columbus (1978-79)		
Participants - Time 1	3.21	3.33
Participants - Time 2	3.10	3.24
Dropouts - Time 1	3.34	3.44
Dropouts - Time 2	3.19	3.34
Comparison Group - Time 1	3.23	3.34
Comparison Group - Time 2	3.11	3.25

[a]The attitudes were rated on a 4-point scale, where a score of 1 indicated that the respondent strongly disagreed with the statement and a score of 4 indicated strong agreement with it. Larger numbers indicate greater agreement with the work ethic, i.e., attitude toward work, self-development as an occupational goal, and the belief that one's efforts control success.

[b]The average length of time on welfare for long-term welfare mothers was 16 years. These women were not enrolled in WIN.

[c]The average length of time on welfare for short-term welfare mothers was one year. These women were not enrolled in WIN.

[d]The corrected mean of means was computed after deleting the score for the item "A woman cannot really think well of herself unless she has a job."

It is also possible that in the past few years, persons living in poverty situations have become increasingly alienated and discouraged, and this has been reflected in declining work attitude scores. Table VII-5 presents the scores for three specific items used in Goodwin's current study of work attitudes, his earlier work and this study. Goodwin's figures show a drop in the scores on all three items, which may reflect general changes in the attitudes of poverty populations, although he cautions that because of possible sampling differences and other factors, interpretation of the differences is difficult. The WIN women in the current study fall between the scores Goodwin collected in 1970 and 1978 in nearly every instance, suggesting that their attitudes are not unusual for female WIN participants and that the women found qualified for the training offered were among those who held more positive work attitudes than the bulk of WIN women in 1978.

TABLE VII-5

COMPARISON OF RESPONSES[a] TO INDIVIDUAL ITEMS COMMON TO GOODWIN'S 1970 AND 1978 INTERVIEWS AND THIS STUDY

	Goodwin		Chicago			Columbus		
			At Time of Determination of Qualifications (1978)			At Time of Determination of Qualifications		
	WIN Women 1970[b] (N=900)	WIN Women 1978[b] (N=790)	Participants (N=42)	Dropouts (N=15)	Nonparticipants (N=61)	Participants (N=56)	Dropouts (N=20)	Nonparticipants (N=76)
Success in a job is mainly a matter of hard work. . .	3.40	2.95	3.21	3.18	3.21	3.22	3.50	3.28
To me, it is important to have the kind of work that gives me a chance to develop my own special abilities.	3.76	3.48	3.69	3.91	3.64	3.65	3.75	3.62
Getting recognition for my own work is important to me.	3.70	3.12	3.46	3.46	3.59	3.61	3.65	3.57

[a]The attitudes were rated on a 4-point scale, where a score of 1 indicated that the respondent strongly disagreed with the statement and a score of 4 indicated strong agreement with it. Larger numbers indicate greater agreement with the work ethic, i.e., attitude toward work, self-development as an occupational goal, and the belief that one's efforts control success.

[b]Source: Leonard Goodwin, 1979. Personal communication.

VIII. LABOR FORCE STATUS AND ACTIVITIES OF NONPARTICIPANTS (COMPARISON GROUP)

At the time of the interview, most of the members of the comparison group were unemployed and receiving welfare support. Only 41 percent were either working or participating in a training program.

TABLE VIII-1

LABOR FORCE STATUS OF NONPARTICIPANTS AT TIME OF FIRST INTERVIEW (In Percentages)

	In Percentages
Homemaker	59
Employed	22
Training	19
Total %	100
(N)	(112)

The types of jobs held by the women who are employed are similar to those which were held by the training participants in the year prior to program entry (see Chapter V). Most were working in low skill occupational categories, worked 40 hours per week and earned an average of $3.41 per hour, 129 percent of the minimum wage.[19] Most lived close to their place of employment, an average of 5 miles and less than 30 minutes away.

[19] Expressed in 1967 dollars the average wage is $1.59 per hour.

A large portion used their own cars to commute and 28 percent used mass transit. Few spent more than $10 per week for commuting. The comparison group members found their jobs through friends or relatives or through self-initiative (Table VIII-2).

Of the 21 women who were enrolled in training programs, almost half were in vocational programs in public or private schools; only 21 percent were in programs directly financed by the federal government. But the majority indicated that their training was paid for through some type of government program (Table VIII-3).

The occupations for which the women were training were concentrated in the lower skill level categories; the distribution was not unlike that for all the comparison group members who had been in training programs prior to the beginning of the selection process for the Bell & Howell program. The main departure is that six of the women enrolled in electronics technician training, either at one of the Bell & Howell schools using other WIN funds, or at similar training institutes.

For the comparison group members enrolled in training programs, travel time and distances were greater than for those who were working. Forty-five percent lived more than nine miles from the place of training and 47 percent spent more than 30 minutes commuting, suggesting a willingness to forego not only immediate earnings, but also to undertake more difficult commuting to upgrade their skills.

All of the women enrolled in training expected to complete their programs. They mentioned finances as a major obstacle to completion, and they said that personal and family illness was the main cause of absences (Table VIII-4).

TABLE VIII-2

CHARACTERISTICS OF JOBS HELD BY EMPLOYED NONPARTICIPANTS
(In Percentages)

	Percentages
A. Occupational Category	
Professional	0
Sub-professional and Technical	4
Managerial, Administrative and Proprietary	0
High Clerical	4
Low Clerical	33
Foreman, Craftsman and Kindred	0
Operative and Kindred	17
Service Workers	42
Total % (N)	100 (24)
B. Hours Worked Per Week	
Less than 20 hours	24
21 - 39 hours	16
40 hours	56
More than 41 hours	4
Total % (N)	100 (25)
C. Hourly Wage	
$2.00 or less	8
$2.01 to $3.00	32
$3.01 to $4.00	40
$4.01 or more	20
Total % (N)	100 (25)

TABLE VIII-2--(continued)

	Percentages
D. Percentage Earned of Minimum Wage Then Effective	
0 to 75	8
76 to 100	4
101 to 125	44
126 to 150	24
151 to 200	16
200% or more	4
Total %	100
(N)	(25)
E. Distance from Home to Work	
Less than 2 miles	28
3 - 9 miles	56
10 - 15 miles	16
Total %	100
(N)	(25)
F. Time Spent Commuting Home to Work	
Less than 15 minutes	32
16 - 30 minutes	40
31 - 45 minutes	12
More than 45 minutes	16
Total %	100
(N)	(25)
G. Kind of Transportation Used	
Mass transit	29
Own car	50
Car pool/paid ride	8
Walk	13
Total %	100
(N)	(24)

TABLE VIII-2--(continued)

	Percentages
H. Cost of Transportation Per Week	
Free	8
$1 - 5	36
$6 - 10	40
$11 - 15	8
More than $16	8
Total %	100
(N)	(25)
I. How Found Job	
Walked into employer's office	32
Friends/relatives at job	20
Newspaper advertisement	8
State employment agency	8
Friends/relatives not at job	4
Other	28
Total %	100
(N)	(25)

TABLE VIII-3

CHARACTERISTICS OF TRAINING PROGRAMS PARTICIPATED IN BY NONPARTICIPANTS
(In Percentages)

	Percentages
A. Type of Training Program	
Vocational training in private school	29
Government financed apprenticeship	19
Vocational training in high school	10
Vocational training in community college	10
Manpower Development and Training	5
Other	19
Didn't know/no answer	9
Total %	101
(N)	(21)
B. Source of Payment for Training	
WIN	29
BEOG	29
Federal Government - unspecified	19
Respondent	10
Public Aid - unspecified	5
Other	9
Total %	101
(N)	(21)
C. Occupational Category of Job title training for	
Professional	5
Subprofessional and Technical	5
Managerial, Administrative and Proprietary	5
High Clerical	24
Low Clerical	10
Foreman, Craftsmen and Kindred	33
Operative and Kindred	5
Service Workers	14
Total %	101
(N)	(21)

TABLE VIII-3--(continued)

	Current Training %	Previous Training %
D. Comparison of Occupational Categories Currently Being Trained for and Those Trained for by Nonparticipants Prior to the Beginning of the Bell & Howell Training Program		
Professional	5	3
Sub-professional and Technical	5	11
Managerial, Administrative and Proprietary	5	8
High Clerical	24	24
Low Clerical	10	22
Foreman, Craftsman and Kindred	33	8
Operative and Kindred	5	3
Service Workers	14	22
Total % (N)	101 (21)	101 (37)
E. Jobs for Which Nonparticipants are Training		
Electronics Technician		28
Secretarial		28
Beautician		10
Data Processing		10
G.E.D.		5
Auto Tune-up		5
Social Work		5
Other		10
Total % (N)		101 (21)

TABLE VIII-3--(continued)

	Percentages
F. Distance from Home to Training	
Less than 2 miles	30
3 - 9 miles	25
10 - 15 miles	35
More than 16 miles	10
Total %	100
(N)	(20)
G. Time Spent Traveling from Home to Training	
Less than 15 minutes	29
16 - 30 miles	24
31 - 45 miles	14
More than 46 miles	33
Total %	100
(N)	(20)
H. Type of Transportation to Training	
Mass transit	57
Own car	24
Car pool/definite ride	14
Other	5
Total %	100
(N)	(21)
I. Cost of Transportation Per Week	
Free	0
$1 - 5	43
$6 - 10	43
$11 - 15	14
Total %	100
(N)	(21)

TABLE VIII-4

MAIN REASON GIVEN FOR ABSENCES FROM TRAINING
(In Percentages)

	In Percentages
Illness of respondent	40
Illness of child/family member	20
Other child/family problem	20
Transportation	13
Babysitting	7
Total %	100
(N)	(15)

When answering our question about plans for seeking future employment, a large proportion of the comparison group members (52%) either replied they didn't know or did not answer the question. Those who had definite plans expected to work 40 hours per week and earn less than $5 per hour (Table VIII-5).

TABLE VIII-5

EXPECTED HOURLY WAGE FOR JOB ATTAINED AFTER TRAINING

	In Percentages
Less than $5.00	82
$5.01 - 6.00	10
$6.01 - 7.00	8
Total %	100
(N)	(39)

Summary

The data suggest that most comparison group members' lives were not significantly affected by their eligibility for the Bell & Howell program and subsequent nonselection. One might have assumed that having successfully passed several screenings, these women might have sought to obtain other high-skill training or placement in better jobs. Apparently this was the case only for a handful of clients. After they failed to gain acceptance to the Bell & Howell program, most women either found (or were placed) in low-level jobs or resumed their full-time homemaker status with welfare support. These findings suggest that in the absence of special programming such as the Bell & Howell demonstration, few among even the most able of welfare mothers will succeed in upgrading their situation to the point where they can move some distance beyond poverty conditions.

IX. OBSERVATIONS ON PROGRAM RETENTION TO DATE

The comments in this chapter are not meant to be taken as final recommendations, or as evaluations of the program to date. Rather, they are a summary of issues which seem to be most important at this time. The issues raised here will be more fully investigated in future phases of data collection and analysis.

The comments are based largely on the impressions reported by Bell & Howell personnel and WIN office staff. These are supplemented by observations made by BSSR staff on site visits and occasionally by data collected in the first interview. Thus, this chapter is not data based, but serves rather as a guide for structuring further inquiry.

Program Retention

The two major success criteria of adult training programs oriented toward job entry are retention and placement. While it can be argued convincingly that there are other valid success indicators (personal growth, skill acquisition, clarification of vocational objectives are but a few of the most obvious ones), operators of training programs tend to focus policy decisions on the program's retention and placement record. At this stage of the Bell & Howell demonstration, only retention can be discussed, since few of the enrollees had completed the program and were ready for placement at the time this report was prepared.

Retention or program completion is a complex phenomenon. Students may choose to "drop" the program for personal reasons (because they become ill, dislike some aspect of the program, decide to move to another city, etc.) or they may be terminated by the school (because of poor academic

performance, poor attendance, bad behavior, etc.). Often a combination of factors can be identified. The "dropout" rate thus reflects a variety of problems. It should also be noted that electronics technician training is a long and difficult program. Officials of the schools report that they anticipate only 25 percent of their non-WIN students who start in the remedial or "prep" program and 35 to 50 percent of those who start in the Technician I Course to graduate from the program. These officials report that the current dropout figures for the WIN students are actually better than for non-WIN students at the same point in the program, which implies that the program is functioning well for the WIN students. However, it is important to note that as of March 1980 more than half (59%) of the students had left the program, and there is some indication that others are persisting only because of the financial benefits they receive from WIN and the false fear of having these benefits cut off if they were to drop out.

The training program experience may be thought of in terms of a process of institutional and individual adjustment to a situation that is new for all involved. Problems in the "fit" between the two parties have been observed to originate from each side. Attempts to solve some of the problems observed have been instituted by the schools and by the WIN sponsors, but others defy solution in this program and in society at large.

Survey data from our interviews with enrollees and dropouts, school information pertaining to grades and attendance, and informal discussions with students and Bell & Howell staff, as well as our own observations on the course of the project, suggest several important considerations:

1. A portion of the attrition may be the result of specific decisions made about the means for conducting this demonstration project and its evaluation, and perhaps would not have occurred under more "normal" circumstances.

2. Poor attendance, usually leading to poor academic performance, is the main obstacle to retention and program completion.

3. One of the principal institutional mechanisms which was to deal with the special problems of WIN enrollees, the remedial or "preparatory" program, apparently was not well suited to the needs of these students. Other institutional mechanisms, especially the addition of special counselors, have proven extremely valuable.

4. The extent to which institutional adjustments can overcome some of the impediments to program completion will require careful assessment.

In the remaining sections of this chapter, these comments are discussed in more detail.

The Rush to Begin Enrolling WIN Students

A number of factors peculiar to the design of this demonstration program which would probably not be a part of an ongoing training program may have contributed to the attrition of clients from the schools. First, the time provided to implement the project may have been too short to allow adequate development of the standards for qualification, both in terms of test scores and other screening mechanisms, by the time the first clients applied for the program. In some cases the women enrolled

in WIN solely to be eligible for this program. Their papers had not been fully processed and their eligibility for WIN not finally determined by the time school began. Childcare arrangements were also difficult to find on such short notice and for some women no arrangements were made until after classes began.

Coupled with the short start-up time was the need to identify a large group of qualified clients. It was important to have enough study participants to have a sizable participant group and a comparison group of equal or greater size. This demand strained and in some cases overwhelmed the feeder system. There is evidence that some of the students felt they were forced into this program even though it was not their first choice. The Chicago WIN office has discussed the problems of providing a class-sized group of clients and says that clients were actively counseled into nontraditional training programs and into this particular program during this time. The demand for size also resulted in the decision to lower the admission standards both on the GATB tests and on the Bell & Howell tests, so that some women were admitted to the schools who would otherwise have been found unqualified. The speed with which the screening was done and the number of people processed may also have limited screening by WIN counselors for health, emotional and family problems; some individuals might not have been admitted to this training if the screening had been more thorough. This may have been especially true in Columbus where a large number of applicants were volunteering for WIN only to take advantage of this program and had not been seen by WIN counselors before.

Finally, the size of the entering class in Columbus may have been too large for the new counselor for WIN students to handle adequately.

It is possible that some of the early adjustment problems experienced by the students went unnoticed or untreated as a result.

Attendance Problems

A number of factors contributed to the attendance problems experienced by the students. Some of these are an intrinsic part of any training program involving single mothers from poverty backgrounds in their childbearing years. Others, however, may be subject to some alleviation through different institutional arrangements.

According to the reports of counselors, the health of the students and of their children is the most overwhelming factor contributing to poor attendance. Although it is likely that these students--like students in general--find ill health the most convenient excuse for missing classes, there are some indications that health problems may indeed be serious for some participants. One institutional solution which has been suggested is to screen potential students for health problems which may affect their ability to attend school. Since WIN participants are already a healthier-than-average subset of the total AFDC population,[20] this may greatly reduce the number of persons to whom this opportunity is offered. Another suggested solution is to increase motivation by awarding bonus payments to those with superior attendance records.

Pregnancy is another intrinsic factor which restricts the ability of students to attend classes regularly. Although most of the women replied during the first interview that they expected to have no more children during their lifetime, reports from students and counselors

[20] Miles, Guy H., and Thompson, David L., 1972. The Characteristics of the AFDC Population That Affect Their Success in WIN. Minneapolis: North Star Research and Development Institute.

indicate that pregnancy is a recurring problem that has in some cases led to termination from the program. Some of the women were pregnant before they learned of this training opportunity, and thus were unable to adjust their behavior to correspond to the demands of school attendance, and some pregnancies may have been unplanned. It may be that the women who are pregnant are those that did expect to have more children and they are having them during the training program because they feel that it is easier to leave and return to training than to return to a new job. Examination of the employment and job training histories presented in Chapter III does not support this argument, however, as pregnancy has interrupted previous employment and training participation, indicating that no gross changes in behavior have occurred. It is unlikely that any institutional adjustments, other than the current policy of allowing students to drop out and then re-enroll, could be made to adapt to this problem. The leave-of-absence-for-pregnancy policy of future employers may well be important in determining the ability of graduates, especially younger graduates, to hold a job for a long period of time.

Other areas of personal problems hindering the students in the completion of the program have been marital difficulties and resistance from family members and boyfriends toward the participation of the women in the training. Marital difficulties have included divorce proceedings, custody hearings, wife beating and threats of violence. However, as in the case of serious health problems, it is important to point out that while such occurrences are dramatic for clients and staff, they are relatively rare and not characteristic of the situation of most participants. Solutions for personal problems such as these are difficult to discover.

Childcare arrangements are a problem intrinsic to the training and employment of mothers from all economic levels, but are subject to some amelioration through institutional arrangements. The WIN program helps students arrange and pay for childcare, although the amounts of payment and assistance vary by site. Some mothers have extremely high standards for the care of their children and are not likely to be satisfied with any arrangements currently made for routine care. Care for children who are sick or for children whose ordinary care arrangements are not available on a given day remains a problem. For some students the problems of childcare provide a convenient excuse for missing school when they don't want to attend for other reasons. Most, however, would welcome some sort of emergency care assistance. Attempts have been made to establish such a service in Columbus but a reliable provider has yet to be found.

Other factors hindering the class attendance of students seem subject to some correction through institutional adjustments, and some are already being made. Transportation has been a major contributor to missed classes. In both sites, the location of the school is remote from the area where most participants live, and as shown in Table IX-1, the time required to commute to school considerably exceeds commuting times which these students had experienced in the past when they were working, or which members of the comparison group now spend commuting to work, though not to school. The longer times, coupled with the periodic breakdowns in transportation arrangements whether public or private (car pools) unquestionably make "transportation" a problem for almost every participant, although perhaps less so in Chicago, with its better developed public transportation system and a population accustomed to longer commuting times.

TABLE IX-1

COMPARISON OF THE COMMUTING DISTANCE, TIME, COST AND MODE BY PARTICIPANTS TO TRAINING, TO LONGEST JOB PREVIOUSLY HELD, AND BY COMPARISON GROUP MEMBERS TO THEIR CURRENT JOBS
(In Percentages)

	Participants		Comparison Group to Current Job
	To Training	To Previous Longest Job	
Distance			
Less than 2 miles	12	37	28
3 - 9 miles	50	31	56
10 - 15 miles	23	19	16
More than 15 miles	14	13	0
Total %	99	100	100
(N)	(98)	(106)	(25)
Time			
Less than 15 minutes	20	28	32
16 - 30 minutes	25	30	40
31 - 45 minutes	14	12	12
More than 46 minutes	41	30	16
Total %	100	100	100
(N)	(100)	(107)	(25)
Weekly Cost			
Free	4	17	8
$1 - 5	26	47	36
$6 - 10	53	27	40
$11 - 15	11	6	8
More than $16	6	4	8
Total %	100	101	100
(N)	(100)	(103)	(25)
Mode of Transportation			
Mass	43	53	29
Own car	35	20	50
Car pool/ride	19	13	8
Other	3	14	13
Total %	100	100	100
(N)	(100)	(108)	(24)

Some of these problems are unavoidable, such as the bus strike in Columbus and the severe weather during the first winter of the program at both sites. Some transportation problems have been addressed through funds for car repairs and the establishment of a shuttle bus in Columbus.

Almost all the women in this program are single heads of households and must cope on their own with a variety of family responsibilities ranging from childcare through legal, financial and housing problems. These women, moreover, encounter more problems and have fewer resources with which to cope than do most other single working parents not on welfare. Their housing situations, for example, are often tenuous, and they face eviction and experience burglaries almost routinely. The women generally see no alternative to being at home to deal with crises, even if that means quitting a job. They do not always make the best use of resources available from AFDC and WIN. They are frequently absent from classes in order to solve these problems even when counselors point out available services which would make prolonged absences unnecessary.

On the other hand, the local welfare offices in both Columbus and Chicago have been primarily responsible for the major financial problems facing the students. Late support checks stretch the resources of the women to the breaking point, contributing to the transportation, legal and housing problems discussed above. Other problems related to personal finances have been the reduction in food stamp benefits to correspond to the bonus payments for participation in the program. Some clients have been declared ineligible for welfare payments when caseworkers made eligibility visits during the time the women were in school. When the women were not found at home it was assumed they were working and thus ineligible. These problems have been reduced in frequency

and emergency funds have been established by WIN and by the students to help tide them over when such problems occur again.

It is interesting to note that about half of the women who have withdrawn from the school because of problems such as those discussed above, or who were terminated for absences accumulated while dealing with them, express an intention of re-enrolling at a later date. Some have followed through on this intention and others may yet do so. The participants have adapted the readmission policies of the school to allow them to solve problems in their accustomed way.

The implications for future employment are mixed. It may be that the increase in income will in fact result in increased access to resources for solving problems, and may result in more adequate housing, better health care for the entire family and a reduction in legal problems. During the period of transition, however, it will take considerable understanding on the part of the employer and support services from WIN or other agencies to help the graduates cope with family problems in ways that will not conflict with the demands of their new jobs.

The Bell & Howell Remedial Program

While poor attendance is generally seen by the school authorities as the main reason for students' poor performance and subsequent withdrawal, it would appear that some degree of responsibility for clients' academic shortcomings can be attributed to certain features of the school environment.

The preparatory studies program designed to deal with the academic deficies (primarily in mathematics) of marginally admissible students (both from WIN and the normal applicant pool) does not appear to have been successful. Students have criticized the preparatory studies sequence offered by

the schools for not teaching basic electronics terminology and workshop skills, and for not giving the students realistic expectations of the sorts of behavior that would be expected of them during the remainder of the program.

One factor which appears to have contributed to these student ctiticisms is the discountinuity between the structure of the coursework during this trimester as compared to that of the rest of the technician program. Unlike the basic technician program, preparatory studies is taught through a series of individualized modules supplemented by lectures and question-and-answer sessions. Students are allowed to work at their own pace and to take module tests when they feel ready, although instructors set deadlines and use grade penalties to prompt individual initiative. Students can make-up missed work or exams more easily during this trimester than they can during the regular technician program, which primarily consists of conventional lecture courses. Students find the coursework during preparatory studies to be familiar, much like high school, and not unusually demanding. Some take advantage of the flexibility of self-pacing, and this has allowed some "prepratory" students to get by with poor attendance habits, and to expect to be able to make-up missed work in a similar fashion in the succeeding technician program.

Another possible shortcoming of the preparatory studies program as taught in Columbus (but not in Chicago) is that the course provides no benchwork familiarity. The students are not exposed to the laboratories, or to the electronics devices and testing equipment they will be expected to use in the following term. Also, the coursework is not directly related to electronics, so that the students are not exposed to the vocabulary and knowledge of the field. This may be more troubling for female than the male students as about two-thirds of the male students

who enroll in the technician program have had some exposure to electronics through hobbies, high school coursework or employment, but about three-fourths of the WIN applicants had little or no prior exposure to the field.

The difficulties involved in trying to provide students with successful remedial instruction are not unique to the WIN students. School officials report that they expect 10 to 15 percent fewer of the students who start in "Prep" to eventually graduate. This has led the Bell & Howell Education Group to terminate the existing preparatory studies program and to begin designing a new program. One change being experimented with is to replace the current program with the first trimester of a new, more mechanically oriented training program for electronics testers and assemblers. This experience should familiarize the remedial students with the laboratory, and place them at an advantage in this area over those who enter directly into the "tech" program. It is also hoped that early exposure to "hands on" electronics instruction will allow students to see some concrete results of the training which will increase their motivation and that this carefully structured early success in electronics will build self-confidence.

Other Training Program Concerns

Other features of the school environment which are less than optimal for WIN students could not easily be ameliorated. An occasional unsympathetic instructor or one whose teaching style is unsuited for underprepared students is bound to create problems, but on the whole the faculty at both schools has apparently been supportive and effective. The fact that these schools have a predominantly male student body may have impeded the progress of some of the WIN participants, but again this was probably not a major source

of difficulty. The innovative nature of this program and the short start-up time allowed made the participation of problems difficult. The hiring of special counselors for the WIN students more than offset some of these institutional obstacles. The counselors have played a key role in discovering problems and in initiating solutions for individuals and for the students as a group. Their advice should be sought during the planning stages of any similar programs.

Implications

Easily instituted solutions for the problems encountered by the students are already underway, and other problems such as student health and marital and household management will not be easily addressed. It is unlikely, therefore, that any recommendations for further fine-tuning of the program could have a sizable impact on the major problem that has become apparent--poor attendance and its concomitant, poor academic performance. Rather, we suspect, the problem could be remedied only through some fairly far-reaching restructuring along one of several dimensions.

A first approach might be to screen applicants carefully and recruit only those least likely to have problems. As this sort of WIN program is not seen as a major panacea for poverty, but rather as one part of a small step toward self-sufficiency for a small portion of the welfare population, some additional screening on such factors as health and life stability may be appropriate. The results of this study are likely to provide some basis for appropriate screening. Subsequent groups of WIN participants have been subjected to various screening criteria before admission to the same Bell & Howell schools. Analysis

of the progress of these students may serve as an indicator of the effectiveness of further screening. It might also be, however, that such screening will be difficult to accomplish, as some of the factors which have been suggested as associated with success are mutually exclusive. School faculty members believe, for example, that the women performing best are those who most recently finished high school, the younger women. Counselors have observed, however, that the older women are freer of such problems as pregnancy, and childcare and marital difficulties. Furthermore, screening on factors other than ability may create political and possibly legal problems for the program.

Another line of approach is to provide yet more services such as childcare, especially when the child is ill, legal advice, housing, and counseling for personal and marital problems. One means for providing this might be to more efficiently deliver services that are currently authorized and funded. The lack of coordination among the three agencies (WIN, SAU, welfare) that deal with each student has created enormous difficulties, taking time, energy and attention away from their efforts at school and sometimes causing financial and emotional problems which lead them to drop out.

Another means for providing increased support services might be to increase the funding of existing programs and the range of situations which they cover. If more resources were at the disposal of the WIN counselors they might be able to move more quickly to address the problems which currently fall into areas serviced by SAU or Income Maintenance, and solve them before they had a major impact on the student's school performance. If more than one counselor were provided at each school and if they had more experience with the local welfare systems, more individualized and efficient services could be delivered.

However, further increasing the volume and cost of support services may be counter-productive, not only in terms of the program's credibility and likelihood of wider acceptance, but also for the clients themselves. The discrepancy in services and support between school and the world of work may create major problems in the period following graduation.

Finally, it is unlikely that even if more support services became available, the attrition rate would be reduced dramatically. As we have suggested earlier, some of the impediments to attendance are rooted in family roles and values, rather than caused by lack of services. A young mother may want to take care of a sick child even if a babysitter is available, or she may want to straighten up her house after a burglary even if she is offered temporary housing.

For all these reasons we see as the most realistic approach an increase in the flexibility of attendance required for successful completion of the training program. The current experience calls into question whether WIN mothers, with all the competing demands for their time and lack of resources to ease these demands, can successfully participate in training programs with inflexible schedules. It may be that the current practice of allowing the students to drop in and out of school in order to deal with crises and to repeat courses failed because their attention was fixed on out-of-school problems is the most economical and practical solution, although the net effect would be to extend the total time period between the start of the program and graduation. But the option of the make-up classes, tests and laboratory exercises should also be considered. Almost everyone associated with the program--WIN and Bell & Howell personnel--believes that the students are highly

motivated and eager to complete the program, although there are those, in WIN and elsewhere, who feel that in the absence of rigorous attendance monitoring, most students would not attend regularly.

As responsible adults, which most of the students are, these women might well be able to deal with a learning environment which puts greater emphasis on self-motivation and self-monitored performance, rather than an attendance-based setting. Certainly this approach has been effective for other women who faced similar problems of reconciling study needs with family responsibilities and is the rule, rather than the exception, in college-level programming for adult women. However, Bell & Howell has shown little interest in modifying the school program in this direction. School administrators argue that the demand for rigid attendance and the provision of few options is designed to acculturate the students to the world of work and is the major aspect of their program which allows graduates of a two-year Bell & Howell program to compete on equal terms, or even have an advantage over, graduates of four-year colleges.

The danger exists of providing students with so much flexibility and opportunity to repeat failed or missed classes, that they will develop inappropriate expectations of the behavior and effort required to successfully hold a job, just as the self-paced remedial program gave students an inaccurate picture of what would be expected in the regular school program. It may also be that it would be difficult to restructure an electronics curriculum in a direction which offers greater attendance flexibility. However, given the high attrition rate which seems to be in the offing for the present program, and the changes taking place in the structure of jobs to accommodate the greater family responsibilities of women who work, it would be worthwhile to think seriously about a more flexible alternative.

APPENDIX A

CHARACTERISTICS OF PARTICIPANTS AND COMPARISON GROUP

CHARACTERISTICS OF PARTICIPANTS AND COMPARISON GROUP

As part of the data analysis for this report, differences between the participant and comparison groups were examined to determine whether our selection procedures resulted in satisfactorily matched groups. Because of the site differences between the Chicago and Columbus populations, it is also necessary to take these differences into account when making comparisons. Such comparisons have been made for every variable mentioned in this report. Chi square tests of statistical significance were used and a .05 probability level was adopted as the criterion for significant differences. According to this standard, there are few variables on which the participant and comparison groups within each site differ significantly, suggesting that the selection procedures adopted for this study were effective in producing matched groups.

Among the demographic variables reported in Chapter II, differences between the participant and comparison groups were found only in the years of schooling completed and type of high school program.

The distribution of years of education completed by the comparison group members is more concentrated in the completed high school category in both sites, as shown in Table A-1. Thus, while the participant groups contain more members who have completed more than a high school education, they also contain more members who have not completed high school. It is interesting to note that the average number of years completed is nearly identical across all groups, and that while the participant group averages slightly more years in Chicago, it averages slightly fewer in Columbus. It would seem that the differences in the years of schooling completed do not clearly favor the participant group. The performance of those with different levels of education will be monitored during this research.

TABLE A-1

YEARS OF SCHOOLING COMPLETED BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE

	Chicago		Columbus	
	Participant	Comparison	Participant	Comparison
Percentage Who Completed:				
Less than high school	44%	40%	46%	30%
High school	33	51	42	69
More than high school	24	9	12	1
Mean number of years completed	12.8	11.5	11.3	11.5
Standard deviation	1.6	1.3	1.3	0.9
Table N	55	45	76	67
Missing Data	2	16	0	9
TOTAL	57	61	76	76
Chi-Square		5.3		12.6
Degrees of Freedom		2		2
Probability		.07		.001

The participant group members in Chicago are more likely to have taken part in a general or academic high school program than the Chicago comparison group. Given the difficulty of the training offered by Bell & Howell, it is likely that these students have an advantage over those who took part in vocational programs, and since assignment to such programs is often based upon previous academic records, it is likely that this is an indicator of previous school performance (Table A-2).

The participant and comparison groups also differ on some aspects of their employment and job training histories. While the occupational category of the job held for the longest period of time did not differ, the length of time this job was held did (Table A-3). Participant group members in Chicago held this job for a shorter period of time than did comparison group members, while in Columbus the participant group members held this job for a longer time. There are also differences in the reasons given for leaving this job, with participant group members being more likely to report that health and pregnancy were problems in continuing employment (Table A-4).

Immediately before the time this training program began there were differences in the types of jobs held by participant and comparison group members, with the comparison group members more concentrated in lower skill occupational categories (Table A-5).

Members of both the participant and comparison groups had taken part in previous training programs in an attempt to upgrade their skills. The Chicago participant group is more likely than the Chicago comparison group to have taken part in such a program and to have completed it. In Columbus there is less of a difference between the groups (Table A-6).

TABLE A-2

TYPE OF HIGH SCHOOL PROGRAM BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE
(In Percentages)

Type of High School Program	Chicago		Columbus	
	Participant	Comparison	Participant	Comparison
General	78	57	65	68
Academic	7	2	14	15
Vocational	15	41	21	17
Total %	100	100	100	100
(N)	(55)	(44)	(71)	(66)
Missing Data	(2)	(17)	(5)	(10)
TOTAL	(57)	(61)	(76)	(76)
	Chi-Square = 9.3 Degrees of Freedom = 2 Probability = .009		Chi-Square = 0.44 Degrees of Freedom = 2 Probability = .80	

TABLE A-3

LENGTH OF TIME AT LONGEST JOB BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE
(In Percentages)

	Chicago		Columbus	
	Participant	Comparison	Participant	Comparison
1 - 6 months	16	17	5	29
7 - 12 months	16	0	19	13
13 - 18 months	7	7	14	9
19 - 24 months	13	3	15	7
25 - 36 months	4	21	22	16
37 - 48 months	20	34	7	9
49 - 60 months	7	0	5	4
More than 61 months	18	17	14	13
Total % (N)	101 (45)	99 (29)	101 (59)	100 (55)
	Chi-Square = 14 Degrees of Freedom = 7 Probability = .05		Chi-Square = 13 Degrees of Freedom = 7 Probability = .06	

TABLE A-4

REASONS FOR LEAVING LONGEST JOB BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE*
(In Percentages)

	Chicago		Columbus	
	Participant	Comparison	Participant	Comparison
Quit - pregnant	51	10	38	18
Quit - daycare	35	24	11	18
Quit - health	30	17	26	2
Quit - transportation	17	7	11	16
Quit - respondent moved	4	7	13	12
Quit - company moved, folded	6	17	2	5
Laid off	6	14	5	2
Quit - low pay	2	3	10	11
Job was temporary	11	3	5	5
Quit - didn't like job	0	7	3	11
Fired	0	7	7	5
Quit - dispute with boss, workers	4	3	7	4
Quit - poor working conditions	2	0	0	5
Quit - other reasons	19	10	18	21
Other reasons	2	14	8	12
Total % (N)	189 (47)	143 (29)	164 (61)	147 (56)
	Chi-Square = 27.7 Degrees of Freedom = 14 Probability = .02		Chi-Square = 26 Degrees of Freedom = 14 Probability = .03	

*Figures include those mentioning each reason as the main reason for leaving the job without prompting plus those additional persons mentioning each reason with prompting. The percentages total to more than 100 due to multiple responses.

TABLE A-5

OCCUPATIONAL CATEGORY OF JOB TITLE FOR JOB HELD IN THE YEAR PRIOR TO ENTERING THE BELL & HOWELL TRAINING PROGRAM BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE
(In Percentages)

	Chicago		Columbus	
	Participant	Comparison	Participant	Comparison
Professional	0	0	0	0
Sub-professional and Technical	0	13	0	13
Managerial, Administrative and Proprietary	0	0	6	0
High Clerical	8	0	19	0
Low Clerical	31	0	11	0
Foreman, Craftsmen and Kindred	0	0	3	0
Operative and Kindred	23	6	6	9
Service Workers	39	81	56	78
Total % (N)	101 (13)	100 (16)	101 (36)	100 (23)
	Chi-Square = 11.3 Degrees of Freedom = 4 Probability = .02		Chi-Square = 14.97 Degrees of Freedom = 6 Probability = .02	

TABLE A-6

PARTICIPATION IN PRE-WIN TRAINING BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE
(in Percentages)

	Chicago		Columbus	
	Participant	Comparison	Participant	Comparison
Did you participate in training before entering WIN?				
Yes	40	18	48	45
No	60	82	52	55
Total %	100	100	100	100
(N)	(55)	(45)	(75)	(66)
	Chi-Square = 4.8 Degrees of Freedom = 1 Probability = .03		Chi-Square = .02 Degrees of Freedom = 1 Probability = .89	
Did you finish the training Program?				
Yes	59	13	56	46
No	41	87	44	54
Total %	100	100	100	100
(N)	(22)	(8)	(36)	(30)
	Chi-Square = 34 Degrees of Freedom = 1 Probability = .06		Chi-Square = .223 Degrees of Freedom = 1 Probability = .63	

Finally, there are differences between the Columbus participant and comparison groups on two of the items of the Rosenberg Self-Esteem Scale. The participant group in Columbus was more likely to disagree with the statements "I certainly feel useless at times" and "I wish I could have more respect for myself" (Table A-7).

Differences between the participant and comparison groups within sites were examined on all other variables discussed in this report and no other statistically significant differences were found. Overall, it would appear that the two groups are well matched. Although there are significant differences on a few of the variables discussed, the direction of the differences in terms of characteristics presumed to be important for success in a training program varies, suggesting that there was no attempt to manipulate the selection process in favor of selecting highly qualified clients into the training program. There is enough variation on all characteristics among participant and comparison group members to allow the assessment of the impact of these differences in program evaluation.

TABLE A-7

SCORES ON SELF-ESTEEM MEASURES BY PARTICIPANT/COMPARISON GROUP STATUS AND BY SITE
(In Percentages)

	Group Status	Chicago					Columbus				
		Strongly Disagree	Dis-agree	Agree	Strongly Agree	TOTAL % (N)	Strongly Disagree	Dis-agree	Agree	Strongly Agree	TOTAL % (N)
"I certainly feel useless at times."	Partici-pant	18	36	41	5	100 (56)	9	49	34	8	100 (74)
	Comparison	18	40	40	2	100 (57)	18	32	49	1	100 (74)
		Chi-Square = 1.2 Degrees of Freedom = 3 Probability = .75					Chi-Square = 9.75 Degrees of Freedom = 3 Probability = .02				
"I wish I could have more respect for myself."	Partici-pant	26	44	18	11	99 (54)	11	49	26	14	100 (73)
	Comparison	38	38	19	4	99 (57)	17	30	47	6	100 (72)
		Chi-Square = 3.42 Degrees of Freedom = 3 Probability = .33					Chi-Square = 15.98 Degrees of Freedom = 3 Probability = .001				

APPENDIX B

INTERVIEW COMPLETION

INTERVIEW COMPLETION

The first round of interviews for this study was conducted between January and March of 1979 (with some difficult-to-locate respondents interviewed in April). The final results of our efforts to contact participants for interviews are presented in Table B-1. The participant or dropout status noted in the table is as of the time of the interview and does not reflect subsequent changes.

Of the 133 members of the participant group, 130 (98%) were successfully interviewed. Of the 137 members of the comparison group, 112 (82%) were successfully interviewed and an additional 5% were contacted but refused to be interviewed. In spite of the use of address maintenance files, the use of contact persons originally listed by each participant, the cooperation of the WIN staff at each site, and the resourcefulness of local interviewing supervisors, we were unable to contact 21 individuals (8%) of the original study population during the time period we had set for interviewing. Efforts to locate these individuals have continued. Several have responded to our latest request for address verification and we are now in the process of scheduling interviews with them. These individuals are reflected in the table in the previous chapters as missing data. They have been retained because of the hope of completing interviews with them as they are located, and because we do have some information for them collected during the process of determining their qualifications and interest in this program.

TABLE B-1

FINAL DATA COLLECTION STATUS FOR FIRST INTERVIEWING PHASE
WINTER - SPRING, 1979

Site	Original Study Populations		Interview Status									Site Total
			Number of Interviews Completed			Number Unable to Locate			Number of Refusals			
	Training Participant	Comparison	Training Participant	Dropout	Comparison	Training Participant	Dropout	Comparison	Training Participant	Dropout	Comparison	
Chicago	57	61	40	15	45	-	2	9	-	-	7	118
Columbus	76	76	55	20	67	-	1	9	-	-	-	152
Total	133	137	95	35	112	-	3	18	-	-	7	270