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ABSTRACT

The Wisconsin Workplace Partnership Training (WPT) program, which provides job-specific basic skills education to employees at their worksites, is a cooperative effort between the state's board of education, labor unions, and manufacturers association. At the time of the evaluation of the its third year, the program was operating at 23 sites throughout Wisconsin. During the evaluation, 102 participants were interviewed at 10 randomly selected sites, and 160 local partners from those and other sites completed mail surveys. The participants strongly agreed that the program had improved their basic academic skills, job skills, self-image, work quality, and problem-solving skills; however, they strongly disagreed as to whether the program resulted in increased promotability. The local partners solidly agreed that participants' basic academic skills improved after participation in the program, but they expressed only weak agreement with the statements that the program enhanced participants' job and problem-solving skills. The most important program goals identified by partners were enhanced self-image and math and reading skills. Six policy recommendations were formulated based on the survey responses. (Appended are the participant and local partners' survey instruments and site visit schedule. Twenty tables are included.) Contains 35 references. (MN)

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ED 361 535

EVALUATION OF THE THIRD YEAR OF IMPLEMENTATION OF THE WISCONSIN WORKPLACE PARTNERSHIP TRAINING PROGRAM

March 1, 1991 through August 31, 1992

Grant from the U.S. Department of Education
Administered by the Wisconsin Board
of Vocational, Technical and Adult Education

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Executive Summary

The following is an evaluation of the third year of implementation of the Wisconsin Workplace Partnership Training Program. The evaluation spans the program from March 1, 1991 through August 31, 1992. The Wisconsin Workplace Partnership Training Program was developed to provide job-specific basic skills education to employees at their worksites. The project was a cooperative effort between the Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE), Wisconsin State AFL-CIO, and Wisconsin Manufacturers and Commerce (WMC) at the state level. At the local level, the partnership was between local Vocational Technical and Adult Education (VTAE) colleges, the unions or employee representatives, and the employing companies. During the period of this evaluation, the program operated at 23 worksites in the state.

The project was funded with federal National Workplace Literacy Program Adult Education Act monies from the U.S. Department of Education and administered in Wisconsin by the Wisconsin Board of Vocational, Technical and Adult Education. The grant award was $981,256 (40.8%) with committed private sector matching funds of $1,584,425 (61.75%), bringing the total project resources to $2,565,681. The Center on Education and Work, School of Education, University of Wisconsin-Madison was awarded the contract to perform the third party evaluation.

One hundred two (102) participants were interviewed individually at ten randomly-selected sites. A total of 160 local partners from those and the remaining sites completed mail surveys.

Participants solidly agreed that they had improved in basic academic skills. In job-related measures, they agreed that they had improved in job skills, self-image, work quality, and problem-solving skills, but strongly disagreed on the question of increased promotability. They expressed weak agreement on getting along better with employees and supervisors. Their response to the question about job enjoyment fell between neutrality and disagreement. Only 3% reported being promoted and 10% reported job transfers since they began attending.

Local partners also solidly agreed that participants had improved in basic academic skills. Local partners solidly agreed that participation had increased self-image but expressed weak agreement relative to enhanced job skills and problem solving. They were neutral relative to getting along better with other employees and supervisors, increased quality, eligibility for promotion and job enjoyment.

Some differences were seen between participant and local partner responses and within groups of local partners. Participants cited enhanced computer skills*, math skills, and self-image as goals of greatest importance to them. For local partners, the most important goals identified were enhanced self-image, math and reading skills.

A noteworthy practice identified included using advisory committees of participants and peer advisors to guide and plan WPT programs. A practice worthy of study was extending Learning Center hours to provide equal access for employees on all shifts.

Policy recommendations included:

1. Each program should focus on a limited number of objectives that meets the needs of that worksite rather than 16 participant outcomes in addition to process outcomes.

*Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

This evaluation measured opinions on participant improvement in seven basic skill areas and nine job-related areas. Thus, local programs were accountable for 16 participant outcomes in addition to 13 process objectives for orienting employees, training peer advisors, and the like.

It would be helpful for each program site to identify which of the 16 kinds of participant outcomes should be targeted at that worksite. For example, "promotion" is a general goal of the program. Participants and local partners alike indicated that promotions and job transfers are not generally occurring as a result of the program. During economic slumps such as the one experienced during the period in which this evaluation was conducted, promotion may be an irrelevant outcome. At one site, of the participants interviewed, more were on lay-off than were currently employed.

In addition, many companies are flattening their organizational structures and moving toward newer administrative structures such as self-managed teams. Promotions and job transfers may not be relevant measures in such companies.

The benefits of sharper focus at each site would be more effective use of resources and an opportunity for more closely linking local planning and evaluation.

2. Instruction in basic skills should be increasingly imbedded in instruction specific to the worksite through increased use of job skill requirement analyses, called Workplace Educational Skills Analysis (WESA).

This process of imbedding basic skills instruction in job-specific tasks or materials is clearly ongoing. It is reflected in the titles given to the Learning Centers, as in Serigraph Inc.'s Personal Development Center; Tecumseh Product's Education, Training and Development Center; and Waukesha Memorial Hospital's Skills Enancement and Education Center. There is variation, however, among the sites in the extent to which site-specific instruction actually occurs. The models vary from programs where the instructor is on the shop floor learning what is required of workers to the more passive models patterned after Adult Basic Education where instructors are available to participants in the Learning Center. Only several instructors mentioned using WESA job analyses as the basis for curriculum development.

Reading *per se* is not a top priority of participants, even though employers need employees with solid reading skills. Participants indicated their priorities for the program, citing computer and math skills and self-image as the top three. Reading was seventh in priority. This points to the need to provide content-specific instruction which will enhance workers' self-esteem through enhanced job skills while improving reading and related basic skills in the process.

As asserted in the 1990-91 WPT evaluation, unless the program can legitimately position itself in the eyes of potential participants as something other than remediation aimed at fixing individuals, it will not be able to serve those employees most in need.

3. Sites should identify and provide the optimal mix between totally individualized instruction and short-term, small group classes.

One-on-one instruction is enormously labor intensive for the instructor and is not as likely to result in the team building and verbal communication skills increasingly required by employers as interactive cooperative learning in small groups. Short-term classes with low numbers (approximately 10 per class) which enable students to learn cooperatively should be provided and be supplemented with one-on-one assistance. Such a mix would accomodate learning syles of those who learn most effectively through interaction an activity, as well as those who learn best through on-on-one independent study.

4. Companies wishing greater participation of employees in educational upgrading should provide paid time

during the work day for employee education.

The most frequently mentioned barriers to WPT participation were long work hours and overtime. On the encouragement side, local partners believe that company incentives are or would be among the most powerful incentives for participation. Employees with families, whether two parent or single parent are under even more pressure to fit in essential life activities around work hours and will continue to find it difficult to divert more time into educational pursuits outside of work hours. Only one company visited paid employees for attending. Another provided release time during work hours. Data collected in 1990 showed that of the 11 WPT sites, the three who compensated employees for participation showed a participation rate of 22% compared to a participation rate of 7% for companies who did not provide pay for participation. Company incentives mentioned in this study included holding classes during company time, paying partial wages for attendance, providing bonuses for completing 50 hours, and providing monthly door prizes for attendance.

5. Sites should use advisory groups of participants to help plan and evaluate the programs.

Half of the sites visited had advisory or steering committees that included participants. This evaluation shows that there are significant discrepancies among the perceptions of key players in local WPT programs. For example, participants and local partners do not share the same notions as to what motivates people to attend. Instructors and company officials differ as to the degree to which participants improve in job-related measures. VTAE supervisors and instructors differ with union officials and peer advisors on the degree to which participation increases promotability of employees. Thus communication and collaborative planning should increase. Advisory groups of stakeholders can be highly effective in that effort.

6. Federal administrative policies restricting computer instruction should be modified or eliminated to enable WPT to reach its intended constituent group more effectively.

Current program participants consider computer skills as one of the three most important goals of the program for them. If WPT is to serve its primary stakeholders—employees—it should be responsive to their expressed needs. Using a computer to compose and then to read what one has written, or using a computer for mathematics are methodologies for building basic skills that hold no stigma for workers.

In addition, many of the WPT participants from clerical to line workers spoke of needing to become computer literate to perform their jobs. A machine operator at American Brass in Kenosha reported that before attending the WPT Learning Center, he had to call his supervisor in the middle of the night to reboot the computer that controlled his machine. He reported that he now has the skill to manipulate the computer himself. Authors Carnevale, Gainer, and Villet (1990) reinforce this claim. "Advances in information-based technology [computer hardware and software] have been the major source of changing skills requirements in most American jobs." (p. 84) The 1983 report of a Task Force on Vocational, Technical Preparation (Wisconsin Department of Public Instruction and Wisconsin Board of Vocational, Technical and Adult Education said:

> Most people either will work directly with computers or have their work influenced by computers in some significant way. An influence as pervasive as this requires, among other things, an informed citizenry that not only understands what computers can and cannot do but also is aware of the problems and issues involved in their use. Computer competency is a basic skill complementary to other competencies, such as reading, writing, mathematics, and reasoning.
>
> Students entering a vocational/technical educational program should be able to:
>
> - Demonstrate a basic knowledge of computer terminology and of how computers operate.
> - Demonstrate some ability to use the computer and appropriate software for:
>
> -self-instruction
> -collection and retrieval of information
> -word processing (including the development of keyboard, composition, and editing skills)

-modeling, simulations, and decision making
-problem solving, both through the use of existing programs and through experience with developing one's own programs. . . (p. 3)

Learning to use computer software can serve the dual function of enhancing basic academic skills while simultaneously developing job skills without stigmatizing workers as being "dumb" or deficient.

Scope of the Evaluation

The following is an evaluation of the third year of implementation of the Wisconsin Workplace Partnership Training Program. The evaluation spans the program from March 1, 1991 through August 31, 1992. The Wisconsin Workplace Partnership Training Program was developed to provide job-specific basic skills education to employees at their worksites. The project was a cooperative effort between the Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE), Wisconsin State AFL-CIO, and Wisconsin Manufacturers and Commerce (WMC) at the state level. At the local level, the partnership was between local Vocational Technical and Adult Education (VTAE) colleges, the unions or employee representatives, and the employing companies. During the period of this evaluation, the program operated at 23 worksites in the state. (This evaluation includes 22 of the 23 sites as the most recent program site, Snap-On Tools, was in its formative stage.)

The Center on Education and Work, School of Education, University of Wisconsin-Madison, was awarded the contract to perform the third-party evaluation.

At each site, employees were recruited to participate in competency-based educational activities designed to upgrade their skills in reading, verbal and written communication, listening, mathematics, reasoning and problem-solving, and use of the English language as those skills related to particular job classifications. Through related advising services provided by both peers and VTAE instructors, participants were encouraged to continue their education as appropriate in adult secondary education, customized training, or other career training offered by employers, participating technical colleges, or other educational institutions. The primary goal of the program was to increase the basic skill level of at least 3,066 workers sufficiently for job retention and/or advancement and improved productivity.

The project was funded with federal National Workplace Literacy Program Adult Education Act monies from the U.S. Department of Education and administered in Wisconsin by the Wisconsin Board of Vocational, Technical and Adult Education. The grant award was $981,256 (40.8%) with committed private sector matching funds of $1,584,425 (61.75%), bringing the total project resources to $2,565,681.

The study sought to determine the extent to which program participants and local partners believed that participation had increased attainment of key academic and job-related measures, and which program objectives both groups viewed as most significant. Further, the study sought to identify some of the "best practices" exhibited by programs whose participants reported the highest levels of improvement academically and in terms of job-related skills.

The WPT sites and local partners studied in this evaluation are found in Table 1. The ten sites visited for this study are indicated with double asterisks. Thirteen, over half, of the programs were operated in partnership with a union. A total of eight out of sixteen VTAE colleges participated in the activities of this grant.

Table 1
WPT Local Partners

Company Site	Union(s)	VTAE College
1. AC Rochester, Milwaukee	International Brotherhood of Electricians; United Auto Workers; and United Plant Guard Workers of America	MATC-Milwaukee
2. American Brass, Kenosha**	International Association of Machinists and Aerospace Workers Local 34; United Steelworkers America Local 9322	Gateway Technical College
3. Beloit Corporation, Beloit**	International Association of Machinists and Aerospace Workers; Glass Molder, Pottery, Plastics, and Allied Workers; Pattern Makers League of North America	Blackhawk Technical College
4. Briggs and Stratton Corporation, Milwaukee**	Allied Industrial Workers Local 232; Glass Molders, Pottery, Plastics and Allied Workers Local 125B	MATC-Milwaukee
5. Cray Research, Inc., Chippewa Falls	—	Chippewa Valley Technical College
6. Curtition/Royal Basket Trucks, Inc., Darien**	—	Gateway Technical College
7. Freeman Shoe Company, Beloit	United Food and Commercial Workers International Union, Footwear Division, AFL-CIO, Local 312R	Blackhawk Technical College
8. Goodyear Tire and Rubber Company, Sun Prairie**	United Rubber Workers Local 904	MATC-Madison
9. J.I. Case Company, Racine**	United Auto Workers, Local 180	Gateway Technical College
10. Joerns Healthcare, Inc., Stevens Point**	United Steelworkers of America, Upholsterers and Allied Industrial Division Local 333U	Midstate Technical College
11. Miller Compressing Company, Milwaukee	Allied Industrial Workers Local 364	MATC-Milwaukee
12. Milwaukee County, Milwaukee**	American Federation of State, County and Municipal Employees (AFSCME) District Council 48	MATC-Milwaukee
13. Navistar International Transportation Corporation, Waukesha	United Steelworkers of America, Local 3740	Waukesha County Technical College
14. Northside Milwaukee Small Businesses	—	MATC-Milwaukee
15. Ore-Ida Foods, Inc.,Plover	—	Midstate Technical College
16. Schreiber Foods, Inc., Wisconsin Rapids**	—	Midstate Technical College
17. Serigraph, Inc., West Bend**	—	Moraine Park Technical College
18. Southside Milwaukee Small Businesses	—	MATC-Milwaukee
19. Tecumseh Products, New Holstein	International Association of Machinists and Aerospace Workers, Local 1259	Moraine Park Technical College
20. Waukesha Memorial Hospital, Inc., Waukesha	—	Waukesha County Technical College
21. Weyerhaeuser Company, Marshfield	United Brotherhood of Carpenters and Joiners of America, Local 1733; United Paperworkers International Union, Local 633	Midstate Technical College
22. Worzalla Publishing, Inc., Stevens Point	—	Midstate Technical College

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Design and Methodology

An ad hoc evaluation planning team met to define the issues of greatest interest. Membership on this informal team included: the Assistant State Director, Executive Assistant to the State Director, Workplace Training Program Project Director and Assistant Project Director, General Education Consultant, and Curriculum Development Consultant from the Wisconsin Board of Vocational Technical and Adult Education; the Peer Advisor Consultant and local labor liaison from the State AFL-CIO; a representative from Wisconsin Manufacturers and Commerce; and the researcher. The group met three times to refine the questions of interest and methodology. The planning team determined that data should be collected from all project sites.

The study addressed four questions:

1. To what extent do program participants agree they have achieved their academic and job-related objectives?

2. To what extent do local partners agree that participants achieve academic and job-related objectives through participation in the program?

3. Which program objectives do participants and local partners view as most significant?

4. What are some of the "best practices" exhibited by the programs whose participants report the highest mean of improvement in academic skills and job performance?

Two survey instruments were designed. The first assessed participants' beliefs on the extent to which they improved their basic skills and job-related skills. The second assessed local partners' views on the extent to which participants improved their basic skills and job-related skills. Responses for both instruments were made on a five-point scale.

The original research design had called for a participant survey instrument which could be completed by participants themselves. The original self-administered survey was field tested at Navistar and was determined to be inappropriate because it would be difficult for non-readers or very low level readers to complete. This is in spite of the fact that the reading level was estimated to be at about 6th grade. Peer advisors at Navistar observed that, based on their own experience with in-house surveys, the open ended questions would elicit little or no response.

The alternative of having instructors assist low-level readers in completing the instrument was discarded because of the potential for singling out and/or embarrassing individuals. A related problem would be that of confidentiality of participants' responses.

Thus, the design was changed to one in which the researchers verbally administered the survey instruments to participants, making participants' reading levels irrelevant and assuring that open ended questions would be answered. The UW Center for Testing and Evaluation created scannable forms for both survey instruments.

Interviewers included the researcher, Kathleen A. Paris, Ph.D., of the Center on Education and Work (CEW) UW-Madison; Robert P. Sorensen, Ph.D., Associate Director, CEW; Cynthia Knickrehm, Project Assistant, CEW; and Natalie Wysong, Managing Editor, *Journal of Vocational Education Research*, CEW.

The participant survey was administered at ten randomly selected program sites during the months of April, May, and June, 1992. Researchers interviewed all participants who utilized the Learning Centers on the days of the site visits. The site visits were planned so that researchers would be present for each different time period the Center was open in a given week. This gave researchers access to workers from different shifts. Three declined to be interviewed, two due to time constraints to complete work prior to the shift commencing

and one because it was her first visit to the Learning Center. A total of 102 participants was interviewed. The participant response rate was 97%. The schedule for the site visits is found in the Appendices.

As Table 2 indicates, at the time of site visits, the ten programs reported total average enrollment for April and May, 1992, as being 341 participants. Of those, 102 were interviewed. Thus the sample for this study represents 30% of the current WPT population for the 10 sites. (The 102 sample participants represent 3% of the total yearly enrollment for all sites through May/June, 1992, which was 3,187.)

Table 2
Participant Samples Compared to Enrollments

Site	Number Interviewed	Average Number Attending April/May	Percent Interviewed
American Brass[a]	12	32	38
Beloit Corporation	10	18	56
Briggs & Stratton	16	59	27
Goodyear	13	23	57
J. I. Case	12	83	15
Joerns	5	5	100
Milwaukee County	12	66	18
Royal Basket	7	19	37
Schreiber	2	4	50
Serigraph	13	32	41
Total	102	341	

[a]American Brass was the company name when the project commenced. At the time of the site visit, the company was called Outokumpu Copper.

Note. Attendance data provided by WBVTAE.

At each of the ten sites visited, written surveys with self-addressed, stamped envelopes were given to the following: (a) Union liaison to the program; (b) Union president if different individual than program liaison; (c) Company liaison to the program; (d) Human resource director; (e) CEO or highest official on site; (e) Three to six peer advisors identified by instructors; (f) Teacher(s); (g) VTAE supervisor. For the remaining 12 sites, surveys were sent to the local partners listed above. In addition to being asked about program impacts, instructors were asked how they ensured that materials were tailored to needs of the worksite.

Local partner surveys were coded for identification. Phone calls were made to non-respondents to encourage them to complete and return their surveys. Data were tabulated by site and in the aggregate.

As Table 3 indicates, 197 surveys were sent or given to local partners which included instructors, union officials, company officials, peer advisors, and VTAE supervisors. A total of 160 local partner surveys was returned for a local partner response rate of 81%.

Instructors had the highest response rate, 95%, followed by VTAE supervisors, 91%, and peer advisors, 89%. The response rate for company and union officials was similar, 68% and 63%, respectively.

Table 1

Local Partners' Responses by Site

Site	Instructors		Union Officials		Company Officials		Peer Advisors		VTAE Supervisors	
	No.	Ret.	No.	Ret.	No.	Ret.	No.	Ret.	No.	Ret.
A.C. Rochester	1	1	1	1	3	2	--	--	1	1
American Brass	1	1	2	1	2	2	6	5	1	1
Beloit Corp	3	3	4	3	3	3	4	4	1	1
Briggs & Stratton	7	6	2	2	3	2	4	4	1	1
Cray Research	5	4	--	--	3	3	3	3	1	1
Freeman Shoe Co.	2	2	2	1	2	2	--	--	1	1
Goodyear	1	1	2	1	3	3	4	4	1	1
J. I. Case	1	1	1	1	3	2	13	13	1	1
Joerns	1	1	2	2	2	0	1	1	1	1
MEC North	1	1	--	--	1	--	--	--	1	1
MEC South	2	2	--	--	--	--	--	--	1	1
Miller Compressing	1	1	2	0	2	1	3	1	1	--
Milwaukee County	1	1	3	2	3	1	1	--	1	--
Navistar	1	1	2	2	2	2	--	--	1	1
Ore-Ida Foods	2	2	--	--	3	3	--	--	1	1
Royal Basket	1	1	--	--	2	2	3	3	1	1
Schreiber	1	1	--	--	2	1	2	2	1	1
Serigraph	3	3	--	--	3	2	2	2	1	1
Tecumseh Products	2	2	2	1	3	2	3	3	1	1
Waukesha Mem. Hospital	1	1	--	--	3	2	3	2	1	1
Weyerhaeuser	1	1	2	--	2	1	3	2	1	1
Worzalla Publishing	1	1	--	--	3	2	--	--	1	1
Total	40	38	27	17	53	36	55	49	22	20

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Statistical analysis. Analysis of variance (ANOVA) was performed to determine if statistically significant differences existed among:

1. All participant responses relative to improvement in academic and job-related measures based on the independent variables of site, age, gender, racial and ethnic background, months of attendance and highest grade in school completed;

2. Participants' and local partners' opinions relative to participants' academic improvement which included math, writing, reading, speaking, English-As-A-Second Language (ESL), skills for the GED test and computer skills (computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software);

3. Participants' and local partners' opinions relative to participants' improvement in job-related measures which included job skills, ability to work together with other employees, ability to work with supervisors, ability to solve problems, quality of work and self-image;

4. Participants' and local partners' opinions relative to promotability of participants;

5. Participants' and local partners' opinions relative to whether or not participants actually are promoted;

6. Participants' and local partners' opinions relative to whether or not participants actually transfer to different jobs;

7. Participants' and local partners' opinions relative to participants' increased enjoyment of their jobs.

Where the ANOVA indicated significant differences, the Scheffé post hoc comparison test was used to identify where the differences existed. Vicki Jacobs of the UW-Madison Experimental Design Lab provided assistance with the statistical analysis.

Limitations

The primary limitation of this study was the difficulty of locating a random sample of participants at the sites. The two earlier WPT studies conducted by the researcher also faced this limitation. Although a random sample could have been drawn from a list of participants, the individuals would have been available for interviews at sporadic times due to their work schedules. Discussions with project personnel indicated that locating and scheduling pre-selected participants was untenable given the privacy assurances participants had received. Researchers interviewed all participants who used the Learning Center during their scheduled site visit. As was stated earlier, two days of interviewing were scheduled at each site to ensure that workers from each shift could be surveyed.

An inherent difficulty in determining appropriate sample size is the nature of the participant population served by the WPT program. Those who attend are not a static group. Participants may use the Learning Center only one or two times to acquire the skills or information they need. They may visit the Learning Center and sign up as a participant and may not come back. This means that the total participant count for the span of one year is considerably higher than the number of participants who may be utilizing the Learning Center at a given time. In this study, rather than utilizing the annual figures to determine the program numbers, the number of students who were reported by the sites as attending during the two-month period of the site visit was used as the population number. (See Table 2.)

Finally, for both local partners and participants, the research for the most part, examined their opinions and perceptions. These perceptions could not be empirically validated in this study. Questions to participants as to whether they had received job promotions or transfers were the exception to this.

Participant Demographics

Gender. In this study, 102 participants from 10 of the 22 WPT sites were surveyed. The sample was fairly even in terms of gender. Fifty-two percent were male and 45% were female. (Data were missing for 3%.) Gender data are shown in Table 4. This proportion was consistent with that of the total WPT population, which was 55% male and 45% female at mid-year.

Table 4
Gender of Participants

Gender	Number	Percent
Male	53	52
Female	46	45
No Response	3	3
Totals	102	100

$n = 102$

Age. Over half of the participants, 58%, were between ages 25-44. Forty percent were 45 and over. This indicates that the program serves a substantial portion of what might be called "older workers." (The federal definition, for purposes of defining older workers as a protected class, is age 40 and older.) Table 5 summarizes age data of the sample. Age of the total WPT population as reported at mid-year showed both consistency with the sample and slight variation. In terms of variation, the sample included 1% of participants in the age 16-24 interval. The total population included 6%. For the age 45 and over interval, the sample included 40%, while the population included 39%. Thus the sample was composed of a slightly older group than the population. This fact is not significant, however, in that the bulk of the sample population, 58%, was in the age 25-44 interval and the bulk of the total population, 62%, was also in the age 25-44 interval.

Table 5
Age of Participants

Years of Age	Number	Percent
16-24	1	1
25-44	59	58
45 and over	41	40
No Response	1	1
Totals	102	100

$n = 102$

Table 6
Participants' Ethnic Groups

Ethnic Group	Number	Percent
Asian American	4	4
Black	10	10
Hispanic	3	3
Native American	1	1
White	82	80
No response	2	2
Totals	102	100

n = 102

Ethnic Group Membership. The majority of participants surveyed, 80%, were white. Ten percent were black. Other groups, such as Asian American, Hispanic, and Native American, accounted for a very small portion of those interviewed, 4%, 3%, and 1% respectively. These figures were very close to the demographic data for the entire participant population as reported to WBVTAE for the mid-project report. That report showed that the majority of all WPT participants, 79%, were white. Fourteen percent were black. Other groups represented in the total WPT population were: Asian American, 1%; Hispanic, 5%; and Native American, less than 1%.

Educational Attainment. Table 7 summarizes data on highest grade in school completed by each participant surveyed. Over half, 55%, were high school graduates. Fifteen percent had not graduated from high school. When the percentage of those with some college work (19%) is combined with the percentage of college graduates (9%), it can be seen that 28% of the sample had attended college. There appeared to be some variation between the sample and the population in terms of educational attainment. Within the sample, 65% had completed grades 9-12, while 51% of the WPT population had completed grades 9-12 at a maximum. Within the sample, 31% had over 12 years of education, compared to 39% for the WPT population. (For 0-8 grade completion, figures were similar for the sample and the WPT population at 5% and 7% respectively.) This suggests that educational attainment level of the sample was slightly lower than the population as a whole with a higher proportion of high school graduates and a lower proportion of participants with some postsecondary education. The researcher could neither identify the cause for this difference, nor any confounding effect the difference might have in interpreting the results.

Table 7
Participants' Highest Grade in School Completed

Highest Grade	Number	Percent
Seventh grade or less	1	1
Eighth grade	4	4
Ninth-Eleventh grade	10	10
Twelfth grade	56	55
Thirteenth-Fifteenth grade	19	19
College graduate	9	9
No Response	3	3
Totals	102	101[a]

n = 102
[a]Does not equal 100% due to errors of rounding.

Months of Attendance. Data on number of months participants had attended the Learning Center are summarized in Table 8. Half of the participants surveyed had attended the Learning Centers from 1 to 6 months. One-fourth (24%) had attended from 7 to 12 months. Overall, this would indicate a relatively short-term involvement on the part of the majority of those surveyed. Data on months of attendance were not available for the WPT population.

Table 8
Months of Attendance

Number of Months	Number	Percent
1-6	51	50
7-12	24	24
13-18	4	4
19-23	7	7
24-29	6	6
30-36	3	3
No Response	7	7
Totals	102	101[a]

n = 102
[a]Does not equal 100% due to errors of rounding.

Participants' Views

Improvement in Basic Skills. Participants were asked to indicate the extent to which they had improved their skills in a variety of academic skill areas. The Likert scale of responses was: 1 = *strongly disagree*; 2 = *disagree*; 3 = *neither agree nor disagree*; 4 = *agree*; and 5 = *strongly agree*. Participants could also indicate that they had not studied a particular area with a response of *not applicable*. Thus the highest level of agreement that they had improved would be 5.00.

Table 9 indicates that in 7 basic skill areas, the mean responses ranged from 4.00 to 4.58. Participants' mean response to all academic measures was 4.45. In the skill areas that showed the greatest number of participants—computers, math, writing, and reading—the means ranged from 4.23-4.57. From either perspective, participants solidly agreed that they had improved in the basic skills areas they studied. (See Table 9 note.)

Table 9
Participants' Views of Improvement in Basic Skills

Area of Improvement	Strongly Disagree (No.)	%	Disagree (No.)	%	Neither (No.)	%	Agree (No.)	%	Strongly Agree (No.)	%	Not Applicable (No.)	%	Mean	Number Studying
Math	–	–	(1)	1	–	–	(22)	22	(24)	24	(55)	54	4.47	47
Writing	–	–	--	–	(5)	5	(14)	14	(12)	12	(71)	70	4.23	31
Reading	–	–	(1)	1	(2)	2	(12)	12	(16)	16	(71)	70	4.39	31
Speaking	–	–	(1)	1	(1)	1	(9)	9	(3)	3	(88)	86	4.00	14
ESL	–	–	–	–	–	–	(5)	5	(7)	7	(90)	88	4.58	12
GED	(1)	1	–	–	–	–	(2)	2	(7)	7	(92)	90	4.40	10
Computer[a]	–	--	(1)	1	(2)	2	(29)	28	(51)	50	(19)	19	4.57	83

[a]Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software

Table 10 includes the opinions only of those individuals who said they studied in the areas cited. Percent of those who agreed or strongly agreed they had improved ranged from 100% in ESL to 83% in writing.

Table 10
Ranking of Basic Skills Improvement by Percent of Agreement among Participants

Basic Skills	Percent of Those Who Studied the Skill Who Agreed or Strongly Agreed They Had Improved
English as a Second Language	100
Math	98
Computer[a]	96
GED	90
Reading	84
Speaking	86
Writing	83

[a]Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

Job-Related Measures. Participants were asked to indicate the extent to which they had improved in a variety of job-related measures. The same Likert scale was used throughout with 1 indicating *strongly disagree* and 5 indicating *strongly agree*.

Participant responses are summarized in Table 11. Participants' mean response to all job-related measures was 2.71. These responses may be studied from two perspectives. First, the means for responses ranged from 1.30 for *becoming eligible for promotion* to 4.16 for *improving job skills*.

Not applicable responses in academic items were not included in calculations of the mean. Participants either studied math or they did not. We were interested only in the responses of those who studied the subject. Whereas, the job-related measures are desired program outcomes regardless of what the participant has studied. A *not applicable* response to this second group takes on a greater significance. It suggests that participants do not see the relationship between their WPT experience and the desired outcomes, much less proclaim that they have attained those outcomes. Thus *not applicable* responses were assigned a value of zero.

The researcher also arrayed the responses to this series of questions according to percent responding *agree* or *strongly agree*. Results are summarized in Table 12. As Table 12 indicates, the great majority agreed or strongly agreed they had improved their self-image. Also among the top three were improvement in problem-solving and job skills. At the low end was eligibility for promotion. It is reassuring to note that analysis by means alone also shows the same three items, improvement in self-image, problem-solving, and job skills, in the top three of the array and the same item, eligibility for promotion, at the bottom.

Table 11
Participants' Views of Improvement in Job-Related Measures[a]

Area of Improvement	Strongly Disagree (No.) %	Disagree (No.) %	Neither Agree nor Disagree (No.) %	Agree (No.) %	Strongly Agree (No.) %	Not Applicable (No.) %	Mean
Job skills	-- --	(1) 1	(11) 11	(31) 30	(24) 24	(35) 34	4.16
Getting along better with other employees	-- --	-- --	(17) 17	(33) 32	(15) 15	(37) 36	3.97
Getting along better with supervisors	(1) 1	(1) 1	(15) 15	(27) 26	(12) 12	(46) 45	3.86
Problem-solving	-- --	(1) 1	(9) 9	(38) 37	(21) 21	(33) 32	4.14
Quality	-- --	(1) 1	(12) 12	(24) 24	(17) 17	(48) 47	4.06
Self-image	-- --	(1) 1	(6) 6	(48) 47	(38) 37	(9) 9	4.32
Eligible for Promotion	(2) 2	(6) 6	(14) 14	(4) 4	(8) 8	(68) 67	1.30
Job enjoyment	(3) 3	(6) 6	(12) 12	(37) 36	(14) 14	(30) 29	2.64

Table 12
Ranking of Job-Related Measures by Percent of Agreement Among Participants

Job-Related Measures	Percent of Total Who Agreed or Strongly Agreed that They Had Improved
Self Image	84
Problem Solving	58
Job Skills	54
Job Enjoyment	50
Getting along better with other employees	47
Quality	41
Getting along better with supervisors	38
Eligible for promotion	12

Satisfaction with Progress. When participants were asked about their level of satisfaction with their progress in the Learning Center, their mean response was 4.32. The percentage of those who agreed or strongly agreed that they were satisfied with their progress was 91%.

Job Promotions and Transfers. Table 13 summarizes participants' reports as to whether they had received job promotions or transfers. (One site requested that these questions not be asked of workers.) Ten percent reported job transfers and 3% reported having been promoted.

Table 13
Job Promotions and Transfers

	Yes (No.) %	No (No.) %	No Response (No.) %
Received promotion	(3) 3	(74) 73	(25) 25
Transferred to a different job	(10) 10	(71) 70	(21) 21

n = 102

Independent Variables. All participant responses were analyzed according to the independent variables of age, gender, racial and ethnic background, months of attendance and highest grade in school completed. There was no statistically significant difference in responses when analyzed according to those variables. The ANOVA indicated a statistically significant response to the item on increased job enjoyment according to highest grade in school completed. Mean responses from lowest to highest were: college graduate, 2.00; 12th grade, 2.29; grades 13-15, 3.00; grades 9-11, 3.70; grade 8, 4.50. (The one participant in the *7th grade or less* category did not respond to this question.) However, the Scheffé post hoc comparison showed no pairwise significance and no meaningful contrasts when categories were aggregated and compared (e.g., 12th grade or more versus 8th grade or less.) Thus the initial statistical significance was regarded by the researcher as an anomaly.

Local Partners' Views

Improvement in Basic Skills. Local partners were asked to indicate the extent to which they agreed that attending the Learning Center improved workers' skills in a variety of academic areas. The Likert scale of 1 = *strongly disagree;* 2 = *disagree;* 3 = *neither agree nor disagree;* 4 = *agree;* and 5 = *strongly agree* was used. Local partners could indicate that their Learning Center did not address a particular academic area with a response of not applicable. Thus the highest level of agreement that workers improved as a result of attending would be 5.00.

Table 14
Local Partners' Views of Improvement in Basic Skills

Area of Improvement	Strongly Disagree (No.)	%	Disagree (No.)	%	Neither (No.)	%	Agree (No.)	%	Strongly Agree (No.)	%	Not Applicable (No.)	%	Mean	Number Providing Instruction[a]
Math	(2)	1	(1)	1	(4)	2	(52)	30	(107)	63	(5)	3	4.57	166
Writing	(1)	1	(2)	1	(12)	7	(86)	50	(65)	38	(5)	3	4.28	166
Reading	(3)	2	(1)	1	(7)	4	(74)	43	(81)	47	(5)	3	4.38	166
Speaking	(1)	1	(12)	7	(55)	32	(61)	36	(30)	18	(12)	7	3.67	159
ESL	(8)	5	(9)	5	(37)	22	(28)	16	(26)	15	(63)	37	3.51	108
GED	(2)	1	--	--	(10)	6	(61)	36	(84)	49	(14)	8	4.43	157
Computer[b]	(2)	1	(1)	1	(15)	9	(54)	32	(93)	54	(6)	4	4.42	165

[a]This column includes the number of local partners indicating that these skills were addressed at their site.
[b]Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

Table 14 indicates that in seven basic skills areas, the mean responses ranged from 3.67 for speaking to 4.57 for math. Local partners solidly agreed that employees improved in math, writing, reading, GED and computer skills. ESL and speaking garnered the lowest levels of agreement on improvement. Most sites, however, do not offer speaking as a formal study. ESL was not offered at most sites. The mean response to all academic measures was 4.23 for local partners.

Job-Related Measures

Local partners were asked to indicate the extent to which they believed employees had improved in a variety of job-related measures. The mean response for *all* job-related measures was 3.65. The same Likert scale was used throughout with 1 indicating *strongly disagree* and 5 indicating *strongly agree.* Local partners' responses are summarized in Table 15. Mean responses ranged from 3.05 for eligibility for promotion to 4.40 for self image. Local partners responses to these job-related items were not characterized by the large proportion of *not applicable* responses found among participant responses. Nevertheless, for purposes of comparison, Table 16 depicts the percent of local partners who indicated agreement or strong agreement relative to participant improvement in those areas. The means indicate solid agreement that participants had increased self-image, but expressed weak agreement relative to job skills and problem-solving. They were close to neutral relative to getting along better with other employees and supervisors, quality, eligibility for promotion and job enjoyment. Their mean relative to whether participants are actually promoted was 1.69 and their mean relative to job transfers was 1.46.

Table 15
Local Partners' Views of Improvement in Job-Related Measures

Area of Improvement	Strongly Disagree No.	%	Disagree No.	%	Neither Agree nor Disagree No.	%	Agree No.	%	Strongly Agree No.	%	Not Applicable No.	%	Mean
Job Skills	(1)	1	(4)	2	(36)	21	(77)	45	(46)	27	(7)	4	3.83
Getting Along Better with Other Employees	(1)	1	(10)	6	(49)	29	(59)	35	(38)	22	(14)	8	3.47
Getting Along Better with Supervisors	(2)	1	(13)	8	(61)	36	(47)	27	(27)	16	(21)	12	3.12
Problem-Solving	(2)	1	(4)	2	(28)	16	(89)	52	(41)	24	(7)	4	3.83
Quality	(2)	1	(10)	6	(52)	30	(69)	40	(22)	13	(16)	9	3.30
Self-Image	(1)	1	(4)	2	(9)	5	(49)	29	(102)	60	(6)	4	4.40
Eligible for Promotion	(6)	4	(11)	6	(52)	30	(58)	34	(21)	12	(23)	13	3.85
Job Enjoyment	(3)	2	(3)	2	(58)	34	(73)	43	(22)	13	(12)	7	3.42

Table 16
Ranking of Job-Related Measures by Percent of Agreement Among Local Partners

Job-Related Measures	Percent of Total who Agreed or Strongly Agreed that Participants Improved
Self Image	89
Problem Solving	76
Job Skills	72
Getting along Better with Other Employees	57
Job Enjoyment	56
Quality of Work	53
Eligible for Promotion	46
Getting along Better with Supervisors	43

Local partners' views of participant satisfaction. When local partners were asked to indicate what they believed to be participants' levels of satisfaction with their progress in the Learning Center, their mean response was 4.23. The percentage of those who agreed or strongly agreed that participants were satisfied with their progress was 85%.

The same top three items having the highest percentage of *agree* or *strongly agree* responses were identified by local partners and participants. (See Tables 12 and 15.) They were self-image, problem-solving and job skills. In fact, the order was the same for participants and local partners except for the two outcomes at the bottom of both arrays which were reversed between the two groups: getting along better with supervisors and eligible for promotion. Local partners and participants expressed virtually the same level of agreement relative to self image and job enjoyment.

Differences within local partner groups. Differences among responses of local partner groups (instructors, union officials, peer advisors, company officials, instructors, and VTAE supervisors) were not statistically significant except in four cases.

An analysis of variance (ANOVA) showed a significant difference between mean improvement in total job-related measures reported by instructors and company officials. Instructors reported 4.01 while company officials reported 3.25 ($F(5,136) = 4.49\ p \leq .05$).

When VTAE supervisors' and instructors' responses were grouped and compared with other groupings of local partners (union officials/peer advisors, and company officials alone), results were similar. The combined mean response for VTAE supervisors and instructors for total job-related measures was 3.86. According to the Scheffé post hoc comparison, this was statistically higher than the mean response of company officials which was 3.25 ($t(136) = 3.45\ p \leq .05$). Thus, both instructors and VTAE supervisors believe participants' job-related gains are higher than company officials believe they are.

An analysis of variance showed a significant difference between instructors' and company officials' mean responses to the question of whether participants are promoted. Instructors reported 3.42 while company officials reported 2.25.

Similarly, responses of VTAE supervisors and instructors to the question of increased eligibility for promotion (versus actual promotions) were statistically higher than grouped responses of union officials/peer advisors. The combined mean for VTAE supervisors/instructors was 3.54. The combined mean for union officials/peer advisors was 2.47 ($t(136) = 3.50\ p \leq .05$).

There were no other significant differences in response to this cluster of items among the other local partner groups.

Comparison of Participants' and Local Partners' Responses

Academic measures. When all questions relative to academic improvement were grouped, responses of participants to the academic cluster were statistically higher than responses of local partners. (Included in the academic cluster were math, writing, reading, speaking, ESL, GED, and computer skills*.) Participants reported a mean improvement of 4.45 while local partners' responses reflected a mean improvement score of 4.23 ($F(1,266) = 10.63\ p \leq .05$). Both means reflect high opinions of participants' academic improvement.

Job-related measures. Similarly, when questions relative to job-related performance were grouped, responses of local partners were statistically higher than responses of participants. (Included in the job-related measures were job skills, ability to work together with other employees, ability to work with supervisors, ability to solve problems, quality of work and self-image.) Participants reported a mean improvement of 2.71 while the mean for local partners was 3.65 ($F(1,271) = 42.00\ p \leq .05$).

Thus, participants believe their overall levels of academic achievement to be higher than local partner believe them to be. Conversely, participants believe their overall levels of improvement in job-related measures to be lower than local partners believe them to be.

Participant promotability. When participants and local partners were asked if participation increased eligibility for promotions, their mean responses differed with the difference being statistically significant. The mean

*Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

response for participants was 1.30. The mean response for local partners was 3.05 ($F(1,255) = 67.92\ p \leq .05$). However, the "3" on the five point scale was "neither agree nor disagree" so in spite of the statistical significance, there appears to be little practical significance in the discrepancy. Neither group agreed that participation resulted in increased eligibility for promotion.

Occurrence of promotions. To compare responses of both groups, the scale for both was converted to the dichotomous scale used on the participant survey where 1 = *yes* and 2 = *no*. When asked whether or not they had actually received promotions, participants reported a statistically higher mean than local partners—1.96 compared to 1.69 ($F(1,219) = 24.31\ p \leq .05$). Given that scale, participants actually reported a *lower* frequency of promotion than local partners. Regardless of the difference, neither participants nor local partners as a group appear to believe that promotions are a significant program outcome.

Job transfers. A similar pattern could be seen in the question relative to job transfer. The two-point scale was also used for this question. Participants reported a statistically higher mean than local partners in response to the question of whether or not they had received job transfers—1.88 compared to 1.46 ($F(1,227) = 45.41$ $p \leq .05$). Thus participants reported lower frequency of job transfer because 1 = *yes* and 2 = *no*. Again neither group appears to believe that job transfers are a significant program outcome.

Responses of both groups to the questions about promotability, actual promotions, or transfers indicated that, in general, neither group believed that participants were promoted or transferred as a result of participation in the program.

Satisfaction with progress. Participants reported statistically higher means for degree of satisfaction with their progress in the Learning Centers—4.32 compared to 4.23 for local partners ($F(1,226) = 3.77\ p \leq .05$). Both scores are strong positive indicators, however.

Job enjoyment. In terms of job enjoyment, responses of participants and local partners were significantly different. Participants reported a mean response to the question of 2.64 while the mean response for local partners was 3.42 ($F(1,271) = 17.12\ p \leq .05$). While the response of local partners was in a more positive direction, the partners' response was closer to *neither agree nor disagree* than to *agree*.

While statistically significant differences do appear to exist between participants and local partners relative to improvement in academic areas, satisfaction with progress, and job-related areas—job enjoyment, promotability, and the actual occurrence of job promotions and transfers—the responses were generally in the same direction and not in opposition. Only in the case of "job enjoyment" were responses of both groups on opposite sides of neutral.

Most Significant Program Goals

To answer the question of "Which program objectives do participants and local partners view as most significant?" both participants and partners were asked to identify which program goals they felt were most significant. (Each goal had been mentioned in preceding questions; additionally, participants were given the option of hearing the list of program goals read.) As Tables 17 and 18 indicate, some differences exist between participants and local partners as to which program goals are considered most important.

For participants, the top three goals selected most consistently as either first, second, or third choice were computer skills, math skills, and self image. For local partners, the top three goals selected most consistently as either first, second, or third choice were self image, math, and reading. Thus, the two groups were in

agreement on the importance of self image and math; participants, however, held computer skills* as the most important program goal and ranked reading as seventh in order of importance. Local partners ranked computer skills as fifth in importance in a two-way tie with problem-solving. The difference relative to the perceived importance of reading versus computer skills has great implications for the way in which workplace literacy is planned, delivered, and marketed to employees.

Local partners offered a number of goals in addition to the stated goals of the program. The two most frequently mentioned "other" goals were improvement in "basic skills" (9 responses) and statements about the learning center as providing a foundation for future learning. As one participant said, "The fact they are accustomed to being in a class makes it easier for them in company training. There's marked difference between those who have been in a class and those who have not. They are head and shoulders above the others, whether it's training for quality or SPC, they are not intimidated like others . . . ."

Table 17
Participants' Choices of Top Three Goals for WPT Program

GOALS	Selected as First Priority (No.)	%	Selected as Second Priority (No.)	%	Selected as Third Priority (No.)	%	Selected as First, Second, or Third Priority (No.)	%
1. Computer skills[a]	(21)	21	(10)	10	(10)	10	(41)	40
2. Math skills	(14)	14	(15)	15	(5)	5	(34)	33
3. Self-image	(10)	10	(6)	6	(14)	14	(30)	29
4. Improved quality	–	–	(8)	8	(13)	13	(21)	21
5. Job skills	(10)	10	(8)	10	(3)	3	(21)	21
6. Problem-solving	(2)	2	(13)	13	(5)	5	(20)	20
7. Reading	(9)	9	(3)	3	(6)	6	(18)	18
8. Writing	(6)	6	(8)	8	(3)	3	(17)	17
9. Getting along better with other employees	(7)	7	(2)	2	(5)	5	(14)	14
10. Eligible for promotion	(3)	3	(2)	2	(9)	9	(14)	14
11. Other	(2)	2	(4)	4	(6)	6	(12)	12
12. Job enjoyment	(2)	2	(5)	5	(2)	2	(9)	9
13. Job transfer	(2)	2	(5)	5	(2)	2	(9)	9
14. Getting along better with supervisors	–	–	(2)	2	(6)	6	(8)	8
15. ESL	(4)	4	(1)	1	–	–	(5)	5
16. Speaking	(1)	1	(1)	1	(3)	3	(5)	5

*Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

17 GED	(3)	3	(1)	1	--	--	(4)	4

$n = 10$.

[a]Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

Table 18

Local Partners' Choices of Top Three Goals for WPT Program

Goals	Selected as First Priority (No.)	%	Selected as Second Priority (No.)	%	Selected as Third Priority (No.)	%	Selected as First, Second, or Third Priority (No.)	%
1. Self image	34	33	13	13	19	19	66	65
2. Math	27	26	22	22	11	11	60	59
3. Reading	21	21	17	17	11	11	49	48
4. Other	13	13	11	11	11	11	35	34
5. Computer skills[a]	7	7	13	13	12	12	32	31
6. Problem-solving	10	10	10	10	12	12	32	31
7. Getting along better with other employees	4	4	15	15	10	10	29	28
8. Job Skills	10	10	7	7	10	10	27	26
9. Improved quality	7	7	7	7	6	6	20	20
10.Eligible for promotion	3	3	9	9	7	7	19	19
11.Writing	–	–	6	6	13	13	19	19
12. GED	8	8	5	5	5	5	18	18
13. Job enjoyment	3	3	4	4	9	9	16	16
14. ESL	1	1	3	3	4	4	8	8
15. Satisfaction with progress	4	4	2		1	1	7	7
16. Speaking	–	–	3	3	3	3	6	6
17. Getting along better with supervisors	1	1	1	1	1	1	3	3
18. Job transfer	–	–	1	1	2	2	3	3

$n = 102$

[a]Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

Noteworthy Practices

One of the research questions sought to identify the "best practices" exhibited by the programs whose participants reported the highest mean of improvement in academic skills and job performance. Thus the mean for all scaled survey items was calculated for each of the 10 sites where participants were interviewed. These aggregate means ranged from 3.71 to 4.13. An Analysis of Variance revealed, however, that none of the differences were statistically significant among the sites. Thus the initial design which included descriptive analyses of these top-performing sites could not be completed. The researcher, nonetheless, identified one practice that has apparently met with success and another worthy of continued study. The approach that appeared to contribute to program vitality related to utilizing an advisory committee composed of and led by participants and peer advisors. The practice that should be studied is that of extending Learning Center hours so that all shifts have reasonable access to educational services.

The 25 instructors who responded reported certification in: Elementary education (11); English/speech 7-12 (5) and English without a specified level (3); and ABE/GOAL (6). Other certifications reported were math

7-12 (1) and math without a specified level (2); ESL (2); reading, K-12 (2); exceptional education, K-8 (1); science (1); social studies, 7-12 (1); family living 6-12 (1); and music K-12 (1).

Table 19
Number of Hours Learning Center is Open per Week

Site	Number of Hours
Serigraph	52
Milwaukee County	24
Briggs & Stratton	22
J. I. Case	20
Goodyear	16
Beloit Corporation	15
American Brass	12
Joerns	8
Schreiber	6
Royal Basket	4

Advisory councils of participants and peer advisors. Half of the sites visited had advisory groups. At J. I. Case, Racine, two advisory groups were observed. One group was composed of peer advisors who represented a group of about 60 peer advisors, a number of whom were participants also. The other group was a steering committee composed of company officials, union representatives and peer advisors. Meetings of both groups were led by committee members themselves and provided opportunities for members to develop their skills in communication, problem-solving, planning, and leadership.

A similar group was observed at Serigraph Printing, West Bend, where employees were active in the planning and actual design of some of the courses offered. At the time of the site visit, employee members of the advisory committee were collecting samples of printing problems and flaws so employees could actually see the examples while learning the terminology.

Customer-centered hours of operation. As Table 19 indicates, there was great variability in the number of hours the Learning Centers were open. Number of hours ranged from four to fifty with the median being 15.5 hours. Serigraph Printing, West Bend, has made an extraordinary effort to accommodate workers' schedules. The Learning Center is open 52 hours per week as early as 6 a.m. and as late as midnight. Participants and local partners both identified inconvenient hours as one of the top four barriers to participation. At the Serigraph site, no matter whether an employee works first, second, or third shift, the Learning Center is available both before and after the shift. At the time of the study, usage figures had not been compiled for the extended hours, but it is a customer-centered approach worthy of further study.

Program Longevity

There appeared to be no direct relationship between length of program operation and participant ratings as to their gains in academic or job-related skills. As a matter of interest, however, Table 20 shows program start-up dates for the 10 sites visited.

Table 20

Program Longevity

Site	Start Date
American Brass	10/88
Beloit Corporation	10/88
Briggs & Stratton	10/88
J. I. Case	10/88
Joerns	10/88
Schreiber	10/88
Goodyear	10/90
Milwaukee County	3/91
Serigraph	4/91
Royal Basket/Curtition	5/91

Barriers to Participation

Participants' views of barriers. Participants interviewed at the 10 sites were asked what factors made it difficult for them to attend the Learning Center. Following are their responses in summary form:

Lack of time (24)
Overtime and long work hours (18)
Family and child care responsibilities (15)
Inconvenient hours (10)
No barriers (8)
Other (7)
Attend VTAE college also (6)
Illness (5)
Second job (4)
Distraction of nice weather (4)
Shift changes (3)
Long distances between work and home (3)
You must push yourself (2)

Local partners' views of barriers. Local partners at all 22 sites were asked what factors made it difficult for workers to attend the Learning Center. Following are their responses in summary form.

Overtime and long work hours (60)
Family responsibilities and child care (44)
Lack of time (34)
Inconvenient hours (25)
Inconvenient location (17)
Other (12)
Embarrassment (11)
Motivation lacking (11)
Shift/schedule changes (10)
Fear (10)
Layoffs (9)
Employees work second jobs (8)
Must go on their own time (5)
Workplace politics (union vs. management) (5)
Attitude of being "too old" to learn (4)
Car pooling (4)
None (3)
Lack of awareness (3)
Shutdowns (2)
Long distances between work and home (2)
Distraction of nice weather (2)
Production schedule makes it difficult to let employees go (2)
Bad attitude toward education (2)
Vacations (1)

Participants and local partners were consistent in their identification of the four top barriers to participation which were: (a) lack of time, (b) overtime and long work hours, (c) family and child care responsibilities, and (c) inconvenient hours. A difference was that the barrier of inconvenient location cited frequently by local partners was not mentioned by the current group of participants.

It is encouraging to note that some of the top barriers to participation identified by both groups are factors that can be addressed. For example, many comments were made about the time periods the centers were open relative to shift hours. Inconvenient location of the learning centers was perceived by local partners as a significant barrier.

One participant said, "It is hard for me to get here before working hours. I have been coming in during breaks, but now I use my breaks to walk outside." another said, "The only time I have is during lunch. It's hard to come in early and stay late--I have two kids."

Of long work hours and limited learning center hours, one participant said, "Our shift hours change frequently. If I work late, I miss the whole time." Another said, " I may have to come in to work four hours early." Another said, " The learning center is open just a short time after I get off work. But when it's open, I am here."

A participant pinpointed a structural problem in the schedule--"I work till 3:30 but I can't come in to the learning center till 5:00 when the center is open." Participants at one site expressed frustration at what appears to be an incomplete meshing of education and work activities. One said, ". . . Work doesn't get done while we attend." Another said, "We are short of help in our area, and we fall behind on certain parts and work. And we are rushed to put out more work faster before going to the Learning Center and to return back to work after schooling to catch up."

While individual attitudes, such as fear, embarrassment, or lack of motivation, were cited frequently, if they are aggregated, they were still not cited as frequently as overtime and long work hours.

Motivators for Participation

Participants' views of motivators. Participants were asked what factors encouraged them to attend the Learning Center. Their responses are summarized below:

Opportunity to learn to use computers (22)
Desire for self-improvement (16)
Desire for education (16)
Knowledgeable, supportive instructor (9)
Math (7)
Convenient hours (6)
ESL (5)
Interesting, varied courses, materials (5)
Sense of accomplishment, pride, and enhanced self image (4)
On-site, accessible location (5)
Fear of job loss (4)
No cost to participants (4)
Company incentives (3)
Self-paced (3)
Nonthreatening learning environment (3)
Promotion (3)
Variety of promotional strategies (3)
Reading (3)
Chance for children to have better life (2)
Confidentiality (2)
Convenience (2)
Equipment (2)
Job skills (2)
Spouse can enroll (2)
Transfer (2)
Other (19)

Local partners' views of motivators. Local partners were also asked what factors encourage workers to attend the Learning Center. Their responses are summarized as follows:

Company incentives for attending (26)
On-site accessible location (21)
Communicative peer advisors (19)
Promotion possibility (18)
Knowledgeable, supportive instructors (17)
Interesting, varied courses, materials (17)
Desire for self-improvement (16)
Convenient hours (16)

Sense of accomplishment pride, enhanced self esteem (16)
Self-paced, one-on-one, individualized instruction (15)
Positive comments from participants (15)
Fear of job loss (15)
Confidentiality (13)
Awareness of workplace changes (12)
Computer skills (11)
Increased job skills (11)
Supportive management (11)
Variety of promotional strategies (8)
Basic reading and/or math skills (6)
No cost to participants (5)
Union support (4)
Convenience (4)
Increased knowledge and skills (4)
Supervisors' support (3)
Child care payment (3)
Facilities (3)
GED (3)
Spouse support (3)
Skills can be applied to job (3)
Socialization opportunities (3)
No testing (2)
Changes in personal situation (2)
Other (22)

Company incentives that topped the list included classes during company time, pay for attendance, bonus payment for completing 50 hours, monthly door prize for attendance, and the like.

Promotional strategies cited included word of mouth by participant, having instructor talk to workers on the floor, flyers, newsletters, videotapes, posting of courses in departments. As one local partner described it, "We have a newsletter, recognition days and management has been giving incentives to encourage attendance. A weekly self-improvement workshop gets the student's foot in the door. We've organized social events around the center to get the word out and more importantly peer advisors recruit and the teacher gets out on the floor to get to know everyone."

Participants and local partners differed in their views of what factors encourage workers to attend the Learning Centers. Participants cited computers and the personal desire for self-improvement and education. Local partners cited company incentives, such as pay or time off from work, as the number one encourager. Current participants did not place company incentives as a top factor. It is probable, however, that company incentives could encourage non-participants who exhibit lower degrees of intrinsic motivation to participate in the Learning Centers.

Suggestions for Program Improvement

Participants' views on potential improvements. Participants were asked how the Learning Center could be improved. They suggested the following:

More hours (16)
Fine as is (11)
Don't know (10)
More participation (7)
More space (6)
More promotion (5)
More computers (5)
More variety in materials, programs, and courses (4)
Popular foreign languages (3)
More job-related classes (3)
More equipment (2)
Other (19)

The top three responses were more hours, fine as is, and don't know. About one third of the suggestions for more hours cited the need for more hours convenient to second and third shift workers. Most of those who had nothing to suggest said they were too new to know.

Local partners' views of potential improvement. When local partners were asked how the Learning Center could be improved, the following suggestions were offered:

More hours (34)
More space (17)
Job-related training (16)
More promotion (13)
More computers (12)
Wider course selection (12)
More employee input (10)
More computer programs/instruction (7)
More structured courses (7)
OK as is (7)
Sites at each plant (4)
Curriculum development (4)
More company support (5)
More peer advisor support (4)
Coordination with other company training (4)
More consistent location (3)
Schedule on company time, not VTAE (3)
Greater depth (3)
More VTAE support, involvement (3)
More materials (2)
Instructor (2)
More instructor inservice (2)
Family members should be allowed (2)
More participants (2)
On-site child care (2)
More visibility of instructor in plant (2)
Don't know (2)
Other (22)

Participants' additional comments. To the open-ended question on additional comments, most participants offered positive responses about the Center and the instructors in particular. Examples include:

- The instructors are great! They and the subjects are good for self-esteem.
- The instructor is so patient and easy to be relaxed around.
- Instructors are great! There's never been an instructor turn me down for help even when it was crowded.

. . .

Participants at one site remarked on the negative attitude some workers had toward the Learning Center:

- People say they don't have to come because they aren't stupid.
- We asked in a questionnaire what we could do to make more people attend and one person wrote, "I got my schoolin' done when I was younger and you shoulda too . . ."

Approaches to Customizing Instruction for a Company

Instructors at all 22 sites were asked how they tailored instruction to meet the needs of the worksite. Twenty-five teachers responded. Six, or about one fourth, described a process of finding out from employees what they need and then assembling instructional materials or experiences to accomplish the objectives desired by employees. The remainder reported varying combinations of that individualized instruction with employee and employer input and use of materials actually used in work activities at the site. About one third said they use input on needs from employees and or management to tailor instruction to the company. Another third reported using company materials, such as shop manuals, blueprints, piece work reports and other data forms, labor grade tests, and the like, in the teaching process.

Several reported using WESA job analyses as the basis for curriculum development. One reported that the Learning Center provided instructional support for required company-taught courses in SPC and blueprint reading. One teacher who reported attending departmental meetings was learning gauging, measurement, and blueprint reading herself.

Summary of Findings

The first research question was, "To what extent do program participants agree they have achieved their academic and job-related objectives?" Participants solidly agreed that they had improved in the basic skills studied. On a five-point scale where 1 = *strongly disagree* and 5 = *strongly agree*, the means ranged from 4.00

for speaking to 4.57 for computer skills*. Participants rated their improvement in Math, writing, reading, GED—the remaining academic areas—with scores over 4.00 (*agree*). The percentage who *agreed* or *strongly agreed* they had improved, ranged from 83% for writing to 100% for ESL.

In job-related measures the same 5-point scale showed participant responses ranging from 1.30 for *becoming eligible for promotion* to 4.16 for *improving job skills*. Improved self image, problem-solving skills and quality were reported at over 4.00 (agree). The percentages who "agreed" or "strongly agreed" that they had improved in job-related areas ranged from 84% for self-image to 12% for eligibility for promotions. Only 3% reported being promoted and 10% reported job transfers.

Participants indicated they were satisfied with their progress in the Learning Center with a mean response of 4.32. All participant responses were analyzed according to the independent variables of age, gender, racial and ethnic background, months of attendance and highest grade in school completed. No statistically significant differences could be identified.

The second research question was, "To what extent do local partners agree that participants achieve academic and job-related objectives through participation in the program?" Local partners solidly agreed that participants improved in math, writing, reading, GED and computer skills. Means ranged from 3.51 for ESL to 4.57 for math. Speaking and ESL were considered lesser areas of improvement however, these two subjects were not taught at most sites.

In job-related measures, local partners solidly agreed that participants had increased self-image, but expressed weak agreement relative to enhanced job skills and problem-solving and neutrality relative to getting along better with other employees and supervisors, enhanced quality, eligibility for promotion and job enjoyment. Local partners' mean relative to increased promotability was 3.05. Their mean relative to actual promotions was 1.69 and their mean relative to job transfers was 1.46.

Responses of local partners to the question of whether participants are satisfied with their progress resulted in a mean response of 4.23 indicating agreement.

Within the local partners' group of instructors, company officials, union officials, peer advisors, and VTAE supervisors, four measures differed statistically. Instructors reported higher levels of participant improvement in job-related measures (4.01) compared to company officials' (3.25). The same difference was found relative to the question of whether participants are promoted.

Similarly, when local partners' responses are grouped into logical clusters, instructors and VTAE supervisors believe participants' job-related gains are higher than company officials believe they are. Instructors and VTAE supervisors together also believe that participants are promoted more than union officials and peer advisors believe they are and that they become eligible for promotions more than the union group believes they do.

Statistically Significant Between-Group Differences

In comparing responses of participants and local partners relative to academic improvement, it was found that participants report a statistically higher mean improvement of 4.45 than local partners (4.23). Both scores, however, reflect high opinions.

In job-related measures, participants reported mean improvement of 2.71 while the mean for local partners was 3.65. Thus participants believe their levels of academic gains to be higher than local partners while

*Computer skills was defined by state WPT leaders as operation of computers to enhance basic skills needed at the job site and to utilize instructional software.

conversely, local partners believe participants' improvement in job-related measures to be higher than participants themselves.

Responses of both groups to questions about promotability, actual promotions or job transfers indicated that neither group believes them to be significant program outcomes.

Participants reported higher level of satisfaction with their progress (4.32) than local partners (4.23) and lower levels of job enjoyment (2.46) than the levels ascribed to them by local partners (3.42). Except in the case of "job enjoyment," responses varied in the same direction.

The third research question was, "Which program objectives do participants and local partners view as most significant?" For participants, the top three goals selected were computer skills, math skills and self image. For local partners, the top three goals selected were self-image, math and reading skills.

The fourth research question was, "What are some of the 'best practices' exhibited by the programs whose participants report the highest mean of improvement in academic skills and job performance?" The question could not be answered as proposed because there was no statistical significance found between the means for the 10 sites. The researcher identified one noteworthy practice observed at the sites, which was participant/peer advisory councils. A promising practice was that of building Learning Center hours around workers' shifts.

In other findings, participants and partners were consistent in identifying the same top four barriers to participation: lack of time; overtime and long work hours; family and child care responsibilities; and inconvenient hours.

Participants reported that they were motivated to attend the Learning Center primarily by the opportunity to learn to use computers, desire for self improvement and desire for education.

Local partners felt that company incentives for attending were the most powerful motivators followed by: on site location; communicative peer advisors; promotion possibility; knowledgeable, supportive instructors; interesting and varied courses and materials; desire for self-improvement; convenient hours; sense of pride and enhanced self esteem; self-paced one-on-one instruction; positive comments from participants; fear of job loss; confidentiality; awareness of workplace changes; computer skills; increased job skills; supportive management.

In terms of suggested program improvements, both participants and local partners indicated that the top need was for more Learning Center hours.

Finally, about one third of the teachers say they use actual company materials in the teaching process--shop manuals, blueprints, piece work reports, labor grade tests and the like. One of these instructors was learning gauging, measurement and blueprint reading herself.

Policy Recommendations

1. Each program should focus on a limited number of objectives that meets the needs of that worksite rather than 16 participant outcomes in addition to process outcomes.

This evaluation measured opinions on participant improvement in seven basic skill areas and nine job-related areas. Thus, local programs were accountable for 16 participant outcomes in addition to 13 process objectives for orienting employees, training peer advisors, and the like.

It would be helpful for each program site to identify which of the 16 kinds of participant outcomes should be targeted at that worksite. For example, "promotion" is a general goal of the program. Participants and local partners alike indicated that promotions and job transfers are not generally occurring as a result of the program. During economic slumps such as the one experienced during the period in which this evaluation was

conducted, promotion may be an irrelevant outcome. At one site, of the participants interviewed, more were on lay-off than were currently employed.

In addition, many companies are flattening their organizational structures and moving toward newer administrative structures such as self-managed teams. Promotions and job transfers may not be relevant measures in such companies.

The benefits of sharper focus at each site would be more effective use of resources and an opportunity for more closely linking local planning and evaluation.

2. Instruction in basic skills should be increasingly imbedded in instruction specific to the worksite through increased use of job skill requirement analyses, called Workplace Educational Skills Analysis (WESA).

This process of imbedding basic skills instruction in job-specific tasks or materials is clearly ongoing. It is reflected in the titles given to the Learning Centers, as in Serigraph Inc.'s Personal Development Center; Tecumseh Product's Education, Training and Development Center; and Waukesha Memorial Hospital's Skills Enancement and Education Center. There is variation, however, among the sites in the extent to which site-specific instruction actually occurs. The models vary from programs where the instructor is on the shop floor learning what is required of workers to the more passive models patterned after Adult Basic Education where instructors are available to participants in the Learning Center. Only several instructors mentioned using WESA job analyses as the basis for curriculum development.

Reading *per se* is not a top priority of participants, even though employers need employees with solid reading skills. Participants indicated their priorities for the program, citing computer and math skills and self-image as the top three. Reading was seventh in priority. This points to the need to provide context-specific instruction which will enhance workers' self-esteem through enhanced job skills while improving reading and related basic skills in the process.

As asserted in the 1990-91 WPT evaluation, unless the program can legitimately position itself in the eyes of potential participants as something other than remediation aimed at fixing individuals, it will not be able to serve those employees most in need.

3. Sites should identify and provide the optimal mix between totally individualized instruction and short-term, small group classes.

One-on-one instruction is enormously labor intensive for the instructor and is not as likely to result in the team building and verbal communication skills increasingly required by employers as interactive cooperative learning in small groups. Short-term classes with low numbers (approximately 10 per class) which enable students to learn cooperatively should be provided and be supplemented with one-on-one assistance. Such a mix would accomodate learning syles of those who learn most effectively through interaction an activity, as well as those who learn best through on-on-one independent study.

4. Companies wishing greater participation of employees in educational upgrading should provide paid time during the work day for employee education.

The most frequently mentioned barriers to WPT participation were long work hours and overtime. On the encouragement side, local partners believe that company incentives are or would be among the most powerful incentives for participation. Employees with families, whether two parent or single parent are under even more pressure to fit in essential life activities around work hours and will continue to find it difficult to divert more time into educational pursuits outside of work hours. Only one company visited paid employees for attending. Another provided release time during work hours. Data collected in 1990 showed that of the 11 WPT sites, the three who compensated employees for participation showed a participation rate of 22% compared to a participation rate of 7% for companies who did not provide pay for participation. Company incentives

mentioned in this study included holding classes during company time, paying partial wages for attendance, providing bonuses for completing 50 hours, and providing monthly door prizes for attendance.

5. Sites should use advisory groups of participants to help plan and evaluate the programs.

Half of the sites visited had advisory or steering committees that included participants. This evaluation shows that there are significant discrepancies among the perceptions of key players in local WPT programs. For example, participants and local partners do not share the same notions as to what motivates people to attend. Instructors and company officials differ as to the degree to which participants improve in job-related measures. VTAE supervisors and instructors differ with union officials and peer advisors on the degree to which participation increases promotability of employees. Thus communication and collaborative planning should increase. Advisory groups of stakeholders can be highly effective in that effort.

6. Federal administrative policies restricting computer instruction should be modified or eliminated to enable WPT to reach its intended constituent group more effectively.

Current program participants consider computer skills as one of the three most important goals of the program for them. If WPT is to serve its primary stakeholders—employees—it should be responsive to their expressed needs. Using a computer to compose and then to read what one has written, or using a computer for mathematics are methodologies for building basic skills that hold no stigma for workers.

In addition, many of the WPT participants from clerical to line workers spoke of needing to become computer literate to perform their jobs. A machine operator at American Brass in Kenosha reported that before attending the WPT Learning Center, he had to call his supervisor in the middle of the night to reboot the computer that controlled his machine. He reported that he now has the skill to manipulate the computer himself. Authors Carnevale, Gainer, and Villet (1990) reinforce this claim. "Advances in information-based technology [computer hardware and software] have been the major source of changing skills requirements in most American jobs" (p. 84). The 1983 report of a Task Force on Vocational, Technical Preparation (Wisconsin Department of Public Instruction and Wisconsin Board of Vocational, Technical and Adult Education) said:

> Most people either will work directly with computers or have their work influenced by computers in some significant way. An influence as pervasive as this requires, among other things, an informed citizenry that not only understands what computers can and cannot do but also is aware of the problems and issues involved in their use. Computer competency is a basic skill complementary to other competencies, such as reading, writing, mathematics, and reasoning.
>
> Students entering a vocational/technical educational program should be able to:
>
> - Demonstrate a basic knowledge of computer terminology and of how computers operate.
> - Demonstrate some ability to use the computer and appropriate software for:
>
> -self-instruction
> -collection and retrieval of information
> -word processing (including the development of keyboard, composition, and editing skills)
> -modeling, simulations, and decision making
> -problem solving, both through the use of existing programs and through experience with developing one's own programs. . . (p. 3)

Learning to use computer software can serve the dual function of enhancing basic academic skills while simultaneously developing job skills without stigmatizing workers as being "dumb" or deficient.

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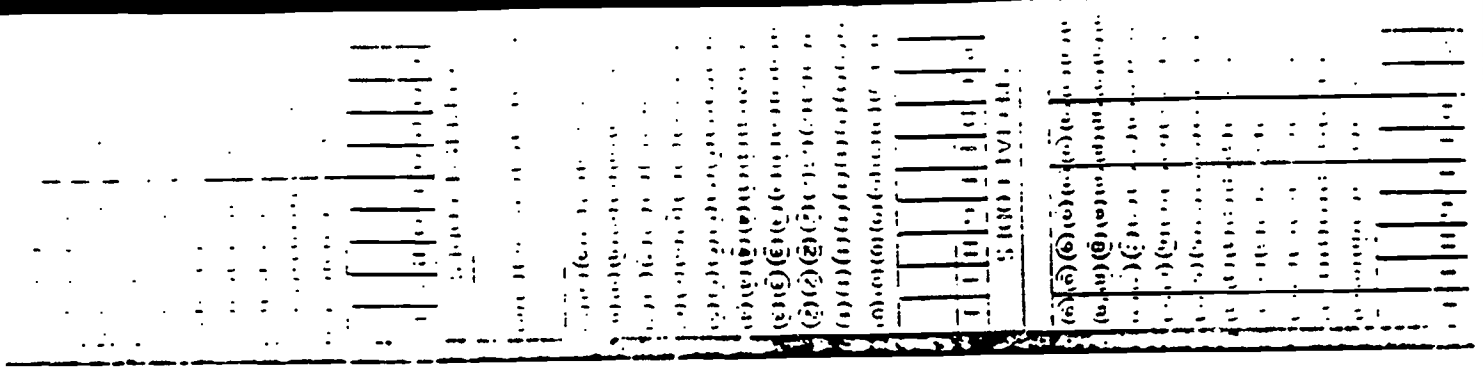

1992 PARTICIPANT SURVEY
WISCONSIN WORKPLACE PARTNERSHIP TRAINING PROGRAM
Conducted by the Center for Education and Work, UW-MADISON

This survey is to help find out how the WPT program helps workers. It is completely confidential and no one will know your name. We are interested in how much you feel the Learning Center has helped you.

I will read a statement. Please tell me whether you strongly disagree, disagree, neither agree nor disagree, agree, strongly agree or find the statement non-applicable. (PLEASE NOTE: Interviewer must use a No. 2 pencil to complete this form.)

If you did not study a subject I ask you about, please tell me.

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree
0 = Not Applicable

PART I: Since I started attending the Learning Center, I have improved:

1. Math Skills
2. Writing Skills
3. Reading Skills
4. Speaking Skills
5. English as a Second Language
6. Skills for the GED test
7. Computer Skills

Since I started attending, I have improved:

8. My job skills
9. Ability to work together with other employees
10. Ability to work with supervisors
11. Ability to solve problems
12. Ability [illegible] less rework, less error
13. Self image

-OVER-

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2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree
0 = Not Applicable

Other Areas Please describe _____

Comments: _____

PART II: Since attending the Learning Center:

15. I am satisfied with the progress I have made

16. I became eligible for a promotion

17. I enjoy my job more

PART III: Since attending the Learning Center, I have

18. Received a promotion 1=Yes 2=No

19. Transferred to a different job 1=Yes 2=No

Comments: _____

PART IV: All the goals of this program were read in the questions we just did. What 3 goals of the program do you think are most important? Please tell me which goal is most important, second most important, and third most important. (PLEASE NOTE: Interviewer repeat list if necessary.)

Most important _____

Second most important _____

Third most important _____

PART V:

20. How many months have you attended?
1 = 1-6 months
2 = 7-12 months
3 = 13-18 months
4 = 19-23 months
5 = 24-29 months
6 = 30-36 months

21. What is your age?
1 = 16-24; 2 = 25-44; 3 = 45-49; 4 = 60 or over

22. What is your sex? 1 = Male 2 = Female

23. Highest grade in school completed?
1 = 7 or less
2 = 8
3 = 9-11
4 = 12
5 = 13-15
6 = college graduate

24. What is your racial or ethnic background?
1 = Asian/American
2 = Black
3 = Hispanic
4 = Native American
5 = White

25. What is the name of your company? _____

THANK YOU SO MUCH FOR COMPLETING THIS SURVEY. WE APPRECIATE YOUR HELP.

UNIVERSITY OF WISCONSIN

FORM Q10S-GENERAL PURPOSE QUESTIONNAIRE

INSTRUCTIONS

Part VI. 1992 Participant Survey

26. What factors make it difficult for you to attend the Learning Center?

27. What factors encourage you to attend?

28. How can the Learning Center be improved?

29. What other topics/subjects should be offered?

30. Other comments?

31. Company:

Thank you!

1992 LOCAL PARTNER SURVEY
WISCONSIN WORKPLACE PARTNERSHIP TRAINING PROGRAM

We are interested in your opinions on how the Wisconsin Workplace Partnership Training Program (WPT) affects participants. Your responses will be kept confidential and reported as grouped data.

The study is being conducted by the Center for Education and Work, University of Wisconsin-Madison, for the Wisconsin Board of Vocational, Technical and Adult Education.

Please use a No. 2 lead pencil. Do not fold or staple this sheet. Write any comments below each question. Respond to each question by filling in the bubbles to the right using the following scale:

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree
0 = Not Applicable (if the items in 1-19 are not goals for your WPT Learning Center)

PART I: The following statements are about people who come to the Learning Center. Indicate your level of agreement or disagreement.

The WPT Learning Center improves workers':

1. Math Skills
2. Writing Skills
3. Reading Skills
4. Speaking Skills
5. English as a Second Language
6. Skills for the GED test
7. Computer Skills
8. Job Skills
9. Ability to work together with other employees
10. Ability to work with supervisors
11. Ability to solve problems
12. Health (e.g., less obesity, less stress)
13. Self image

1. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
2. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
3. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
4. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
5. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
6. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
7. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
8. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
9. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
10. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
11. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
12. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
13. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

-OVER-

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4 = Agree
5 = Strongly Agree
0 = Not Applicable

PART II: As a result of the WPT program, participants:

15. [illegible]
16. [illegible]
17. [illegible]
18. Transfer to different jobs
19. Enjoy their jobs more

Comments: _____

PART III: All the goals of this program are given in questions 1-19. Please list the 3 goals of the program that you think are most important

Most important: _____

Second most important: _____

Third most important: _____

PART IV: Please provide the following information about yourself.

20. I am a an:

1 = instructor
2 = union official
3 = company official
4 = peer advisor
5 = VTAE supervisor
6 = State partner
7 = Other _____ (please describe)

Company name: _____

Please go on to PART V on the attached sheet for further comments. Thank you.

UNIVERSITY OF WISCONSIN

FORM 2105-GENERAL PURPOSE QUESTIONNAIRE

INSTRUCTIONS

USE A NO. 2 OR SOFTER LEAD PENCIL. MAKE DARK MARKS THAT FILL THE RESPONSE OVALS COMPLETELY. IF YOU CHANGE AN ANSWER, BE SURE TO ERASE YOUR MISTAKE COMPLETELY. REQUESTED IDENTIFICATION ON THE REVERSE SIDE.

INCORRECT MARKS ✓ ✗ ○

CORRECT MARKS ●

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Part V. Local Partner Survey

21. What factors make it difficult for workers to attend the WPT Learning Center?

22. What factors encourage workers to attend the WPT Learning Center?

23. How can the WPT Learning Center be improved?

24. What other topics/subjects should be offered?

25. Other comments?

Part VI. (Instructors Only)

26. In what subject(s) and level(s) is your teacher certification?

Over Please . . .

27. Describe how you tailor instruction to meet the needs of this worksite.

28. To what extent do you feel the curriculum resources in the Learning Center are adequate to meet student needs?

29. Company:

Thank you for completing this survey! Please do not fold or staple any of the sheets.

Workplace Literacy Interviews
April-June, 1992

BUSINESS	INTERVIEWERS	DATES/TIMES
01. Goodyear	Natalie Kathleen	Tues 7-10 am; May 12 Tues 2-6 pm; May 12
02. Joerns	Kathleen	Wed 1-5 pm; June 3
03. Schreiber	Kathleen	Wed 3-5 pm; May 13
04. Briggs & Stratton	Kathleen Cindy	Mon 7-9 am; 11:30-2:30, 3-7 pm; May 11 Tues 3-7 pm; May 12
05. Milwaukee County	Kathleen Bob	Tues 7-11 am; May 12 Wed 11 am-7 pm; May 13
06. Beloit Corp.	Cindy Cindy	Wed 1-6 pm; May 13 Thurs 1-6 pm; May 14
07. American Brass	Kathleen Kathleen	Tues 1-5 pm; April 21 Thurs 1-5 pm; April 23
08. Royal Basket/Curt.	Kathleen	Tues 2-4 pm; May 19
09. J.I. Case	Kathleen Bob	Mon 7-10 am; April 27 Mon 2-7 pm; April 27
10. Serigraph	Kathleen & Natalie Kathleen & Natalie	Thurs 5:30-8:30 am, 12-5 pm, 7 pm-12:00 am; May 28 Friday 6 am-4 pm; May 29

Revised 4-29-92