





Preparing Teens for Success: Building 21st Century Skills through a 4-H Work-Based Learning Program

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Preparing Teens for Success: Building 21st Century Skills through a 4-H Work-Based Learning Program

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Abstract: There is widespread concern that youth lack the skills essential for job success and are entering the workplace unprepared. To address issues of workforce preparation, Extension educators at an urban 4-H education center created the Job Experience and Training (JET) program, a work-based learning program for teens. JET is conducted over a six-month period, culminating in an eight-week summer work experience in collaboration with a local park district. Supervisors and teens completed a performance appraisal measure based on SCANS workforce skills at two points during the program. Both teens and supervisors provided written comments addressing teens' strengths and areas for growth, as well as comments on their satisfaction with the program itself. Overall, the experience appears to have produced improvements in teens' workforce skills, as evidenced by their own self-assessment and that of their supervisors. We conclude with implications for conducting work-based learning programs.

Introduction

Preparing youth for the workforce is a major concern in U.S. society. In the last 30 years, the skills required for youth to succeed in the economy have changed radically, but the skills emphasized in schools have not changed at the same pace (Levy & Murnane, 2006; Murnane & Levy, 1996; Partnership for 21st Century Skills, 2003; SCANS, 1991). Thus, there is widespread concern that youth lack the skills essential for job success and are entering the workplace unprepared (Business-Higher Education Forum, 2003; Casner-Lotto & Barrington, 2006). The concern about youth work readiness comes not only from the business community – those on the receiving end of employees entering the workforce – but of those who work directly with youth to prepare them for a successful future.

Youth development professionals are interested in providing positive development supports and opportunities to meet youths' needs, including those to be successful in the workforce. Helping youth develop life skills and navigate the journey to successful employment has been a program focus at Adventure Central, a comprehensive youth program based at an urban park facility, for the past five years. Adventure Central is a unique partnership with Ohio State University Extension, 4-H Youth Development and Five Rivers MetroPark in Dayton, Ohio. This article describes Adventure Central's Job Experience and Training (JET) program, one such program designed to address the need for youth development opportunities to enhance workforce skills. We discuss how principles of youth development can be applied to workforce preparation programs. Next, we describe the specific components of JET and report our initial evaluation results of the program. We conclude with implications for conducting work-based learning programs.

Background

It is clear from the literature that programs to address 21st century skills are urgently needed. Developing applied skills for the workforce is vitally important for all youth. However, numerous obstacles, such as the rising demand for technical skills and the emphasis on applied skills in the 21st century, translate into serious challenges for workers of color, particularly in urban communities (Moss & Tilly, 2001). Urban minority youth face career development challenges including the extent to which there are opportunities for exposure to role models, to obtain work experiences as teens, and the support available in making career decisions (Constantine, Erickson, Banks, & Timberlake, 1998). Furthermore, it may be challenging for younger teens to find income-earning opportunities. As they get older, teens may be in a position of needing to choose between working or participating in a youth organization. Consequently, it has become increasingly important to provide youth with:

- a. opportunities to develop the basic skills and competencies necessary to succeed in the workplace, and
- b. experiences, information, and guidance that will lead to good decisions and plans for the future.

In the past 10 years there has been an increased emphasis on the school-to-work transition. While much of the attention is focused on what should be taught in schools, out-of-school time programs have an important role to play. In fact, out-of-school and after-school programs have been suggested as the ideal place to focus on developing skills needed for the 21st century workforce (Schwarz & Stolow, 2006). There is an urgent need to understand the types of strategies, programs, and resources that will result in the most positive outcomes for today's youth as they prepare for productive futures. Thus, we hope our experience with the JET program will provide helpful insight.

JET Program Model: Applying Youth Development Principles to Workforce Preparation Programs

Effective workforce preparation programs must make an effort to incorporate youth development principles. Practices that enhance positive youth development and workforce preparation are complementary (Ferrari, 2003). The skills needed for success in the workforce—such as communication, interpersonal skills, and problem solving—can be described more broadly as life skills. They are the skills needed not only on the job, but also for success in life

and for active participation as a citizen in the community. We believe that this approach ensures that work experiences are also developmentally appropriate learning experiences.

A positive youth development approach is based on the premise that youth are resources to be developed (Hamilton, Hamilton, & Pittman, 2004; Lerner, 2005; Witt & Caldwell, 2005). There is general agreement that certain key features characterize positive developmental settings (Eccles & Gootman, 2002). When these features are in place, it is more likely that young people's developmental needs will be met. Key among these features is the involvement of supportive adults. Adults walk a fine line as they offer the appropriate balance of guidance as young people take on new responsibilities (Eccles & Gootman, 2002; Larson, Hansen, & Walker, 2005). Such relationships are critical in providing a safe and supportive environment for youth to take on new challenges and develop their skills. Furthermore, these relationships allow youth to develop human capital, meaning they accumulate personal resources that have value within a workforce setting (Entwisle, Alexander, & Olson, 2000). Thus, the program model is one that engages youth and adults as partners with the common goal of workforce preparation.

Because some research indicates that adolescent employment may have negative effects (Marsh & Kleitman, 2005), opening doors to high quality jobs through experiences that build applied skills and expand young people's view of career opportunities is critical. However, many jobs available to teens do not provide opportunities for important qualities such as initiative to develop life skills (Bryant, Zvonkovic, Raskauskas, & Peters, 2004; Greenberger, Steinberg, & Ruggerio, 1982). Researchers concur that opportunities to hold meaningful roles and carry out real responsibilities are important to adolescents, as they are critical to the development of both initiative and identity (Eccles & Gootman, 2002; Kroger, 2000; Larson, 2000). Workforce preparation programs should seek to incorporate these elements.

Another perspective underlying positive developmental settings is that of experiential learning. Youth development programs that are organized around real work experiences will afford the opportunity to learn cooperation and teamwork through hands-on experiences. There is support in the literature that the best way to learn is through actual experience (Cafarella, 2002; Carlson & Maxa, 1998). Part of the experiential learning process is engaging in reflection, a strategy that facilitates transfer of learning from one setting to another (Caferella, 2002; Gardner & Korth, 1997; Gilbert & Trudel, 2005). Therefore, workforce preparation programs should incorporate active learning strategies.

Our conception of workforce preparation programs is not simply about getting a job, nor is the focus to prepare youth for getting specific jobs. Although they share some common features with youth employment programs and can incorporate some of the same practices (Partee, 2003; Partee & Halperin, 2006), there appear to be some notable differences. Of the model programs reviewed by the American Youth Policy Forum (Partee, 2003; Partee & Halperin, 2006), most target older youth (at least 16, with most 18 and older), target high school dropouts, are designed to transition youth to full-time employment, or are residential in nature. Some, but not all, focus on vocational trades. This is not to say that one type of program is superior to the other, but that each seeks to accomplish different goals with a different target audience.

The goal of workforce preparation programs as we define them here is that the work experience is a learning experience. They are designed to introduce young people to the world of work and to develop the workforce skills necessary for success through active participation in work experiences. Specifically, we define this component of workforce preparation as *work*-

based learning. Work-based learning is one of five components that are part of a model developed by the Ohio 4-H Workforce Preparation Initiative (Cochran et al., 2006).

We define work-based learning as a structured experience that meets the following criteria:

- 1. Youth perform real work that provides a meaningful service.
- 2. Youth are supervised and their performance is evaluated.
- 3. Program strategies emphasize making the work experience a learning experience (e.g., need for reflection to complete the experiential learning cycle).
- 4. The work experience may be paid or unpaid but is clearly viewed as real work.

While the work is important, as it provides the real-world context for skill development, it is viewed as the means to the end of positive youth development. This approach is consistent with ecological theory, which contends that individuals benefit when they receive support to negotiate transitions as they assume new roles (Bronfenbrenner, 1979). Assuming a new role as an employee is a major transition for adolescents (Hansen & Jarvis, 2000), and therefore workforce preparation programs aim to support this transition by preparing for it in advance. It is also appropriate for younger teens who are making their first forays into the world of work and are not ready for full-time employment.

In conclusion, youth development programs provide support and opportunities for youth as they transition through key phases of their life, including the school-to-work transition. Although it has become normative for adolescents to work part-time while they are attending school, the job experiences available to them may not be quality ones. Out-of-school programs have the opportunity to help youth make connections with what they are learning in school with what employers require for success in the world of work (Pittman, Irby, Yohalem, & Wilson-Ahlstrom, 2004).

Program Description: Adventure Central

An important aspect of JET is understanding that it is embedded within the context of a comprehensive youth development program at Adventure Central. Overall, the program at Adventure Central has been successful in developing a core program based on a foundation of principles of positive youth development described above. Serving as a hub for out-of-school time programming, Adventure Central brings the 4-H experience into an urban environment for youth in kindergarten through age 18 during out-of-school hours.

The program at Adventure Central includes after-school, summer day camp, parent engagement, and teen programming. The program content focuses on such topics as technology, gardening, science and nature, health and nutrition. An emphasis is placed on hands-on, experiential activities utilizing research-based curriculum. There is an emphasis on meeting a variety of developmental needs, on serving a wide range of ages, and on providing positive youth development opportunities that see youth as part of a family and in the context of the larger community. Youth describe themselves as "connected" at Adventure Central (Ferrari & Turner, 2006). In addition, there is an embedded curriculum that addresses developing personal qualities, such as respect and responsibility, and life skills, such as leadership, teamwork, and communication, as well as an emphasis on building relationships with peers and adult role models (the program is described in more detail in Cochran, Arnett, & Ferrari, 2007).

Workforce preparation programming has been implemented at Adventure Central, in various forms, for the past five years. Based on an understanding of the literature and daily experience

of working with youth, it became clear that a program to address workforce skills would benefit teens at Adventure Central, and thus the Job Experience and Training (JET) program was born.

In essence, JET is a program-within-a-program, because it is able to build on the existing after-school programming and relationships between the youth participants and Adventure Central adult staff. While it could be argued that youth learn workforce skills simply through their participation in 4-H, JET takes a more intentional approach to developing these skills. In addition, applying youth development principles to creating workforce preparation programs would address the challenges identified in the literature. We believe it is this intentional focus and conscious application of youth development principles that is the strength of the JET model.

JET Program Description

Having provided some background on the principles underlying JET, we now turn to a more specific description of the program. The JET program has two major goals:

- a. to develop meaningful job skills in teens, and
- b. to provide a service to the public.

JET is open to youth at Adventured Central between the ages of 12 to 18. It is conducted over a period of six months, culminating in an eight-week summer work experience. Teens participate in an application and interview skills session. An informational open house is held to explain the program components. Interested youth complete an application and participate in an interview for a work experience in one of the following six areas: Youth Education, Nutrition, Clerical, Parks and Conservation, Information Technology, or Outdoor Recreation. Through this process 20 teens have been selected to participate each year. Participants are selected as Teen Assistants (volunteer positions receiving gift cards as incentives) or Teen Apprentices (employees paid minimum wage). A small number of Teen Apprentice positions provide an opportunity for increasing responsibility and reward; determination is based on past performance and current performance in the interview process, taking their age and labor laws into account.

MetroParks facilities serve as placement sites. Adventure Central's focus on science and nature, as well as the connection to the larger MetroParks system, provides an ideal chance to expose youth to new career options. Adults at each participating worksite agree to serve as supervisors. A series of training opportunities (teens alone, supervisors alone, and teens and supervisors together) are conducted with the aim of making the work experience a learning experience. At the beginning of the summer work experience a one-day orientation for all teen and adult participants reviews youth-adult partnerships, experiential learning, work expectations, and the performance appraisal process. A variety of instructional strategies are used. All JET participants complete self-directed learning journals and attend team meetings every two weeks to enhance the experiential learning process. A celebration is held to culminate the end of the work experience.

JET Program Evaluation

Continuous monitoring and evaluation ensures that the programs at Adventure Central are aligned with best practices in youth development. Furthermore, evaluation is critical in an era of program accountability (Witt, 2005). The purpose of the JET evaluation was two-fold. The first objective was to determine if the goals of the program were reached, that is, that the youth gained workforce skills. A performance appraisal process was selected as we believed it represented an authentic means to evaluate this objective. We believed a combination of teen self-assessment and supervisors' feedback, both in numerical ratings and open-ended

responses, would give us the most useful information. Secondly, we wanted to be sure that both teens and the adult worksite supervisors found the program worthwhile (i.e., the teens performed a public service for the park, and it was worth their time and effort to participate).

Regarding the first objective, a literature search yielded no instruments that adequately addressed JET's program evaluation needs. Thus, we created a performance appraisal measure to provide an assessment of workplace skills which were defined by SCANS (1991) competencies and foundation skills. The areas evaluated included basic skills, thinking skills, and personal qualities as well as abilities to productively use resources, process information, demonstrate interpersonal skills, understand systems, and use technology. The resulting measure had 30 items (see Table 1). The four-point response scale ranged from *strongly disagree* (1) to *strongly agree* (4). This measure was assessed for face validity by two youth development specialists. To gain their perspective, we also asked youth an open-ended question about the most important thing they gained from being in the JET program.

To address the second objective, we asked teens for their suggestions in an open-ended question collected at the time they completed their final self-assessment. We also developed open-ended questions to elicit the worksite supervisors' feedback about the experience from their perspective. The questions addressed the overall experience, their satisfaction with the support provided by Adventure Central staff, the training provided, the use of the performance appraisal process, and their suggestions for improvement.

Procedure

As part of preparing for the summer work experience, expectations of worksite supervisors regarding use of the performance appraisal measure were communicated. Supervisors rated the teens at Week 2 and again at the conclusion of the program (Week 8). Teens also completed the concluding assessment with their supervisor. Both teens and supervisors provided written comments addressing overall strengths and areas for growth. In addition, as part of their reflection process at the conclusion of the summer work experience, teens provided two ratings of their skills in the SCANS areas using a retrospective pre-post format (Rockwell & Kohn, 1989). Finally, supervisors' feedback regarding program satisfaction was collected in a series of interviews held in the month following the program's completion. Although data were collected for two years, due to its similarity, only data from Year 2 are presented.

Results

After careful consideration, we determined that reporting means scores for skill areas within the performance appraisal instrument was not in keeping with the overall purpose of the performance appraisal process. First and foremost, the performance appraisal was a tool to assess the individual's growth throughout the work experience. We felt that mean scores would mask these individual changes. We determined that we could best characterize the nature of the changes by examining the frequency distribution of the responses, along with responses to the open-ended questions. The open-ended responses from supervisors and teens were analyzed for themes and we have used representative quotes to illustrate these themes here. In the following sections we use the themes derived from qualitative data to frame the results in relation to the workforce skills gained by participants, drawing both from the numerical ratings on the performance appraisals (Tables 1 and 2) as well as from the open-ended responses. Then we present the teens' perceptions of what they learned the most as well as teens' and supervisors' overall perception of the program, including their suggested changes.

Table 1

JET Teen Participants' Retrospective Pre-Post Performance Appraisal (N=20)

Description Skills 1	SCANS Competencies and		Beg	Beginning (Wk. 2) <i>f (%)</i>			End (Wk. 8) f(%)			
Uses materials and space efficiently.			1	2	3	4	1			4
3 Meets scheduled deadlines. 15 35 50 15 85 4 Demonstrates self-motivation. 15 35 50 10 90 5 Is prepared for routine tasks and duties. 50 50 5 5 90 6 Works well with clients. 5 15 0 80 5 5 90 7 Is a team player. 25 75 5 95 90 8 Works well with people of diverse backgrounds. 20 80 5 5 90 9 Displays a positive attitude. 5 35 60 10 90 10 Acquires and organizes information appropriately. 10 40 50 10 90 11 Asks questions to clarify information. (N=19) 10 40 50 5 32 63 12 Is able to communicate information learned to others. 5 35 60 5 20 75 13 Understands t	1	Uses time wisely.		15	60	25		5	10	85
4 Demonstrates self-motivation. 15 35 50 10 90 5 Is prepared for routine tasks and duties. 50 50 5 5 90 6 Works well with clients. 5 15 0 80 5 5 90 7 Is a team player. 25 75 5 5 90 8 Works well with people of diverse backgrounds. 20 80 5 5 90 9 Displays a positive attitude. 5 35 60 10 90 10 Acquires and organizes information appropriately. 10 40 50 10 90 11 Asks questions to clarify information. (N=19) 10 16 37 37 5 32 63 12 Is able to communicate information learned to others. 5 35 60 5 20 75 13 Understands the organization and their place in it. (N=19) 5 35 40 15 85		Uses materials and space efficiently.			45	55			10	90
5 Is prepared for routine tasks and duties. 50 50 5 5 90 6 Works well with clients. 5 15 0 80 5 5 90 7 Is a team player. 20 80 5 5 95 8 Works well with people of diverse backgrounds. 20 80 5 5 90 9 Displays a positive attitude. 5 35 60 10 90 10 Acquires and organizes information appropriately. 10 40 50 10 90 11 Asks questions to clarify information (N=19) 10 16 37 37 5 32 63 12 Is able to communicate information learned to others. 5 35 60 5 20 75 13 Understands the organization and their place in it. (N=19) 5 10 47 37 21 79 14 Offers suggestions for improvements in the workplace when appropriate. 5 10 55		Meets scheduled deadlines.		15	35	50			15	85
6 Works well with clients. 5 15 0 80 5 5 90 7 Is a team player. 20 80 5 5 95 8 Works well with people of diverse backgrounds. 5 35 60 10 90 9 Displays a positive attitude. 5 35 60 10 90 10 Acquires and organizes information appropriately. 11 Asks questions to clarify information. (N=19) 12 Is able to communicate information learned to others. 12 13 Understands the organization and their place in it. (N=19) 14 Offers suggestions for improvements in the workplace when appropriate. 15 Uses technology when appropriate. 15 Uses technology when appropriate. 15 Uses technology when appropriate. 16 Maintains and troubleshoots equipment issues. (Wk. 2 N=19) 17 Asks questions when encountering new technologies. 18 Communicates well in writing. 10 5 30 50 10 30 60 19 Is a good listener. (Wk 2 N=19) 5 37 58 5 5 90 Communicates well in writing. 10 30 60 30 70 21 Acquires and applies new knowledge. 10 30 60 30 70 22 Acquires and applies new knowledge. 10 30 60 30 70 21 Acquires and applies new knowledge. 10 30 60 30 70 21 Acquires and applies new knowledge. 10 30 65 5 10 85 20 Poemonstrates responsibility. 15 85 85 5 10 85 85 15 15 85 85 15 85 85 10 85 85 15 15 85 85 15 85 16 85 16 85 16 85 17 Maintains proper work appearance. 15 85 5 5 10 85 15 85 15 85 16 85 17 Maintains proper work appearance. 15 85 5 5 10 85 15 85 15 15 15 85 15 15 85 15 15 85 15 15 85 15 15 85 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 85 15 15 15 15 85 15 15 15 15 85 15 15 15 15 85 15 15 15 15 85 15 15 15 15 15 15 15 15 15 15 15 15 15		Demonstrates self-motivation.		15	35	50			10	90
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8 Works well with people of diverse backgrounds. 20 80 5 5 90 9 Displays a positive attitude. 5 35 60 10 90 10 Acquires and organizes information appropriately. 10 40 50 10 90 11 Asks questions to clarify information. (N=19) 10 16 37 37 5 32 63 12 Is able to communicate information learned to others. 5 35 60 5 20 75 13 Understands the organization and their place in it. (N=19) 5 10 47 37 21 79 14 Offers suggestions for improvements in the workplace when appropriate. 5 0 55 40 15 85 15 Uses technology when appropriate. 11 21 68 5 5 90 16 Maintains and troubleshoots equipment issues. (Wk. 2 W=19) 11 21 68 5 5 90 17 Asks questions when encountering new technologies. 10 40 50 21 79	6	Works well with clients.	5	15	0	80		5	5	90
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11 Asks questions to clarify information. (N=19) 10 16 37 37 5 32 63 12 Is able to communicate information learned to others. 5 35 60 5 20 75 13 Understands the organization and their place in it. (N=19) 5 10 47 37 21 79 14 Offers suggestions for improvements in the workplace when appropriate. 5 0 55 40 15 85 15 Uses technology when appropriate. 55 45 25 75 16 Maintains and troubleshoots equipment issues. (Wk. 2 N=19) 11 21 68 5 5 90 17 Asks questions when encountering new technologies. 10 40 50 21 79 18 Communicates well in writing. 10 5 30 50 10 30 60 19 Is a good listener. (Wk 2 N=19) 5 37 58 5 5 90 20 Communicates well verbally. 10 35 55 5 95	10			10	40	50			10	90
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20 Communicates well verbally. 10 35 55 5 95 21 Demonstrates good decision making. 10 30 60 30 70 22 Acquires and applies new knowledge. 10 30 60 15 85 23 Demonstrates creative thinking. 35 65 5 10 85 24 Adapts to change positively. (Wk 2 16 21 63 15 85 V=19) 5 30 65 10 90 25 Demonstrates responsibility. 5 30 65 10 90 26 Takes and applies constructive criticism. 10 25 65 15 85 27 Maintains proper work appearance. 15 85 5 10 85 28 Is respectful. 10 90 10 90	18	Communicates well in writing.	10	5	30	50		10	30	60
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26 Takes and applies constructive criticism. 10 25 65 15 85 27 Maintains proper work appearance. 15 85 5 10 85 28 Is respectful. 10 90 10 90	25	Demonstrates responsibility.		5	30	65			10	90
27 Maintains proper work appearance. 15 85 5 10 85 28 Is respectful. 10 90 10 90				10	25	65			15	85
	27				15	85		5	10	85
20 D										90
Problem solves before going to Supervisor.	29	Problem solves before going to supervisor.	5	15	35	45			15	85
		80								

Rating scale: (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree

Table 2Adult Worksite Supervisors' Performance Appraisal of JET Teen Participants

SCANS Competencies and		Beginning (Wk. 2) f(%)			End (Wk. 8) f (%)				
	Foundation Skills	1	2	3	4	1	2	3	4
1	Uses time wisely.		10	58	32		10	60	30
2	Uses materials and space efficiently. (Wk 2 <i>N</i> =18)		6	67	28		5	65	30
3	Meets scheduled deadlines. (Wk 2 N=18)		6	83	11		5	55	40
4	Demonstrates self-motivation.		5	68	26		15	40	45
5	Is prepared for routine tasks and duties.		5	79	16		5	65	30
6	Works well with clients.			74	26			60	40
7	Is a team player.		5	68	26			50	50
8	Works well with people of diverse backgrounds. (Wk 2 <i>N</i> =17; Wk 8 <i>N</i> =19)			94	6			47	53
9	Displays a positive attitude.		11	47	42		10	45	45
10	Acquires and organizes information appropriately. (Wk 2 <i>N</i> =18 Wk 8 <i>N</i> = 19)			83	17			90	10
11	Asks questions to clarify information. (Wk 2 <i>N</i> =12; Wk 8 <i>N</i> =19)			67	33		11	63	26
12	Is able to communicate information learned to others. (Wk 2 <i>N</i> =13; Wk 8 <i>N</i> =16)			77	23			69	31
13	Understands the organization and their place in it. (Wk 2 <i>N</i> =3; Wk 8 <i>N</i> =13)				100			92	8
14	Offers suggestions for improvements in the workplace when appropriate. (Wk 2 <i>N</i> =10)			80	20			80	20
15	Uses technology when appropriate. (Wk 2 <i>n</i> =14; Wk 8 <i>N</i> =18)			86	14		6	78	17
16	Maintains and troubleshoots equipment issues.		5	68	26			65	35
17	Asks questions when encountering new technologies. (Wk 2 <i>N</i> =16; Wk 8 <i>N</i> =18)			63	37			61	39
18	Communicates well in writing. (Wk 2 <i>N</i> =7; Wk 8 <i>N</i> =15)			71	29			80	20
19	Is a good listener. (Wk 2 <i>N</i> =18)		5	67	28		10	50	40
20	Communicates well verbally.		16	47	37		5	60	35
21	Demonstrates good decision making. (Wk 2 <i>N</i> =18)		6	72	22		10	55	35
22	Acquires and applies new knowledge. (Wk 2 <i>N</i> =16)			81	19			75	25
23	Demonstrates creative thinking. (Wk 2 <i>N</i> =13)			61	39		10	55	35
24	Adapts to change positively. (Wk 2 <i>N</i> =17; Wk 8 <i>N</i> =19)		6	59	35			58	42
25	Demonstrates responsibility. (Wk 8 <i>N</i> =19)		5	58	37		5	53	42
26	Takes and applies constructive criticism. (Wk 2 <i>N</i> =10; Wk 8 <i>N</i> =19)			60	40		5	68	26
27	Maintains proper work appearance. (Wk 8 <i>N</i> =19)		5	58	37			74	26
28	Is respectful. (Wk 2 N=18; Wk 8 N=19)			44	66			47	53
29	Problem solves before going to supervisor. (Wk 2 <i>N</i> =13; Wk 8 <i>N</i> =19)			92	8			68	32
30	Asks for help when needed. (Wk 2 <i>N</i> =16; Wk 8 <i>N</i> =19)		6	56	38			68	32

Week 2 N=19 unless otherwise noted. Week 8 N=20 unless otherwise noted. Rating scale: (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree

Workforce Skills

Overall, the experience appears to have produced improvements in youths' workforce skills, as evidenced by their own self-assessment and that of their supervisors. Most of the supervisors agreed that the teens demonstrated workforce skills and personal qualities; there were very few "disagree" ratings. When reviewing their comments several themes were evident, and the results are organized by these themes.

1. Teens and supervisors were able to identify areas of strength.

At the outset, teens' perceived their strengths to be in the areas of interpersonal relationships, being respectful, and maintaining a proper work appearance (80% or more rated themselves "strongly agree" in these areas). The supervisors noted the teens' respectful behavior and positive attitude. Many strengths were identified by the end of the program. In addition, their comments reflected an understanding of these strengths (Table 3).

Table 3Workforce Skills Identified as Strengths

Examples of Teen Self-Assessment	Examples of Supervisor Assessment
"I think that I work well with all sorts of	"She was self-motivated and eager to help.
people."	She gave her input and worked as a team member."
"I think that the decisions I make are good ones; I think I apply knowledge fast."	"Very conscientious and reliable; conducts herself in a professional manner; works very well independently."
"I have learned to come up with ideas on the spot."	"She is a natural leader, fast-paced worker, self-motivated, and a good
·	decision maker."

Note. Strengths identified at end of program (Week 8).

2. In early appraisals, youth and supervisors were able to identify areas where teens needed to improve.

Teens rated themselves lower in the areas of resources, particularly using time wisely; asking questions; problem solving; and understanding the organization as a system. Less than half rated themselves "strongly agree" in these areas, as well as there were several who disagreed or strongly disagreed that they had these skills. Overall supervisors' ratings were lower; for all but one item (respect), less than half of the supervisors gave ratings of "strongly agree." Their comments illustrate examples of areas for improvement (Table 4).

Table 4Workforce Skill Areas Identified as Needing Improvement

Examples Identified by Teens	Examples Identified by Supervisor
"I can be more prepared than I usually	"Spends a lot of time talking to others and
am."	not getting the job done."
"I think I must work on my adapting skills.	"Work more on showing up for work on
I don't like it much when things change at	time."
the last minute."	
"I need to work on being more respectful."	"Would like to see her take a little more
	initiative in leading games."

3. Many areas for improvement noted by teens and supervisors in the early performance appraisal had strengthened by the end of the program.

From the teens' perspective, they experienced gains in workforce skills. The most growth appeared to be in the areas of demonstrating self-motivation, organizational systems (understanding the organization and their place in it as well as making suggestions to improve the organization), wise use of resources (e.g., time and materials), asking questions to clarify information, listening and verbal communication skills, demonstrating responsibility, and problem solving. In some cases, youths' comments indicated something had clicked in the process (Table 5).

Table 5Examples of Improvements Identified by Teens

"There have been a few times when I haven't been well prepared or ready on time, but I think I have made a very big improvement thanks to my supervisor."

"Over the last couple of weeks I have really figured out my place in the program. Now I must apply myself 100%."

"There have been many times when I have had a problem with trouble shooting, but I think I have gotten the hang of it."

"Adapts to change positively was kind of challenging, working with one specific co-worker, but I learned how to adapt to his personality and appearance; if I had to do the JET program again I would like to do it with him again."

Supervisors rated teens as gaining the most in the areas of meeting scheduled deadlines, working well with people of diverse backgrounds, being a team player, and problem solving. The comments in Table 6 illustrate these improvements by comparing supervisors' comments that were made at Week 2 with those at Week 8.

Table 6Comparison of Supervisors' Early and Late Performance Appraisals of Workforce Skills

Week 2	Week 8
"Can stand to sharpen his constructive criticism outlook. Instead of getting offended, take what is being said in a positive way."	"Very good job! He has worked on his constructive criticism issue a lot."
"Spends a lot of time talking to others and not getting the job done."	"Tries to use time more wisely by being more active in children's activities."
"He needs to work on his decision making skills a little. Instead of walking around or playing, find something to do in your work area."	"His decision making ability has improved. He has been working more than he has been walking away."

Note: These responses reflect the supervisors' assessment for the same teen from Week 2 to Week 8.

4. In some cases, supervisors' and/or teens' final assessments indicated there was additional room for improvement.

While it was not as apparent from the numerical ratings, the open-ended responses from both supervisors and teens provided insight into areas and improvement for continued growth. As evidenced from the comments in Table 7, supervisors noted a positive area along with a suggestion for improvement.

Table 7Areas for Identified for Continued Improvement

Examples Identified by Teen	Examples Identified by Supervisor
'I need to ask for more feedback from co- workers and supervisors."	"His listening skills are good and he learns quickly; would like to hear him speak louder when interacting in public."
"I need to make better decisions and communicate more with my supervisor."	"Does a very good job on his duties; my biggest concern is time management. He spends more time than he should not focused on the task at hand."
"I need to work more on showing a positive attitude."	"Needs to think more when saying things to certain people but is usually respectful."

5. Although youth tended to rate themselves higher on the self-assessment, youth and supervisors generally agreed on the nature and direction of performance.

Although supervisors' numerical ratings were overall positive, they tended to rate the teens' with more "agree" than "strongly agree" ratings. Responses in Table 8 demonstrate the general agreement between the teens' and supervisors' assessment of the teens' job performance.

Table 8Comparison of Teen and Supervisor Comments Regarding the Teens' Work Performance

Teen	Supervisor
"I agree [with the supervisor's rating] because I do not think I use my time wisely sometimes."	"Gets relaxed and engages in other activities, however, time management has vastly improved."
"There have been many times when my teen co-worker has been very dysfunctional which made me mad and want to yell at him a lot of times but he is much better and so am I."	"Has shown a lot more leadership when it comes to dealing with her co-worker."
"May get off task a few times."	"May have gotten off task but in the last weeks she improved greatly."
"I think I work well with my teammates."	"Is a very great team player. Has a great attitude."
"I think I listen to the kids well and show them respect."	"Ability to communicate with others is outstanding."

Note. Supervisor responses are matched with those of the corresponding teen participant.

What Teens Learned the Most

In an open-ended question, we asked teens to indicate what they learned the most through their participation in JET. We sorted their comments into three overall themes (Table 9). Many of the teens mentioned specific workforce skills or personal qualities that they learned. Other comments were more general, relating to what they learned through the work experience as a whole, rather than a particular workforce skill. A few comments related to specific aspects of the job, such as particular content knowledge gained.

Table 9What Teens Learned Most from Participation in JET

Theme	Representative Responses
Teens learned specific workforce skills.	"Responsibility is the most important thing I gained being in the JET Program."
	"I have learned how to make a change if I need to learn something new."
	Communication "is the key and teamwork can help you solve lots of things."
Teens learned about	"To learn how a job works and what you have to deal with."
the world of work more generally.	"The most important thing I learned was getting the opportunity to have a real job and fill out an application and take an interview."
Teens learned	"Work with plants."
knowledge related to specific jobs.	"The most important thing I gained being in Adventure Central's JET Program is working outside."

Finally, the following comment from one teen illustrates the wide range of benefits that were possible.

"Good communication skills, to enjoy my work, interviewing skills, adapting to new environments, to use initiative, to ask questions, and to be respectful as well as be all I can be."

Overall Program Assessment

When asked about their overall assessment of JET, most of the teens offered a positive comment ("it was a great program"), said they would not change anything, or did not have a specific program change to suggest. The areas where they recommended changes were related to money (more of it), having different program hours (a one-week break, choice of hours), and adding more worksites so there would be more choices and more teens could work.

The supervisors' comments reflected that their involvement in JET was definitely worth the effort. Supervisors noted that the teens "added a nice dynamic" and "really filled a gap" at their work location. Beyond these general comments, there were three themes derived from the supervisors' feedback. First, supervisors identified areas they needed to address at their worksite to better accommodate the teens, such as better planning and support (see Table 10).

Table 10

Supervisors' Suggestions for Accommodating Teen at Worksites

- 1. Planning ahead for the teens' arrival and ensuring that the rest of the staff were knowledgeable about the program's goals
- 2. Making sure the teens received the necessary orientation and training to do their job (e.g., learning plant names)
- 3. Making sure the teens had a range of experiences (e.g., greeting the public, helping with a program)
- 4. Adjusting the teens' hours to be able to include them in crew meetings

In addition, the supervisors identified ways that Adventure Central staff could help make JET a better experience. This included providing additional training and sharing ideas from other sites about how the staff members at these sites have worked with teens. Finally, supervisors identified unanticipated ways in which they had benefited from the teens' presence on the job. For example, one of teens attended a planning meeting for an event and gave her honest feedback about the plan. Based on this experience, the supervisor realized they could learn how to better serve the teen age group by asking for the teens' input. Another supervisor noted that the experience of having teens at their worksite forced them to stop and think about why things are done a certain way. They were forced to improve their communication, especially on details that might otherwise be taken for granted. It was as if they were seeing their own work through new eyes. Teens' presence in the workplace also gave other staff members the opportunity to gain experience in supervising and delegating work to someone else. The experience made them realize that they all needed to work together to be prepared to have the teens as part of their staff. Thus, there was a reciprocal benefit to their involvement in JET. This perception appeared to strengthen their feelings as to the value of the program.

Discussion

This article describes the Job Experience and Training (JET) program, a work-based learning program that is part of the comprehensive 4-H youth development program at Adventure Central in Dayton, Ohio. We described important components of a workforce preparation program based on youth development principles. We also provided a description of the specific context of the program, because it is an important part of understanding the process by which the program outcomes are produced.

The first objective of the evaluation was to assess the workforce skills gained by teen participants. By their self-assessment and that of their worksite supervisors, youth did develop workforce skills in many areas. The skills reported were those deemed important by employers in recent publications (e.g., interpersonal relationships, professionalism and work ethic, communication, and problem solving; Casner-Lotto & Barrington, 2006; Partnership for 21st Century Skills, 2003). The findings from the present study become especially relevant when considered in relation to the disagreement regarding the developmental benefits of adolescent employment. The interconnection between the work setting and the youth development program of Adventure Central represents a "merged" context that appears to provide support during the work experience but is not typical of adolescent employment opportunities (Hansen & Jarvis, 2000, p. 419).

However, not all JET participants improved in the same areas or to the same degree. In part, this is due to pre-existing differences, as well as to their particular experiences on the job. Within a youth development framework, the fact that participants identified areas for improvement was viewed as a positive sign, not a negative one. If JET were simply a work experience, then success might be viewed as receiving a superior rating from a supervisor. However, because the program model is that of work-based *learning*, this learning must take place in a supportive environment where adults provide the appropriate scaffolding for skill development. This approach demonstrates the benefit of infusing principles of positive youth development into workforce preparation programming.

The present results illustrate the usefulness of a performance appraisal process as a way to evaluate the development of workforce skills. Our approach is consistent with that taken by Blalock and Strieter (2006), who also used the SCANS skills and competencies as the basis for their instrument. As practiced in JET, the performance appraisal process has advantages over self-report instruments because it also gathers input from worksite supervisors who observe teens while they are practicing the skills. We found that although teens tended to rate themselves somewhat higher, their assessment were similar in nature to that of their adult counterparts.

It is important to reiterate that, first and foremost, the performance appraisal was designed to be a useful program tool. The teens knew from the beginning what the expectations were and the process allowed them to reflect on what they learned in their work experience. By having supervisors complete appraisals two weeks into the experience, it was hoped that they would be able to see areas of strength and areas needing improvement. We concluded there is some fine-tuning needed with the performance appraisal process. Specifically, there is a need to emphasize with supervisors the importance of the early assessment. We noted that some supervisors did not complete this first assessment so there was no point for comparison at the program's conclusion. There are several possible explanations. We suspect that is some instances, the supervisors rated the youth highly at the beginning to be "nice," without recognizing the appraisal process was meant to be a tool for setting goals and for documenting growth and improvement; this was a problem also encountered in other programs (Blalock & Strieter, 2006). It could be that the particular job tasks did not enable youth to demonstrate skills in a particular area. Alternately, it is possible that supervisors did not have a chance to observe the teens demonstrating these particular skills. Changing the anchors on the rating scale from agree/disagree to outstanding, satisfactory, shows improvement, needs improvement, not applicable/not observed (Blalock & Strieter, 2006) might be one way to facilitate this different view. We also have considered adding specific skills that are unique to each worksite in addition to the more generic workforce skills, as Blalock and Strieter (2006) have suggested.

Our second major objective was to determine if supervisors and teens found the program to be worthwhile. Both groups indicated their support of the program. Most of the teens appeared satisfied with the program, and they did not have many suggestions for changes. Supervisors rated the program as a positive experience. They also offered ways that they could better prepare for teens in the workplace. In addition, they noted unanticipated benefits to having teens as employees.

In combination with workforce skill development, information on teen and supervisor satisfaction provides us with valuable information regarding what is working well and provides the basis for making any necessary changes in the program structure, educational strategies,

and content. For example, because getting buy-in from all staff members at a worksite is important to the quality of the experience for both the teens and the adults involved, Adventure Central staff members have begun to do training at each of the park sites in anticipation of the next round of summer placements. Adjustments such as these will ensure that the program continues to be successful in meeting the needs of all those involved.

Although adolescent employment has been the topic of previous research, much of it has focused on the number of hours worked per week, with little attention paid to the quality of the work experience (Markel & Frone, 1998) or the developmental opportunities it affords (Greenberger et al., 1982). There has been limited documentation of workforce preparation programs as we define them, thus the study presented here extends the literature in this area.

Implications

JET is an example of a program that incorporates principles of youth development and workforce preparation. Although the JET program was focused on parks-related careers, the model could be applied in many different career areas. It is important to note that because JET is embedded within the comprehensive youth development program at Adventure Central, the teens had the security afforded by a safe environment, which had been documented in past studies (Ferrari, Paisley, Turner, Arnett, Cochran, & McNeely, 2002; Ferrari & Turner, 2006; Paisley & Ferrari, 2005). This is an important consideration for anyone interested in replicating a similar program.

Our continued reading in the area of workforce skills, combined with discussion as part of a larger workforce preparation initiative in our organization, has led us to consider moving from the categorization used in SCANS (1991) to a more contemporary one. Building on the foundation skills and competencies identified by the U. S. Department of Labor more than 15 years ago, recent publications have used the terms *learning skills* (Partnership for 21st Century Skills, 2003) and *applied skills* (Casner-Lotto & Barrington, 2006). Although we will likely adapt our performance appraisal measure to reflect this new terminology, it will not change the nature of our program. We would encourage others to review these publications, as well as those by the Business and Higher Education Forum (2003) and Levy and Murnane (2006), to provide a foundation in current conceptualizations of workforce skills.

Because after-school programs have been suggested as an ideal place to focus on developing skills needed for the 21st century workforce (Schwarz & Stolow, 2006), the information gained from our experience with JET has implications for designing and evaluating additional workbased learning programs for teens that take place in an after-school context. As well, because work often conflicts with teens' participation in out-of-school time programs (Pittman, Yohalem, Wilson-Ahlstrom, & Ferber, 2003), it makes sense to keep teens engaged by offering workbased learning programs within the context of a comprehensive after-school program. Although many communities have summer work programs that focus on paying teens to do work, they typically place youth in low-skill jobs. Our approach was to provide a meaningful, guided experience that allows youth to reflect on and learn from their work experience gaining skills that will transfer to other settings.

Components for Replication

Based on our experience, within the context of a positive youth development philosophy expressed earlier, some key ingredients are needed for success. These recommendations are in alignment with those shared by Brown and Thakur (2006). Among the components needed for replication are the following:

- 1. Establish partnerships for worksite placements. Successful workforce preparation initiatives require strong community partnerships—a collaboration of all stakeholders. The strength of these partnerships is based on relationships and communication, both of which require an investment of time that pays dividends in the long term.
- 2. Ensure a strong commitment from adults serving as worksites supervisors. The program will not work well without the support of the site-based supervisor. It is important to involve those adults who view youth as resources. They need to be willing to invest the time needed to develop a plan for involving teens as well as mentoring teens in a work setting by providing guidance and constructive feedback.
- 3. Include skill-building sessions to set up teen participants for success with job applications and interviews.
- 4. Have clear expectations and duties for all participants, both teens and adults.
- 5. Gather enough information to make good matches between teens and worksite placements. Ensure a balance between enough challenge and enough opportunities for success.
- 6. Use performance appraisal and self-assessment strategies, including reflection. Written reflections in journals, participating in performance appraisals, and facilitated group discussions help to make the work experience a learning experience. This process puts responsibilities on teens for their own learning, but gives them structure to do so.
- 7. Engage in continual monitoring to ensure everything is on target. Planning, supervision, support, feedback, and on-going communication throughout the course of the project are necessary.
- 8. Seek grant funding or partnerships to fund salaries or incentives for youth.
- 9. Evaluate the process and the outcomes of the program.
- 10. Communicate results to stakeholders.

The evaluation results presented here demonstrate that JET was successful as a work-based learning program. Successful work-based learning programs empower young people to be an active participant in their future by taking control of their own learning and experiences. Given the concerns expressed about the need for young people to develop workforce skills, we feel the JET program is a good model for engaging teens in meaningful service to the public and developing workplace skills and competencies that they can apply now and in the future.

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