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A Net Impact Analysis of Adult, Job-Specific Training Programs Funded by the Ohio Department of Education

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Upjohn Institute Technical Report No. 93-003

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ACKNOWLEDGEMENTS

Publicly-funded adult job training is an important segment of this country's education and training enterprise. It serves a specific clientele whose circumstances require focussed, short-term training and whose learning styles are best accommodated by practical, hands-on instruction. This training serves as a conduit to the labor force for individuals who have had weak or intermittent labor force attachment. Despite the importance of this system, little study or research has been conducted to assess its strengths and weaknesses. This study is intended to begin to fill this void.

The Upjohn Institute gratefully acknowledges the support of the Ohio Department of Education to conduct this study. We appreciate the guidance and cooperation of Tom Applegate, who monitored the study for the Department, and the input of Darrell Parks, Connie Blair, Vicki Melvin, and Jim Pinchak. Furthermore, the success of the data collection for both the profile study and the survey of participants hinged greatly on the cooperation of the adult directors of all the districts. These very busy people were nevertheless gracious and accommodating to project staff and their assistance is greatly appreciated.

I would also like to thank Dennis Benson, President of Appropriate Solutions, Inc., and his entire staff for their diligence and professionalism in conducting the telephone survey of program participants. Despite a complex survey design that started from a rather amorphous idea, ASI fielded highly accurate data in a timely fashion. Of course, both ASI and the Institute owe gratitude to the hundreds of survey respondents who cooperated with our prodding into their lives.

My coauthor, Bill Anderson, quietly completed a highly professional effort. He designed, conducted, and wrote most of the profile study that is described in chapter 2 of this report. Thanks, Bill, for your dedication and effort.

This report was ably produced by Claire Vogelsong. Ken Kline was responsible for the statistical analyses and Renee Barr assisted the project by coding and preparing the data. I would like to thank these Institute staff members for their fine work also.

Kevin Hollenbeck
Project Director

EXECUTIVE SUMMARY

The Ohio Department of Education (ODOE) funds a variety of job-specific skill training programs for adults throughout the State. These programs are conducted in public secondary or adult education facilities and share resources and equipment with those activities. The job-specific training programs are short-term in nature (6-9 months) and typically lead to a vocational certificate or occupational license. The curricula are typically very focused. Examples of the types of programs offered are licensed practical nursing, word processing, auto technician, electrical equipment repair, food service, and cosmetology.

The individuals who participate in these programs are typically planning to enter a new occupation, but a sizeable share of the participants are upgrading their skills for advancement within their current job. They typically have little postsecondary education and typically have an insecure attachment to the labor force or they are in jobs with little opportunity for advancement. The participants are often in a position where they cannot afford to pursue an education for an extended period of time. They want short-term, intensive training that will lead to a job. In addition to funding training that meets these needs, a key objective of the Ohio Department of Education is to facilitate training for adults pursuing occupations that are nontraditional for their sex.

Like most other states, Ohio is feeling fiscal pressures. State programs need to examine their effectiveness in order to justify claims on scarce state resources. Thus, the State's funding of adult, job-specific training needs to be examined. Furthermore, adult, job-specific programs often operate in close proximity to community or technical colleges and often share facilities with secondary education. A legitimate question that the State might

want to have answered then, as it examines programmatic effectiveness, is to what extent is there overlap or duplication in the system. Finally, given that a major goal is to facilitate the occupational pursuits of nontraditional students, another interest of the State is in the success of such programs.

It is from these perspectives that the Ohio State Department of Education contracted with the W. E. Upjohn Institute to conduct a net impact analysis of full-time adult, job-specific training programs. The specific outcomes of interest to the Department were labor market characteristics, such as labor force participation, spells of employment and unemployment, current employment status, wage rates, and occupational advancement. The net impact analysis was to be undertaken separately for all participants and for nontraditional students. Labor market outcomes were to be the main focus of examination because the State's main objective in funding adult, job-specific programs is to provide training that will provide skills that have labor market payoffs.

The purpose of the net impact analysis, which was the primary focus of the overall study, was to assess program effectiveness. However, because the State was interested in questions of programmatic duplication or gaps, Upjohn Institute staff supplemented the net impact analysis with a profile study of the adult, job-specific training system in Ohio. In this task, we reviewed, in a cursory fashion, all of the institutions offering formal postsecondary job-specific training programs in Ohio in order to understand the objective and operations of each type of system and the interconnections between the institutions and programs.

At least three systems of programs operate in the state. For shorthand purposes, we characterize them as (1) associate degree programs at institutions administered by the Board

of Regents, (2) certificate programs administered by the Department of Education, and (3) proprietary institutions. Each of these systems has a different philosophical base, different mission, different instructional and curricular approaches, and different clientele. The primary intent of the profile study was to document the strengths and weaknesses of these systems and to identify areas of overlap and duplication or areas of unmet needs.

The overall findings from the combined net impact analysis and profile study suggest that a substantial number of individuals who reach their late 20's or early 30's find themselves in quite tenuous straits in the labor market with few saleable skills. These individuals did not successfully traverse the school-to-work transition or they dropped out of the labor force for marriage, family, or other reasons, but now need to find "good" jobs. The United States has established a number of "second-chance" programs--JTPA, AFDC and JOBS, Pell grants, and so forth--but, still, the individuals we are referring to may not be eligible for these programs or they may have attempted 2- or 4-year college or other formal training programs and not been successful. Adult education and, in particular, adult job-specific training may be a "last chance" program for them. The typical participant is thus in their 30's and desires quick results. They want to be trained for an occupation that is in demand and they want to be placed as soon as possible.

To meet the needs of this type of client, the role of the ODOE-funded programs must be to provide solid, accessible training in occupations that are in demand. The programs need not be on the cutting edge of educational change nor highly theoretical or technically complex. They need to be delivering practical skills that employers value. Indeed, the ODOE-funded programs seem to be meeting the needs of their clientele. Instructors are

reported to be dedicated and interested in their students. Instruction is hands-on, practical, and appropriately geared. Programs are completed in less than a year. Program completers, for the most part, are finding jobs.

The sample survey that was undertaken as part of the net impact analysis found that program participants could be characterized as follows:

- approximately twice as many women participate in adult, job-specific training as men
- the average age of participants is around 35 and the proportion of participants who are of minority ethnicity is in very close proportion to the State's population
- about half of the participants are married; however, family incomes of participants tend to be well below average
- the majority of participants (around 60 percent) pursued the general curriculum in high school
- about 80 percent of participants are high school graduates; and a large share (about three-quarters) of individuals who do not have their high school diploma have earned a GED.

Participants surveyed as part of this study were quite satisfied with the adult, job-specific training programs that they had pursued:

- almost 80 percent of the participants had completed their programs
- over half of the participants assigned an "A" when asked to grade the overall quality of the program; less than one percent gave a failing grade.

The overwhelmingly most-often mentioned program characteristic among the three best things about the program was instructors.

What were the outcomes for training program participants?

- over 80 percent of participants were in the labor force at the time of the survey; about three-quarters were employed and about 9 percent were unemployed

- individuals who were employed were earning, on average, about $9.00/hour

- about three-quarters of nontraditional students were participating in the labor force; around 62 percent were employed and 11 percent were unemployed

- among the nontraditional students who were employed, the average hourly wage was $8.30.

Substantial benefits accrue to employers who hire program participants in the form of reduced training times for individuals who become employed in jobs related to their training:

- about 60 percent of employed participants (just under 50 percent of nontraditional students who were employed) reported that their employment is related to their training

- almost 80 percent of these individuals suggested that their training shortened the time it took to become fully trained in their jobs.

Another substantial benefit of the adult, job-specific training programs that accrues to society as a whole is reduction in public assistance rolls. This study suggests that training may have led to an 8 percentage point decline (approximately a 30 percent reduction) in the proportion of participants who receive public assistance.

When considering the labor market outcomes of program participants, it is important to judge them against an appropriate benchmark. The rates of employment and wages of participants might be judged as rather modest when compared to the entire U.S. labor force. However, it is inappropriate to make this comparison because program participants are educationally and economically disadvantaged relative to the population as a whole. The net

impact analysis conducted for this study, on the other hand, compares participants' labor market outcome to those for a group of individuals who are more comparable. The results of this comparison suggest the following:

- the employment rate of male participants of almost 80 percent exceeds a comparable group of males, who did not participate in adult, job-specific programs, by over 7 percentage points
- the unemployment rate of males also exceeds the comparison group--13 percent to 11 percent
- thus the net impact of adult, job-specific programs on males is to increase their labor force participation rate by over 10 percentage points
- the average current hourly wage for male participants who are employed is $9.15 compared to $10.43 for the comparison sample[1]
- for women training program participants, the current employment and unemployment rates (and thus the labor force participation rate) are virtually identical to the rates for the comparison group
- the average current hourly wage for women participants who are employed is $8.46 as compared to $8.07 for the comparison sample.[2]

The ODOE-funded adult, job-specific training programs result in higher labor force participation for men and higher wages for women. Apparently, these programs are encouraging entrance into the labor force of men who would otherwise not be in the labor

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[1]Much of this difference may be explained by a difference in months on the job. The average duration in their current job for male participants was 47.7 months, whereas it was 79.2 months for the comparison sample of men.

[2]This wage advantage "overcomes" a job duration disadvantage; the average number of months in their current job is 33.7 for participants and 52.5 for the comparison group.

force. A side effect of this result is that the wages of the employed men who participated in programs lag behind the wages of men who did not participate, but who are employed. Women's labor force participation seems to be unaffected by training; however, the wage of employed women who participated in adult vocational education are higher than their comparison group counterparts. This occurs despite the fact that the women in the comparison group have more job experience, on average.

In terms of the training delivery system, it appears as though the ODOE-funded programs have excellent instructors. This was a message that came through "loud and clear" in the profile study and in the net impact survey. Furthermore, the profile study suggested that program overlap or duplication is not a problem. Where overlap may exist, there is sufficient labor market demand for multiple programs, there are differentials in program content, or there is programmatic choice that will benefit participants.

Most district supervisors of adult education felt that their institutions were flexible enough to close any gaps that may arise in terms of program needs. However, anecdotes from employers and other knowledgeable persons suggested that there may be programmatic gaps in the following areas:

- computer equipment repair
- health-related technician training
- basic skills remediation

Of course, the latter is not a direct responsibility of adult, job-specific training programs.

The interviews that were conducted as part of the profile study suggested that the most substantial problem facing the ODOE-funded programs is keeping up with technology and acquiring equipment. Program directors, outside agency administrators, and employers

all recognized this problem. Another important priority for ODOE-funded programs is to strengthen links with business and industry. For example, one respondent complained that a lot of advisory committee meetings are nothing more than "window-dressing." Employers want to be asked for advice and they want to be listened to. Training programs and participants would probably benefit more from more extensive employer involvement than would the employers. Therefore it should be up to the training directors to actively solicit employer involvement.

Finally, some respondents to the profile study interviews felt that ODOE should consider ways to improve placement support for training program participants. After all, most of the students are participating in the programs for employment-related reasons. A finding from the net impact analysis that supports this opinion is that the percentage of training participants who report that their current job is related to their training is modest, at best. Besides enhancement of student placement, another benefit to job development and follow-up with employers would be that it would promote employer interaction.

The bottom line is that ODOE-funded adult, job-specific training programs are serving a unique population in a way that is accessible and of quality. This population is unlikely to be comfortable with other types of institutions. The labor market outcomes for participants are modest relative to the entire population, but are positive relative to an appropriate comparison group. The programs seem to be impacting in a positive way the labor force participation of men and wages earned by women. The cursory review of the system undertaken as part of the profile study suggests that program duplication is not a problem and that there are few, if any, gaps in program offerings. District supervisors and

other knowledgeable parties interviewed as part of the profile study felt that the system's biggest concerns are keeping up with technology, improving linkages with employers, and facilitating the placement of participants.

1. INTRODUCTION

The Ohio Department of Education (ODOE) funds a variety of job-specific skill training programs for adults throughout the State. These programs are conducted in public secondary or adult education facilities and share resources and equipment with those activities. The job-specific training programs are short-term in nature (6-9 months) and typically lead to a vocational certificate or occupational license. The curricula are typically very focused. Examples of the types of programs offered are licensed practical nursing, word processing, auto technician, electrical equipment repair, food service, and cosmetology.

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Like most other states, Ohio is feeling fiscal pressures. State programs need to examine their effectiveness in order to justify claims on scarce state resources. Thus, the State's funding of adult, job-specific training needs to be examined. Furthermore, adult, job-specific programs often operate in close proximity to community or technical colleges and

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In addition to examining the labor market outcomes of individual participants, Upjohn Institute staff conducted a profile study of the adult job-specific training system in Ohio. The purpose of this task was to review <u>all</u> of the institutions offering formal postsecondary job-specific training programs in Ohio in order to understand the objectives and operations of each type of system and the interconnections between the institutions and programs. At least three systems of programs operate in the state. For short-hand purposes, we characterize them as (1) associate degree programs at institutions administered by the Board of Regents, (2) certificate programs administered by the Department of Education, and (3) proprietary

institutions. Each of these systems has a different philosophical base, different mission, different instructional and curricular approaches, and different clientele. The primary intent of the profile study was to document the strengths and weaknesses of these systems and to identify areas of overlap and duplication or areas of unmet needs, if any.

The next section of this report documents the profile study.[3] That section introduces the questions that were addressed by this study, describes the methodology that was followed, and analyzes the data that were collected. Section 3 of the report documents the sample survey that was conducted to provide data for the net impact analysis. It reviews the survey design and procedures that were followed for the overall net impact study and for the nontraditional student net impact analysis. The fourth section of the report uses data from the survey to characterize job-specific training participants and to report their reactions to the programs that they pursued. The fifth section comprises the net impact analyses. The labor market outcomes of individuals are described and analyzed. Furthermore, they are compared to those of a comparison sample of individuals. The sixth section summarizes the major findings and provides recommendations for ODOE to consider as it administers its adult programs.

[3]This section constitutes the deliverable report entitled "An Administrative Profile of the Adult, Job-Specific Training System in Ohio."

2. AN ADMINISTRATIVE PROFILE OF THE ADULT, JOB-SPECIFIC TRAINING SYSTEM IN OHIO

Numerous options are available to Ohio adults to pursue postsecondary training. Individuals may enroll in a 4-year college or university that is either publicly or privately controlled, a 2-year community or technical college, a program offered by a proprietary institution, or an adult education or job-specific program offered by a public school district. In fact, it must be rather daunting to gather information about all the options and to decide in which direction to go.

Compounding the difficulty of navigating the system of postsecondary education is the fact that many institutions may offer programs (or courses) that appear to duplicate programs at nearby schools. Furthermore, gaps may exist in terms of programs that may be in demand or populations that are not being served, and programs may be offered that train individuals for occupations that have no labor market demand.

2.1 *Study Design*

The study being documented was undertaken to try to sort out the similarities and differences among the types of postsecondary institutions in Ohio. The main emphasis of the study was on the three types of institutions that offer full-time, job-specific training below the baccalaureate level--ODOE-funded adult programs, community/technical colleges, and proprietary institutions. The main questions that this study addressed were as follows:

- What are the dimensions of the overall system of postsecondary education and training in Ohio?
- What are the characteristics of the adult, job-specific training system in Ohio? What types of student populations are served by the different types of

programs? Are there differences in instructional style/philosophies across the different types of institutions?

- Are there overlaps/gaps in program offerings?
- To what extent do institutions in a particular geographic area coordinate with each other?
- What are the relative strengths and relative weaknesses of the various institutions?

To answer these questions, project staff selected seven areas across the state and conducted interviews with various informants who were thought to be knowledgeable about, and who had different perspectives on, the postsecondary educational institutions in their location. For example, interviews were conducted with administrators and staff of postsecondary institutions who would obviously be knowledgeable about students and programs at their own institutions. But interviews were also conducted with administrators of JTPA and JOBS programs and with high school counselors whose jobs require them to be familiar with all training programs in their area.[4]

Project staff selected seven study sites. The final choices were somewhat arbitrary, but they did meet several criteria. The study included only sites that had at least one existing postsecondary vocational training facility. Furthermore, the selection process targeted areas that had both a community/technical college and a school district with a sizeable enrollment in ODOE-funded adult programs. Both urban and rural areas were included and all areas of

[4]It turned out that high school counselors had little knowledge about adult, vocational education programs. They were more familiar with Board of Regents institutions or proprietary schools than "second chance" or "last chance" programs for adults. As a consequence, their comments were somewhat discounted.

the state were covered to the extent possible. The specific localities that were selected were as follows:

- Canton (Stark County)
- Cincinnati (Hamilton County)
- Columbus (Franklin County)
- Nelsonville (Hocking County)
- Piqua (Miami County)
- Sandusky (Erie County)
- Van Wert (Van Wert County)

In order to identify all training providers at a site, project staff consulted a listing of city school districts, local school districts, and joint vocational schools provided by the state Department of Education; the *1989-90 Directory of Postsecondary Institutions, Volumes 1 and 2* of the U.S. Department of Education; the *Counseling Guide for Ohio Schools* published by the Ohio Council of Private Colleges and Schools; and local telephone directories.

After selecting sites for the study and identifying local postsecondary institutions, project staff identified actors in the local postsecondary education and training scene who might be able to provide a reliable cross-section of opinions and experiences concerning job-related training. In particular, project staff attempted to identify individuals in the following positions:

- high school vocational counselors
- JTPA/PIC administrators
- employers
- provider training directors
- instructors
- training participants

In conducting interviews, staff pursued a "snowball" sampling approach, wherein respondents would nominate additional persons who might be knowledgeable about the topics of interest.

The goal of the project was to interview at least three respondents in each of these positions at each site. Structured interview guides were developed for each of these respondent categories (see Appendix A).

In fact, we were not successful in completing interviews with at least three respondents in each category at each site. The most difficult group of respondents to reach were program participants. In some sites, we also had difficulty identifying and reaching instructors and employers. Table 1 summarizes the interviews that were completed. A total of 64 interviews were conducted, with the number of interviews per site ranging from 5 to 13. We were able to complete interviews with at least one high school guidance counselor in each county and with at least one JTPA/JOBS administrator.[5] The largest number of interviews and, in many ways, the most successful interviews were with training directors of the various provider organizations. These individuals were, in general, proud of their organizations, and happy to talk about them. But they also were quite candid. We interviewed only one participant and a handful of instructors. We completed 11 employer interviews; but many of these were not particularly informative.

The small sample sizes for the various sites and types of respondents are a problem. They limit considerably the generalizability of the information that was gathered by the profile study. The opinions and views expressed by the respondents must therefore be considered as anecdotal. The intent of this study was to gain a cursory picture of the

[5]Whereas the interviews with high school guidance counselors were not useful, the JTPA/JOBS administrator interviews were highly successful in eliciting candid and pertinent information.

environment in which the adult, job-specific training programs operate and to begin to address the questions of program duplication or gaps.

Table 1. Profile Study Respondents, by Position and Site

Position	Site							Total
	Canton	Cincinnati	Columbus	Erie County	Hocking County	Miami County	Van Wert County	
High School Guidance Counselor	2	1	2	1	2	1	1	10
JTPA/JOBS Administrator	2	2	1	1	1	3	1	11
Training Director								
- Adult Ed./JVS	3	3	2	2	1	2	1	14
- Tech. or Comm. College	1	3	1	1	1	1	1	9
- Proprietary	1	2	0	0	0	0	1	4
Instructor								
- Adult Ed./JVS	1	1	1	0	0	0	0	3
- Tech. or Comm. College	0	0	0	0	0	1	0	1
Participant	0	1	0	0	0	0	0	1
Employer	1	0	1	0	4	3	2	11
Total	11	13	8	5	9	11	7	64

Another important caveat to the study's findings is that all the data collection was conducted via telephone interviews and is therefore valid only to the extent that respondents chose to provide complete and accurate information. Very little validity checking could be undertaken; although we could compare and contrast responses from the different individuals in each position. Although we do feel that we collected reliable information, we were reminded of the methodological shortcomings when a JTPA administrator told us,

> I attend advisory committee meetings, but these are not useful sources of information because they tend to be well-planned luncheons with very little controversy or discussion. When I

> want to know what is really going on, I visit the institution unannounced.

The rest of this chapter will highlight the findings from interviews that were conducted across the seven sites in a way that will attempt to answer the questions posed above.

2.2 *System Model*

Ohio has fifteen state universities, eight of which have multiple campuses. These universities grant baccalaureate or graduate degrees. In the early 1970's, the State initiated a program to create a network of technical and community colleges across the state. The goal of this program was to place a college within 35-40 miles of every Ohio resident. The outcome of this program is the present network of twenty-three technical and community colleges, three of which have multiple campuses. These technical and community colleges provide two-year degrees in vocational and academic programs with credits that are transferable to the state's four-year universities. Programs at technical and community colleges are similar to each other with the distinction that community colleges offer the Associate of Arts and Associate of Science degrees that are equivalent to the first two years of a Bachelor's degree. Technical colleges offer Associate of Applied Arts or Associate of Applied Science degrees.

Within the public elementary and secondary school system, students choosing a vocational curriculum are served by vocational training facilities that, in metropolitan areas, are usually part of a comprehensive high school, and, in suburban and rural areas, are usually housed in a Joint Vocational School (JVS) that serves a number of separate school districts. In many, if not all, cases, the facilities of the JVSs and adult education centers in urban areas are utilized for adult vocational training--providing programs for skills

upgrading, retraining for new jobs, and serving the needs of dislocated workers and displaced homemakers re-entering the job market. Many of the JVSs have active programs to provide contract training to business and industry with customized programs conducted at the client's work site or on-campus. A group of 32 career centers with these expanded capabilities are known as Adult Vocational Education "Full Service Centers."

In addition to publicly-funded institutions, Ohio has many nonprofit (independent) and for-profit proprietary institutions. According to a listing of all institutions of higher education as developed by the Carnegie Foundation and listed in the Chronicle of Higher Education (1987), Ohio has about 40 privately-owned, nonprofit 2-or 4-year colleges or universities; 13 religious colleges; and 8 colleges of art/design or other specialty area. The State Board of Proprietary School Registration (1991) indicates that there are approximately 320 proprietary institutions in the state (with a total enrollment of about 125,000 students.) The Ohio Council of Private Colleges & Schools (1990, 1991) lists approximately 120 of these proprietary institutions that are accredited and active in that organization (with a total enrollment of approximately 56,000).

2.3 *Characteristics of the Adult, Job-Specific Training System*

As alluded to above, the three main systems for providing job-specific training below the baccalaureate degree-level are (1) ODOE-funded adult education programs, (2) Board of Regents-funded programs at public technical and community colleges, and (3) proprietary institutions. These three systems have some similarities and many differences. But what we found to be interesting is that each of the systems seems to serve a particular population or

need and that they are not duplicative or particularly competitive with each other. Each system has its strengths and weaknesses.

To compare and contrast the three systems that deliver adult, job-specific training, we address each of the following institutional characteristics in the remainder of this section:

- Student characteristics
- Student services
- Curriculum and instruction
- Facilities and equipment
- Business and industry involvement

Student characteristics. The community and technical colleges have the largest number of students pursuing technical training. Furthermore, they attract a much higher share of students right out of high school than do either of the other two systems. Extrapolating from the responses to the profile study interviews, we would estimate that 10 - 20 percent of Ohio high school graduates enroll in a technical or community college directly out of high school. Part of the attraction of technical and community colleges is that students maintain their options to easily transfer to a 4-year university or college. So a large share of those incoming students are pursuing a transfer program. The community and technical colleges also enroll many older students, but because of the large number of individuals right out of high school, the average age of students is 28-30. Community and technical colleges draw from a wider geographic range than either of the other two types of systems.

Publicly-funded adult education programs feature a very wide range of enrollment sizes. But for the most part, it is fair to say that the adult, full-time technical training

programs[6] are smaller than their community or technical college counterparts. They also seem to draw from a narrower geographic area--they are very much identified with a community (for a City School District) or with a service area (for a JVS or Local School District). Finally, these programs attract an older clientele than either of the other two systems. The average age of participants lies in the mid-30's.

Proprietary schools, like the ODOE-funded programs, tend to be smaller in size. They seem to be more prevalent in urban areas and, except for very specialized programs, tend to attract local students only. However, some proprietary school programs are well-reputed and draw from a wide area. Like community and technical colleges, their students tend to be younger--average age around 28-30.

Student services. Relative to the other two types of institutions, ODOE-funded adult programs seem to offer fewer support services for students. The handful of respondents to the profile study cited a need for improvement in placement activities, child care or transportation services, and financial aid. Individual attention through counseling or testing and assessment seem to be the exception and not the rule. Project staff got the impression that resources were too thin to support these services that might be considered ancillary to the mission of providing technical education.[7, 8]

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[6]The ODOE-supported institutions offer both job-specific training programs that are intended to last 6-9 months and very short-term programs (or seminars) that address narrow and specific topics. The State refers to the latter as consultative, hourly, or short-term programs and refers to the former as full-time or adult, job-specific training. The net impact analysis is intended to evaluate the full-time, job-specific programs only.

[7] The Queen City Vocational Center in Cincinnati seems to be an exception. It offers many support services to students.

The community and technical colleges, with their larger enrollments and stronger financial bases, tend to better support student services. These institutions have more highly staffed financial aid offices to help students procure various forms of aid, for example. Furthermore, they have placement offices and engage in job development for students and employer follow-up. Finally, many of these campuses offer career guidance and child care services.

Proprietary institutions, with their higher tuition costs, depend on financial aid as a major source of revenue. So they offer students significant help in procuring assistance. Also in order to attract students, proprietary schools emphasize their ability to place graduates. Placement is often facilitated by the fact that these schools often come into existence because of a relationship to a particular business firm.

Curriculum and instruction. Both technical and community colleges and ODOE-funded adult education institutions offer many programs in addition to job-specific technical training. The technical and community colleges offer transfer programs, developmental education, customized/contract training for business and industry, apprenticeship, and community interest programs. Adult education departments offer adult basic education and GED preparation, consultative programs, employability/self-awareness programs, customized/contract training for business and industry, apprenticeship, and avocational courses. Proprietary schools are far more focused and tend to offer one or a few specific programs.

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[8]Upon reviewing this document, ODOE staff disputed the contention that student support services were underemphasized at their institutions--particularly, at the full service career centers.

Technical and community colleges offer advanced coursework, usually intended to take 2 years, that leads to an associate degree. Programs typically involve some coursework outside of the major area of interest. In particular, students must show certain proficiencies in basic skills in order to graduate. Because programs lead to a degree, these institutions are less flexible in their abilities to change curricula content. The branch campuses of universities are particularly inflexible because of the added level of approval (the main campus) necessary to implement changes.

The curricula of the publicly-funded adult programs are more focussed than for the technical and community colleges. These single year programs typically lead to a vocational certificate, which is intended to certify competency in a particular field of vocational expertise or occupation. Therefore outside courses and basic skill attainment are not formal concerns of the programs.[9] Because they are shorter-term and because they don't involve particular requirements outside a program area, these curricula tend to be more flexible than those at the community and technical colleges. However, public accountability and state funding (and the consequent paperwork) add inflexibility to this system.

The curricula of proprietary institutions also tend to be focussed, as they are with the publicly-funded certificate programs. (Some proprietary institutions do operate programs that lead to associate or higher degrees, but this is the exception, not the rule.) One advantage of the autonomy of these schools is that they are the most flexible and can respond easily to

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[9] Some training directors may disagree with this statement because they reported offering basic skill remediation on an individual basis as a prerequisite to skill training. Nevertheless, we suggest that basic skill attainment is not generally a formal requirement for program completion or certificate attainment.

changes in the labor market. However, these schools tend to be very specialized and to offer programs that are in high demand (otherwise there would be little market for the programs), so there is little pressure on them to change or be flexible. Respondents from proprietary institutions touted their small class sizes and individual attention; however we did not uncover any evidence that class sizes were any larger at either of the other two types of institutions.

Facilities and equipment. ODOE-funded adult, job-specific training programs generally share facilities with secondary school programs or are housed at an adult education center. Such an arrangement has obvious economic advantages through cost sharing and extending utilization. However, on the down side, the facilities sharing arrangement tends to limit scheduling and, at one site, a program director felt that facilities were being overtaxed. A major issue that these programs have to grapple with is maintaining and upgrading technology. Accelerating technological advancement in industry is making it more and more difficult for ODOE-funded programs to keep up. Having adequate resources for equipment and managing technology was cited by several respondents as major weaknesses for these institutions and for technical and community colleges and for proprietary schools.

Technical and community colleges operate in more of a collegiate atmosphere. Campuses are generally separated from the public school system and consist of multiple buildings. These colleges foster this atmosphere by using terminology such as Deans, faculty, laboratories, and so forth. Although these institutions are arguably better funded than publicly-funded adult education departments, project staff heard very similar complaints from knowledgeable respondents about outdated equipment and difficulties in keeping up.

Proprietary institutions, being smaller in enrollment size than either of the other two types of institutions, tend to occupy modest amounts of space. Several proprietary institutions own their own buildings (e.g. Columbus Paraprofessional Institute, Devry Institute, Bliss College), whereas the more typical mode is to lease commercial space. The proprietary school respondents to our study indicated also that a major issue for their institutions was maintaining up-to-date equipment.

Business and industry involvement. The motivating factor for almost every participant in job-specific training is to improve one's career--either by upgrading one's skills in a current position or by acquiring new skills that will lead to a new position. Thus, to some extent, business and industry is the ultimate client of training institutions. Consequently, several respondents to the profile study interviews suggested that programs should make a better effort to involve business and industry in curriculum and instructional decisionmaking and to respond to any feedback that they provide.

There are many forms of business and postsecondary training program interaction. Hollenbeck and Dorsten (1989) document 16 different forms of interaction ranging from advisory committees to equipment donation to summer internships for instructors. In this study, three types of interaction predominated. The publicly-funded programs, both ODOE-funded certificate programs and technical and community college programs, mentioned that advisory committees were mandated. The effectiveness of these committees seemed to be highly variable, though. Some respondents (both from the education and from the business side) indicated that the advisory committees had virtually no influence; other respondents

reported more positive experiences. Proprietary institutions also mentioned that they worked with advisory committees, but it seemed to be on a more limited basis.

The second type of interaction that was frequently discussed was provision of training to industry. Respondents indicated that they engaged in both contract and customized training for business and industry. Furthermore, a number of the participants in the adult, full-time programs were employees who were receiving formal training paid for by their employers. Again, proprietary institutions indicated that they were engaged in this type of interaction, but it is a much newer development for them, and they were not as actively involved as the public institutions.

The third type of interaction that was discussed was hiring of program graduates and conducting follow-up surveys of employers to get feedback about the individuals that were hired. ODOE-funded programs were criticized by a few respondents for not getting involved in placement activities; whereas both two-year degree programs and proprietary institutions seemed to be more systematic with their placement and follow-up activities.[10]

A final form of interaction that was discussed briefly was co-op programs. One of the technical college respondents indicated that his institution had a long history of successful co-op programs, which was one of the strengths of his institution.

Table 2 summarizes this section by comparing and contrasting the characteristics of the three major systems for providing adult job-specific training in Ohio. The table lists descriptors that pertain to each of the systems. Scanning these descriptors gives a thumbnail

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[10]Again, ODOE staff disputed this criticism and suggested that, in particular, full-service career centers were actively involved in placement and follow-up activities.

Table 2. Summary Descriptors of the Three Systems that Offer Adult, Job-Specific Training

ODOE-funded Adult Ed./JVS Programs	Technical or Community Colleges	Proprietary Institutions
Community-focus	Regional	Community-focus (Urban)
Focussed curriculum, diversity of programs	More general curriculum, diversity of programs	Focussed curriculum, few programs
Less technical	More technical/equipment of a more technical nature	Less technical
Certificate/license	Associate degree	Certificate (occ. associate degree)
Students: older, more disadvantaged	Students: not as old, less disadvantaged	Students: not as old, more disadvantaged
Shared facilities and equipment	Own facilities and equipment	Own facilities and equipment
Curriculum flexibility	Less flexible	Most flexible
Employer involvement: mandated, but of variable effectiveness	Employer involvement: mandated, but of variable effectiveness	Relatively less employer involvement

sketch of each of the systems and shows that each system is somewhat distinct from the others.

2.4 *Overlaps/Duplication and Programmatic Gaps*

A concern that the State had when it initiated this study was the extent to which programs might be overlapping or duplicating each other. Consequently, most of the interview guides contain questions concerning this subject. Duplication of programs is disadvantageous if financial savings could be obtained by combining programs or by better coordination. For instance, suppose that a community's economy can support only 12 graduates of an auto mechanics program each year, and further suppose that the community has two different institutions, each with a capacity for training 12 individuals in auto

mechanics. If each institution offers the program and only enrolls 6, then it is likely that the duplication is financially harmful. Furthermore, note that the excessive costs of duplication will be greater for programs that use expensive equipment or supplies.

On the other hand, overlapping courses or duplication may not be a problem at all. First of all, the labor market of a community may be able to absorb all of the completers from more than one program. Second, more than one program offering gives students choice. Many proponents of choice in education suggest that it leads to program improvement through the normal market forces of competition. Third, duplication may be in name only and the content of the course may be quite different. One institution's course may cover the subject matter at a higher level of complexity than another institution's course.

The profile study interviews evoked a virtually universal opinion that overlaps/duplication are not a problem in Ohio. Employers and third party trainers from JTPA/JOBS believe that the training programs in their area are well-differentiated in terms of level of complexity. Furthermore, an employer respondent pointed to the gains from multiple offerings of a program. Training directors also feel that the amount of duplication in the system is minimal. For example, the Vantage JVS training director pointed to her school's coordination with other nearby JVSs in order to maintain reasonable class sizes. In Nelsonville, Tri-County JVS and Hocking Tech offer similar programs, but all respondents in that community recognized that the programs were quite different in terms of content. Similar examples were related to project staff at virtually every site.

A few respondents provided examples of specific programs where they thought there might be duplication or overlap in their community. The two most frequently mentioned

programs were business/clerical skills and computer software. Again, it should be emphasized that these programs were sometimes mentioned in the course of a comment that was presenting an argument in favor of duplication. In short, based on the interviews conducted for this study, we can conclude that program duplication is, at most, an insignificant problem in the adult, job-specific training system.

Another concern of the State was the extent to which there might be gaps in program offerings. On this subject, training directors tended to respond that their institutions were flexible enough to respond to identified gaps/needs. They did admit, however, that resource limitations have precluded some programs. For example, institutions could not afford the equipment cost for a program or there might not have been enough student demand to offer a program. Employers and other community members, however, were much more likely than training directors to identify areas that they felt constituted gaps. (Of course these respondents did not have to deal with the resources and logistics necessary to offer a program.)

Programs that had experienced reductions in State support, but for which respondents felt that there was still demand include the following:

- Electronics
- Auto body
- Welding
- ABE/GED preparation[11]

Programs that respondents indicated comprised gaps in training opportunities in their vicinities include the following:

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[11]Again, not within the direct purview of the sponsoring agency.

- Computer equipment repair technician (mentioned by 5 respondents)
- Health-related fields (4)
- Basic skills[11] (2)
- Paralegal, CNC machining, HVAC, Day care, Entrepreneurship, Graphic arts and printing, Conservation and environmental, CAD (all 1)

In summary, it appears as though despite the fact that directors of training institutions perceive their institutions to be flexible enough to respond to any gaps in offerings, other respondents have mentioned a number of potential gaps. Of course, these gaps may be "justified," in the sense that the training community in a locality may have determined that there is insufficient student interest or occupational demand for a particular program. However, it should be noted that the gaps may or may not even exist, since the information collected simply represents the knowledge and opinions of a few individuals. Furthermore, more than one respondent agreed on the relative lack of programs for computer equipment repair, nursing and other health-related fields, and basic skills development.

2.5 *Coordination between Institutions*

Coordination among institutions can take many shapes and forms. Therefore it is difficult to assess rigorously the degree of coordination in the seven sites studied. However, for purposes of this section of the report, we define coordination to be comprised of explicit actions taken by at least two institutions to jointly plan and offer training in a specific program area. We furthermore imposed the condition that interview respondents from each coordinating institution would acknowledge the coordination.

Using this definition, we learned of only two examples that might be characterized as exhibiting some degree of coordination. In Piqua, Upper Valley JVS and Edison State Community College are actively working together in the area of business and industry

training. In Van Wert, Vantage JVS reported actively working with other nearby JVSs to develop sufficient class sizes for programs such as EMT, firefighting, and computers.

Training directors of ODOE-funded programs in the large urban areas--Canton, Cincinnati, and Columbus--mentioned that articulation agreements with local community or technical colleges were in place or were in the planning stages. However, we noted very little else in the way of coordination efforts in these cities. The impressions that we got were that the size of the labor market and the size of the potential student population were so large that the institutions in these urban areas had no need to coordinate.

Analysis of the data that we collected suggested three types of coordination models operate in the State. First of all, in Piqua, there was a high degree of coordination between Upper Valley JVS and Edison State. Proximity of these two institutions undoubtedly contributed to this coordination. Second, in large urban areas, there is little coordination despite proximity because the "market" is sufficiently large that each institution is able to maintain its programs and enrollment. Third, there is very little coordination between institutions because there are no nearby institutions (Van Wert) or because there have been no apparent efforts for coordination (Erie County and Hocking County).[12]

2.6 *Relative Strengths and Weaknesses of All Three Systems*

All respondents to the profile study interviews were asked to assess the relative strengths and weaknesses of the overall training system and the institutions with which they were familiar. The quality, ability, and dedication of instructional staff was the relative

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[12]In Hocking County, respondents from Hocking Tech indicated that they deliberately tailor courses to avoid duplication with other institutions such as Tri-County JVS, but they did not allude to explicit coordination.

strength mentioned most often. This is confirmed for adult, job-specific vocational education programs by the respondents to the telephone survey of program participants described in chapters three and four below. Apparently relatively underpaid and working in institutions where the adult directors acknowledged having difficulty keeping up technologically, these individuals are nevertheless reported to be very dedicated to their tasks and effectively delivering instruction.

The second most often mentioned strength was the hands-on instructional style that is used in many of the job-specific programs. Many respondents alluded to students' learning styles as being "turned-off" by traditional lecture-type formats and they felt that instructors were maximizing their effectiveness with the hands-on, experiential-type approach.

Other strengths of the system, according to one or more respondents, included low cost, diversity of program offerings, and flexibility. The modest cost of training clearly improves its accessibility, although some respondents indicated that more financial aid opportunities are needed because a number of individuals who could benefit from the job training are excluded on affordability grounds. Both the breadth and depth in the diversity of program offerings is a strength of the system. Most localities have a number of institutions, each offering a wide variety of programs. But also, institutions differ in terms of the complexity or depth that they go into. Thus individuals can choose among different program areas and can choose the extent to which they want to specialize within a given area. Finally, program directors in all three types of institutions felt that the system was flexible and could respond rapidly to change. Not all respondents agreed, however. Some suggested

that programs were still not flexible enough to keep up with changes in business, particularly among the publicly-funded programs of the Board of Regents and ODOE.

Without doubt, the relative weakness mentioned most often and, thus, the biggest challenge to program administrators, was keeping up with technology. Programs decried both the lack of resources for procuring new equipment and facilities and also the difficulty in keeping instructional staff up-to-date.

A second concern was inadequate interaction with business and industry. Most institutions have mechanisms in place for doing this, such as mandated advisory committees, but some respondents suggested that these are sometimes not effective. One respondent said he is on several advisory committees and one merely meets for lunch once a year. Another respondent, a PIC administrator, told about attending advisory committee meetings that consisted of having a lunch meeting followed by several hours of the school personnel putting on a show-and-tell. The committee didn't meet often enough for the people to know each other. Another flaw in the advisory committee system that was mentioned by a respondent not associated with an education provider, is that institutions often seek impressive credentials and fill advisory committees with business presidents and owners--people with little first-hand knowledge of hiring entry level workers or training.

Several other respondents cited closer relationships between education and business and industry as the most needed change in the system. These respondents felt that what was needed was closer ties between workers and teachers rather than administrators and bosses. Links between trainers and business and industry were very effective in some areas and some

institutions, but at least one respondent from each site investigated in this study reported need for improvement in this area.

Several respondents commented that job training providers, particularly Board of Regents institutions, tend to follow a traditional schedule and often training is not available when participants are available. This particularly affects young families with two working parents and a child that needs care when they are in class. Another group affected is shift workers who have to schedule their training around their work hours. Another scheduling problem that was mentioned is the fact that public school adult education programs share facilities with secondary schools and can only operate at night when the secondary school is not in session.

Two final issues that were raised as relative weaknesses in the overall training system were that some institutions were still offering programs in low demand occupations and that programs were not marketing themselves effectively. This latter issue was particularly aimed at ODOE-funded programs. Adult vocational education directors and others felt that these programs should be reaching a larger number of individuals and that a sizeable segment of the community was unaware of the programs' existence.

3. SURVEY DESIGN AND OPERATIONS

3.1 *Study Design*

From an evaluation point of view, the best way to estimate the benefits of job specific training would be through an experiment. If it were possible to conduct such an experiment, the evaluator would take a group of individuals who had applied for adult training and randomly allow some of the group to go ahead and take the training and randomly assign the rest to a control group for whom the training would be denied. The employment and earnings of the two groups would be tracked, and any advantages/benefits that accrued to the individuals who took the training could be attributed to the training because of the random assignment.

The next best alternative is referred to as a quasi-experiment. In this methodology, a group of people who receive training are compared to a similar group of people, who did not receive the training. In this case, participants are compared to a comparison group rather than a control group. The evaluator attempts to match the comparison group to the group of trainees as closely as possible. Data on employment and earnings before and after the training are collected for the trainees and for comparable time periods for the comparison group.

With this methodology, post-training earnings for the group of individuals who participated in the training can be compared to earnings of the comparison group and the assumption can be made that any differences result from the training because an effort was made to match the two groups. In addition to simple comparisons between the two groups,

statistical models that explain earnings or employment can be estimated using known data about the training group and the comparison group. This will yield a more precise estimate of the effect of the training than a comparison of means across the participant and comparison groups. The drawback to the quasi-experimental approach is that there may be unmeasured or unmeasurable differences between the trainees and the comparison group, so there is never certainty that differences in earnings after the training can be reliably attributed to the training.

The last alternative is to allow the trainees to act as controls for themselves by comparing employment and earnings before and after the training. Essentially here you are assuming that any earnings or employment changes that occur to individuals are due to the training. This is a strong assumption because in the intervening time period, the economy will be changing, which will affect employment opportunities, and the individual will be maturing, which in general will improve employment outcomes.

This study relies on the quasi-experimental approach. The validity of the overall study then hinges on the appropriateness of the comparison group that has been constructed. This project uses a rather unique approach of having the training participants provide the comparison sample. In the course of interviewing training program students (including nontraditional program participants), project staff asked respondents to nominate as many as 5 individuals from their circles of acquaintances or siblings who are of the same sex, who are of approximately the same age, and who happen to have approximately the same educational and demographic backgrounds, grades, and aspirations as they do. Analyses of

the differences in labor market outcomes between the participants and the comparison group members yield estimates of the net impact of the program.

3.2 *Sample Design*

Because of the State's interest in nontraditional program participants, the study actually is comprised of two substudies. First of all, the General Study analyzes data from a survey of a random sample of participants who enrolled in an adult program during FY 1990, that is July 1989 - June 1990, and from a survey of a comparison group of individuals who did not participate in ODOE-funded adult training. The Nontraditional Study employs data from a survey of a random sample of FY 1990 participants in a training program designated as nontraditional for their sex and from a survey of a comparison group for these individuals.

A first step in developing the design of the study was to determine the size of the overall population of interest. ODOE provided a printout that gave opening enrollments for all relevant programs at the 79 schools or school districts funded in FY 1990. Even with this information in hand, we had difficulty estimating total enrollment in appropriate programs (full-time and job-specific) because many districts offer short-term consultative programs, offer customized training programs, and offer programs that do not teach direct job-specific skills, e.g. Options, Transitions, Job Club, etc. Table 3, derived from the printout provided by ODOE, lists the universe of school districts and provides an estimate of total and nontraditional enrollment in school year 1989-1990.

Using this information, we determined that the optimal sample sizes given the constraints of the contract would be 500 General Study participants and 300 Nontraditional

Table 3. Estimated FY 1990 Enrollment in Full-Time Adult, Job-Specific Training in Ohio, by School District (Table entries are estimates derived from State administrative report)

ID[a]	District	Estimated Total Enrollment	Estimated Total Nontraditional Enrollment
01	Akron City	561	32
02	Alliance City	59	1
03	Bowling Green City	80	6
04	Canton City	163	28
05	Celina City	31	2
06	Cincinnati City	629	40
07	Cleveland City	106	15
08	Columbus City	868	148
09	Copley-Fairlawn City	40	1
10	Dayton City	305	21
11	Greenville City	63	0
12	Hamilton City	25	2
13	Kent City	24	2
14	Kettering City	0	0
15	Lima City	86	3
16	Lorain City	164	0
17	Mansfield City	71	23
18	Middletown City	261	2
19	Parma City	138	0
20	Rocky River City	57	0
21	Sandusky City	140	4
22	Toledo City	123	13
23	Warren City	13	0
24	Willoughby-Eastlake City	65	3
25	Youngstown City	212	18
26	Oregon City	57	0
TOTAL	CITY SCHOOL DISTRICTS	4341	364
27	Adams Co. Local	15	0
28	River View Local	50	0
29	Central Local	73	0
30	Fairfield Union Local	43	0
31	Morgan Local	30	0
32	Madison Local	120	7
33	Jackson Local	77	1
34	Lordstown Local	48	0
TOTAL	LOCAL SCHOOL DISTRICTS	456	8

Table 3. (Continued)

ID[a]	District	Estimated Total Enrollment	Estimated Total Nontraditional Enrollment
35	Apollo JVS	384	19
36	Ashland Co.-West Holmes JVS	79	0
37	Ashtabula Co. JVS	336	6
38	Auburn JVS	110	3
39	Belmont-Harrison JVS	198	2
40	Buckeye JVS	426	0
41	Butler Co. JVS	335	95
42	Columbiana Co. JVS	248	17
43	Coshocton Co. JVS	24	0
44	Cuyahoga Valley JVS	190	2
45	Delaware JVS	22	1
46	Eastland JVS	139	5
47	EHOVE JVS	51	1
48	Four County JVS	443	0
49	Gallia-Jackson-Vinton JVS	285	13
50	Great Oaks JVS	480	57
51	Greene Co. JVS	188	4
52	Jefferson Co. JVS	36	0
53	Knox Co. JVS	132	8
54	Lawrence Co. JVS	256	22
55	Licking Co. JVS	128	58
56	Lorain Co. JVS	99	4
57	Mahoning Co. JVS	158	9
58	Maplewood Area JVS	80	0
59	Medina Co. JVS	133	0
60	Mideast Ohio JVS	215	14
61	Montgomery Co. JVS	842	27
62	Ohio Hi-Point JVS	128	6
63	Penta Co. JVS	90	2
64	Pickaway-Ross Co. JVS	158	47
65	Pioneer JVS	294	9
66	Polaris JVS	235	0
67	Portage Lakes JVS	211	13
68	Scioto Co. JVS	95	4
69	Springfield-Clark Co. JVS	36	0
70	Tri-County JVS	522	16
71	Tri-Rivers JVS	142	4
72	Trumbull Co. JVS	259	11
73	U.S. Grant JVS	70	4
74	Upper Valley JVS	365	64
75	Vanguard-Sentinal JVS	92	4
76	Vantage JVS	31	0
77	Warren Co. JVS	29	0
78	Washington Co. JVS	90	4
79	Wayne Co. JVS	427	22
TOTAL	JOINT VOCATIONAL SCHOOLS	9291	577
TOTAL		14088	949

Source: Derived from unpublished printout of administrative data provided by Ohio Department of Education.
[a] ID assigned for this study by project staff.

Study participants. We also decided that the comparison groups should be balanced in terms of sample size--i.e., 500 for the General Study and 300 for the Nontraditional Study.

We pursued the following procedures to select the sample for the survey of participants and to conduct the survey. We first contacted each of the 79 schools to request enrollment lists for FY 1990. A total of 68 of the 79 school districts complied with this voluntary request[13]. The enrollment information provided by the districts was not consistent with the printout provided by the State, so we called the adult education directors at each of the 68 schools to reconcile the two sources of information. Differences arose for many reasons. First of all, the State's information was derived from the opening enrollment reports submitted by individual districts. Programs may have gained enrollment or lost enrollment after the opening dates of the programs. Second, individuals may have been enrolled in multiple programs and thus double-counted in the State reports. Third, personnel changes or recordkeeping practices at some of the districts resulted in an inability to provide accurate information for some programs. In short, the actual enrollment lists that were received indicated a smaller total enrollment than what is shown in table 3. Table 4 provides data on the actual enrollment as provided by the school districts. The total FY 1990 enrollment as calculated from the lists received from these 68 schools was approximately 10,000 and the nontraditional enrollment was about 650. (This enrollment is about 70 percent the comparable enrollment from table 3.)

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[13]Three schools refused to participate in the study; 2 schools were dropped from the universe for administrative reasons; 2 schools had no full-time students in FY 1990; and 4 schools were dropped after not supplying information despite several conversations in which they assured us that they would send the material.

Table 4. Estimated FY 1990 Enrollment in Full-Time Adult, Job-Specific Training in Ohio Districts that Supplied Enrollment Data, by School District (Table entries are estimates derived from District enrollment reports)

ID	District	Estimated Total Enrollment	Estimated Total Nontraditional Enrollment
01	Akron City	415	12
02	Alliance City	25	1
03	Bowling Green City	79	4
04	Canton City	110	4
06	Cincinnati City	640	32
07	Cleveland City	139	11
08	Columbus City	536	95
09	Copley-Fairlawn City	40	0
10	Dayton City	135	5
11	Greenville City	64	0
12	Hamilton City	25	1
15	Lima City	87	4
16	Lorain City	16	1
17	Mansfield City	64	17
18	Middletown City	83	0
19	Parma City	76	0
20	Rocky River City	30	0
21	Sandusky City	75	1
22	Toledo City	128	9
23	Warren City	14	0
24	Willoughby-Eastlake City	27	0
25	Youngstown City	52	2
26	Oregon City	57	0
TOTAL	CITY SCHOOL DISTRICTS	2917	199
28	River View Local	8	0
30	Fairfield Union Local	38	0
32	Madison Local	111	7
33	Jackson Local	61	1
TOTAL	LOCAL SCHOOL DISTRICTS	218	8

Table 4. (Continued)

ID	District	Estimated Total Enrollment	Estimated Total Nontraditional Enrollment
35	Apollo JVS	212	14
37	Ashtabula Co. JVS	258	4
38	Auburn JVS	98	4
40	Buckeye JVS	13	0
41	Butler Co. JVS	333	82
43	Coshocton Co. JVS	25	0
44	Cuyahoga Valley JVS	18	0
45	Delaware JVS	22	0
46	Eastland JVS	105	3
47	EHOVE JVS	45	1
48	Four County JVS	387	0
49	Gallia-Jackson-Vinton JVS	178	9
50	Great Oaks JVS	290	46
51	Greene Co. JVS	115	4
52	Jefferson Co. JVS	36	0
53	Knox Co. JVS	229	6
54	Lawrence Co. JVS	224	19
56	Lorain Co. JVS	89	5
57	Mahoning Co. JVS	145	12
58	Maplewood Area JVS	80	0
59	Medina Co. JVS	45	0
60	Mideast Ohio JVS	130	2
61	Montgomery Co. JVS	565	23
62	Ohio Hi-Point JVS	76	4
63	Penta Co. JVS	97	2
64	Pickaway-Ross Co. JVS	142	47
65	Pioneer JVS	181	5
66	Polaris JVS	330	0
67	Portage Lakes JVS	83	7
68	Scioto Co. JVS	95	4
69	Springfield-Clark Co. JVS	8	0
70	Tri-County JVS	463	10
71	Tri-Rivers JVS	152	5
72	Trumbull Co. JVS	156	8
73	U.S. Grant JVS	51	4
74	Upper Valley JVS	437	62
75	Vanguard-Sentinal JVS	32	1
76	Vantage JVS	26	4
77	Warren Co. JVS	32	0
78	Washington Co. JVS	361	11
79	Wayne Co. JVS	427	21
TOTAL	JOINT VOCATIONAL SCHOOLS	6791	429
TOTAL		9926	636

Source: Derived from unpublished enrollment data supplied by school districts.

To generate enough sample points given that we expected to have difficulty obtaining accurate and useful contact information from schools and given our expected response rates, project staff sampled randomly 10% of the total enrollment, and 100% of the remaining nontraditional enrollment. The sampling process resulted in the selection of 932 students for the General Study (representing all but one of the 68 school districts; by chance, no name was sampled from that district) and 575 nontraditional students (from a total of 48 districts). Note that the general participant sample included nontraditional students and students who did not complete their program. The sample is intended to be representative of all individuals who encountered full-time adult programs during the year. (Analyses in subsequent chapters shows differences between program completers and all participants.)

For each individual who was sampled, we sent a form back to the school districts to request identification information such as address and telephone and program information such as whether or not the individual completed the program, start and end dates of attendance, and referral sources. All but five of the 68 school districts responded to our request for information about participants comprising the sample, although the schools varied considerably in the diligence and priority that they put into the task. Two districts refused to give contact information for any student and the other three provided the information for only a subset of the sampled students. These five districts remained in the study because we had the names of all students that had been sampled; the districts had simply not supplied contact information, which made it more difficult for us to find and interview these students.

Interviewing took place during the months of September through November 1992. All individuals who were sampled were mailed a letter explaining the purpose of the study

and indicating that they would be contacted shortly. An "800" number was supplied so that respondents without a telephone or who had schedules that made it difficult to be interviewed could call in. Appendix B provides a copy of the questionnaires that were used for the participant sample and for the comparison sample. Note that all participants were asked to provide names and contact information for up to five individuals who would be appropriate comparison sample members (siblings, friends, or acquaintances of the same sex, age, and aspirations.) The telephone interviewers used an unlimited follow-up procedure, in which each member of the sample was "pursued" until the interview was completed, the respondent refused to participate, or all leads on finding the respondent had resulted in dead ends. All questionnaires were reviewed for quality purposes and coded, key entered, and fully verified.

3.3 *Survey Response*

Table 5 provides response statistics for the participant survey. The overall response rate was just under 60 percent for both the participant and nontraditional student samples.[14] Because of the small sample sizes and the many idiosyncracies of the sample, the reader is cautioned not to interpret critically the response rates by district. In general, it turns out that response rates are relatively smaller in urban areas (54 percent for the General Study and 45 percent for the Nontraditional Study for the combined Akron, Cincinnati, Cleveland,

[14]These response rates are based on the total sample that was selected and are really underestimates of the "true" response rates. Interviewers did not have adequate information to find many individuals in the sample because of obsolete or missing addresses, spelling mistakes, errors in telephone numbers, unlisted numbers, and so forth.

Table 5. Response Rates, by District and Study

ID	District	General Study			Nontraditional Study		
		Sample	Completions	Percentage	Sample	Completions	Percentage
01	Akron City	43	22	51.0%	10	5	50.0%
02	Alliance City	2	2	100.0	1	1	100.0
03	Bowling Green City	7	5	71.4	3	2	66.7
04	Canton City	9	6	66.7	4	3	75.0
06	Cincinnati City	57	28	49.1	27	11	40.7
07	Cleveland City	12	9	75.0	10	4	40.0
08	Columbus City	56	29	51.8	82	41	50.0
09	Copley-Fairlawn City	5	3	60.0	0	0	na
10	Dayton City	13	6	46.2	5	3	60.0
11	Greenville City	2	1	50.0	0	0	na
12	Hamilton City	2	2	100.0	1	1	100.0
15	Lima City	12	6	50.0	4	4	100.0
16	Lorain City	1	0	0.0	1	0	0.0
17	Mansfield City	7	2	28.6	15	9	60.0
18	Middletown City	10	6	60.0	9	5	55.6
19	Parma City	9	5	55.6	0	0	na
20	Rocky River City	4	0	0.0	0	0	na
21	Sandusky City	9	3	33.3	1	0	0.0
22	Toledo City	15	11	73.3	8	0	0.0
23	Warren City	1	1	100.0	0	0	na
24	Willoughby-Eastlake City	4	2	50.0	0	0	na
25	Youngstown City	2	2	100.0	1	0	0.0
26	Oregon City	4	1	25.0	0	0	na
TOTAL	CITY SCHOOL DISTRICTS	256	152	59.4%	183	84	45.9%
28	River View Local	3	0	0.0%	0	0	na
30	Fairfield Union Local	4	3	75.0	0	0	na
32	Madison Local	7	3	42.9	7	2	28.6%
33	Jackson Local	4	1	25.0	1	1	100.0
TOTAL	LOCAL SCHOOL DISTRICTS	18	7	38.9%	8	3	37.5%
35	Apollo JVS	16	12	75.0%	14	13	92.9%
37	Ashtabula Co. JVS	24	19	79.2	2	0	0.0
38	Auburn JVS	8	4	50.0	4	3	75.0
40	Buckeye JVS	2	2	100.0	0	0	na
41	Butler Co. JVS	41	21	51.2	70	43	61.4
43	Coshocton Co. JVS	1	1	100.0	0	0	na
44	Cuyahoga Valley JVS	2	2	100.0	0	0	na
45	Delaware Co. JVS	0	0	na	0	0	na
46	Eastland JVS	5	2	40.0	3	2	66.7
47	EHOVE JVS	5	5	100.0	1	1	100.0

Table 5. (Continued)

ID	District	General Study			Nontraditional Study		
		Sample	Completions	Percentage	Sample	Completions	Percentage
48	Four County JVS	36	17	47.2	0	0	na
49	Gallia-Jackson-Vinton JVS	21	13	61.9	7	2	28.6
50	Great Oaks JVS	21	14	66.7	43	30	69.8
51	Greene Co. JVS	14	9	64.3	4	1	25.0
52	Jefferson Co. JVS	1	1	100.0	0	0	na
53	Knox Co. JVS	26	13	50.0	6	5	83.3
54	Lawrence Co. JVS	19	13	68.4	17	8	47.1
56	Lorain Co. JVS	12	3	25.0	4	3	75.0
57	Mahoning Co. JVS	9	5	55.6	11	9	81.8
58	Maplewood Area JVS	6	5	83.3	0	0	na
59	Medina Co. JVS	6	2	33.3	0	0	na
60	Mideast Ohio JVS	15	10	66.7	1	0	0.0
61	Montgomery Co. JVS	60	30	50.0	21	14	66.7
62	Ohio Hi-Point JVS	7	6	85.7	4	2	50.0
63	Penta Co. JVS	13	7	53.8	2	1	50.0
64	Pickaway-Ross Co. JVS	10	8	80.0	45	33	73.3
65	Pioneer JVS	21	12	57.1	5	4	80.0
66	Polaris JVS	25	18	72.0	0	0	na
67	Portage Lakes JVS	9	7	77.8	7	5	71.4
68	Scioto Co. JVS	15	11	73.3	3	1	33.3
69	Springfield-Clark Co. JVS	1	1	100.0	0	0	na
70	Tri-County JVS	44	18	40.9	9	0	0.0
71	Tri-Rivers JVS	17	10	58.8	5	4	80.0
72	Trumbull Co. JVS	19	12	63.2	7	4	57.1
73	U.S. Grant JVS	3	3	100.0	4	2	50.0
74	Upper Valley JVS	52	32	61.5	54	34	63.0
75	Vanguard-Sentinal JVS	3	1	33.3	1	0	0.0
76	Vantage JVS	0	0	na	4	1	25.0
77	Warren Co. JVS	2	1	50.0	0	0	na
78	Washington Co. JVS	23	11	47.8	11	8	72.7
79	Wayne Co. JVS	44	26	59.1	15	7	46.7
TOTAL	JOINT VOCATIONAL SCHOOLS	658	387	58.8%	385	240	62.3%
TOTAL		932	546	58.6%	575	327	56.9%

na means not applicable.

Columbus, Dayton, Toledo, and Youngstown City school districts compared to about 60 percent overall).

The two main reasons for nonresponse were (1) incorrect or outdated contact information so that respondent could not be located and (2) respondent refusal. The first of these explains part of the reason for the lower response rate for urban areas. When the school-provided contact information turned out to be outdated or incorrect, then the interviewing staff had to turn to secondary sources such as telephone books or directory assistance. It is far easier to find an individual in a less populous area than in a major metropolitan area--last names are less common, fewer telephone books, and so forth.

3.4 *Sample Weighting*

Because of the unequal sampling rates between the General Study and the Nontraditional Study and because response rates differed across sites, it was necessary to calculate sample weights that could be used to aggregate the data to be representative of the entire population of participants. These weights are essentially the inverse of the probability of being sampled adjusted by the response rate. Equation (1) presents an expression for the probability of selection, adjusted for response.

$$(1) \quad prob_{ij}(g) = prob_j(g) * prob_{i \mid j}(g)$$

$$= (N_r / N) * (.10 * r_j / n_j)$$

where,

$prob_{ij}(g)$ = probability that individual i who attended district j was sampled for the General Study and completed their survey

$prob_j(g)$ = probability that anyone from district j was sampled

$prob_{i \mid j}(g)$ = probability that individual i was sampled for the General Study and completed their survey given that at least one response was received from district j

N_r = total number of students from districts that had at least one respondent

N = total number of participants in FY 90

r_j = number of participants in district j who completed their survey

n_j = number of participants in district j who were sampled

The weight to be assigned to an observation in the General Study then is the inverse of $prob_{ij}(g)$, or

(2) $wt_{ij}(g) = (N / N_r) * (n_j / r_j) * 10$

The factor (N / N_r) turned out to equal 1.096 and the (n_j / r_j) are the inverses of the response rates reported in table 5. The weighting process insures that the sum of the weights is equal to the entire population of FY90 students (including nontraditional students).

The weights for the Nontraditional Study observations were slightly more complicated to determine because the General Study had sampled from the nontraditional population. In this case, the derivation is as follows:

(3) $prob_{ij}(nt) = prob_j(nt) * prob_{i \mid j}(nt)$

$= (N_r(nt) / N(nt)) * (r_j(nt) / n_j(nt))$

where,

$prob_{ij}(nt)$ = probability that nontraditional participant i who attended district j was sampled for the Nontraditional Study and completed their survey

$prob_j(nt)$ = probability that any nontraditional student from district j was sampled

$prob_{i \mid j}(nt)$ = probability that nontraditional participant i was sampled for the Nontraditional Study and completed their survey

given that at least one response was received from district j

$N_r(nt)$ = total number of nontraditional students from districts that had at least one Nontraditional Study respondent minus the total number of nontraditional students sampled for the General Study

$N(nt)$ = total number of nontraditional participants in FY 90

$r_j(nt)$ = number of nontraditional participants in district j who completed their survey

$n_j(nt)$ = number of nontraditional participants in district j who were sampled (equals total number of nontraditional students in the district minus nontraditional students sampled for the General Study)

The weight assigned to observations in the Nontraditional Study then is the inverse of $prob_{ij}(nt)$, or

$$(4) \quad wt_{ij}(nt) = (N(nt) / N_r(nt)) * (n_j(nt) / r_j(nt)) \quad .$$

The factor $(N(nt) / N_r(nt))$ turned out to equal 1.269 and the (n_j / r_j) ratios are again derived from table 5. The sum of the Nontraditional Study weights is equal to the entire population of nontraditional students.

The weights assigned to the observations in the General Study and Nontraditional Study databases can be used to weight particular statistics so that they represent the entire population of participants.

4. CHARACTERISTICS OF PARTICIPANTS AND PROGRAMS

This chapter provides a descriptive picture of training program participants and summarizes their perceptions of the training that they received. An important aspect of the design of this project is that the population that was surveyed included all individuals who enrolled during FY 1990, including completers and individuals who did not complete their programs (it turns out that the completion rate is about 80 percent). An alternative, and justifiable, design of the study would have been to focus only on completers. To accommodate that perspective, the last section of this chapter presents data that characterize only the program completers.

4.1 *Participant Characteristics*

Table 6 provides descriptive statistics concerning the demographic characteristics of FY90 program participants, displayed separately for the General Study and the Nontraditional Study. Few characteristics differ between the general population of students and nontraditional students. Over 60 percent of the participants are women. The average age of the participants is about 36; the median age--35--is slightly lower than the mean suggesting that there are a few observations that skew upward the age distribution. And indeed, a frequency distribution on age (not shown in the table) confirms a few participants in their late 60's and early 70's. A majority of the General Study participants are married--about 55 percent; however less than half of the nontraditional students are married. The percentages of participants of minority ethnicities, both in general programs and in nontraditional programs--about 10 and 15 percent, respectively--are not at odds with the racial composition

Table 6. Summary Statistics Describing Sample of Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study	Nontraditional Study
Sex		
Male	39.7%	35.8%
Female	60.3	64.2
Age		
(mean)	36.3	36.4
(median)	35	35
Marital Status		
Married	55.3%	42.7%
Not married	44.7	57.3
Ethnicity		
White	90.1%	85.4%
Nonwhite	9.9	14.6
Family Income[a]		
<, $5,000	11.2%	14.6%
5,000-9,999	13.4	19.9
10,000-14,999	13.2	15.6
15,000-24,999	28.0	24.3
25,000-39,999	19.9	14.0
40,000+	14.4	11.6
Sample Size	546	327

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

[a] Self-reported data.

of the overall state population. According to the 1990 Census of Population, Ohio has a population that is 87.8 percent white and 12.2 percent nonwhite.

The final characteristic shown in the table is family income (as self-reported). The incomes displayed in that distribution tend to be skewed toward the low end. About 40 percent of the General Study participants (50 percent of the Nontraditional Study participants) reported family incomes below $15,000. Comparable data for the Midwest Census region for the first 4 income classes shown in the table are reported by the U.S. Census Bureau

(1992). According to that publication, the median 1991 family income in the Midwest was $29,927 and the percentage of families with incomes < $5,000 is 4.6; between 5,000 - 9,999 is 10.1; between 10,000 - 14,999 is 9.3; and between 15,000 - 24,999 is 17.5. All of these percentages are considerably less than the comparable data in the table for both the General Study and the Nontraditional Study.

Table 7. Educational Background of Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study	Nontraditional Study
High School Graduate?		
Yes	80.7%	79.3%
No	19.3	20.7
If Not Graduate, Earn GED?		
Yes	70.6%	57.4%
No	29.4	42.6
Course of Study in H.S.		
College prep	22.5%	21.3%
Vocational	21.0	18.1
General	56.5	60.6
High School GPA (mean)	2.55	2.50
Type of High School		
Public	94.2%	95.7%
Private, religious	4.8	1.9
Private, other	0.9	2.5
Other Postsecondary Attendance Besides FY '90 Program		
Yes	47.6%	61.5%
No	52.4	38.5
Sample Size	546	327

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

Note: All characteristics are self-reported.

Table 7 presents educational background statistics describing the two samples. Approximately 80% of the individuals have graduated from high school, and approximately two-thirds of the individuals who didn't graduate have received their GED. (The GED attainment rate for nontraditional students, about 57 percent, is significantly lower than for the overall population of students, for which it is about 70 percent.) About one-fifth of the participants reported that they had pursued a vocational curriculum in high school, and only slightly more than a fifth reported a college preparatory curriculum. The remaining participants--about 60 percent of both samples--indicated that they had pursued the general curriculum in high school.

Self-reported high school grades averaged right around 2.5 on a 4.0 scale (half B's & C's). Interestingly, a larger percentage of the Nontraditional Study sample had pursued additional postsecondary education than for the general population of participants as a whole. About 60 percent of the participants in nontraditional programs had attended programs other than the FY90 program being studied here, whereas just under half of the general study population had.

4.2 *Characteristics of the FY90 Programs*

The first row of table 8 indicates the short-term nature of these training programs. The average (self-reported) length of time at the institution offering the FY 1990 program was about 9 months, in general, and about 6 months for the nontraditional programs. This average is probably a good estimate of program duration because it includes some individuals who did not complete the program, but also it includes lengths of study for a few individuals

Table 8. Characteristics of FY90 Adult, Job-Specific Programs

Characteristic	General Study	Nontraditional Study
Duration (months-mean)[a]	9.0	6.1
Completed Program?[a]		
Yes	78.7%	79.8%
No	21.3	20.2
Type of Certificate/Degree[a]		
Vocational certificate	70.2%	67.1%
Other (including license)	29.8	32.9
Participant Satisfaction with Program Quality		
A+/A/A-	52.1%	50.9%
B+/B/B-	34.0	29.7
C+/C/C-	9.8	14.6
D+/D/D-	2.8	3.8
Fail	1.3	0.9
Best Things about Program[b]		
Instructors	48.9%	40.1%
Subject Matter	15.5%	17.2%
Equipment	10.3%	12.2%
Instruction	9.1%	7.3%
Other	45.7%	57.6%
Comments:	"Liked it all" "Motivation, self-esteem" "Nothing"	"Motivation" "Orientation toward women" "Nothing"
Worst Things about Program[b]		
Instructors	11.4%	9.5%
Instruction	6.4%	3.8%
No placement	2.1%	6.1%
No worst thing	35.2%	30.9%
Other	36.5%	48.5%
Comments:	"Wasn't long enough"	"Daytime classes"
Reasons for Selecting School		
Location	42.3%	39.8%
Only institution w/program	18.5%	23.2%
Reputation	12.1%	9.5%
Cost/financial aid	11.5%	10.1%
Friends	5.9%	7.0%

Table 8. (Continued)

Characteristic	General Study	Nontraditional Study
Reasons for Selecting Particular Program		
Work-related reasons (change jobs or upgrade skills)	39.0%	31.8%
Subject matter of interest	37.0%	32.7%
Need program for success in my career	22.2%	22.6%
Sample Size	546	327

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

[a] Self-reported data.

[b] Participants were asked to name 3 best and 3 worst things about program. Table entries represent percent of sample who identified this aspect as one of 3 best/3 worst.

who entered other programs at the same institution. (The question was phrased to ask how many months at a particular institution.)

Just over 80 percent of the participants reported that they completed the training program.[15] Over 70 percent of those that reported completing their program indicated that they had earned a vocational certificate, whereas the other 30 percent of the completers indicated that they had received some other type of credential (usually an occupational license).

The participants were generally quite satisfied with their program experience. Over half of them gave their programs a grade of A+, A, or A- for overall quality of the

[15]These data correlate very highly with institution-reported data on completion. The latter also indicate that over 80 percent of the adult program participants complete their programs.

program. Approximately one-third more assigned a grade in the B range. Only about one percent of the sample gave the program a failing grade.

To follow up on the grade for program quality, the survey gave respondents an opportunity to list the best and worst things about the programs. In general, the program feature that was mentioned most often as the best thing was instructors. Almost half of the respondents mentioned instructors as one of the three best things about the program. The subject matter itself and equipment used were the two program characteristics that had the next two highest rates of being mentioned--by about 10 to 15 percent of the respondents. These two were followed by instructional style.

Another indication of the satisfaction level of participants is the fact that the response that was mentioned most often as one of the three worst things about the program was "there was no worst thing." However among the features that were identified as among the worst things, "instructors" was first (mentioned by about 10 percent of respondents), which was followed by "instructional style" and "lack of placement."[16]

The survey also asked participants open-ended questions about why they had selected the particular school that had offered the program and why they had selected the particular program itself. The most important reason for selecting the particular school was its "location"--mentioned as a factor by about 40 percent of the sample. The next three most important reasons were "only institution that offered program," "reputation of the school,"

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[16]These data come from all participants, so they may include comments from some individuals who were unhappy with their training experiences and did not complete them. However, the distribution of responses from completers only was not appreciably different from the distribution for all participants.

and "cost concerns or availability of financial aid." "Friends" influenced the school choice for about 6 percent of the sample.

The responses to the question about why they chose the training program itself were more difficult to categorize. Because the programs are intended to provide job-specific skills, one would expect that job-related reasons would be an important factor. Indeed, the table shows that "work-related" reasons are the most important factor for the General Study. The specific answers given by respondents were phrases such as "Needed it for my job," or "Wanted to change jobs." A second set of reasons that is probably closely related is "subject matter is of interest." These people answered with responses such as, "I always wanted to study nursing," or "I've always wanted to work around cars." Finally, a little over a fifth of the sample indicated that they "need the program in order to succeed in my career."

4.3 *Program Completers*

The program completion rates for both the General Study and the Nontraditional Study are just under 80 percent. Tables 9 and 10 display the completion rates by district (table 9) and by program (table 10). For most districts and programs, the overall sample size is much too small to have confidence in the percentage completion as representative of that district's or program's true experience. When the data are aggregated, however, we can observe some systematic relationships. Completion rates tend to be lower in large cities. The completion rates among respondents in Cincinnati, Columbus, and Cleveland are 71 percent for both the General and Nontraditional Studies. Among programs, some of the T&I programs have relatively low completion rates--64 percent for Auto Mechanics, 59 percent

Table 9. Program Completion Rates for FY90 Participants, by District

ID	District	General Study			Nontraditional Study		
		Total Sample	Completers	Percent	Total Sample	Completers	Percent
01	Akron City	22	15	68.2%	5	3	60.0%
02	Alliance City	2	2	100.0	1	1	100.0
03	Bowling Green City	5	2	40.0	2	1	50.0
04	Canton City	6	5	83.3	3	3	100.0
06	Cincinnati City	28	22	78.6	11	6	54.6
07	Cleveland City	9	5	55.8	4	0	0.0
08	Columbus City	29	20	69.0	41	34	82.9
09	Copley-Fairlawn City	3	3	100.0	0	0	--
10	Dayton City	6	6	100.0	3	3	100.0
11	Greenville City	1	0	0.0	0	0	--
12	Hamilton City	2	2	100.0	1	1	100.0
15	Lima City	6	5	83.3	4	4	100.0
17	Mansfield City	2	1	50.0	9	6	66.7
18	Middletown City	6	6	100.0	0	0	--
19	Parma City	5	5	100.0	0	0	--
21	Sandusky City	3	3	100.0	0	0	--
22	Toledo City	11	10	90.9	0	0	--
23	Warren City	1	1	100.0	0	0	--
24	Willoughby-Eastlake City	2	1	50.0	0	0	--
25	Youngstown City	2	2	100.0	0	0	--
26	Oregon City	1	1	100.0	0	0	--
TOTAL	CITY SCHOOL DISTRICTS	152	117	76.97%	84	62	73.81%
30	Fairfield Union	3	3	100.0%	0	0	--
32	Madison Local	3	2	66.7	2	2	100.0%
33	Jackson Local	1	1	100.0	1	1	100.0
TOTAL	LOCAL SCHOOL DISTRICTS	7	6	85.71%	3	3	100.0%
35	Apollo JVS	12	10	83.3%	13	10	76.9%
37	Ashtabula JVS	19	14	73.7	0	0	--
38	Auburn JVS	4	4	100.0	3	3	100.0
40	Buckeye JVS	2	2	100.0	0	0	--
41	Butler Co. JVS	21	12	57.1	43	38	88.4
43	Coshocton Co. JVS	1	1	100.0	0	0	--
44	Cuyahoga Valley JVS	2	2	100.0	0	0	--
46	Eastland JVS	2	2	100.0	2	1	50.0
47	EHOVE JVS	5	3	60.0	1	0	0.0

Table 9. (Continued)

ID	District	General Study			Nontraditional Study		
		Total Sample	Completers	Percent	Total Sample	Completers	Percent
48	Four Co. JVS	17	12	70.6	0	0	--
49	Gallia-Jackson-Vinton	13	11	84.6	2	1	50.0
50	Great Oaks JVS	14	14	100.0	30	26	86.7
51	Greene Co. JVS	9	8	88.9	1	1	100.0
52	Jefferson Co. JVS	1	0	0.0	0	0	--
53	Knox Co. JVS	13	12	92.3	5	1	20.0
54	Lawrence Co. JVS	13	13	100.0	8	7	86.7
56	Lorain Co. JVS	3	2	66.7	3	1	33.3
57	Mahoning Co. JVS	5	4	80.0	9	4	44.4
58	Maplewood Area	5	4	80.0	0	0	--
59	Medina Co. JVS	2	1	50.0	0	0	--
60	Mideast Ohio JVS	9	8	88.9	0	0	--
61	Montgomery Co. JVS	30	24	80.0	14	11	78.6
62	Ohio Hi-Point	6	5	83.3	2	1	50.0
63	Penta Co. JVS	7	4	57.1	1	0	0.0
64	Pickaway-Ross Co. JVS	8	6	75.0	33	32	97.1
65	Pioneer JVS	12	6	50.0	4	4	100.0
66	Polaris JVS	18	15	83.3	0	0	--
67	Portage Lakes JVS	7	7	100.0	5	5	100.0
68	Scioto Co. JVS	10	9	90.0	1	1	100.0
69	Springfield-Clark JVS	1	1	100.0	0	0	--
70	Tri-County JVS	18	16	88.9	0	0	--
71	Tri-Rivers JVS	10	8	80.0	4	4	100.0
72	Trumbull Co. JVS	12	10	83.3	4	4	100.0
73	U.S. Grant JVS	3	3	100.0	2	1	50.0
74	Upper Valley JVS	32	22	68.8	34	26	76.5
75	Vanguard-Sentinal JVS	1	0	0.0	0	0	--
76	Vantage JVS	0	0	--	1	0	0.0
77	Warren Co. JVS	1	1	100.0	0	0	--
78	Washington Co. JVS	10	7	70.0	8	8	100.0
79	Wayne Co. JVS	26	23	88.5	7	5	71.4
TOTAL	JOINT VOCATIONAL	384	306	79.7%	240	195	81.3%
TOTAL		543	429	79.0%	327	260	79.5%

Source: Upjohn Institute Survey of FY90 adult, job-specific training.
Note: Completion data are self-reported.

Table 10. Program Completion Rates for FY90 Participants, by Taxonomy

Taxonomy	Program	General Study			Nontraditional Study		
		Total Sample	Completers	Percent	Total Sample	Completers	Percent
01.0104	Farm Bus Mgmt	33	18	54.6%	0	0	--
01.0500	Horticulture	7	5	71.4	0	0	--
04.0800	General Mdse	1	1	100.0	0	0	--
04.0803	Mrkg Mgmt	10	8	80.0	0	0	--
04.0803	HRD	21	17	81.0	0	0	--
04.1700	Real Estate	1	1	100.0	0	0	--
07.0302	Pract Nurse	106	91	81.0	37	27	73.0
07.0303	Nurse Asst	16	13	81.3	6	5	83.3
07.0307	Home Health Aide	3	3	100.0	2	2	100.0
07.0904	Med Asst	8	8	100.0	0	0	--
09.0201	Child Care	5	4	80.0	1	1	--
09.0202	Fabric Svc	1	0	0.0	1	0	0.0
09.0203	Food Svc	3	3	100.0	0	0	--
09.0205	Comm & Home	1	1	100.0	0	0	--
14.0100	Acct & Comp	11	9	81.8	2	1	50.0
14.0200	Bus DP Sys	23	19	82.6	30	21	70.0
14.0300	General Off	55	45	81.8	26	21	80.8
14.0400	Info Comm Occ	26	19	73.1	2	1	50.0
14.0402	Corres Clerk	2	2	100.0	0	0	--
14.0406	Med Rec Clk	1	1	100.0	1	1	100.0
14.0700	Steno & Secr	25	20	80.0	6	5	83.3
14.0799	Med/Legal St	3	2	66.7	0	0	--
14.0900	Typing & Rel	9	7	77.8	3	2	66.7
17.0100	Air Cond & Htg	20	17	85.0	1	1	100.0
17.0301	Body & Fender	5	3	60.0	3	1	33.3
17.0302	Auto Mech	14	9	64.3	4	3	75.0
17.0304	Auto Tech	6	5	83.3	0	0	--
17.0401	Aircraft Mtnc	7	7	100.0	2	1	50.0
17.0600	Bus Mach Mtnc	1	1	100.0	3	3	100.0
17.1001	Carpentry	1	0	0.0	0	0	--
17.1002	Electrician	15	13	86.7	2	1	50.0
17.1011	Bldg Mtnc	12	9	75.0	7	6	85.7
17.1012	Indus Mtnc	10	8	80.0	8	6	75.0
17.1200	Diesel Mech	1	1	100.0	0	0	--
17.1300	Drafting	4	1	100.0	6	6	100.0
17.1503	Electronics	3	3	100.0	7	6	85.7

Table 10. (Continued)

Taxonomy	Program	General Study			Nontraditional Study		
		Total Sample	Completers	Percent	Total Sample	Completers	Percent
17.2302	Mach Shop	2	13	59.1	24	12	50.0
17.2303	Mach Tools	2	2	100.0	0	0	--
17.2306	Welding	14	13	92.9	10	8	80.0
17.2602	Cosmetol	6	4	66.7	0	0	--
17.2802	Law Enf	2	2	100.0	0	0	--
17.2814	Truck Dr	1	1	100.0	0	0	--
17.3500	Upholster	0	0	--	8	6	75.0
17.9901	Other T & I	1	1	100.0	27	23	85.2
17.9911	ONOW	9	6	66.7	98	90	91.8
17.9960		1	0	0.0	0	0	--
99.0313	Transitions	5	4	80.0	0	0	--
TOTAL		543	429	79.0%	327	260	79.5%

Source: Upjohn Institute Survey of FY90 adult, job-specific training.
Note: Completion data are self-reported.

for Machine Shop, for example. The Farm Business Management course also has a relatively low reported completion rate.[17]

Table 11 presents summary statistics describing the demographic characteristics of participants, by completion status and by whether they were in the General or Nontraditional Study. For the General Study, the only significant difference between completers and the overall sample is with family income. Completers have a smaller share of individuals whose family income is less than $10,000 than does the overall sample. Slightly over 21 percent of

[17]Note that some individuals may choose to leave a program prior to formally completing it because they become employed. In other words, they may have achieved a positive outcome and met their goals despite not completing the training program. We were unable to analyze the data in a way that would allow us to identify the frequency of such "positive" noncompletions, however.

completers in the General Study have incomes in the first two classes, whereas almost 25 percent of the total participant sample have such low incomes.

Table 11. Demographic Characteristics of Program Completers and All Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study		Nontraditional Study	
	Program Completers[a]	All Participants	Program Completers[a]	All Participants
Sex				
Male	37.7%	39.5%	33.5%	27.1%
Female	62.3	60.5	66.5	72.9
Age				
Mean	35.9	36.3	36.4	36.0
Median	35	35	35	34
Marital Status				
Married	54.4%	56.4%	42.4%	43.4%
Nonmarried	45.6	43.6	57.6	56.6
Ethnicity				
White	92.0%	90.1%	88.2%	91.2%
Nonwhite	8.0	9.9	11.8	8.8
Family Income[a]				
< $5,000	9.2%	11.3%	13.0%	11.4%
5,000-9,999	12.0	13.3	20.6	16.5
10,000-14,999	13.7	13.3	16.4	11.9
15,000-24,999	30.4	27.7	23.5	29.0
25,000-39,999	20.4	20.0	14.7	18.8
4,000	14.2	14.5	11.8	12.5
Sample Size	429	543	260	327

[a] Self-reported data.

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

For the Nontraditional Study, the differences between program completers and the total sample are more apparent. Completers of nontraditional programs tend to be male, nonwhite, and have a family income of less than $15,000 per year. Note that exactly 50

percent of completers of nontraditional programs have incomes below $15,000, whereas less than 40 percent of the overall sample have incomes that low. It may be the case that many of the individuals who did not complete a nontraditional program left because they became employed, and thus would tend to report higher family incomes. But this is the opposite relationship from what was observed in the General Study.

Table 12 provides data about the educational backgrounds of program completers vis-a-vis all participants. One hypothesis to test is whether program completers are likely to have "better" educational backgrounds than non-completers. The evidence presented in the table suggests that this might be true; however, it is far from overwhelming. A slightly higher share of program completers in both the General Study and the Nontraditional Study are high school graduates than for the sample of all participants. Furthermore, high school GPA's are slightly higher. (The difference is quite significant in the Nontraditional Study.) However, the (self-reported) course of study in high school, the type of high school, and whether or not the individual attended other postsecondary programs besides the FY90 training are similar for completers and all participants.

One highlight of table 12 is that a higher percentage of program completers who had not graduated from high school prior to entering the training, attained their GED in both the General Study and the Nontraditional Study. This may be a significant benefit to the job training programs.

Finally, table 13 presents data concerning selected characteristics of the training programs themselves as perceived by program completers and all participants. Table entries show only very slight differences. Program completers reported being marginally more

Table 12. Educational Background of Program Completers and All Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study		Nontraditional Study	
	Program Completers	All Participants	Program Completers	All Participants
High School Graduate?				
Yes	82.3%	80.7%	81.4%	79.3%
No	17.1	19.3	18.6	20.7
If Not Graduate, Earn GED?				
Yes	75.0%	70.6%	62.5%	57.4%
No	25.0	29.4	37.5	42.6
Course of Study in H.S.				
College prep	23.8%	22.5%	21.6%	21.3%
Vocational	20.6	21.0	17.3	18.1
General	55.3	56.5	61.2	60.6
High School GPA (mean)	2.57	2.55	2.61	2.50
Type of High School				
Public	94.1%	94.2%	96.1%	95.7%
Private, religious	5.4	4.8	1.9	1.9
Private, other	0.5	0.9	1.9	2.5
Other Postsecondary Attendance Besides FY '90 Program				
Yes	49.0%	47.6%	60.8%	61.5%
No	51.0	52.4	39.2	38.5
Sample Size	429	546	260	327

Note: All characteristics and completion status are self-reported data.

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

satisfied with program quality (as measured by the percentage of the sample grading the program quality in the A range). They were furthermore more likely to mention that instructors were one of the three best things about the program and more likely to testify that there were "no worst things" about the program.

Table 13. Selected Characteristics of FY90 Adult, Job-Specific Programs as Reported by Program Completers and All Participants

Characteristic	General Study		Nontraditional Study	
	Program Completers[a]	All Participants	Program Completers[a]	All Participants
Duration (months-mean)[a]	9.6	9.0	6.4	6.1
Satisfaction with Program Quality				
A+/A/A-	54.0%	52.1%	54.2%	50.9%
B+/B/B-	34.8	34.0	28.9	29.7
C+/C/C-	7.2	9.8	12.7	14.6
D+/D/D-	2.8	2.8	3.0	3.8
Fail	1.2	1.3	1.2	0.9
Best Things about Program[b]				
Instructors	53.5%	48.9%	40.4%	40.1%
Subject matter	15.4%	15.5%	16.9%	17.2%
Equipment	11.2%	10.3%	10.4%	12.2%
Instruction	8.4%	9.1%	6.5%	7.3%
Other	50.2%	45.7%	65.4%	57.6%
Worst Things about Program[b]				
Instructors	11.4%	11.4%	9.6%	9.5%
Instruction	6.3%	6.4%	4.6%	3.8%
No placement	3.0%	2.1%	5.8%	6.1%
No worst thing	38.4%	35.2%	33.1%	30.9%
Other	36.3%	36.5%	46.5%	48.5%
Sample Size	429	546	260	327

[a] Self-reported data.

[b] Table entries represent percent of sample who identified items as one of 3 best/3 worst.

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

With the background characteristics of program participants and completers as a basis, the next chapter of the report presents a net impact analysis of the overall adult, job-specific training system.

5. NET IMPACT ANALYSES

5.1 *Labor Market Outcomes*

Table 14 presents data concerning the current (Fall 1992) labor market characteristics of the individuals who participated in FY 1990 training programs. Around three-quarters (Nontraditional Study) to four-fifths (General Study) of the participants were in the labor force, meaning they were either employed or unemployed and looking for work, at the time of the survey.[18] These labor force participation rates are slightly lower than the U.S. rate, which in August 1992, was 83.6 percent for individuals aged 25-54. For individuals in the labor force, the unemployment rate for the General Study sample was about 8.9% and for the Nontraditional Study, about 15%. These rates exceed the state's overall unemployment rate, which was 7.1% in July 1992. In short, the labor market experiences of FY 1990 participants in Fall 1992 may be described as average or slightly below average, when compared to the entire U.S. or the State of Ohio was a whole.

The reported hourly wage rates for individuals holding jobs at the time of the interview averaged $8.92 for the General Study and $8.30 for the Nontraditional Study sample. Not too much can be made of this difference because the job duration for the Nontraditional Study sample members was, on average, 16 months shorter than for the General Study sample. Most of the individuals who were currently employed worked more

[18]This chapter relies heavily on the classification of the population as either being in or out of the labor force. Any individual who is working for pay or is unemployed but is looking for a job is considered in the labor force. All other individuals are not working for pay and not looking for employment are classified as not in the labor force.

Table 14. Current Labor Market Status of Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study	Nontraditional Study
Labor Force Status		
Employed	74.5%	62.1%
Unemployed	7.3	11.3
Not in labor force	18.1	26.6
Unemployment Rate	8.9%	15.4%
Labor Force Participation Rate	81.8%	73.4%
For Currently Employed Persons --		
Hours per week	39.3	36.4
Job duration (months-mean)	46.7	30.3
Starting wage	$7.01	$6.72
Current wage	$8.92	$8.30
Industry		
Agriculture	5.4%	0.9%
Construction	5.1	4.1
Manufacturing	17.5	21.7
TCPU[a]	2.3	6.8
Wholesale/retail trade	14.7	15.4
FIRE[b]	2.6	1.8
Services	46.8	46.6
Government	5.6	2.7
Selected Occupations		
LPN and health-related	20.0%	14.1%
Secretary and related	8.2%	5.5%
Personal services	6.8%	6.9%
Sample Size	546	327

[a] Transportation, Communication, and Public Utilities
[b] Finance, Insurance, and Real Estate

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

than 30 hours per week; the average weekly hours was just under 40. Because licensed practical nursing and health-related programs had the largest enrollments in FY90, it is not surprising that a large percentage of the participants were employed in the services sector, which includes hospitals and other health-related industries.

Table 15 displays additional indicators of program impact. All together, about 60 percent of currently employed individuals in the General Study sample indicated that the training they received in FY 1990 was related to their current jobs. In the Nontraditional Study, the percentage was smaller--just under half. The smaller percentage for the Nontraditional Study may be explained by the fact that ONOW was included as a program in the study, and participants may not see a direct relationship between ONOW and their current job duties. The individuals who reported that their training was related to their current employment were asked whether or not the training shortened the time it took for them to become fully trained in their jobs. The preponderance of such cases (80 percent in the Nontraditional Study and General Study combined sample) indicated that, indeed, the training had shortened the time it took to become fully trained. And most of these observations (about 65 percent) indicated that the training shortened the time it took to become fully trained "a great deal."

Another potential benefit of the training is to reduce the incidence of income support recipiency or to reduce the total amount of benefits being paid. The entries in table 15 show a modest reduction in incidence of public assistance receipt (e.g., from almost 30 percent to 21 percent for the General Study).[19] However it is difficult to gauge the significance of this change. The reduction may have been caused by participation in job training or this change

[19]These data come from a very general question phrased as follows, "Did you receive any public assistance from ADC, GR/GA, SSI, Food Stamps, Medicaid, Housing Assistance—prior to completing your coursework and since you left or completed your program?" (See page 16 of survey questionnaire in Appendix B.) The study's estimate of the reduction in public assistance may be an underestimate if some individuals exiting from public assistance are receiving transitional Food Stamps or Medicaid benefits.

Table 15. Training-Relatedness and Other Outcomes for Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study		Nontraditional Study	
Training Related to Current Job				
Yes	60.6%		47.7%	
No	39.4		52.3	
If Training Related to Current Job --				
Training shortened time to become fully trained in job	79.8%		79.4%	
A great deal shorter		63.6%		54.3%
Somewhat shorter		31.8		32.1
Little shorter		4.5		13.6
Did not shorten time	20.2		20.6	
Training Related to 1st Job after FY90 Program				
Yes	62.6%		48.2%	
No	37.4		51.8	
If Training Related to 1st Job --				
Training shortened time to become fully trained in job	80.0%		75.0%	
A great deal shorter		62.0%		55.2%
Somewhat shorter		31.7		34.5
Little shorter		6.3		10.3
Did not shorten time	20.0		25.0	
Received Public Assistance --				
Prior to training	29.7%		36.4%	
After training	21.2		32.4	
Attended Additional Postsecondary Schooling After FY90 Program				
Yes	10.6%		18.7%	
Community college		52.2%		28.8%
4-year college/university		19.4		33.3
No	89.4		81.3	
Still a student	5.5%		8.0%	
Sample Size	546		327	

Note: All characteristics are self-reported data.

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

may reflect a normal amount of welfare program attrition that results simply from becoming 2-3 years older.

The final entry in table 15 shows how many respondents chose to attend an additional postsecondary program after completing the FY90 job-specific training. This, too, might be viewed as a positive outcome for the adult training. However, a relatively small minority of individuals pursued this course of action--about 10 percent and about 19 percent for the General and the Nontraditional Studies, respectively.

Table 16 contrasts these labor market and additional outcomes between program completers and all participants. The upshot of this table is that, as might be expected, program completers achieve "better" outcomes for almost all of the characteristics shown. Employment rates are slightly higher and unemployment rates are slightly lower. Program completers' average current hourly wage is about 3 percent higher in the General Study, but is identical in the Nontraditional Study sample.

The outcome with the biggest difference between program completers and all participants is training-relatedness of the current job. In both the General Study and the Nontraditional Study, the percentage of respondents who reported that their training was related to their current or most recent job is 10 percent higher for completers than for the entire sample.

Whereas the reduction in public assistance recipiency for the entire Nontraditional Study sample is only about 4 percentage points, the reduction is almost 6 percentage points for program completers.

Table 16. Selected Labor Market and Other Outcomes of Program Completers and All Participants in FY90 Adult, Job-Specific Training

Characteristic	General Study		Nontraditional Study	
	Program Completers	All Participants	Program Completers	All Participants
Labor Force Status				
Employed	77.2%	74.5%	64.2%	62.1%
Unemployed	7.0	7.3	10.8	11.3
Not in labor force	15.9	18.1	25.0	26.6
Unemployment Rate	8.3%	8.9%	14.4%	15.4%
Labor Force Participation Rate	84.1%	81.8%	75.0%	73.4%
For Currently Employed Persons --				
Hours per week (mean)	39.4	39.3	36.5	36.4
Job duration (months-mean)	44.1	46.7	29.5	30.3
Starting wage	$7.17	$7.01	$6.73	$6.72
Current wage	$9.21	$8.92	$8.30	$8.30
Training Related to Current Job				
Yes	66.5%	60.6%	54.4%	47.7%
No	33.5	39.4	45.6	52.3
If Training Related to Current Job --				
Training shortened time to become fully trained in job --	83.4%	79.8%	78.9%	79.4%
A great deal shorter	69.9%	63.6%	62.9%	54.3%
Somewhat shorter	27.1	31.8	22.7	32.1
Little shorter	3.1	4.5	14.4	13.6
Did not shorten time	16.6	20.2	21.1	20.6
Received Public Assistance --				
Prior to training	28.4%	29.7%	37.7%	36.4%
After training	20.0%	21.2%	31.9%	32.4%
Attended Additional Postsecondary Schooling				
Yes	12.1%	10.6%	18.1%	18.7%
No	87.9	89.4	81.9	81.3
Sample Size	429	546	260	327

Note: All characteristics and completion status are self-reported data.

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

5.2 *Net Program Impacts*

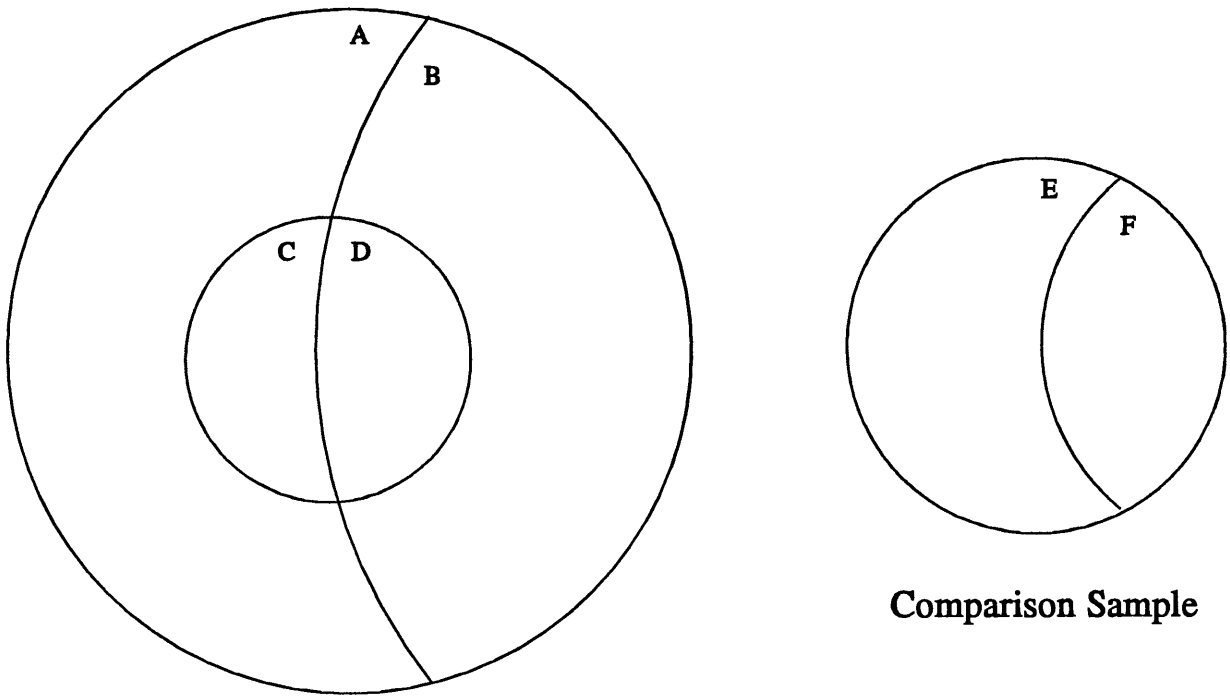
How the program participants are faring in today's labor market does not, by itself, indicate how well the ODOE-funded training programs performed. **Much more relevant is how the participants are faring relative to where they would be without the training.** If the training is provided to individuals who would otherwise have serious labor force difficulties, then average or slightly below average outcomes can be regarded as good. If the participants would otherwise have better than average labor market outcomes, then average outcomes would be considered negative.

To be able to calculate net program impacts, we identified a comparison set of individuals and interviewed them to determine their labor market and employment circumstances. As long as the members of the comparison set are similar to the training program participants, then differences in labor market outcomes may be attributed to participation in the program.

As described earlier in this report, the respondents to the survey of participants were asked to refer siblings, friends, or acquaintances who had approximately the same abilities and interests, and who had similar career aspirations, but who had not participated in job-specific skills training. The diagram in figure 1 shows the study design and provides resulting sample sizes. The large circle on the left represents all of the surveyed individuals who participated in a program during FY 1990. The circle is broken into two parts, A and B, to represent the General Study and the Nontraditional Study. The circle on the right represents the comparison sample(s).

Figure 1

Representation of Net Impact Survey Samples



Participant Sample

Comparison Sample

Note:
A = General Study Participants (n = 546)
B = Nontraditional Study Participants (n = 327)

C (subset of A) = General Study Participants with matched individuals in the comparison sample (n = 110)
D (subset of B) = Nontraditional Study Participants with matched individuals in the comparison sample (n = 71)

E = Comparison Sample for General Study (n = 160)
F = Comparison Sample for Nontraditional Study (n = 103)

The inner circle on the left represents the subset of participants who provided referral information for potential members of the comparison group and for whom at least one completed interview of a comparison person was obtained. Both the inner circle on the left and the circle on the right are also divided because each has members of both the Nontraditional and General Studies.

Table 17 displays the labor market outcomes for the comparison sample and for the subset of participant sample cases who have matches in the comparison sample (E ⋃ F and C ⋃ D). For reference purposes, the initial column of the table provides the outcomes for the entire sample of participants (A ⋃ B). A comparison of columns 2 and 3 shows very little difference in labor market outcomes between participants and members of the comparison sample. The labor force statuses, unemployment rate, and labor force participation rate shown at the top of the table are virtually identical. Members of the comparison sample have considerably longer average job duration (60 months compared to 38 months) and have average hourly wage rates that are about 2 percent higher, however.

The industrial and occupational mixes of the two samples are quite different. Participants tend to be working in health-related or clerical occupations and in the services and agriculture sectors relative to the comparison sample members, who tend to have higher shares in manufacturing and wholesale/retail trade.

It may be argued that additional schooling is an important outcome of adult, job-specific training. Participants may be motivated to attend more technical classes or other additional classes in their field or other related fields of study. The last entry in the table attempts to compare this outcome for participants relative to the comparison sample.

Table 17. Selected Labor Market and Other Outcomes of Participants in FY90 Adult, Job-Specific Training and a Matched Comparison Sample

Characteristic	All Participants	Participants w/Match	Comparison Sample
Labor Force Status			
Employed	69.9%	70.3%	70.3%
Unemployed	8.8	7.7	7.5
Not in labor force	21.3	22.0	22.2
Unemployment Rate	11.2%	9.9%	9.6%
Labor Force Participation Rate	78.7%	78.0%	77.8%
For Currently Employed Persons --			
Hours per week (mean)	38.3	36.6	35.8
Job duration (months-mean)	41.0	37.9	59.5
Starting wage	$6.91	$6.95	$6.48
Current wage	$8.70	$8.68	$8.85
Industry			
Agriculture	3.9%	5.1%	2.0%
Construction	4.8	5.9	6.2
Manufacturing	19.1	11.8	17.8
TCPU[a]	3.9	3.7	7.2
Wholesale/retail trade	15.1	10.3	16.8
FIRE[b]	2.3	0.7	6.1
Services	48.8	55.9	44.4
Government	3.6	5.9	4.6
Selected Occupations			
LPN and health-related	18.1%	23.7%	7.7%
Secretary and related	7.3	8.1	3.1
Personal services	6.7	5.2	9.2
Attended Additional Postsecondary Schooling			
Yes	13.6%	16.9%	27.7%
No	86.4	83.1	72.3
Sample Size	873	182	266

[a] Transportation, Communication, and Public Utilities

[b] Finance, Insurance, and Real Estate

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

However, the comparison is somewhat flawed. The percentages reported for participants represent individuals who pursued a postsecondary program after the FY 90 program, from which they were sampled. For the comparison sample, the percentage is the share of individuals who attended any postsecondary program after 12/31/89. Thus the data are not strictly comparable.

While it appears as though there are only slight differences between participants and the comparison sample, table 18 shows much greater differences when the samples are disaggregated by sex. Training appears to greatly influence the labor force participation rate of men--92 percent for the matched participants compared to 82 percent for the comparison sample--but not to influence, or to slightly lower, the participation rate of women. The increase in labor force participation for men emanates from both a higher employment rate (more men have jobs) and a higher unemployment rate (more nonworking men are looking for jobs).

The large increase in labor force participation for men may indicate that job-specific training is attracting men who are marginally attached to the labor force. Without the training, they would probably not be in the labor force, that is not looking for work and not employed. Thus it is not surprising that wage rates, which are conditional on employment, are lower for training participants, on average. The $1.28 disadvantage in current wages for male participants is about 13 percent lower than the males in the comparison sample, who are working. Much of this disadvantage may also be explained by shorter job durations. On average, the comparison sample members have held their jobs for 79 months; participants for 48 months.

Table 18. Selected Labor Market Outcomes of the Comparison Sample and the Participants in FY90 Adult, Job-Specific Training Who Have a "Match" in the Comparison Sample, by Sex

Characteristic	Participants with a Match		Comparison Sample	
	Male	Female	Male	Female
Labor Force Status				
Employed	79.6%	67.4%	72.3%	69.7%
Unemployed	12.2	6.1	9.2	6.6
Not in labor force	8.2	26.5	18.5	23.7
Unemployment Rate	13.3%	8.3%	11.3%	8.7%
Labor Force Participation Rate	91.8%	73.5%	81.5%	76.3%
For Currently Employed Persons --				
Hours per week (mean)	38.1	35.9	40.4	34.4
Job duration (months-mean)	47.7	33.7	79.2	52.5
Starting wage	$6.69	$7.07	$6.89	$6.18
Current wage	$9.15	$8.46	$10.43	$8.07

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

For men, the benefit to training seems to lie in increased employment and labor force participation rates, but not in wages. For women, the benefit to training seems to be in wages. The labor force participation rate for women participants (with a comparison group match) is just under 75 percent compared to just over 75 percent for the comparison group women. Similarly, the employment and unemployment rates of the two groups are statistically indistinguishable. However, the average current hourly wage rate of participants--at almost $8.50 per hour--is approximately 5 percent higher than the average current hourly wage rate of the comparison group females--at $8.07. This result occurs even though the average job tenure of the comparison group is over 52 months compared to only 34 months for the participants.

5.3 *Analysis of Net Program Impacts*

The first step in trying to gain an understanding of the results reported in tables 17 and 18 is to gauge how well the comparison sample actually matches the participants. After all, the study makes the assumption that the two groups are comparable, so that differences in outcomes may be attributed to the training that participants received in FY 1990.

Table 19 displays demographic and educational background statistics for the two groups. In fact, the match is reasonably good. The proportions of each sample that are female, that are of minority ethnicity, and that are high school graduates are virtually identical. As far as the other characteristics in the table go, the comparison sample appears to be slightly younger, more likely to be married, more likely to have taken a college prep curriculum in high school, have a slightly higher (self-reported) high school grade point average, and less likely to have received public assistance. In short, the comparison group differs from the matched participants in ways that are generally associated with better labor market outcomes. And indeed, the table shows that the comparison group has higher family incomes than the matched participants. Almost half of the comparison group reports an income greater than $25,000 per year, whereas only 30 percent of the matched participants report incomes that high. In short, other things equal, the comparison group seems to be a reasonable match, although it appears to be marginally more advantaged.

All of the analysis up to this point has been done in terms of sample means trying to ferret out impacts by examining differences across groups. The next analytical step is to conduct multivariate analyses that control for intervening characteristics. The first outcome

Table 19. Demographic and Educational Characteristics of the Comparison Sample and the Participants in FY90 Adult, Job-Specific Training, Who Have a "Match" in the Comparison Sample

Characteristic	Participants w/Match	Comparison Sample
Sex		
Female	72.9%	74.3%
Male	27.1	25.7
Age		
Median	34	32
Mean	34.8	33.4
Marital Status		
Married	43.4%	56.1%
Not married	56.6	43.9
Ethnicity		
White	91.2%	92.4%
Nonwhite	8.8	7.6
Family Income[a]		
< $5,000	11.4%	7.6%
5,000-9,999	16.5	11.2
10,000-14,999	11.9	12.7
15,000-24,999	29.0	21.1
25,000-39,999	18.8	25.5
40,000+	12.5	21.9
High School Graduate[a]		
Yes	81.2%	81.2%
No	18.8	18.8
If Not Graduate, Earn GED?[a]		
Yes	71.4%	37.0%
No	28.6	63.0
High School Curriculum[a]		
College prep	23.2%	32.4%
Vocational	23.2	22.0
General	53.7	45.6
High School GPA[a]	2.60	2.69
Ever Received Public Assistance[a]		
Yes	34.6%	26.3%
No	65.4	73.7
Sample Size	182	266

[a] Self-reported data.

Source: Upjohn Institute Survey of FY90 adult, job-specific training.

to be analyzed is current hourly wage rates. The following multiple regression model was estimated:

$$(1) \quad \ln w_i = a + b X_i + c_1 T_i + c_2 N_i + c_3 N_i{*}T_i + e_i$$

where
- $\ln w_i$ = (natural) log of individual i's current hourly wage rate
- X_i = vector of characteristics of individual i thought to impact wages
- T_i = 1, if individual i participated in training; 0 otherwise
- N_i = 1, if individual i is a nontraditional participant (or a match to a nontraditional participant); 0 otherwise
- e_i = stochastic error term
- a,b,c_1,c_2,c_3 = parameters to be estimated

The dependent variable, hourly wages, was transformed into logarithmic form for two reasons. First of all, empirical studies have demonstrated that this form seems to fit actual wage profile data the best. Second, it allows the coefficients to represent percentage effects. That is, the b coefficients can be interpreted as the percentage increase (or decrease) in wages of a unit change in an X variable.

Table 20 provides estimates of the model given in equation (1), estimated separately by sex. Estimating separate models is typical practice and represents the fact that labor markets tend to operate differently for women and men. For the most part, most of the characteristics in the model are estimated to be indistinguishable from 0. For men, age is positively correlated with wages; each year adds almost 2 percent to the wage rate, on average. The coefficient on training confirms the results from table 18, in that it shows that training reduces wage rates. We hypothesize that this effect stems from two factors. First of all, many of the men who received the training were not employed at the time and thus began their current jobs since FY '90. Thus the tenure of the comparison group members exceeds that of the training participants. Second, training attracted many individuals into the

Table 20. Estimates of the Impact of Adult, Job-Specific Training on Wage Rates, by Sex (Standard errors in parentheses)

Characteristic	Male		Female	
Demographic and Family Background				
Age	.017***	(.006)	.015***	(.003)
Married	.052	(.157)	-.068	(.065)
No. of children	-.038	(.070)	.016	(.028)
Minority	-.158	(.204)	-.044	(.146)
Mother's education	-.031	(.072)	.022	(.034)
Father's education	.033	(.054)	.025	(.028)
Education				
High school grad.	.175	(.301)	.023	(.162)
GED	.177	(.362)	.252	(.189)
H.S. GPA	.028	(.043)	.004	(.025)
Vocational curriculum	-.019	(.182)	-.099	(.086)
General curriculum	-.043	(.146)	-.160**	(.078)
Work Experience (months)	.008	(.006)	.016***	(.003)
Unemployment Rate				
Unemp. rate in 1990	-.184	(.155)	.053	(.063)
Unemp. rate in 1992	.069	(.144)	-.048	(.049)
Training				
Received training	-.465***	(.156)	-.039	(.083)
Nontraditional training	.150	(.269)	.026	(.124)
Nontraditional participant or match	.013	(.177)	.086	(.081)
Dependent Variable Mean	2.05		1.92	
$\bar{R}^2$	.2814		.2484	
n	75		194	

Note: Table entries are OLS regression estimates and associated standard errors.

** Significant at .05 level
*** Significant at .01 level.

labor force. Those individuals who joined the labor force are unlikely to have had significant attachment to employment in the past and thus are likely to have relatively low wage rates as they move into the labor force.

The coefficient on having received nontraditional training is positive (although smaller in size than the overall training coefficient). This means that men who were enrolled in nontraditional programs received lower wages than comparison group counterparts, but the disadvantage is about 15 points smaller than for the General Study.

For women, the impact of the job-specific training on wage rates appears to be negligible. None of the training coefficients achieve statistical significance. The major explanatory factors for women's wages are age and work experience (both positively and significantly related to wage rates). Interestingly, pursuing a general curriculum in high school results in a 16 percent point wage disadvantage for women.

Other results displayed in table 20 that tend to confirm prior research include fairly sizeable wage disadvantages for minority individuals (particularly males), lower wages for married women but higher wages for married men, and higher wages for high school graduates and GED earners. None of these results are statistically significant, however.

Table 21 displays regression results for the probability of being employed. Essentially, the model portrayed in equation (1) was estimated, except that the dependent variable is a dummy variable equal to 1, if the individual was employed, and equal to 0, otherwise. The interpretation for the dependent variable is the probability of employment.

The equation did not "fit" well for males--note the negative adjusted R-squared statistic. In fact, the only interesting result from this model is that it suggests that the employment advantage of individuals who pursued training (recall table 18) probably came from nontraditional programs. For women, the table again suggests that training did not influence the likelihood of employment. Instead, the coefficients imply that a woman's prior

Table 21. Estimates of the Impact of Adult, Job-Specific Training on Employment, by Sex (Standard errors in parentheses)

Characteristic	Male		Female	
Demographic and Family Background				
Age	-.004	(.004)	.005	(.003)
Married	.054	(.126)	-.145***	(.053)
No. of children	-.037	(.056)	-.018	(.023)
Minority	-.206	(.155)	.035	(.122)
Mother's education	.022	(.055)	-.022	(.028)
Father's education	.015	(.043)	.034	(.023)
Education				
High school grad.	-.046	(.240)	.018	(.128)
GED	-.300	(.292)	.081	(.153)
H.S. GPA	.026	(.033)	-.015	(.020)
Vocational curriculum	-.083	(.146)	-.054	(.072)
General curriculum	.006	(.116)	-.023	(.064)
Work Experience (months)	.006	(.005)	.018***	(.003)
Unemployment Rate				
Unemp. rate in 1990	.086	(.124)	-.026	(.052)
Unemp. rate in 1992	-.049	(.114)	.030	(.040)
Training				
Received training	-.005	(.119)	-.033	(.069)
Nontraditional training	.297	(.214)	-.008	(.103)
Nontraditional participant or match	-.091	(.141)	-.043	(.067)
Dependent Variable Mean	.833		.821	
$\bar{R}^2$	-.0563		.2310	
n	78		201	

Note: Table entries are OLS regression estimates and associated standard errors.

*** Significant at .01 level.

work experience has a positive effect on employment and her marital status has a negative effect.

Additional regression analyses have been conducted but not reported. In addition to models of wages and employment, regression analyses of unemployment status and labor force participation were estimated. Furthermore, many additional functional forms and

variables were tested. For the most part, these models added little to an understanding of the payoff to training because of the limited sample sizes in the matched and comparison groups.

6. FINDINGS AND RECOMMENDATIONS

6.1 *The "Last Chance" System*

A substantial number of individuals who reach their late 20's or early 30's find themselves in tenuous straits in the labor market with few saleable skills. These individuals did not successfully traverse the school-to-work transition or they dropped out of the labor force for marriage, family, or other reasons, but now need to find "good" jobs. Despite a number of "second-chance" programs in this country--JTPA, AFDC and JOBS, Pell grants, and so forth--the individuals we are referring to may not be eligible for these programs or they may have attempted 2- or 4-year college or other formal training programs and not been successful. Adult education and, in particular, adult job-specific training may be a "last chance" program for them. The typical participant is thus in their 30's and desires quick results because they have families or other significant financial responsibilities. They want to be trained for an occupation that is in demand and they want to be placed as soon as possible.

From this picture of client needs, it is clear that the role of the ODOE-funded programs should be to provide solid, accessible training in occupations that are in demand. The programs need not be on the cutting edge of educational change nor highly theoretical or technically complex. They do need to be delivering practical skills that employers value. Indeed, the ODOE-funded programs seem to be meeting the needs of this type of clientele. Instructors are reported to be dedicated and interested in their students. Instruction is hands-on, practical, and appropriately geared. Programs are completed in less than a year.

The purpose of this chapter of the report is to highlight the key findings of this study of the "last chance" system and to offer some recommendations for ODOE to consider as it administers the system.

6.2 *Findings*

Almost twice as many women participate in adult, job-specific training as men. The average age of participants is around 35 and the proportion of participants who are of minority ethnicity is in very close proportion to the state's population. About half of the participants are married and family incomes of participants tend to be well below average. The majority of participants (around 60 percent) pursued the general curriculum in high school. About 80 percent of participants are high school graduates; and a large share (about three-quarters) of individuals who do not have their high school diploma have earned a GED.

Participants are quite satisfied with the programs that they pursued. Almost 80 percent of the participants completed their programs. Over half of the participants assigned an "A" when asked to grade the overall quality of the program; less than one percent gave a failing grade. The overwhelmingly most-often mentioned program characteristic that was among the three best things about the program was instructors.

Over 80 percent of participants were participating in the labor force at the time of the survey; about three-quarters were employed and about 9 percent were unemployed. The individuals who were employed were earning, on average, about $9.00/hour. About three-quarters of nontraditional students were participating in the labor force; around 62 percent were employed and 11 percent were unemployed. Among the nontraditional students who were employed, the average hourly wage was $8.30.

Substantial benefits accrue to employers who hire program participants in the form of reduced training times for individuals who become employed in jobs related to their training. About 60 percent of employed participants (less than 50 percent of nontraditional students) reported that their employment is related to their training. Almost 80 percent of these individuals suggested that their training shortened the time it took to become fully trained in their jobs. Another substantial benefit of these programs that accrues to society as a whole is reduction in public assistance rolls. The General Study showed an 8 percentage point decline (approximately a 30 percent change) in receipt of public assistance.

Labor market outcomes for training participants might be judged as rather modest when compared to the population as a whole. However it is inappropriate to make this comparison because program participants are educationally and economically disadvantaged relative to the population as a whole. The net impact analysis conducted for this study compares participants' labor market outcomes to those for a group of individuals who are more comparable. The results of this comparison suggest that the ODOE-funded adult, job-specific training programs result in higher labor force participation for men and higher wages for women. These programs are encouraging the labor force participation of men who would otherwise not be in the labor force. An expected side effect of this result is that the wages of the employed men who participated in programs lag behind the wages of men who did not participate, but who are employed.[20] Women's labor force participation seems to be unaffected by training; however, the wages of employed women who participated in the

[20]The programs are "causing" more men to work than would otherwise do so in the absence of the training opportunities. The marginal work force entrants are likely to be earning entry-level wages and thus reducing the average wages of all participants.

training are higher than their comparison group counterparts. This occurs despite the fact that the women in the comparison group have more job experience.

In terms of the training delivery system, it appears as though a strength of the ODOE-funded programs are their excellent instructors. This was a message that came through "loud and clear" in the profile study and in the net impact survey. Furthermore, the profile study seemed to indicate that program overlap or duplication is not a problem. Where overlap may exist, there is sufficient labor market demand for multiple programs, there are differentials in program content, or there is programmatic choice that will benefit participants.

Most district supervisors of adult education felt that their institutions were flexible enough to close any gaps that may arise in terms of program needs. However, anecdotal evidence from employers and other knowledgeable individuals suggested that there may be programmatic gaps in the following areas:

- computer equipment repair
- health-related technician training
- basic skills remediation

Of course, the latter is not the direct responsibility of adult, job-specific vocational education programs.

6.3 *Recommendations*

The profile study interviews suggest that the most substantial problem facing the ODOE-funded programs is keeping up with technology and acquiring equipment. Program directors, outside agency administrators, and employers all recognized this problem. The present study was not designed to evaluate facilities. However, it seems to us that the solution to this problem comes from one of the following choices:

- Current funds are adequate and the problem lies in how those funds are expended. If this is the situation, then ODOE should provide technical assistance to local districts on how to more effectively invest in technology.

- Current funds are inadequate and there needs to be substantial funding increases at the state or local level. ODOE could document funding needs and benefits and work with the legislature to attempt to procure additional funding.

- Current funding is inadequate and no increases in funding are likely to occur. Hard decisions about allocating funds differently across programs or across districts would have to be made. Alternatively, it may be possible to share equipment or facilities across programs or districts. Or it may be possible to form alliances with employers and share employers' facilities.

Another important priority for ODOE-funded programs to address is to strengthen links with business and industry. Advisory committees seem to be strong in some program areas and in some institutions, but not effective in others. For example, one of the employers we encountered complained that advisory committee meetings were sometimes just "window-dressing." Employers want to be asked for advice and they want to be listened to. Training programs and participants would probably benefit more from more extensive employer involvement than would the employers. Therefore it should be up to ODOE and local training directors to work toward enhanced employer involvement. One way for the ODOE-funded system to interact more with employers may be to engage in workplace education activities. Hollenbeck and Anderson (1992) note that many employers are conducting education and training activities on site. ODOE could consider establishing regulations that would allow certificate programs to operate on-site and receive state subsidy.

Finally, ODOE should consider ways to improve placement support for training program participants. After all, most of the students are participating in the programs for employment-related reasons. An impact analysis finding of some concern is that the

percentage of training participants who report that their current job is related to their training is modest, at best. Another benefit to more proactive job development and follow-up with employers is that it promotes employer interaction.

The bottom line is that ODOE-funded adult, job-specific training programs are serving a unique population in a way that is accessible and of quality. This population is unlikely to be comfortable with other types of institutions. The labor market outcomes for participants are modest relative to the entire population, but are positive relative to an appropriate comparison group. Challenges for the system that, if met, will enhance the experiences of participants are keeping up with technology, improving linkages with employers, and placing more emphasis on the placement of participants.

Appendix A: Example Interview Forms for Profile Study

CANTON

Questions for High School Vocational Counselors

(Revised September 18, 1992)

NAME.....
SCHOOL.....
DATE.....

1. How long have you been a vocational counselor?

   a. How long with this school?

2. Approximately how many students from your school go on to a vocational training center/school immediately after high school?

   a. After completing high school?

   b. After dropping out of high school?

3. Of these, what proportion or what number of students go to each of the following:

   a. Canton City Schools Vocational Education?

   b. Kent State Univ Stark Campus?

   c. Stark Technical College

   d. Jackson Local SD

   e. ETI Technical College

4. Are there any other nearby institutions, not named, that receive a significant number of your students?

5. What sources of information do you use to learn about the offerings of postsecondary training institutions?

   a. Is this information usually accurate?

6. What information is most important to the participants in choosing one institution over another?

   a. cost,

   b. subjects taught,

   c. quality of instruction,

   d. location,

   e. ultimate career goals

7. Have you had the experience of counseling students interested in nontraditional job training? (i.e. female construction workers; male secretaries)

   a. If so, how often does this occur?

   b. Are there special barriers to these students finding the training they need?

   c. Do you have information available to help them?

8. Do you feel that the programs most desired by students are readily available?

   a. Or conversely, do the students tend to choose from those readily available rather than look elsewhere?

9. In general, do your students find more satisfactory job training in:

   a. Publicly funded vocational education programs in schools?

   b. Community Colleges?

   c. Proprietary vocational schools?

10. Do you perceive any gaps or lack of programs to fulfill the needs and desires of your students?

11. Are there any areas where you feel that subjects are overly covered or there is overlap or duplication by different vocational training institutions?

12. In your opinion, are the postsecondary job-skills training programs in your area doing the job you expect them to do?

13. If Canton City Schools Vocational Education / Kent State Univ Stark Campus / Stark Technical College / Jackson Local SD shut down, who would be hurt?

    a.What would students do?

14. What are the weaknesses and strengths of the system that is in place now in meeting the vocational training needs of your students?

15. Do you have any personal thoughts or suggestions for shoring up the weaknesses?

16. Can you suggest any other persons that might be able to give us good information on the subjects we have been asking about?

17. Can you suggest any employers that hire workers trained by the vocational training programs mentioned that might be able to share information with us?

18. Can you suggest any program participants that might be able to give us good information about their experience with these vocational training programs?

CANTON

Questions for JTPA/PIC SDA Director

(Revised September 18, 1992)

NAME.....
ORGAN.....
DATE.....

1. How long have you been working for the JTPA/PIC program?

   a. How long at this location?

2. Approximately how many participants does your program typically serve in a given year?

   a. Title II? ___

   b. Title III? ___

3. Do you offer classroom training to participants?

   a. What providers do you use?

      i. Canton City Schools Vocational Education

      ii. Kent State Univ Stark Campus

      iii. Stark Technical College

      iv. Jackson Local SD

      v. Other?

4. What criteria do you use in determining what institution for vocational training will be recommended/prescribed to a client?

   a. Job-placement experience?

   b. Training results?

   c. Client preference?

   d. Client ability and potential?

   e. Agreements or contracts with institutions?

5. Is there an adequate number of vocational educational programs available in this area to meet the needs of JTPA participants?

6. If a participant wants training in a subject that is not available locally, does he/she usually commute or move to another area where it is available or is he/she more likely to accept another subject that is available?

7. What weaknesses and strengths do you perceive in the vocational training system now in place in your area to serve your clients?

8. Do you feel there are overlaps or duplications in available vocational programs in your area?

   a. What are these, if any?

9. Are there any gaps or holes in available programs that need filling?

   a. What are these, if any?

10. In your opinion, are the postsecondary job-skills training programs doing the job you expect them to do?

11. Do you have any suggestions on what could be done to make the system work better from your perspective?

12. Do you feel that better qualified workers come from publicly funded education programs or from proprietary vocational schools?

13. What proportion of participants in your program are ultimately placed in local jobs.

14. Can you suggest any:

    a. trainers,

    b. participants, or

    c. employers

    that might be able/willing to give us more information on the availability and effectiveness of job-specific training programs in this area?

CANTON
Questions for Employers
(Revised October 12, 1992)

NAME.....
COMPANY.....
DATE.....

1. How long have you been with your present firm?

2. Are you familiar with the skill training programs of any of the following schools? Have you hired / would you hire students from these programs?

School	Familiar Y/N	Hire Y/N
Canton City Schools Vocational Education		
Kent State Univ Stark Campus		
Stark Technical College		
Jackson Local SD		
ETI Technical College		
R.G. Drage Career Education Center (JVS)		

3. Where do most of your workers receive their job-skill training?

4. If you have a need to train workers for a new job skill, would you be more likely to make use of:

   a. On-the-job training?

   b. A public school vocational education center?

   c. A community college?

   d. A private vocational school?

5. Have you ever worked with a vocational training institution to design a training program to meet your specific needs? If so, please describe.

6. When you hire workers, do you pay attention to credentials such as training certificates or associate degrees as evidence of training in a specific skill?

7. Is the present vocational training system adequate for meeting your needs for trained workers?

   a. Is training in the needed skills available locally?

8. What are the strengths and weaknesses in the present training system?

9. Are there any holes or gaps in the present system that need filling?

10. Are there any areas of duplication and overlap in the present job-skills training system?

11. What suggestions do you have for improvement in the present vocational training system?

12. In general, are newly hired workers better qualified for your needs if they come from publicly funded institutions such as:

    a. adult vocational training centers, or

    b. community colleges, or

    c. from profit-making proprietary schools?

13. What is your response to the same question applied to more experienced workers either coming from other jobs or with more tenure at your firm?

    a. Can you identify a source of job training as producing ultimately more satisfactory workers?

14. Can you suggest anyone else that might be able to give us more information about the effectiveness of the adult job-training system:

    a. workers,

    b.
    c. instructors,

    d. employers, etc.?

CANTON

Questions for Vocational Training Directors

(Revised September 18, 1992)

NAME.....
SCHOOL.....
DATE.....

1. How long have you been training director here?

2. What conditions led to the founding of this school or influenced the offering of job-skill training here?

3. Where do most of your training recipients come from?

   What proportion from:

   a. high schools,

   b. employer sponsored training,

   c. dislocated workers,

   d. adult job retraining programs,

   e. walk-ins?

4. Which programs that you offer have the most participation?

5. Are there any other institutions in the surrounding area offering similar programs?

   a. If so, what characteristics of your program motivate participants to come here rather than to the other institutions?

6. To what degree do your programs overlap or duplicate those offered by other nearby institutions?

a. What subjects overlap?

7. Are there any gaps in the availability of instructional program subjects in this area; i.e. subjects for which there is some demand?

a. What subjects are needed?

8. Where do interested students go to meet their interests?

a. Or do they simply choose other subjects?

9. Is your institution doing anything to fill those gaps?

a. What, and

b. if not, why?

10. Do you work closely with local employers in designing programs to meet the needs of local area businesses?

    a. Please describe how.

11. Do you get feedback from employers as to the effectiveness of your instructional programs in meeting the needs of business?

12. What are the leading motivators that cause participants to choose this school for training?

13. Do most of the participants live nearby, or do they commute?

    a. How far do they commute?

    b. Do some live here temporarily while being trained?

    c. What proportion?

14. What are the major strengths and weaknesses in the vocational training system in this area?

15. What do you think are the most needed changes in the present vocational training system?

16. If you were given double your current resources, how would

you spend the extra money?

17. If you were forced to close this institution, who would be hurt the most?

18. Can you suggest any other persons who would be good sources of information on vocational training availability and effectiveness?

    a. Employers,

    b. other institutions,

    c. participants, etc.?

CANTON

Questions for Vocational Training Instructors

(Revised September 18, 1992)

NAME.....
SCHOOL.....
DATE.....

1. How long have you been a vocational education instructor?

   a. How long at this school?

2. How many different students do you typically teach in a year?

3. What job skills do you teach?

4. What do you feel are the objectives of the program that you are involved in?

   a. Are these objectives being met?

5. How does this program fit in with other similar programs locally and over a broad (state-wide) area?

6. Are there other institutions nearby that offer training similar to what you teach here?

   a. How far away are they?

   b. Are they publicly funded or private?

   c. Do they attract a different type of clientele than this school does?

7. What are the leading motivators that cause participants to choose this school for training?

8. What proportion of participants are:

   a. in high school

   b. high school dropouts

   c. some job experience

   d. sent by employers

   e. dislocated workers

   f. adults retraining for a different job

   g. adults electing to change careers?

9. Are jobs readily available for participants when they complete the training program?

   a. Locally, or must they relocate?

10. Do most of the participants live nearby, or do they commute?

   a. How far do they commute?

   b. Do some live here temporarily while being trained?

   c. What proportion?

11. What are the major strengths of the program?

   a. What are the major weaknesses?

12. What suggestions can you make to improve the effectiveness of job-skill training at this institution?

    a. Throughout the state?

    b. The country?

13. Are there any notable needs for job-skill training that are not being met?

    a. What are they?

14. Can you suggest any other persons who would be good sources of information on vocational training availability and effectiveness?

    a. Employers,

    b. other institutions,

    c. participants, etc.?

CANTON

Questions for Vocational Training Participants

(Revised September 18, 1992)

NAME.....
SCHOOL.....
DATE.....

1. How long have you been a student at this school?

2. What is your prior educational background?

3. What sources of information did you have that described the offerings of this and other job-skills training institutions?

   a. Was this information accurate?

4. What kind of training are you receiving?

5. When training is complete, what kind of a job would you like to have, or where do you want to work?

6. Are you satisfied with the training you are receiving at this school?

   a. The courses offered?

   b. The instructors?

   c. The teaching methods used?

7. Have you taken job-skill training at any other schools?

   a. If so, what schools,

   b. and for what type of job?

8. How would you say this school compares with other job-training schools that you know about?

9. What factors made you decide to participate in training here at this school?

   Probe:
   a. Cost?
   b. Location?
   c. Recommended by:
      i. teacher,
      ii. counselor,
      iii. friend,
      iv. employer,
      v. school advertisement?

10. What do you think are the major strengths in the training program you are participating in?

    a. What do you think are the major weaknesses?

11. Are there any gaps or holes in the training program you are participating in or others at this school?

    a. Any areas that are not getting needed attention?

12. Are there other schools nearby that offer the same kind of training that you are receiving here?

    a. If so, how far away are they?

    b. Why did you choose this school instead of the others?

13. Are there job-skills you would prefer to learn instead of your present program, but the training is not available to you?

14. What barriers do you see that prevent you from getting the training and the kind of job you would really like to have?

Appendix B: Survey Questionnaires

OHIO VOCATIONAL EDUCATION STUDY

|___.___.___.___.___|-|0| |___.___|
RID I'er ID

1 - Call-out 2 - Call-in Start Time:_____ End Time: _____ = |___.___| Length

|___.___| QC |___.___| SuperQC 3 = Version

My first few questions deal with your high school experience.

1. What was the last month and year you attended high school?

|___.___|-|___.___| 98 = Did not attend HS 99 = DK / NA
mo yr

IF 98 SKIP TO Q7

2. Was that a public, private or religious school?

1 - Public 2 - Private 3 - Religious 9 - DK/NA

3. Would you say your high school grades were closest to A's, B's, C's, D's or lower than D's?

1	- A's	4	- B's & C's	7	- D's
2	- A's & B's	5	- C's	8	- lower than D's
3	- B's	6	- C's & D's	9	- DK/NA

4. What course of study did you follow in high school -- general curriculum, college prep, or vocational?

1	- General curriculum	3	- Vocational
2	- College prep	9	- DK/NA

IF VOCATIONAL

5. In what area was your vocational study? _____

6. Did you graduate?

1 - Yes 2 - No 9 - DK/NA

IF NO

7. Have you received your GED since leaving high school? **[IF YES]** Do you recall the month and year you got your GED?

1 - Yes |___.___| |___.___| 2 - No 9 - DK/NA
mo yr

8. Next, I'd like to ask you a few questions about any schooling you may have received since you left school. How many different schools have you attended since you left high school?

|__.__|

IF 2 OR MORE

Let's begin with the first school's training program you attended after high school.

9. What was the name of that school?_____

IF 1 SCHOOL AND NAME DOESN'T MATCH - PROBE CR

10. What type of school was it?

1 - Joint vocational / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11. What was the month and year you began attending |NAME OF SCHOOL Q9|?

|__.__| mo |__.__| yr 99 = DK/NA

12. Do you recall the month and year you last attended or completed this school?

|__.__| mo |__.__| yr 99 = DK/NA 00 =Still attending

13. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

19. What are the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

ASK ONLY OF CR PROGRAM?

20. If you were to grade the overall quality of that program, what letter grade would you give it?

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	Fail	DK/NA
01	02	03	04	05	06	07	08	09	10	11	12	13	99

21. What would you say were the best things about the program?

1 _____

2 _____

3 _____

22. And what would you say were the worst things?

1 _____

2 _____

3 _____

[IF ONLY ONE SCHOOL --> SKIP TO BLUE]

9/2. What was the name of the school or training program you attended next?

_____

10/2. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/2. What month and year did you begin attending |NAME OF SCHOOL Q9/2|?

|__.__| |__.__| 99 = DK/NA
mo yr

12/2. Do you recall the month and year you last attended or completed this school?

|__.__| |__.__| 99 = DK/NA 00 = Still attending
mo yr

13/2. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/2. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK / NA

15/2. What program or major course of study were you pursuing when you left or completed your work at this school?

_____

16/2. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/2. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/2. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

19/2. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

ASK ONLY OF CR PROGRAM

20/2. If you were to grade the overall quality of that program, what letter grade would you give it?

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	Fail	DK/NA
01	02	03	04	05	06	07	08	09	10	11	12	13	99

21/2. What would you say were the best things about the program?

1 _____

2 _____

3 _____

22/2. And what would you say were the worst things?

1 _____

2 _____

3 _____

USE ADD-ON SHEET IF NECESSARY - - CR PROGRAM PROBE

IF DONE, SKIP TO BLUE

SCHOOL SUPPLEMENT

|___.___.___.___.___|
RID

School: 3 4 5

9/s. What was the name of the school or training program you attended next?

_____

10/s. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/s. What month and year did you begin attending |NAME OF SCHOOL Q9/S|?

|___.___| |___.___| 99 = DK/NA
mo yr

12/s. Do you recall the month and year you last attended or completed this school?

|___.___| |___.___| 99 = DK/NA 00 = Still attending
mo yr

13/s. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/s. How many months did you actually attend classes at this school?

|___.___| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15/s. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16/s. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/s. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/s. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

19/s. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

ASK ONLY OF CR PROGRAM

20/s. If you were to grade the overall quality of that program, what letter grade would you give it?

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	Fail	DK/NA
01	02	03	04	05	06	07	08	09	10	11	12	13	99

21/s. What would you say were the best things about the program?

1 _____

2 _____

3 _____

22/s. And what would you say were the worst things?

1 _____

2 _____

3 _____

USE ADD-ON SHEET IF NECESSARY - - CR PROGRAM PROBE

IF MORE THAN 5, 5TH MUST BE CR SCHOOL

IF DONE OR AT 5, SKIP TO BLUE

SCHOOL SUPPLEMENT

|__.__.__.__.__|
RID

School: 3 4 5

9/s. What was the name of the school or training program you attended next?

_____

10/s. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/s. What month and year did you begin attending |NAME OF SCHOOL Q9/S|?

|__.__| mo |__.__| yr 99 = DK/NA

12/s. Do you recall the month and year you last attended or completed this school?

|__.__| mo |__.__| yr 99 = DK/NA 00 = Still attending

13/s. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/s. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15/s. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16/s. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/s. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/s. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

19/s. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

ASK ONLY OF CR PROGRAM

20/s. If you were to grade the overall quality of that program, what letter grade would you give it?

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	Fail	DK/NA
01	02	03	04	05	06	07	08	09	10	11	12	13	99

21/s. What would you say were the best things about the program?

1 _____

2 _____

3 _____

22/s. And what would you say were the worst things?

1 _____

2 _____

3 _____

USE ADD-ON SHEET IF NECESSARY - - CR PROGRAM PROBE

IF MORE THAN 5, 5TH MUST BE CR SCHOOL

IF DONE OR AT 5, SKIP TO BLUE

SCHOOL SUPPLEMENT

|__.__.__.__.__|
RID

School: 3 4 5

9/s. What was the name of the school or training program you attended next?

_____

10/s. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/s. What month and year did you begin attending |**NAME OF SCHOOL Q9/S**|?

|__.__| |__.__| 99 = DK/NA
mo yr

12/s. Do you recall the month and year you last attended or completed this school?

|__.__| |__.__| 99 = DK/NA 00 = Still attending
mo yr

13/s. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/s. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15/s. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16/s. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/s. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/s. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

19/s. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

ASK ONLY OF CR PROGRAM

20/s. If you were to grade the overall quality of that program, what letter grade would you give it?

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	Fail	DK/NA
01	02	03	04	05	06	07	08	09	10	11	12	13	99

21/s. What would you say were the best things about the program?

1 _____

2 _____

3 _____

22/s. And what would you say were the worst things?

1 _____

2 _____

3 _____

USE ADD-ON SHEET IF NECESSARY - - CR PROGRAM PROBE

IF MORE THAN 5, 5TH MUST BE CR SCHOOL

IF DONE OR AT 5, SKIP TO BLUE

23. Next I'd like to ask you a few questions about employment. How many different employers have you had since you left the |CR TRAINING PROGRAM|?

|___.___| # of employers

IF NONE

24. In the last month have you been actively looking for work?

1 - Yes 2 - No

IF NO

25. What is the main reason you are not currently looking for work?

1 - Did not look, didn't think I could find a job
2 - Taking care of children / family
3 - Waiting for school or job to start
4 - Laid off - awaiting recall
5 - Transportation problems
6 - Health problems
7 - Going to school
8 - Other _____
9 - DK/NA

26. Are you receiving unemployment benefits?

1 - Yes 2 - No 9 - DK/NA

IF YES

27. What is the amount of your weekly unemployment benefit?

$|___|___|___|___| / Weekly

SKIP TO WHITE

IF ONE OR MORE

28. Are you currently employed?

1 - Yes --> **BLUE**
2 - No --> **GREEN SUPPLEMENT**
9 - DK/NA --> **WHITE**

29. What is the name of your current employer? |___| Self-employed

_____

[company name]

30. What is the month and year you started working for this company?

|__.__| |__.__|
mo yr 99 = DK/NA

ADD TO CR WORK GRID

31. What type of business is this company involved in? |__|__| _____

32. What is your job title? |__|__|__| _____

33. What types of duties do you have? _____

_____

34. Is this employment related to the training you received through the |CR PROGRAM|?

1 - Yes 2 - No 9 - DK/NA

IF YES

35. Are you using the skills and knowledge you obtained in your training a great deal, some, a little or not at all?

1 - A great deal 2 - Some 3 - Little 4 - Not at all 9 - DK/NA

36. Do you think it did or did not shorten the amount of time it took you to be fully trained on the job?

1 - Did 2 - Did not 3 - No effect 9 - DK/NA

IF DID SHORTEN

37. Did it shorten the time a great deal, some or a little?

1 - A great deal 2 - Some 3 - Little 9 - DK/NA

38. How many hours per week do you usually work?

|__.__| hours 99 = DK / NA

39. How many hours did you work last week?

|___|___| hours 99 = DK / NA

40. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

41. And what is your current hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

42. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

43. Do you recall the month and year of the time periods you were not working?

44. What was the main reason you were not working?

45. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF ONLY EMPLOYER, SKIP TO PINK

IF OTHERS, SKIP TO YELLOW

29/2. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

30/2. Do you recall the month and year you started with this company?

|___.___| |___.___| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

30a/2. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

30b/2. When did you leave? |___.___| |___.___|
mo yr

31/2. What type of business *(was/is)* it? |___|___| _____

32/2. What *(was/is)* your job title? |___|___|___| _____

33/2. What types of duties *(did/do)* you have? _____

_____

34/2. Was this employment related to the training you received through the |**CR PROGRAM**|?

1 - Yes 2 - No 9 - DK/NA

IF YES

35/2. *(Are / Were)* you using the skills and knowledge you obtained in your training a great deal, some, a little or not at all?

1 - A great deal 2 - Some 3 - Little 4 - Not at all 9 - DK / NA

36/2. Do you think it did or did not shorten the amount of time it took you to be fully trained on the job?

1 - Did 2 - Did not 3 - No effect 9 - DK/NA

IF DID SHORTEN

37/2. Did it shorten the time a great deal, some or a little?

1 - A great deal 2 - Some 3 - Little 9 - DK/NA

38/2. How many hours per week *(did / do)* you usually work?

|___|___| hours 99 = DK / NA

39/2. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|___| hours 99 = DK / NA

40/2. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

41/2. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

42/2. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

43/2. Do you recall the month and year of the time periods you were not working?

44/2. What was the main reason you were not working?

45/2. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE, SKIP TO PINK

IF OTHERS, CONTINUE YELLOW

29/3. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

30/3. Do you recall the month and year you started with this company?

|___.___| |___.___| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

30a/3. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

30b/3. When did you leave? |___.___| |___.___|
mo yr

31/3. What type of business *(was/is)* it? |___|___| _____

32/3. What *(was/is)* your job title? |___|___|___| _____

33/3. What types of duties *(did/do)* you have? _____

_____

34/3. Was this employment related to the training you received through the |**CR PROGRAM**|?

1 - Yes 2 - No 9 - DK/NA

IF YES

35/3. *(Are / Were)* you using the skills and knowledge you obtained in your training a great deal, some, a little or not at all?

1 - A great deal 2 - Some 3 - Little 4 - Not at all 9 - DK / NA

36/3. Do you think it did or did not shorten the amount of time it took you to be fully trained on the job?

1 - Did 2 - Did not 3 - No effect 9 - DK/NA

IF DID SHORTEN

37/3. Did it shorten the time a great deal, some or a little?

1 - A great deal 2 - Some 3 - Little 9 - DK/NA

38/3. How many hours per week *(did / do)* you usually work?

|___|___| hours 99 = DK / NA

39/3. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|___| hours 99 = DK / NA

40/3. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

41/3. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

42/3. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

43/3. Do you recall the month and year of the time periods you were not working?

44/3. What was the main reason you were not working?

45/3. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE, SKIP TO PINK

IF OTHERS, CONTINUE YELLOW

EMPLOYER SUPPLEMENT

|__.__.__.__.__.__|
RID

Employer: 4 5

29/s. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

30/s. Do you recall the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

30a/s. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

30b/s. When did you leave? |__.__| |__.__|
mo yr

31/s. What type of business *(was/is)* it? |___|___|_____

32/s. What *(was/is)* your job title? |___|___|___|_____

33/s. What types of duties *(did/do)* you have? _____

_____

34/s. Was this employment related to the training you received through the |**CR PROGRAM**|?

1 - Yes 2 - No 9 - DK/NA

IF YES

35/s. *(Are / Were)* you using the skills and knowledge you obtained in your training a great deal, some, a little or not at all?

1 - A great deal 2 - Some 3 - Little 4 - Not at all 9 - DK / NA

36/s. Do you think it did or did not shorten the amount of time it took you to be fully trained on the job?

1 - Did 2 - Did not 3 - No effect 9 - DK/NA

IF DID SHORTEN

37/s. Did it shorten the time a great deal, some or a little?

1 - A great deal 2 - Some 3 - Little 9 - DK/NA

38/s. How many hours per week *(did / do)* you <u>usually</u> work?

|___|___| hours 99 = DK / NA

39/s. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|___| hours 99 = DK / NA

40/s. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

41/s. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

42/s. While you were employed by this company, were there any periods of time lasting one month or longer that you were <u>not</u> working?

1 - Yes 2 - No 9 - DK/NA

IF YES

43/s. Do you recall the month and year of the time periods you were not working?

44/s. What was the <u>main</u> reason you were not working?

45/s. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	<u>From (mo/yr)</u>	<u>To (mo/yr)</u>	<u>Reason</u>	<u>UI Benefit</u>
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE OR AT 5, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

EMPLOYER SUPPLEMENT

|__.__.__.__.__.__|
RID

Employer: 4 5

29/s. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

30/s. Do you recall the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

30a/s. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

30b/s. When did you leave? |__.__| |__.__|
mo yr

31/s. What type of business *(was/is)* it? |___|___|_____

32/s. What *(was/is)* your job title? |___|___|___|_____

33/s. What types of duties *(did/do)* you have? _____

_____

34/s. Was this employment related to the training you received through the |**CR PROGRAM**|?

1 - Yes 2 - No 9 - DK/NA

IF YES

35/s. *(Are / Were)* you using the skills and knowledge you obtained in your training a great deal, some, a little or not at all?

1 - A great deal 2 - Some 3 - Little 4 - Not at all 9 - DK / NA

36/s. Do you think it did or did not shorten the amount of time it took you to be fully trained on the job?

1 - Did 2 - Did not 3 - No effect 9 - DK/NA

IF DID SHORTEN

37/s. Did it shorten the time a great deal, some or a little?

1 - A great deal 2 - Some 3 - Little 9 - DK/NA

38/s. How many hours per week *(did / do)* you usually work?

|___|___| hours 99 = DK / NA

39/s. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|___| hours 99 = DK / NA

40/s. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

41/s. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

42/s. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

43/s. Do you recall the month and year of the time periods you were not working?

44/s. What was the main reason you were not working?

45/s. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE OR AT 5, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

MOST RECENT EMPLOYER

Only used if not currently working, See blue page 6

|__:__:__:__:__|
RID

24/M. In the last month have you been actively looking for work?

1 - Yes 2 - No

IF NO

25/M. What is the main reason you are not currently looking for work?

1 - Did not look, didn't think I could find a job
2 - Taking care of children / family
3 - Waiting for school or job to start
4 - Laid off - awaiting recall
5 - Transportation problems
6 - Health problems
7 - Going to school
8 - Other _____
9 - DK/NA

26/M. Are you receiving unemployment benefits?

1 - Yes 2 - No 9 - DK/NA

IF YES

27/M. What is the amount of your weekly unemployment benefit?

$|__|__|__|__| / Weekly

29/M. What is the name of your most recent employer? |__| Self-employed

_____

[company name]

30/Ma. What is the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

30/Mb. And when did you leave the company?

|__.__| |__.__|
mo yr

31/M. What type of business is this company involved in? |__|__|_____

32/M. What was your job title? |__|__|__|_____

33/M. What types of duties did you have? _____

_____

34/M. Was this employment related to the training you received through the |CR PROGRAM|?

1. - Yes 2. - No 9. - DK/NA

IF YES

35/M. Did you use the skills and knowledge you obtained in your training a great deal, some, little or not at all?

1 - A great deal 2 - Some 3 - Little 4 - Not at all 9 - DK / NA

36/M. Do you think it did or did not shorten the amount of time it took you to be fully trained on the job?

1 - Did 2 - Did not 3 - No effect 9 - DK / NA

IF DID SHORTEN

37/M. Did it shorten the time a great deal, some or a little?

1 - A great deal 2 - Some 3 - Little

38/M. How many hours per week did you usually work?

|__|__| hours 99 = DK / NA

39/M. When you started working at this company, what was your hourly rate of pay?

$|__|__|.|__|__| per hour 99 = DK / NA

Not paid per hour $ |__|__|__|__|.|__|__| per _____

40/M. And what was your ending rate of pay?

$|__|__.__|__| per hour 99 = DK / NA

Not paid per hour $ |__|__|__|__|.|__|__| per _____

41/M. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1. - Yes 2 - No 9 - DK/NA

IF YES

43/M. Do you recall the month and year of the time periods you were not working?

44/M. What was the main reason you were not working?

45/M. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:

1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

CHECK GRID FOR GAPS
IF NO GAPS, DO WHITE

REPEAT AS NECESSARY

46. Between |DATES|, you were not working. Were you looking for work, or doing something else at that time? |IF ELSE| What was that?

47. Did you receive any unemployment benefits? |IF YES| What was your weekly benefit?

	Reason	UI Benefit
a)	_____	$ _____
b)	_____	$ _____
c)	_____	$ _____
d)	_____	$ _____
e)	_____	$ _____

Reason:
1 - Looking for work
2 - Waiting for school or job to start
3 - Family responsibility
4 - Did not look because did not think could find job
5 - Layoff, waiting for recall
6 - Transportation problems
7 - Health problems
8 - Other _____
9 - DK / NA

Next, I'd like to ask a few questions about your family at the time you were in high school.

48. Did you have any brothers or sisters living with you at the time you were in high school? This would include step-brothers and step-sisters.

1 - Yes 2 - No 9 - DK/NA

How many brothers? |___.___|

00 = NONE

How many sisters? |___.___|

49. When you were in high school, were your parents married, widowed, divorced, separated or were they never married?

1 - Married
2 - Divorced / separated
3 - Never married
4 - Widowed
5 - Both deceased
9 - DK/NA

50. Do you recall the highest grade or year in school or college that your mother completed?

1 - Grade school (0-8)
2 - Some high school (9-11)
3 - High school graduate or GED (12 or GED)
4 - Some college or tech school (13-15)
5 - College graduate (16)
6 - Post-grad study/degree (17+)
9 - DK/NA

51. And your father, what was the highest grade or year in school or college that he completed?

1 - Grade school (0-8)
2 - Some high school (9-11)
3 - High school graduate or GED (12 or GED)
4 - Some college or tech school (13-15)
5 - College graduate (16)
6 - Post-grad study/degree (17+)
9 - DK/NA

52. When you were in high school would you guess that your family income would have been? **[READ 1 - 6]**?

1 - Less than $5,000
2 - $5,000 - $10,000
3 - $10,000 - $15,000
4 - $15,000 - $25,000
5 - $25,000 - $40,000
6 - over $40,000
9 - DK/NA

Finally, I'd like to ask a couple of questions about the present.

53. Are you now married, widowed, divorced or separated, or have you never been married?

1 - Married
2 - Divorced / Separated
3 - Never married
4 - Widowed
9 - DK/NA

54. Are there any children under the age of 18 currently living in your home? **[IF YES]** Could you tell me how many there are?

|___.___| children 99 = DK / NA 00 = NONE

55. What was your age on your last birthday? |___.___| 99 = DK/NA

56. Is your race or ethnic background White, Black, Hispanic, Asian or some other?

1 - White
2 - Black
3 - Hispanic
4 - Asian
5 - Other _____
9 - DK/NA

57. Which of the following categories includes your total family income over the last 12 months? -- **[READ 1 - 6]**

1 - Less than $5,000
2 - $5,000 - $10,000
3 - $10,000 - $15,000
4 - $15,000 - $25,000
5 - $25,000 - $40,000
6 - over $40,000
9 - DK/NA

My last few questions deal with financial support or assistance you personally may have received.

58. At any time prior to leaving or completing your course work, did you receive any public assistance from these programs:

ADC	1 - Yes	2 - No	9 - DK/NA
GR/GA	1 - Yes	2 - No	9 - DK/NA
SSI	1 - Yes	2 - No	9 - DK/NA
Food Stamps	1 - Yes	2 - No	9 - DK/NA
Medicaid	1 - Yes	2 - No	9 - DK/NA
Housing Assistance	1 - Yes	2 - No	9 - DK/NA

59. And since you left or completed your program have you received any public assistance from:

ADC	1 - Yes	2 - No	9 - DK/NA
GR/GA	1 - Yes	2 - No	9 - DK/NA
SSI	1 - Yes	2 - No	9 - DK/NA
Food Stamps	1 - Yes	2 - No	9 - DK/NA
Medicaid	1 - Yes	2 - No	9 - DK/NA
Housing Assistance	1 - Yes	2 - No	9 - DK/NA

Finally, as we mentioned in our letter, we would like you to recommend some other people for us to talk to. These would be people who did not attend a vocational school with you. They might be classmates from high school, a relative, friend or co-worker. They must be of the same sex as you and have similar interests and grades. Do you know of anyone?

[IF YES] Could you tell me how to get in touch with them?

USE RECOMMENDATION SHEET

[IF NO]

I want to thank you very much for your cooperation and taking the time to share this information with me.

|__.__|-|__.__|-|__.__|
mo da yr

_____
Interviewer Signature

|_____| Number of Recommendations Provided

COMPARISON STUDY

|___.___.___.___.___| - |___| |___.___|
RID I'er ID

1 - Call-out 2 - Call-in Start Time:_____ End Time: _____ = |___.___| Length

|___.___| QC |___.___| SuperQC 3 = Version

My first few questions deal with your high school experience.

1. What was the last month and year you attended high school?

|___.___|-|___.___| 98 = Did not attend HS 99 = DK / NA
mo yr

IF 98 SKIP TO Q7

2. Was that a public, private or religious school?

1 - Public 2 - Private 3 - Religious 9 - DK/NA

3. Would you say your high school grades were closest to A's, B's, C's, D's or lower than D's?

1 - A's 4 - B's & C's 7 - D's
2 - A's & B's 5 - C's 8 - lower than D's
3 - B's 6 - C's & D's 9 - DK/NA

4. What course of study did you follow in high school -- general curriculum, college prep, or vocational?

1 - General curriculum 3 - Vocational
2 - College prep 9 - DK/NA

IF VOCATIONAL

5. In what area was your vocational study? _____

6. Did you graduate?

1 - Yes 2 - No 9 - DK/NA

IF NO

7. Have you received your GED since leaving high school? **[IF YES]** Do you recall the month and year you got your GED?

1 - Yes |___.___| |___.___| 2 - No 9 - DK/NA
mo yr

8. Next, I'd like to ask you a few questions about any schooling you may have received since you left school. How many different schools have you attended since you left high school?

|__.__| **IF ZERO SKIP TO BLUE**

IF 2 OR MORE

Let's begin with the first school's training program you attended after high school.

9. What was the name of that school?_____

10. What type of school was it?

1 - Joint vocational / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11. What was the month and year you began attending |**NAME OF SCHOOL Q9**|?

|__.__| |__.__| 99 = DK/NA
mo yr

12. Do you recall the month and year you last attended or completed this school?

|__.__| |__.__| 99 = DK/NA 00 =Still attending
mo yr

13. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

_____

19. What are the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

_____

[IF ONLY ONE SCHOOL --> SKIP TO BLUE]

9/2. What was the name of the school or training program you attended next?

_____

10/2. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/2. What month and year did you begin attending |**NAME OF SCHOOL Q9/2**|?

|__.__| mo |__.__| yr 99 = DK/NA

12/2. Do you recall the month and year you last attended or completed this school?

|__.__| mo |__.__| yr 99 = DK/NA 00 = Still attending

13/2. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/2. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK / NA

15/2. What program or major course of study were you pursuing when you left or completed your work at this school?

_____

16/2. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/2. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/2. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

_____

19/2. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

_____

USE ADD-ON SHEET IF NECESSARY

IF DONE, SKIP TO BLUE

SCHOOL SUPPLEMENT

|__.__.__.__.__| - |__|
RID

School: 3 4 5

9/s. What was the name of the school or training program you attended next?

_____

10/s. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/s. What month and year did you begin attending |NAME OF SCHOOL Q9/S|?

|__.__| |__.__| 99 = DK/NA
mo yr

12/s. Do you recall the month and year you last attended or completed this school?

|__.__| |__.__| 99 = DK/NA 00 = Still attending
mo yr

13/s. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/s. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15/s. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16/s. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/s. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/s. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

_____

19/s. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

_____

USE ADD-ON SHEET IF NECESSARY

IF DONE OR AT 5, SKIP TO ORANGE

SCHOOL SUPPLEMENT

|__.__.__.__.__| - |__|
RID

School: 3 4 5

9/s. What was the name of the school or training program you attended next?

_____

10/s. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/s. What month and year did you begin attending |NAME OF SCHOOL Q9/S|?

|__.__| |__.__| 99 = DK/NA
mo yr

12/s. Do you recall the month and year you last attended or completed this school?

|__.__| |__.__| 99 = DK/NA 00 = Still attending
mo yr

13/s. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/s. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15/s. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16/s. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/s. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/s. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

_____

19/s. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

_____

USE ADD-ON SHEET IF NECESSARY

IF DONE OR AT 5, SKIP TO ORANGE

SCHOOL SUPPLEMENT

|__.__.__.__.__| - |__|
RID

School: 3 4 5

9/s. What was the name of the school or training program you attended next?

_____

10/s. What type of school was it?

1 - Joint vocational school / high school
2 - Proprietary/Private Specialized school
3 - Community college / two year college
4 - 4 year college or university
5 - Other _____
9 - DK/NA

11/s. What month and year did you begin attending |NAME OF SCHOOL Q9/S|?

|__.__| |__.__|
mo yr

99 = DK/NA

12/s. Do you recall the month and year you last attended or completed this school?

|__.__| |__.__|
mo yr

99 = DK/NA 00 = Still attending

13/s. Were you considered a full or part-time student?

1 - Full-time 2 - Part-time 9 - DK/NA

14/s. How many months did you actually attend classes at this school?

|__.__| months ------> **VERIFY CONTINUOUS ATTENDANCE**

99 = DK/NA

15/s. What program or last course of study were you pursuing when you left or completed your work at this school?

_____

16/s. Did you complete your course of study and receive a degree or certificate of completion?

1 - Yes 2 - No 9 - DK/NA

IF YES

17/s. What type of certificate or degree did you receive?

1 - Vocational certificate
2 - Assoc. Degree
3 - Bachelor's Degree
4 - Master's Degree
5 - Other _____
9 - DK/NA

18/s. What are the main reasons you selected this program or major course of study?

1 _____

2 _____

3 _____

_____

19/s. What were the most important reasons you chose to attend this particular school?

1 _____

2 _____

3 _____

_____

USE ADD-ON SHEET IF NECESSARY

IF DONE OR AT 5, SKIP TO ORANGE

20. Are you familiar with training opportunities that are offered to adults at the local high school or vocational school in your area?

1 - Yes 2 - No 9 - DK/NA

21. Have you ever considered taking any of these classes?

1 - Yes 2 - No 9 - DK/NA

IF YES

22. What type of class or program were you most interested in?

_____

23. Did you ever enroll in this class?

1 - Yes 2 - No 9 - DK/NA

IF NO

24. What were the main reasons you did not take this class?

1. _____

2. _____

3. _____

25. Next I'd like to ask you a few questions about employment. How many different employers have you had since January 1990?

|___.___| # of employers

IF NONE

26. In the last month have you been actively looking for work?

1 - Yes 2 - No

IF NO

27. What is the main reason you are not currently looking for work?

1 - Did not look, didn't think I could find a job
2 - Taking care of children / family
3 - Waiting for school or job to start
4 - Laid off - awaiting recall
5 - Transportation problems
6 - Health problems
7 - Going to school
8 - Other _____
9 - DK/NA

28. Are you receiving unemployment benefits?

1 - Yes 2 - No 9 - DK/NA

IF YES

29. What is the amount of your weekly unemployment benefit?

$|___|___|___|___| / Weekly

SKIP TO WHITE

IF ONE OR MORE

30. Are you currently employed?

1 - Yes --> **BLUE**
2 - No --> **GREEN SUPPLEMENT**
9 - DK/NA --> **WHITE**

31. What is the name of your current employer? |___| Self-employed

_____

[company name]

32. What is the month and year you started working for this company?

|__.__| |__.__|
mo yr 99 = DK/NA

ADD TO CR WORK GRID

33. What type of business is this company involved in? |___|___| _____

34. What is your job title? |___|___|___| _____

35. What types of duties do you have? _____

_____

36. How many hours per week do you usually work?

|__.__| hours 99 = DK / NA

37. How many hours did you work last week?

|___|___| hours 99 = DK / NA

38. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

39. And what is your current hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

40. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

41. Do you recall the month and year of the time periods you were not working?

42. What was the main reason you were not working?

43. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:

1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF ONLY EMPLOYER, SKIP TO PINK

IF OTHERS, SKIP TO YELLOW

31/2. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

32a/2. Do you recall the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

32b/2. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

32c/2. When did you leave? |__.__| |__.__|
mo yr

33/2. What type of business *(was/is)* it? |___|___| _____

34/2. What *(was/is)* your job title? |___|___|___| _____

35/2. What types of duties *(did/do)* you have? _____

_____

36/2. How many hours per week *(did / do)* you usually work?

|___|___| hours 99 = DK / NA

37/2. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|_ |___|___| hours 99 = DK / NA

38/2. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

39/2. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

40/2. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

41/2. Do you recall the month and year of the time periods you were not working?

42/2. What was the main reason you were not working?

43/2. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

31/3. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

32a/3. Do you recall the month and year you started with this company?

|___.___| |___.___| 99 = DK/NA

mo yr

ADD TO CR WORK GRID

32b/3. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

32c/3. When did you leave? |___.___| |___.___|

mo yr

33/3. What type of business *(was/is)* it? |___|___| _____

34/3. What *(was/is)* your job title? |___|___|___| _____

35/3. What types of duties *(did/do)* you have? _____

_____

36/3. How many hours per week *(did / do)* you usually work?

|___|___| hours 99 = DK / NA

37/3. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|___| hours 99 = DK / NA

38/3. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

39/3. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

40/3. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

41/3. Do you recall the month and year of the time periods you were not working?

42/3. What was the main reason you were not working?

43/3. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE, SKIP TO PINK

IF OTHERS, CONTINUE YELLOW

EMPLOYER SUPPLEMENT

|__.__.__.__.__.__| - |__|
RID

Employer: 4 5

31/s. What was the name of the company you worked for before that? |___| Self-employed

_____

[company name]

32/s. Do you recall the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

32b/s. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

32c/s. When did you leave? |__.__| |__.__|
mo yr

33/s. What type of business *(was/is)* it? |___|___|_____

34/s. What *(was/is)* your job title? |___|___|___|_____

35/s. What types of duties *(did/do)* you have? _____

_____

36/s. How many hours per week *(did / do)* you usually work?

|___|___| hours 99 = DK / NA

37/s. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|___|___| hours 99 = DK / NA

38/s. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

39/s. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

40/s. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

41/s. Do you recall the month and year of the time periods you were not working?

42/s. What was the main reason you were not working?

43/s. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE OR AT 5, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

EMPLOYER SUPPLEMENT

|__.__.__.__.__| - |__|
RID

Employer: 4 5

31/s. What was the name of the company you worked for before that? |__| Self-employed

_____

[company name]

32/s. Do you recall the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

32b/s. Are you still working for this company?

1 - Yes 2 - No 9 - DK/NA

IF NO

32c/s. When did you leave? |__.__| |__.__|
mo yr

33/s. What type of business *(was/is)* it? |__|__|_____

34/s. What *(was/is)* your job title? |__|__|__|_____

35/s. What types of duties *(did/do)* you have? _____

_____

36/s. How many hours per week *(did / do)* you usually work?

|__|__| hours 99 = DK / NA

37/s. **(IF CURRENTLY EMPLOYED)** How many hours did you work last week?

|__|__| hours 99 = DK / NA

38/s. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

39/s. And what *(was/is)* your *(ending / current)* rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

40/s. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1 - Yes 2 - No 9 - DK/NA

IF YES

41/s. Do you recall the month and year of the time periods you were not working?

42/s. What was the main reason you were not working?

43/s. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:

1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE OR AT 5, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

MOST RECENT EMPLOYER |__.__.__.__.__| - |__|
RID

26/M. In the last month have you been actively looking for work?

1 - Yes 2 - No

IF NO

27/M. What is the main reason you are not currently looking for work?

1 - Did not look, didn't think I could find a job
2 - Taking care of children / family
3 - Waiting for school or job to start
4 - Laid off - awaiting recall
5 - Transportation problems
6 - Health problems
7 - Going to school
8 - Other _____
9 DK/NA

28/M. Are you receiving unemployment benefits?

1 - Yes 2 - No 9 - DK/NA

IF YES

29/M. What is the amount of your weekly unemployment benefit?

$|__|__|__|__| / Weekly

31/M. What is the name of your most recent employer? |__| Self-employed

_____

[company name]

32/Ma. What is the month and year you started with this company?

|__.__| |__.__| 99 = DK/NA
mo yr

ADD TO CR WORK GRID

32c/Ma. And when did you leave the company?

|__.__| |__.__|
mo yr

33/M. What type of business is this company involved in? |__|__|_____

34/M. What was your job title? |__|__|__|_____

35/M. What types of duties did you have? _____

_____

36/M. How many hours per week did you usually work?

|___|___| hours 99 = DK / NA

38/M. When you started working at this company, what was your hourly rate of pay?

$|___|___|.|___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

39/M. And what was your ending rate of pay?

$|___|___.___|___| per hour 99 = DK / NA

Not paid per hour $ |___|___|___|___|.|___|___| per _____

40/M. While you were employed by this company, were there any periods of time lasting one month or longer that you were not working?

1. - Yes 2 - No 9 - DK/NA

IF YES

41/M. Do you recall the month and year of the time periods you were not working?

42/M. What was the main reason you were not working?

43/M. Did you receive any unemployment benefits? **[IF YES]** What was your weekly benefit?

	From (mo/yr)	To (mo/yr)	Reason	UI Benefit
a)	___|___	___|___	_____	$ _____
b)	___|___	___|___	_____	$ _____
c)	___|___	___|___	_____	$ _____
d)	___|___	___|___	_____	$ _____

PROBE ADDITIONAL TIME OFF

Reason:
1 - Health / disability
2 - Leave / vacation
3 - Pregnancy
4 - Laid off, seasonal
5 - Laid off, no work
6 - Going to school
7 - Strike
8 - Other _____
9 - DK / NA

IF DONE, SKIP TO PINK
IF OTHERS, CONTINUE YELLOW

CHECK GRID FOR GAPS
IF NO GAPS, DO WHITE

REPEAT AS NECESSARY

44. Between |DATES|, you were not working. Were you looking for work, or doing something else at that time? |IF ELSE| What was that?

45. Did you receive any unemployment benefits? |IF YES| What was your weekly benefit?

	Reason	UI Benefit
a)	_____	$ _____
b)	_____	$ _____
c)	_____	$ _____
d)	_____	$ _____
e)	_____	$ _____

Reason:
1 - Looking for work
2 - Waiting for school or job to start
3 - Family responsibility
4 - Did not look because did not think could find job
5 - Layoff, waiting for recall
6 - Transportation problems
7 - Health problems
8 - Other _____
9 - DK / NA

Next, I'd like to ask a few questions about your family at the time you were in high school.

46. Did you have any brothers or sisters living with you at the time you were in high school? This would include step-brothers and step-sisters.

1 - Yes 2 - No 9 - DK/NA

How many brothers? |___.___|

00 = NONE

How many sisters? |___.___|

47. When you were in high school, were your parents married, widowed, divorced, separated or were they never married?

1 - Married
2 - Divorced / separated
3 - Never married
4 - Widowed
5 - Both deceased
9 - DK/NA

48. Do you recall the highest grade or year in school or college that your mother completed?

1 - Grade school (0-8)
2 - Some high school (9-11)
3 - High school graduate or GED (12 or GED)
4 - Some college or tech school (13-15)
5 - College graduate (16)
6 - Post-grad study/degree (17+)
9 - DK/NA

49. And your father, what was the highest grade or year in school or college that he completed?

1 - Grade school (0-8)
2 - Some high school (9-11)
3 - High school graduate or GED (12 or GED)
4 - Some college or tech school (13-15)
5 - College graduate (16)
6 - Post-grad study/degree (17+)
9 - DK/NA

50. When you were in high school would you guess that your family income would have been? **[READ 1 - 6]**?

1 - Less than $5,000
2 - $5,000 - $10,000
3 - $10,000 - $15,000
4 - $15,000 - $25,000
5 - $25,000 - $40,000
6 - over $40,000
9 - DK/NA

Now, I'd like to ask a couple of questions about the present.

51. Are you now married, widowed, divorced, separated, or have you never been married?

1 - Married
2 - Divorced / Separated
3 - Never married
4 - Widowed
9 - DK/NA

52. Are there any children under the age of 18 currently living in your home? **[IF YES]** Could you tell me how many there are?

|___.___| children 99 = DK / NA 00 = NONE

53. What was your age on your last birthday? |___.___| 99 = DK/NA

54. Is your race or ethnic background White, Black, Hispanic, Asian or some other?

1 - White
2 - Black
3 - Hispanic
4 - Asian
5 - Other _____
9 - DK/NA

55. Which of the following categories includes your total family income over the last 12 months?

-- **[READ 1 - 6]**

1 - Less than $5,000
2 - $5,000 - $10,000
3 - $10,000 - $15,000
4 - $15,000 - $25,000
5 - $25,000 - $40,000
6 - over $40,000
9 - DK/NA

My last few questions deal with financial support or assistance you personally may have received.

57. Have you received any public assistance from:

ADC	1 - Yes	2 - No	9 - DK/NA
GR/GA	1 - Yes	2 - No	9 - DK/NA
SSI	1 - Yes	2 - No	9 - DK/NA
Food Stamps	1 - Yes	2 - No	9 - DK/NA
Medicaid	1 - Yes	2 - No	9 - DK/NA
Housing Assistance	1 - Yes	2 - No	9 - DK/NA

I want to thank you very much for your cooperation and taking the time to share this information with me.

|___.___|-|___.___|-|___.___|
mo da yr

_____
Interviewer Signature

REFERENCES

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