DOCUMENT RESUME

ED 361 494   CE 064 423

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TITLE   Workplace Literacy Skills and Training Inventory.
INSTITUTION   Tecumseh Consortium, Springfield, OH.
SPONS AGENCY   Ohio State Dept. of Education, Columbus.
PUB DATE   [93]
NOTE   51p.; For a related tutor training manual, see CE 064
                422.
PUB TYPE   Reports - Research/Technical (143) --
                Tests/Evaluation Instruments (160)

EDRS PRICE   MF01/PC03 Plus Postage.
DESCRIPTORS   Adult Basic Education; Adult Literacy; *Basic Skills;
                *Competence; *Employer Attitudes; Employer Employee
                Relationship; Job Skills; *Literacy Education; *Needs
                Assessment; Surveys
IDENTIFIERS   Ohio (Greene County); *Workplace Literacy; *Workplace
                Literacy Skills and Training Inventory

ABSTRACT
                The Workplace Literacy Skills and Training Inventory
was created as a needs assessment instrument to determine existing
programs and services and current needs at workplace sites. Subjects
were 64 representatives from businesses in Greene County, Ohio,
randomly selected from the yellow pages. The framework for the
inventory consisted of 16 skills identified as essential to
employers. Three skills were added--computer, technical, and total
quality management. Twenty-six surveys were completed. Four
skills--knowing how to learn, basic reading, listening, and oral
communication--were rated as important by 100 percent of subjects.
The majority rated the remaining skills as important. All 26 believed
only one skill, basic reading, was mastered. Relatively few
businesses were providing or planned to provide training for these
workplace literacy skills. Results of the Yates corrected chi-square
analyses for each skill indicated that businesses do not provide
training for a skill simply because they believed it important. The
majority relied on inhouse providers for training. Upper management
determined training content in 16 businesses. Twenty indicated lack
of time was a possible constraint to training, eight identified lack
of money, and six identified unavailability of type of training
wanted. (Twenty-six tables are provided. Appendixes include the
inventory, skill definitions, and 12 references.) (YLB)

WORKPLACE LITERACY SKILLS AND

TRAINING INVENTORY

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INTRODUCTION

What exactly are the workplace literacy skills employers will need to address in order to cope with some of the following issues:

(1) changing demographics of the workforce

(2) increasing international competition

This question is not an easy one to answer. There does not appear to be one, "agreed upon" definition of workplace literacy skills. In many studies and articles, basic skills which include reading, writing, and computation have been cited as essential for success in the workplace (Copeland, 1987; May, 1990; Beil, 1992; Ford, 1992b; Solovy-Pratt & Vicary, 1992; Szabo, 1992). In other studies and articles, the importance of basic reading, writing, and computation skills as well as other skills such as communication, problem solving, and creative thinking has been acknowledged (Gorman, 1988; Bernardon, 1989; Durity, 1991; Feldman, 1991; Ford, 1992a). The most comprehensive list of essential skills has been compiled in a joint study by the American Society for Training and Development (ASTD) and the United States Department of Labor (Carnevale, Gainer, & Meltzer, 1988). This list of skills ranges from the foundation skill, knowing how to learn, to higher level skills such as

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organizational effectiveness and leadership (Carnevale et al., 1988). These skills were chosen as the framework for the survey developed for this study.

<center>Purpose</center>

This study was conducted in fulfillment of requirements for the Workplace Literacy and Training Grant received by the Greene County Branch of the Tecumseh Consortium from the Ohio Department of Education. The Workplace Literacy Skills and Training Inventory (see Appendix B) was created as a needs assessment instrument to determine existing programs and services, as well as current needs at workplace sites. The researcher hoped to create a workplace literacy profile of Greene County businesses that would benefit future researchers and future workplace literacy programs in Greene County by providing them with demographic information, data on how businesses view various workplace literacy skills, and information on the types of training already being provided. The researcher also conducted statistical analyses of some of the data provided by the survey in an effort to determine why many of the businesses in Greene County were currently not providing training for workplace literacy skills.

METHODS

Subjects

The subjects used for this study were 64 representatives from businesses in Greene County, Ohio who were knowledgeable about the types of training being conducted within their businesses. The businesses were randomly selected from the business yellow pages of three phone books covering Greene County including the phone books for Xenia and Vicinity, Fairborn, and Beavercreek.

Instrumentation

The Workplace Literacy Skills and Training Inventory (see Appendix B) was developed in fulfillment of requirements for the Workplace Literacy and Training Grant through the Tecumseh Consortium. The framework for the Inventory consists of the 16 skills listed as essential to employers in Workplace Basics: The Essential Skills Employers Want (Carnevale et al., 1988).

Building upon Carnevale et al.'s (1988) skills, the researcher, in conjunction with a faculty committee from Wright State University and personnel from the Workplace Literacy and Training Grant, developed questions that would gather demographic data, data regarding importance and mastery ratings for workplace literacy skills, data

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regarding the existence of current and future training, and data regarding training programs already in place. Three skills, computer, technical, and total quality management were added to the list of Carnevale et al.'s (1988) skills as they were of interest to grant personnel.

Once an initial draft of the Workplace Literacy Skills and Training Inventory was completed, the researcher conducted a pilot study to determine the clarity and understandability of items on the survey. Subjects for this pilot study were three members of the Workplace Literacy Advisory Committee which was established under the Workplace Literacy and Training Grant. These three members were chosen because they represent businesses in Greene County. During face-to-face interviews with each of the three subjects, the researcher administered the initial draft of the Workplace Literacy Skills and Training Inventory and encouraged questions and suggestions for improvement. As a result of the pilot study, items on the survey were added or modified, and the definitions for the skills were clarified. The modified definitions can be found in Appendix C.

Procedure

Once contact was established by telephone with randomly selected businesses located in Greene County, Ohio. The researcher asked to speak with an owner, manager, office manager, or human resource representative. Initial contact was made with appropriate representatives from 64 businesses

in Greene County.

Once contact was established with an appropriate representative, the researcher explained the purpose of the study and sought their participation. If the representative was not willing to participate, he or she was thanked for his/her time, and the conversation was ended. If the representative was willing to participate, the researcher obtained his or her name. Then an appointment was scheduled approximately one week in advance for the researcher to call back and administer the survey.

Thirty-nine of the 64 subjects initially contacted agreed to participate. During the interim, the researcher mailed an appointment card to the representative showing the date and time of the next call. The mailing also included a copy of a cover letter (see Appendix A) further explaining the study, and a copy of the Workplace Literacy Skills and Training Inventory (see Appendix B) to review before the second phone conversation. At the appointed time, the researcher called the subject and administered the Workplace Literacy Skills and Training Inventory (see Appendix B). If the subject was unable to participate at that time, attempts were made to reschedule the appointment.

RESULTS AND DISCUSSION

Twenty-six surveys were ultimately completed. For question 1, subjects were asked to disclose their department or job title. Table 1 contains the responses to question 1.

Table 1

Contact's Department or Job Title

Department / Job Title	Number
Office Manager	10
Manager	7
Owner	3
Executive	4
President	1
Medical Assistant	1
Total	26

These subjects were all familiar with the types of training being conducted within their businesses.

For question 2 on the Workplace Literacy Skills and Training Inventory, subjects were asked to indicate the type

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of business for which they work. The responses for this question are presented in Table 2.

Table 2

Type of Business

Type of Business	Number
Retail Sales	11
Manufacturing	2
Health Services	4
Communications	2
Professional Services	2
Restaurant/Food Services	1
Construction/Contracting	0
Government Services	0
Education	1
Maintenance/Repairs	5
Advanced Technologies	0
Other:	
Travel	1
Veterinarian	1
Banking	1
Utilities	1

The total for types of businesses exceeds 26 because subjects were asked to circle all relevant choices and some

of the businesses surveyed are involved in more than one type of service or operation.

Question 3 asked the subjects to indicate the size of the business for which they work. The results of question 3 are presented in Table 3.

Table 3

<u>Size of Business</u>

Size of Business	Number
Under 25	23
26 - 50	0
51 - 75	2
76 - 100	0
101 - 300	0
301 - 500	0
500 - Over	1
Total	26

The results show that the vast majority of subjects surveyed had 25 or fewer employees.

Question 1 was included in the survey to ensure that the researcher was surveying a representative with knowledge about the training being conducted within the business. Questions 2 and 3 were included to provide a very basic

demographic framework of businesses in Greene County. From this data, one can determine that most of the businesses in Greene County have 25 or fewer employees and that a large number of the businesses are involved in retail sales. This data provides an indication of the types of business one would be targeting if establishing a workplace literacy program for Greene County.

For question 4, subjects were asked to rate how important they believe each skill is for the success of their business on a scale of "2 4 6 8". Ratings of 2 or 4 were combined to represent a rating of "not important" and ratings of 6 or 8 were combined to represent a rating of "important". Subjects were also asked to indicate to what degree they believe their employees have mastered each of these skills on a scale of "2 4 6 8". Ratings of 2 or 4 indicate "no mastery" and ratings or 6 or 8 indicate "mastery". Next, subjects were asked to indicate whether or not they were currently training for each of the skills by circling either "yes" or "no", and to indicate whether or not they plan to train for these skills in the future by circling "yes" or "no". The results of the importance ratings are presented in Table 4.

Insert Table 4 about here

Four skills, knowing how to learn, basic reading,

Table 4

Number and Percent of Subjects Rating Skills as Important

Skills	Number	Percent
Knowing How to Learn	26 of 26	100%
Basic Reading	26 of 26	100%
Listening	26 of 26	100%
Oral Communication	26 of 26	100%
Basic Writing	25 of 26	96.15%
Interpersonal	25 of 26	96.15%
Teamwork	25 of 26	96.15%
Self-esteem	24 of 26	92.31%
Leadership	24 of 26	92.31%
Basic Math	23 of 26	88.46%
Problem Solving	23 of 26	88.46%
Goal Setting / Motivation	22 of 26	84.62%
Negotiation	22 of 26	84.62%
Creative Thinking	21 of 26	80.77%
Organizational Effectiveness	18 of 26	69.23%
Personal / Career Development	17 of 26	65.38%

listening, and oral communication were rated as important by
all 26 or 100% of the subjects surveyed. The remaining
skills were rated as important by the majority of subjects
surveyed. These results indicate that employers in Greene
County recognize these workplace literacy skills as
important to the success of their businesses.

The results of the mastery ratings are presented in
Table 5.

Insert Table 5 about here

Only one skill, basic reading, was believed to be mastered
by all 26 or 100% of the subjects surveyed. The results in
Table 5 show that for most of the skills on the survey,
employers in Greene County believe there is some room for
improvement. Future workplace literacy providers may want
to establish programs that address the skills that many of
the respondents believe are not mastered. Of course it is
necessary to perform some type of actual assessment to
determine the true level of mastery for any skill, but these
results may help workplace literacy program providers
determine where to begin.

The number and percent of subjects currently providing
training for each of the skills are presented in Table 6 and
the number and percent of subjects planning to provide
training for these skills in the future are presented in
Table 7.

Table 5

Number of Percent of Subjects Indicating Skills Have Been
Mastered By Employees

Skills	Number	Percent
Basic Reading	26 of 26	100%
Basic Writing	24 of 26	92.31%
Basic Math	23 of 26	88.46%
Interpersonal	21 of 26	80.77%
Knowing How to Learn	20 of 26	76.92%
Listening	20 of 26	76.92%
Oral Communication	20 of 26	76.92%
Leadership	20 of 26	76.92%
Total Quality Management	20 of 26	76.92%
Technical	19 of 26	73.08%
Teamwork	17 of 26	65.38%
Negotiation	16 of 26	61.54%
Problem Solving	15 of 26	57.69%
Self-Esteem	15 of 26	57.69%
Creative Thinking	14 of 26	53.85%
Organizational Effectiveness	13 of 26	50.00%
Goal Setting / Motivation	12 of 26	46.15%
Computer	12 of 26	46.15%
Personal / Career Development	10 of 26	38.46%

Table 6

Number and Percent of Subjects Currently Providing Training

for Skills

Skills	Number	Percent
Teamwork	14 of 26	53.85%
Computer	14 of 26	53.85%
Technical	13 of 26	50.00%
Leadership	12 of 26	46.15%
Listening	11 of 26	42.31%
Oral Communication	11 of 26	42.31%
Goal Setting / Motivation	11 of 26	42.31%
Personal / Career Development	9 of 26	34.65%
Problem Solving	9 of 26	34.65%
Total Quality Management	9 of 26	34.65%
Knowing How to Learn	8 of 26	30.77%
Self-Esteem	8 of 26	30.77%
Creative Thinking	8 of 26	30.77%
Interpersonal	7 of 26	26.92%
Negotiation	7 of 26	26.92%
Organizational Effectiveness	7 of 26	26.92%
Basic Math	6 of 26	23.08%
Basic Writing	5 of 26	19.23%
Basic Reading	2 of 26	7.69%

Table 7

Number and Percent of Subjects Planning to Provide Training

for Skills in the Future

Skills	Number	Percent
Computer	17 of 26	65.38%
Teamwork	15 of 26	57.69%
Technical	13 of 26	50.00%
Total Quality Management	13 of 26	50.00%
Leadership	13 of 26	50.00%
Listening	12 of 26	46.15%
Goal Setting / Motivation	12 of 26	46.15%
Oral Communication	11 of 26	42.31%
Problem Solving	11 of 26	42.31%
Personal / Career Development	11 of 26	42.31%
Creative Thinking	10 of 26	38.46%
Interpersonal	10 of 26	38.46%
Self-Esteem	10 of 26	38.46%
Knowing How to Learn	9 of 26	34.62%
Negotiation	9 of 26	34.62%
Basic Math	8 of 26	30.77%
Organizational Effectiveness	8 of 26	30.77%
Basic Writing	6 of 26	23.08%
Basic Reading	4 of 26	15.38%

The data in Table 6 and 7 show that relatively few businesses are currently providing training or plan to provide training in the future for these workplace literacy skills. An important question to ask at this time is why? What factors might prevent a business from providing training for these workplace literacy skills?

Using the data from question 4 and Carnevale et al's (1988) original 16 skills, the researcher attempted to answer these questions. The first hypothesis is that there is a significant relationship between the importance businesses place on each of the 16 skills and the existence of training in business for these skills as determined by the Workplace Literacy Skills and Training Inventory. In other words, employers might provide training for skills they believe to be important to the success of their businesses.

A second hypothesis is that there is a significant relationship between the mastery rating given to employees for each skill and the existence of training in businesses for these skills as determined by the Workplace Literacy Skills and Training Inventory. For example, employers may not provide training for a skill because they think their employees have already mastered the skill.

A third hypothesis is that employers may not currently be providing training for a skill because they plan to provide training for that skill in the future. All three of

these hypotheses were tested using Yates corrected chi-square analysis which is a statistical test of significance. The results of the Yates corrected chi-square analyses for each of the 16 skills listed as essential by Carnevale et al. (1988) are presented in Tables 8 through 23.

Insert Table 8 through 23 about here

Based on these results, there is a significant relationship between the importance businesses place on the skill Personal / Career Development and the existence of training in businesses for this skill as determined by the Workplace Literacy Skills and Training Inventory. However, for the remaining 15 skills no significant relationships were found. By looking at the overall picture of importance by current training, it appears that businesses do not provide training for a skill simply because the skill is believed to be important. Other factors may influence the decision to provide training.

For mastery by current training, there is a significant relationship between ratings of mastery and the existence of training in businesses for basic writing. All 21 of the businesses who believed their employees had mastered basic writing were not currently providing training for this skill. Once again though, one must look at the overall picture. For the remaining 15 skills, there are not

Table 8

Yates Corrected Chi-Square Analyses for Knowing How to Learn

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent)	Value	DF	Prob.
Important					
No	0 (.00)	0 (.00)			
Yes	8 (30.77)	18 (69.23)	.000	1	1.000
Mastery					
No	3 (11.54)	3 (11.54)			
Yes	5 (19.23)	15 (57.69)	.435	1	.510
Future Training					
Yes	8 (30.77)	1 (3.85)			
No	0 (.00)	17 (65.38)	17.854	1	0.000

Table 9

Yates Corrected Chi-Square Analyses for Basic Reading

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	0 (.00)			
Yes	2 (7.69)	24 (92.31)	.000	1	1.000
Mastery					
No	0 (.00)	0 (.00)			
Yes	2 (7.69)	24 (92.31)	.000	1	1.000
Future Training					
Yes	2 (7.69)	2 (7.69)			
No	0 (.00)	22 (84.62)	5.915	1	.015

Table 10

Yates Corrected Chi-Square Analyses for Basic Writing

| | Currently Training | | Yates Corrected Chi-Square | | |
| | Yes | No | | | |
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	1 (3.85)			
Yes	5 (19.23)	20 (76.92)	.000	1	1.000
Mastery					
No	2 (7.69)	0 (.00)			
Yes	3 (11.54)	21 (80.77)	4.338	1	.037
Future Training					
Yes	4 (15.38)	2 (7.69)			
No	1 (3.85)	19 (73.08)	7.678	1	.006

Table 11

Yates Corrected Chi-Square Analyses for Basic Computation

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	3 (11.54)			
Yes	6 (23.08)	17 (65.38)	.079	1	.779
Mastery					
No	1 (3.85)	2 (7.69)			
Yes	5 (19.23)	18 (69.23)	.000	1	1.000
Future Training					
Yes	6 (23.08)	2 (7.69)			
No	1 (3.85)	19 (73.08)	7.678	1	.006

Table 12

Yates Corrected Chi-Square Analyses for Listening

| | Currently Training | | Yates Corrected | | |
| | Yes | No | Chi-Square | | |
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	0 (.00)			
Yes	11 (42.31)	15 (57.69)	.000	1	1.000
Mastery					
No	3 (11.54)	3 (11.54)			
Yes	8 (30.77)	12 (46.15)	.000	1	1.000
Future Training					
Yes	11 (42.31)	1 (3.85)			
No	0 (.00)	14 (53.85)	18.647	1	.000

Table 13

Yates Corrected Chi-Square Analyses for Oral Communication

	Currently Training		Yates Corrected Chi-Square		
	Yes	No			
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	0 (.00)			
Yes	11 (42.31)	15 (57.69)	.000	1	1.000
Mastery					
No	4 (15.38)	2 (7.69)			
Yes	7 (26.92)	13 (50.00)	.821	1	.365
Future Training					
Yes	11 (42.31)	0 (.00)			
No	0 (.00)	15 (57.69)	22.064	1	.000

Table 14

Yates Corrected Chi-Square Analyses for Creative Thinking

	Currently Training		Yates Corrected Chi-Square		
	Yes	No			
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	1 (3.85)	4 (15.38)			
Yes	7 (26.92)	14 (53.85)	.002	1	.967
Mastery					
No	4 (15.38)	8 (30.77)			
Yes	4 (15.38)	10 (38.46)	.000	1	1.000
Future Training					
Yes	8 (30.77)	2 (7.69)			
No	0 (.00)	16 (61.54)	14.924	1	.000

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Table 15

Yates Corrected Chi-Square Analyses for Problem Solving

	Currently Training		Yates Corrected Chi-Square		
	Yes	No			
	N (Percent)	N´(Percent)	Value	DF	Prob
Important					
No	0 (.00)	4 (15.38)			
Yes	9 (34.62)	13 (50.00)	1.022	1	.312
Mastery					
No	2 (7.69)	10 (38.46)			
Yes	7 (26.92)	7 (26.92)	1.870	1	.171
Future Training					
Yes	9 (34.62)	2 (7.69)			
No	0 (.00)	15 (57.69)	15.329	1	.000

Table 16

Yates Corrected Chi-Square Analyses for Self-Esteem

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	2 (7.69)			
Yes	8 (30.77)	16 (61.54)	.034	1	.854
Mastery					
No	4 (15.38)	7 (26.92)			
Yes	4 (15.38)	11 (42.31)	.010	1	.921
Future Training					
Yes	8 (30.77)	2 (7.69)			
No	0 (.00)	16 (61.54)	14.924	1	0.000

Table 17

Yates Corrected Chi-Square Analyses for Goal Setting /

Motivation

| | Currently Training | | Yates Corrected | | |
| | Yes | No | Chi-Square | | |
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	1 (3.85)	3 (11.54)			
Yes	10 (38.46)	12 (46.15)	.045	1	.832
Mastery					
No	6 (23.08)	8 (30.77)			
Yes	5 (19.23)	7 (26.92)	.000	1	1.000
Future Training					
Yes	11 (42.31)	1 (3.85)			
No	0 (.00)	14 (53.85)	18.647	1	.000

Table 18

Yates Corrected Chi-Square Analyses for Personal / Career
Development

	Currently Training		Yates Corrected Chi-Square		
	Yes	No			
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	9 (34.62)			
Yes	9 (34.62)	8 (30.77)	5.136	1	.023
Mastery					
No	5 (19.23)	11 (42.31)			
Yes	4 (15.38)	6 (23.08)	.001	1	.974
Future Training					
Yes	9 (34.62)	2 (7.69)			
No	0 (.00)	15 (57.69)	15.329	1	.000

Table 19

Yates Corrected Chi-Square Analyses for Interpersonal Skills

| | Currently Training | | Yates Corrected | | |
| | Yes | No | Chi-Square | | |
	N (Percent)	N(Percent)	Value	DF	Prob
Important					
No	0 (.00)	1 (3.85)			
Yes	7 (26.92)	18 (69.23)	.000	1	1.000
Mastery					
No	1 (3.85)	4 (15.38)			
Yes	6 (23.08)	15 (57.69)	.000	1	1.000
Future Training					
Yes	7 (26.92)	3 (11.54)			
No	0 (.00)	16 (61.54)	11.975	1	.001

Table 20

Yatès Corrected Chi-Square Analyses for Negotiation

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	4 (15.38)			
Yes	7 (26.92)	15 (57.69)	.500	1	.480
Mastery					
No	1 (3.85)	9 (34.62)			
Yes	6 (23.08)	10 (38.46)	1.174	1	.279
Future Training					
Yes	7 (26.92)	2 (7.69)			
No	0 (.00)	17 (65.38)	14.356	1	0.000

Table 21

Yates Corrected Chi-Square Analyses for Teamwork

	Currently Training		Yates Corrected Chi-Square		
	Yes	No			
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	1 (3.85)			
Yes	14 (53.85)	11 (42.31)	.006	1	.937
Mastery					
No	6 (23.08)	3 (11.54)			
Yes	8 (30.77)	9 (34.62)	.292	1	.589
Future Training					
Yes	14 (53.85)	1 (3.85)			
No	0 (.00)	11 (42.31)	18.647	1	0.000

Table 22

Yates Corrected Chi-Square Analyses for Organizational

Effectiveness

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent)	Value	DF	Prob
Important					
No	0 (.00)	8 (30.77)			
Yes	7 (26.92)	11 (42.31)	2.510	1	.113
Mastery					
No	4 (15.38)	9 (34.62)			
Yes	3 (11.54)	10 (38.46)	.000	1	1.000
Future Training					
Yes	7 (26.92)	1 (3.85)			
No	0 (.00)	18 (69.23)	17.335	1	0.000

Table 23

Yates Corrected Chi-Square Analyses for Leadership

	Currently Training		Yates Corrected		
	Yes	No	Chi-Square		
	N (Percent)	N (Percent	Value	DF	Prob
Important					
No	0 (.00)	2 (7.69)			
Yes	12 (46.15)	12 (46.15)	.390	1	.532
Mastery					
No	4 (15.38)	2 (7.69)			
Yes	8 (30.77)	12 (46.15)	.466	1	.495
Future Training					
Yes	12 (46.15)	1 (3.85)			
No	0 (.00)	13 (50.00)	18.726	1	0.000

significant relationships between ratings of mastery and the existence of current training. Mastery does not appear to play a role in the decision to provide training for a skill.

For all 16 skills, the data shows a significant relationship between future training and current training, but it is not the relationship previously hypothesized. The reason businesses are not currently providing training for each of the 16 skills is not because they plan to provide training in the future. Instead, there is a correlation between current training and future training such that if current training is being provided, it is likely that training will be provided in the future. Also, if current training is not being provided, it is not likely to be provided in the future.

This finding has important implications for workplace literacy training. If a business is not currently providing training for one of Carnevale et al.'s (1988) 16 skills, chances are that the business will not provide training for these skill in the future. However, if a business could be convinced of the importance of training for these skills, chances are that once started, the business would continue the training. These finding should be further explored.

Continuing with the survey, for question 5, subjects were asked to indicate who provides or has provided training for their business. Subjects were asked to circle all relevant choices. The responses to question 5 are presented

in Table 24.

Table 24

Training Providers for Businesses in Greene County

Providers	Numbers
In-House	24
Local School District	1
Community College	2
Community Organization	1
Equipment Manufacturer	6
Outside Consultant	4
Joint Vocational School	4
College/University	3
Professional Organization	6
Union	0
Other	0

The data shows that the majority of respondents' businesses are relying on in-house providers for their training, which in most cases translated into on-the-job training. Relatively few were using local community resources such as the local school district, community colleges, and community organizations. Future researchers should explore the reasons why companies are not using these resources. Possible reasons may be that these organizations are not

providing the type of training needed by the businesses, or
businesses may not be aware of the training offered by these
organizations. While the Workplace Literacy and Training
Grant through the Tecumseh Consortium has helped to link
some businesses with these organizations, much work in the
area of collaboration still needs to be done.

For question 6, subjects were asked to indicate whether
their training programs were voluntary, required, or both.
Seven of the subjects surveyed replied that their training
programs are voluntary, seven replied that thier programs
are required, and 11 replied that some of the training is
voluntary and some is required.

Question 7 asks who pays for the training programs.
Fifteen indicated that the company pays for training, nine
said both the company and employees pay, and one responded
that the employees pay. One subject did not respond to this
question. These questions were asked simply to provide
background information about the training currently taking
place in Greene County businesses.

For question 8, subjects were asked to disclose who
participates in the training provided by the company.
Subjects were asked to circle all relevant choices. The
responses to this question are presented in Table 25.

Insert Table 25 about here

Table 25

Training Program Participants

___

Participants	Number
Executives	2
Managers	5
Front-Line Employees	7
Professionals	1
Supervisors	1
Administrative Support	1
Other:	
All Employees	16
New Employees	1

___

The number of subjects answering "all employees" was
surprising considering the number of sources who relate that
much of the money spent on training is spent on higher level
employees. This question should be explored in greater
detail by future researchers to determine exactly what types
of training each of these groups is receiving. The question
may simply need to be clarified.

Question 9 asks the subjects to indicate who determines
what will be learned in the company's training programs.
Subjects were asked to circle all relevant responses. The
responses to this question are presented in Table 26.

Table 26

Who Determines What Will be Learned in the Training Programs

Decision Makers	Number
Upper Management	16
Program Provider	7
Union	1
First-Line Management	2
Participants in the Program	6
Other:	
All	1

The information provided by this question should help future workplace literacy providers become aware of the training environment within businesses in Greene County. The data in Table 26 shows that most of the decision making regarding the types of training programs provided is made by upper management who may have lost touch with the needs of lower-level employees.

Finally question 10 asks what might prevent the subject's business from providing the type of training it wants to provide. The choices include a) lack of time, b) lack of money, c) unavailability of the type of training wanted, and d) other. Subjects were asked to circle all relevant choices.

Twenty of the subjects surveyed indicated that lack of time was a possible constraint to training while eight identified lack of money and six identified the unavailability of the type of training wanted. Other possible constraints identified included size (1), personal skill (1), and nothing (1). Controlled scientific study of these variables compared to the existence of current training should be conducted to determine if significant relationships are present.

In conclusion, the researcher has tried through the use of the Workplace Literacy Skills and Training Inventory to create a workplace literacy profile of businesses in Greene County. This information can be used as a foundation for further research or as background information for groups trying to establish county-wide workplace literacy programs.

APPENDIX A

COVER LETTER FOR INVENTORY

Dear Participant:

Thank you for agreeing to take part in this research study. I have enclosed a copy of the survey for you to read through if you wish. I have also enclosed a card with the date and time for my next call. I look forward to talking with you during our appointed time.

One purpose of the Workplace Literacy Grant at the Tecumseh Consortium is to develop a model program that businesses in Greene County could use if they wanted to start a workplace literacy program of their own. The results of this survey will be used to help us learn which skills Greene County employers think are important so that these skills can be included in the model program. The survey will also help us learn what types of training programs Greene County businesses already have so we can include those skills in the model program for which employees are not already being trained. A summary of the results will be made available in June and can be obtained in person at the Tecumseh Consortium, 541 Ledbetter Road Xenia, Ohio 45385, or by mail by calling the Tecumseh Consortium at 372-3381 or 426-3976.

The survey will take about 20 minutes to complete over the phone. Please note that your participation in this project is voluntary and your individual responses will be <u>confidential</u>. You do not have to answer any question that makes you uncomfortable and you can end your participation at any time.

If you have any questions regarding this survey, please contact:

Alexis Horner   Dr. Beverly Byrum-Robinson
Tecumseh Consortium   Department of Communication
541 Ledbetter Rd.   Wright State University
Xenia, OH 45385   Dayton, OH 45435
(513) 372-3381   (513) 873-2145
(513) 426-3976

Sincerely,

Alexis Horner

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WORKPLACE LITERACY SKILLS AND TRAINING INVENTORY

1) Contact's Department or Job Title _____

2) Type of Business: (Please circle all relevant choices)

   a) Retail Sales   g) Construction/Contracting
   b) Manufacturing   h) Government Services
   c) Health Services   i) Education
   d) Communications   j) Maintenance/Repairs
   e) Professional Services k) Advanced Technologies
   f) Restaurant/Food Services   l) Other _____

3) Size of Business: (Within Greene County)

   a) Under 25   e) 101 - 300
   b) 26 - 50   f) 301 - 500
   c) 51 - 75   g) 501 - Over
   d) 76 - 100

4) On the following page you will find a list of skills.
   I will define each of these skills for you.

   Under "Importance", please circle the number that best
   describes how important you believe it is for the
   success of your business that your employees have these
   skills. "2" is not important and "8" is very
   important.

   Under "Mastery", please circle the number that best
   describes the degree to which you believe your
   employees possess these skills. "2" is to a small
   degree and "8" is to a large degree.

   Please circle "yes" or "no" under "Current Training" to
   indicate whether or not your business is now providing
   training for these skills or has provided training for
   these skills during the past fiscal year.

   Please circle "yes" or "no" under "Future Training" to
   indicate whether or not your business plans to offer
   training for these skills during the next fiscal year.

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5) Who provides or has provided training for your business? (Please circle all relevant choices)

a) In-house Provider   f) Outside Consultant
b) Local School District   g) Joint Vocational School
c) Community College   h) College/University
d) Community Organization   i) Professional Organization
e) Equipment Manufacturer   j) Union
                              k) Other _____

6) Are your training programs voluntary, required, or both?

_____

7) Who pays for your training programs?

a) Company   c) Employees
b) Both Company and Employees   d) Other _____

8) Who participates in the training programs provided by your business? (Please circle all relevant choices)

a) Executives   e) Supervisors
b) Managers   f) Administrative Support
c) Front-line Employees   g) Other_____
d) Professionals

9) Who determines what will be learned in your training programs? (Please circle all relevant choices)

a) Upper Management   d) First-line Management
b) Program Provider   e) Participants in the Programs
c) Union   f) Other _____

10) What might prevent your business from providing the training it wants to provide? (Please circle all relevant choices)

a) Lack of Time
b) Lack of Money
c) Unavailability of the Type of Training Wanted
d) Other _____

SKILLS	IMPORTANCE	MASTERY	CURRENT TRAINING	FUTURE TRAINING
Computer	2 4 6 8	2 4 6 8	yes / no	yes / no
Technical	2 4 6 8	2 4 6 8	yes / no	yes / no
Teamwork	2 4 6 8	2 4 6 8	yes / no	yes / no
Leadership	2 4 6 8	2 4 6 8	yes / no	yes / no
Total Quality Management	2 4 6 8	2 4 6 8	yes / no	yes / no
Basic Reading	2 4 6 8	2 4 6 8	yes / no	yes / no
Basic Writing	2 4 6 8	2 4 6 8	yes / no	yes / no
Basic Math	2 4 6 8	2 4 6 8	yes / no	yes / no
Knowing How to Learn	2 4 6 8	2 4 6 8	yes / no	yes / no
Organiza-tional Effective-ness	2 4 6 8	2 4 6 8	yes / no	yes / no
Listening	2 4 6 8	2 4 6 8	yes / no	yes / no
Negotiation	2 4 6 8	2 4 6 8	yes / no	yes / no
Oral Communi-cation	2 4 6 8	2 4 6 8	yes / no	yes / no
Inter-personal	2 4 6 8	2 4 6 8	yes / no	yes / no
Creative Thinking	2 4 6 8	2 4 6 8	yes / no	yes / no
Personal/ Career Development	2 4 6 8	2 4 6 8	yes / no	yes / no
Problem Solving	2 4 6 8	2 4 6 8	yes / no	yes / no
Self-esteem	2 4 6 8	2 4 6 8	yes / no	yes / no
Goal Setting/ Motivation	2 4 6 8	2 4 6 8	yes / no	yes / no

APPENDIX C

SKILL DEFINITIONS

<u>Computer</u>: The ability to use a computer well enough to function on the job.

<u>Technical</u>: Having an understanding of the scientific or mathematical base underlying the performance of a task (Carnevale et al., 1988, p. 2).

<u>Teamwork</u>: The ability to recognize and deal with various personalities and to understand group dynamics (Carnevale et al., 1988, p. 14).

<u>Leadership</u>: The ability to influence others to act in a certain way (Carnevale et al., 1988, pp. 15-16).

<u>Total Quality Management</u>: The ability to identify and fix problems, set high-performance targets and measure results, and focus the company's vision on the needs of its customers (Bowles & Hammond, 1991, p. 13).

<u>Basic Reading</u>: The ability to read information well enough to function on the job (Ohio Literacy Network, 1992, p. 8).

<u>Basic Writing</u>: The ability to write information well enough to function on the job (Ohio Literacy Network, 1992, p. 8).

<u>Basic Math</u>: The ability to identify and solve problems, reason, and estimate (Carnevale et al., 1988, p. 11).

<u>Knowing How to Learn</u>: Knowing how one best learns new information (Carnevale et al., 1988, p. 9).

<u>Organizational Effectiveness</u>: Understanding what organizations are, why they exist, and how one can work within different types of organizations (Carnevale et al., 1988, p. 15).

<u>Listening</u>: The ability to listen for a speaker's content and the ability to listen to follow directions (Carnevale et al., 1988, p. 12).

<u>Negotiation</u>: The ability to separate people from the problem, to come up with options that will benefit both

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sides, and to use objective criteria in making decisions (Carnevale et al., 1988, p. 14).

Oral Communication: Understanding how one speaks can have an influence on what is heard (Carnevale et al., 1988, p. 11)

Interpersonal: The ability to decide what behaviors are appropriate, to deal with inappropriate behaviors in others, and to interact with others (Carnevale et al., 1988, p. 14).

Creative Thinking: The ability to think beyond logical or "step-by-step" thought patterns (Carnevale et al., 1988, p. 12).

Personal/Career Development: The ability to define career goals and to identify the education and training needed to meet these goals (Carnevale et al., 1988, p. 14).

Problem Solving: The ability to recognize and define problems, invent and implement solutions, and track and evaluate results (Carnevale et al., 1988, p. 12).

Self-esteem: Being aware of one's own impact upon others and the ability to deal with stress, change, and criticism (Carnevale et al., 1988, p. 13).

Goal Setting/Motivation: The ability to set and meet goals and to recognize small successes along the way towards meeting those goals (Carnevale et al., 1988, p. 13).

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