Workforce Preparation in the Context of Youth Development Organizations: Building a Case with Theory, Research, and Practice

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Preparing youth for the workforce is a major concern in U.S. society that has taken on new meaning in the 21st century. 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; Secretary’s Commission on Achieving Necessary Skills [SCANS], 1991). Thus, there is widespread concern that youth lack the skills essential for job success and are entering the workplace unprepared. Several recent studies have documented this skills gap (American Society for Training & Development [ASTD], 2006; Business-Higher Education Forum [BHEF], 2003; Casner-Lotto & Barrington, 2006). The American Society for Training and Development (2006) summarized the issue by saying that “organizations in the United States and around the world are finding themselves ill-equipped to compete in the 21st-century economy. The reason: too many workers lack the right skills to help their employers grow and succeed” (p. 4).

Lack of skills is only part of the concern. Another aspect of the issue appears to be lack of opportunity. In 1994 the School-to-Work Opportunities Act was passed because our country “lacks a comprehensive and coherent system to help youth acquire the knowledge, skills, abilities, and information about and access to the labor market that are necessary to make an effective transition from school to work or further education” (cited in Joyce & Neumark, 2001, p. 38). However, despite these efforts, work-based learning opportunities are not prevalent in schools (Joyce & Neumark, 2001). Recent research from America’s Promise (2007) found that “young people lack not only the skills themselves but important opportunities to develop them” (p. 2). Attention on what to do to remedy the skills gap has focused on what should be taught in schools, and much of the existing literature addresses the issues from a school-based perspective. However, learning cuts across both the school day and after-school hours (Pittman, Irby, Yohalem, & Wilson-Ahlstrom, 2004), suggesting the important role youth development organizations can play. Although youth development programs are recognized as a key resource in preparation for the world of work, their potential is not yet realized (Schwarz & Stolow, 2006). America’s Promise (2007) data suggest that young people are still lacking opportunities to develop skills when they are outside the school doors. Therefore, the time is right to explore the opportunities for supporting adolescents’ workforce preparation in the context of youth development programs.

In this paper, we will build a case, drawing from theory, research, and our experience, as to the role that youth development organizations can play to aid in adolescents’ workforce preparation and successful transition to adulthood and the workforce. We will discuss how youth development programs are uniquely positioned to play an important role. Youth development organizations have been conducting leadership and life skill programs for many years, programs that ultimately enhance participants’ workforce preparation. From our vantage point as youth development professionals, we hear examples from adults who say they got their start as a rocket scientist, teacher, or business leader through their experiences in a youth development program, a path that is clear perhaps only in hindsight. As well, we know that by serving as a club officer, doing a community service project, or being a teen leader, young people are developing the “soft skills” that are now highly valued by employers as we move into a knowledge-based economy of
the 21st century. Youth development professionals have an important role to play as they assist youth to develop life skills and navigate the journey to successful employment and success in life. We think youth development professionals can make an even greater impact if they are more intentional about their work in this area.

What we present here has been informed by a parallel process of writing this paper while leading an initiative within our own organization, Ohio State University Extension, to address issues around the skills gap and the role of a youth development organization in supporting young people’s preparation for and transition to the workforce and adulthood. Thus, our work on this paper has influenced our leadership of the Workforce Preparation Initiative (Cochran, Ferrari, et al., 2007) in our organization and vice versa. Our message here is that we are grounded in what we discuss. One of us has planned and led workforce preparation programming as a youth development practitioner and is now in human resources working with new entrants to the workforce; the other has conducted research about workforce preparation programs and is working with projects seeking to develop workforce skills. Because of this perspective, we are also interested in helping others to learn from our experience and to influence the quality of workforce preparation programs overall.

What is Workforce Preparation?
Before we get too far, it is important for us to define the term workforce preparation as we will use it in this paper. The goal of workforce preparation programs as described here is to introduce young people to the world of work and to develop the workforce skills necessary for success through active participation in learning experiences. Situated in the context of community-based youth development programming, workforce preparation strategies must build on an early foundation of knowledge, skills, attitudes, and experiences to most effectively achieve long-term results (Ferrari, 2003). This approach favors a strategy that starts early in life and continues across the age spectrum. Our work is aligned with a definition of workforce preparation that includes a network of programs designed to help young people explore career opportunities, acquire applied skills, and gain experience in the workforce (National 4-H Council, 1993). This definition is flexible, inclusive of a variety of ages from early childhood through adult learning experiences, and focused on non-formal educational settings.

Our concept of workforce preparation is also compatible with that of Kazis and Kopp (1997). In their report on work-based learning, they describe that the goal of workforce preparation is to provide adequate preparation and qualifications for sustained labor market participation and lifelong learning so that all young people can move toward economic self-sufficiency and positive engagement as family members and citizens. It sees work preparation—particularly in today’s changing economy—as an incremental, multidimensional, developmental process of building competence, confidence, and connections. Being prepared for work and a career requires development, over time, of a repertoire of skills, knowledge, attitudes, and experiences that an individual can draw upon to make the most of a range of opportunities in the labor market—and life. And that repertoire cannot be fully developed in an environment that is lacking in rich opportunities for employment, quality learning, and engagement in a vital community life. To a great extent, healthy development into adulthood and preparation for work are synonymous. (p. 4)
As we view them, workforce preparation programs in the context of youth development organizations do not focus simply on getting a job. We intentionally use the term workforce preparation to emphasize preparation rather than employment, although we recognize that successful employment is an ultimate long-term goal of such efforts. Furthermore, preparation implies that it is a process of accumulating experiences, not a one-time event. By creating workforce preparation experiences, youth development organizations can serve as a bridge from adolescence to the world of work. We will address this concept further in a later section of this paper.

In the process of immersing ourselves in this topic, we have learned how complex workforce preparation really is. Because workforce preparation, as such, has very little coverage in the literature, we needed to cast a wider net, taking a broader view as we framed the issue. With each of the areas we reviewed, we could go into even greater detail to explore the topic more fully. Therefore, we have also chosen to focus on a subset of workforce preparation that is particularly relevant to adolescents – work-based learning, which simply put is defined as “learning activities that use the workplace as a site for learning” (Keating, 2006, p. 2). Our purpose is to review and summarize research and practice from a wide variety of sources, providing youth development practitioners and key stakeholders with a synthesis of this work. It is our goal for this synthesis to serve as a reference on the current workforce environment and the skills young people need, how workforce preparation is connected to youth development, and how to best teach and assess 21st century skills in the context of out-of-school time programming.

We begin with a discussion of current issues and the context of the 21st century workplace, including adolescent employment, the changing nature of work, the skills gap, and the contemporary view of skills needed for success. Then, we make the case regarding the relevancy of the youth development context for workforce preparation, discussing workforce preparation and youth development from several related frameworks. Next is a section on workforce preparation with a focus on one type of workforce preparation programming, work-based learning. Although workforce preparation can include programs for young people of all ages and stages, we have focused on work-based learning because of its particular relevance for teens. Our section on work-based learning includes benefits and challenges, program profiles, key principles, and assessment strategies. We briefly discuss the concept of “growing your own,” that is, a continuum of opportunities for young people to move from program participant to employee. We have distilled our reading and experiences so others can walk away with a basic understanding of the key issues. Finally, we suggest implications so that others can begin to view their role and opportunities in light of the current environment. Our hope is that this paper will enhance readers’ understanding of the need and the opportunities for workforce preparation programming while providing suggestions that are both research based and practical. The importance of preparing our children for success in this new age–the knowledge economy of the 21st century–cannot be underestimated. Our future depends on it.
BACKGROUND: CURRENT ISSUES AND CONTEXT

In this section, we examine two major topics that provide a background for our later discussion of workforce preparation programming. Because of the prevalence of adolescent employment, we review the literature on this topic. It is also important to understand the skills needed for success in the 21st century and whether adolescents are adequately prepared to enter the workforce, hence we give an overview of the skills gap and research on skills needed for success in the 21st century.

Adolescent Employment
A visit to the local shopping mall or fast food restaurant is enough to tell us that teens are in the workforce. The prevalence of employed teens is such that we consider work a normal part of adolescent life. Although such naturally occurring employment is not the primary focus of our paper, it is important to understand what researchers have learned through studying youth employment, particularly in light of the skills needed for success in the knowledge economy and as a backdrop for our later discussion of programs that seek to enhance the workforce preparation process.

First, if we are to understand naturally occurring adolescent employment better, we need to answer some basic questions. How early do youth start working? What sort of jobs do they have? How much do they work? Next, we will briefly review the major findings from the research on adolescent employment. This research has sparked some controversy; particularly regarding differing views of the potential effects that working has on adolescents’ development. While a full review of the adolescent employment literature is beyond the scope of this paper, we will summarize some of the major arguments here. Finally, we consider how understanding adolescent employment is critical to informing the development of workforce preparation programs.

Who works? What jobs? How much? According to data from the National Longitudinal Survey of Youth (Huang, Pergamit, & Shkolnik, 2001), young people are beginning to work as early as age 12, primarily in “freelance” or informal jobs such as babysitting, lawn mowing, and yard work. These types of jobs account for nearly 75% of the jobs held by 12- and 13-year-olds. The likelihood of employment increases with age (Rothstein, 2001b). Over half (57%) of the adolescents surveyed held a job at least some time while they were 14; most of these were still in the category of freelance jobs. Nearly two-thirds were working at age 15. Between the ages of 15 and 16, there was a significant increase in the percentage of youth working and the average number of hours they work (Rothstein, 2001a). By the time they are seniors in high school this estimate is as much as 90% (Entwisle, Alexander, & Olson, 2000; Manning, 1990; U.S. Department of Labor, 2000). As they get older, there is a shift from freelance to formal or employee jobs (i.e., a job where a youth has an on-going relationship with a particular employer), and the average number of hours worked increases (U.S. Department of Labor, 2000). Statistics confirm that teenage jobs are highly concentrated in a small number of industries and occupations, with jobs in retail and service sector topping the list (Bureau of Labor Statistics, 2007; National Research Council, 1998; Rothstein, 2001b; Warren & Cataldi, 2006).
In addition to age, research suggests that employment varies by factors such as sex, race, ethnicity, household income, and family structure (Brown, 2001; Entwisle et al., 2000; Rothstein, 2001b; U.S. Department of Labor, 2000). Data from the National Longitudinal Survey of Youth (Rothstein, 2001b) indicate that approximately equal numbers of boys and girls work and for about the same amount of time (about half of the year), but they differ in the types of jobs they do. More girls are babysitting and more boys are doing yard work. Girls were much more likely to hold freelance jobs and less likely to hold employee jobs than boys. There were differences by race and ethnicity as well; employment was much higher for whites than among blacks (Entwisle et al., 2000; Gardecki, 2001; Rothstein, 2001b; Warren & Cataldi, 2006) or Hispanics (Brown, 2001; Gardecki, 2001; Rothstein, 2001b). Although they are less likely to work, minority youth are more likely to work intensely (Apel, Paternoster, Bushway, & Brame, 2006). Youth in households with low incomes were less likely to work (Brown, 2001; Rothstein, 2001b).

Consistent with these figures, Apel et al. (2006) noted that adolescent employment is a “suburban, White, middle-class phenomenon” (p. 341). Regarding family structure, Rothstein (2001b) noted that those in two-parent families were more likely to work than those who were in single-parent families headed by females. However, other studies have not found this distinction (Manning, 1990).

Employment patterns of youth vary substantially. While employment peaks in the middle of summer, many students are employed during the school year (Rothstein, 2001b; U.S. Department of Labor, 2000; Warren & Cataldi, 2006). Thus, they enact the roles of student and employee simultaneously. The type of job tends to affect when youth are working, with youth who hold employee jobs more likely to work during the school year (Rothstein, 2001b). Youth may alternate between working and not working within a given year, and they may change employers in the process. However, the rate of student employment has been relatively the same over time, and “employed students worked about as many hours per week in 2000 as they did in 1940” (Warren & Cataldi, 2006, p. 121). Not only is age related to the prevalence and type of work, but also its intensity; that is, older youth are more likely to be working and more likely to work longer hours (Rothstein, 2001a). Even so, only a relatively small percentage are working intensely (Ruhm, 1995; U.S. Department of Labor, 2000).

Mortimer and Finch (1996) noted that working, broadly defined, appears to follow a developmental trend where children first start out with chores in the home, progressing to doing similar work for others in the informal job market, and then moving into paid work for an employer, typically in the service industry. By the time adolescents are in the later high school years, they have moved into jobs that become “increasingly more complex, involve increasingly more lengthy training, and more supervisory responsibility” (Mortimer & Finch, 1996, p. 17).

Adolescent employment research – What’s the issue? Attitudes towards youth participation in the workforce have shifted back and forth over the past 30 to 35 years, and research has had a bearing on how this work is viewed. Reviewers of the adolescent employment literature note that investigators have examined this topic in a number of ways and with differing conclusions (Mortimer & Finch, 1996; Stone & Mortimer, 1998). This literature has sparked some controversy, with some noting the beneficial effects of work for adolescents while others conclude that it is detrimental to their development in a variety of ways (see Zimmer-Gembeck & Mortimer, 2006, for a recent review). Investigators have used varying methodologies and
analytical procedures, which may account, in part, for their differing conclusions (Mortimer & Finch, 1996). The approaches taken depend to some extent on the researchers’ discipline (e.g., economics, sociology, psychology, or education). Thus, researchers have considered the relationships of working to the labor market consequences (i.e., wages in later life), the impact on social and psychological functioning, and academic indicators (Stone & Mortimer, 1998). In the following section we summarize the arguments related to adolescent employment.

The primary arguments against adolescent employment are that it competes with and detracts from school engagement and performance (i.e., the zero-sum model; Post & Pong, 2000; Warren, 2002) and that young people who work are subject to a range of negative educational, social, and psychological outcomes. Studies generally compare those who are working with those who are not (Warren, 2002); as well, many studies have focused on the number of hours worked per week. Researchers have found relationships between adolescent employment and a variety of negative outcomes. These include:

- Lower grades (Steinberg & Dornbusch, 1991)
- Cutting classes (Barling, Rogers, & Kelloway, 1995)
- School tardiness or absences (Greenberger & Steinberg, 1986)
- Dropping out of school (McNeal, 1997)
- Greater incidence of delinquency and problem behaviors (Apel et al., 2006)
- Greater substance use (Apel et al., 2006; Greenberger & Steinberg, 1986; Mortimer & Finch, 1996)
- Higher levels of stress (Mortimer & Staff, 2004)
- Less sleep and lower levels of exercise (National Research Council, 1998)
- Less completion of homework and participation in extracurricular activities (Greenberger & Steinberg, 1986)
- Less time for family interaction (Greenberger & Steinberg, 1986)
- Potentially creating negative attitudes towards work (Stone & Mortimer, 1998)

A majority of this research demonstrates an association of intense employment (over 20 hours per week) with negative outcomes such as dropping out of school (McNeal, 1997) and substance use (Marsh & Kleitman, 2005). However, the results are somewhat mixed and contradictory. Although some researchers have documented these negative outcomes, others have not. This may be due to limitations such as cross-sectional data that is not able to fully sort out the direction of causality. For example, students who already are not performing well in school may seek more hours at their paid jobs, rather than spending long hours studying. Other researchers do not find a relationship with working a greater number of hours (Apel et al., 2006). Research examining the zero-sum model has shown that work did not appreciably decrease the time spent on homework but did decrease the time spent watching TV and hanging out (Schoenhals, Tienda, & Schneider, 1998; Warren, 2002). The findings relative to employment intensity have led to recommendations for restrictions on the amount of hours adolescents work (National Research Council, 1998). However, some consider the focus on work intensity as too narrow and the recommendations premature and misguided (Apel et al., 2006).

On the other hand, other researchers propose that work has the potential to provide adolescents with developmental opportunities. The suggested benefits include:
• Socialization; developing an understanding of how the work world operates (Hamilton & Hamilton, 2004; Whalen, DeCoursey, & Skyles, 2003)
• Developing personal qualities such as responsibility and independence; encouraging good work habits (Stone & Mortimer, 1998)
• Increased feelings of autonomy and independence (Brown, 2001; Hamilton & Hamilton, 2004; Whalen et al., 2003)
• Self-discovery and goal setting (Hamilton & Hamilton, 2004; Whalen et al., 2003)
• Economic advantages (e.g., greater earnings as an adult) (Carr, Wright, & Brody, 1996)
• Providing valuable experience and skills (Leventhal, Graber, & Brooks-Gunn, 2001; Whalen et al., 2003).
• Skills learned on the job may have an academic benefit, at least indirectly by encouraging interest in school (Stern, McMillion, Hopkins, & Stone, 1990)
• Developing social capital – the opportunity to create informal networks and interact with adult role models (Entwisle et al., 2000; Whalen et al., 2003)

Mortimer and her colleagues (Mortimer & Finch, 1996; Stone & Mortimer, 1998) offer a third perspective on whether work is good or bad: It depends. This “it depends” view is informed by Bronfenbrenner’s (1979) ecological theory, which directs us to look holistically at the environment in which the work occurs. From this perspective, it is more than the workplace itself that is of interest. We must consider the specific activities, interpersonal relationships, and roles that occur within this setting and the connections between work and other aspects of the adolescent’s life. Additionally, larger cultural and societal influences may play a role.

In support of this third perspective, several authors have noted that it is not only the number of hours worked that should be the focus but that we must consider the quality of the employment experience (e.g., Barling et al., 1995; Entwisle et al., 2000; Markel & Frone, 1998; Mortimer & Finch, 1996; Warren, 2002). From a review of the literature, authors have proposed that the impact of adolescent employment may depend on such factors as:

• Individuals’ pre-existing differences (Entwisle et al., 2000; Leventhal et al., 2001)
• The meaning of work and their reasons for working (Marsh, 1991; Warren, 2002)
• Primary orientation, that is, whether one is engaged in school or disinterested and turns to work as an alternative source of satisfaction (Warren, 2002)
• The type of work adolescents perform; job characteristics (i.e., what they actually do on the job) (McNeal, 1997; Mortimer & Finch, 1996; Post & Pong, 2000 Stern, Stone, Hopkins, & McMillion, 1990)
• The seasonal pattern of employment such as whether one works during the school year, summer only, or both (Carr et al., 1996)
• The extent to which adolescents have autonomy on the job (Barling et al., 1995; Greenberger, Steinberg, & Ruggiero, 1982)
• Whether adolescents have an opportunity to learn new skills in their job and have opportunities for advancement (Greenberger et al., 1982; Mortimer & Finch, 1996; Stern et al., 1990)
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- Whether adolescents perceive role conflict between work and school (Barling et al., 1995; Mortimer & Finch, 1996)
- Timing of entry into the workforce (Leventhal et al., 2001)
- The individual’s economic circumstances (Brown, 2001; Leventhal et al., 2001)
- Minority status (Leventhal et al., 2001)
- Community location – rural vs. urban (Leventhal et al., 2001; Shanahan, Elder, Burchinal, & Conger, 1996)
- Influence of family, school, and neighborhood contexts (Chaplin & Hannaway, 1996; Gardecki, 2001; Leventhal et al., 2001)
- Whether one looks at short-term or long-term effects (Warren, 2002)

Considering the variety of factors begins to show how complex the landscape of adolescent employment really is. For example, Schoenhals, Tienda, and Schneider’s (1998) research showed that when pre-existing differences were controlled, the intensity of adolescent employment did not adversely affect grades directly. Similarly, the association between employment intensity and school performance “mostly or entirely disappears after controlling for whether school or work are central aspects of students’ lives” (Warren, 2002, p. 384). When quality of work was considered, it was found to interact with employment quantity, such that the amount of hours worked had negative associations with school performance when employment quality was low, but there were negligible associations when quality was average or high (Barling et al., 1995).

In summary, although authors have argued both the pros and cons of adolescent employment, the contemporary view is that whether work is beneficial or harmful depends on a wide variety of factors. Clearly, adolescent work is not a singular phenomenon. To get a more complete picture, we must understand both within-group and between-group differences, as well as differences that are dependent on the nature of the work, the settings in which it occurs, and differences across time. The quality of the work environment is a necessary consideration.

**What does it mean?** Most American adolescents now combine school and work during their high school years. During this time their work becomes more formal and more time-consuming. However, Stone and Mortimer (1998) noted that “high levels of youth engagement in the labor market are occurring, ironically, concurrent with widespread criticism of how poorly our young people are prepared to go to work” (p. 186). How are the jobs held by adolescents preparing them for their future work? Are they developing the skills that employers say they will need? The business community has been critical of schools for failing to adequately prepare youth to enter the workforce (Partnership for 21st Century Skills, 2003; Peter D. Hart Research Associates, 2005). Recent reports and polls indicate that, in addition to employers, educators, the general public, and youth themselves feel that they are entering the workforce unprepared (Partnership for 21st Century Skills, 2007; Peter D. Hart Research Associates, 2005).

One of the concerns is that most adolescents’ jobs are not related to what they are studying in school and are not the type of quality experience that will teach valuable skills needed for later workplace success (Stern, McMillion, et al., 1990; Stone & Mortimer, 1998). This concern is relevant for naturally occurring jobs, where jobs exist with the interests of the employer in mind, but not with the benefits that the young employee will gain from working. A common belief
underlying past research is that working comes at the expense of schooling (Markel & Frone, 1998; Post & Pong, 2000; Warren, 2002). However, developing necessary skills not taught in conventional classrooms, increasing interest in school, and realizing the relevance of what they are learning are among the potential benefits of students’ participation in work-based learning experiences (Hamilton & Hamilton, 1997; Lerman, 1996; Stern, McMillion, et al., 1990; Whalen et al., 2003). Hamilton and Hamilton (1997) promote the idea that “workplaces are part of the education system of the future” (p. 1). Indeed, students who participate in work-based learning experiences gain important skills (Ferrari, Arnett, & Cochran, in press; Halpern, 2006; Massachusetts Department of Education, 2007). Additionally, when students who were in supervised work experiences were compared to unsupervised students in comparable jobs, those who had supervised work experiences fared better in terms of their attitudes toward work (Stern, Stone, et al., 1990). These finding suggest that it may be helpful for adolescents to have work experiences and to have some assistance transitioning into the world of work.

Another concern is the obstacles faced by workers of color, particularly in urban communities (Moss & Tilly, 2001; Wilson, 2006). 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 to gain 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.

Mortimer and Finch (1996) noted that research has paid little attention to work compared to other domains of adolescent life. To some extent at least, it appears that adolescent employment is not viewed as contributing to a later career path; it is considered a diversion rather than progress in the process of the transition from school to adult work. Even less attention has been paid to the process of preparing for work, particularly from the perspective of the role of youth development organizations. However, despite this situation, the existing research can inform the work of youth development professionals in a variety of ways.

- We should view work neither as all good nor all bad. Rather, we should seek to emphasize the factors that contribute to a positive work experience and minimize those that create negative conditions.

- We should not assume that all jobs are created equal or that all adolescents experience work in the same way. We must take into account that there are individual and community differences that influence adolescents’ experiences: if and when they enter the workforce, the kind of work they do, and what they get out of it. If we accept that the quality of the work environment and the degree of connection between work and other contexts make a difference, then those interested in creating workforce preparation programs to help youth make a successful transition to the world of work should focus on the aforementioned areas.
• We should give thoughtful consideration to the selection of target audiences, considering those who may have the most to gain from supportive workforce preparation experiences.

• We should consider how to make connections with employers to ensure a quality work experience.

• We should recognize that the family is often a silent partner when it comes to workforce preparation and consider how we can involve parents in this process.

By design or default, adolescents make important decisions that affect their future in the world of work. How adolescent employment can be a stepping stone to future workplace success is a topic requiring further consideration. The answer is not more work but better structured work experiences (Brown, 2001). Workforce preparation programs are part of the answer.

**Current Context**

*Why this topic?* In research publications, white papers, and the popular press, the skills gap has been a common topic. While those surveyed and the intended audience of the publication varies from youth development and K-12 education to higher education and the business sector, the message is the same: The nature of work has changed, there is a widening gap between the skills employers need and the capabilities of new entrants to the workforce, and the issue is very important for our future.

The nature of work is changing, resulting in an increased demand for higher level skills. In the 19th century, the United States moved from an agrarian society to an industrial society. For most of the 20th century, factory and office workers focused on a single task, using a single machine in an environment where the technology of mass production emphasized discipline to the assembly line (SCANS, 1991). In 1991, the SCANS report concluded that American high school students need to develop a new set of competencies and foundation skills if they want to enjoy a productive and satisfying work life. The shift to a knowledge and technology-based economy has moved jobs from routine tasks to more opportunities for high skilled workers (Levy & Murnane, 2006; Partnership for 21st Century Skills, 2003). According to the ASTD Public Policy Council (2003), “Every economy has a driving force. The agricultural economy relied on land, while the industrial economy leveraged machines. The knowledge economy of the 21st century is anchored by two critical commodities: people and knowledge” (p. 6). Statistics support this description; while 80% of jobs were classified as unskilled in 1950, over 80% are classified as skilled today (BHEF, 2003). Levy and Murnane (2006, p. 54) described this changing job mix as a “hollowing out” effect where blue collar and administrative support jobs are declining while lower paid service sector jobs and higher paid categories are experiencing the greatest growth.

Furthermore, there is a significant skills gap, with new entrants and current workers lacking the most important skills. Reports over the past 15 years (1991 through 2006) have documented a skills gap, with over half of high school graduates described as unprepared. The report *Are They Ready to Work?* (Casner-Lotto & Barrington, 2006) framed the issue by saying:
The survey results indicate that far too many young people are inadequately prepared to be successful in the workplace. At the high school level, well over one-half of new entrants are deficiently prepared in the most important skills – Oral and Written Communications, Professionalism/Work Ethic, and Critical Thinking/Problem Solving. College graduates are better prepared…but too few are excelling. (p. 7)

In addition to specialized skills for their work, companies are asking for young adults who have applied skills in communication, leadership, teamwork, adaptability, and problem solving (ASTD, 2006; BHEF, 2003; Casner-Lotto & Barrington, 2006; SCANS, 1991). In research on the skills gap, employers, educators, and other key stakeholders have consistently identified deficiencies for high school, two-year, and four-year college graduates (ASTD, 2006; BHEF, 2003; Casner-Lotto & Barrington, 2006; Moss & Tilly, 2001; Peter D. Hart Research Associates, 2005). It is important to note that the deficiencies reported by employers are in skills employers are also identifying as most important (e.g. communication and leadership) and that the skills gap is particularly evident among urban minority workers (Moss & Tilly, 2001). Thus, there is widespread concern that youth lack the skills necessary for success and are entering the workforce unprepared. This concern is highlighted in results from a nationwide poll (Partnership for 21st Century Skills, 2007) of registered voters which revealed that “Americans are deeply concerned that the United States is not preparing young people with the skills that they need to compete in a global economy” (p. 1).

Although most of the publications have surveyed adults, when asked, young people themselves support these concerns. Recent survey research (Peter D. Hart Research Associates, 2005) found that 35 to 45% of high school graduates say they are deficient in skills that are expected of them in college and the workforce, such as writing and oral communication. Every Child Every Promise survey data from 15- to 17-year-olds confirms some concerns expressed by employers (America’s Promise, 2007). These data suggest that the problem is more than young people failing to develop applied skills but also reflects a gap in opportunities to practice and master skills. For example, 35% of teens said they were never or only sometimes empowered to make decisions in after-school programs, one-third of teens lacked the opportunity to learn and practice teamwork and leadership skills, and less than half felt like they communicate well with others (America’s Promise, 2007).

Finally, the skills gap will be compounded by a shortage of workers resulting from changing demographics. Baby boomer retirees are a concern because large numbers will be eligible for retirement soon resulting in a significant increase in the percentage of young workers (ASTD, 2006; Casner-Lotto & Barrington, 2006). According to BHEF (2003), the shortage of workers with some college-level skills will be more than 12 million by 2020; with baby boomer retirements, employers must fill high-performance jobs. In short, the nature of jobs is changing and research with a wide spectrum of stakeholders has identified a skills gap that will be compounded by changing demographics. For individuals and society, there are economic and social benefits to successfully filling these jobs.

Why is addressing the skills gap important? The stakes are high with a heavy price paid by individuals, organizations, communities, states, regions, and countries when employers cannot find adequately skilled workers (ASTD, 2006; Levy & Murnane, 2006). For individuals,
wages of workers with higher-level skills are growing while those with low skills are declining (BHEF, 2003). According to Conrad (1999), employers say skills matter and they act like they do, as evidenced by their hiring decisions and pay levels that favor those with soft skills. There is a growing gap between entry-level service jobs and jobs requiring high levels of the applied skills described above. The traditional, well paid blue collar and administrative jobs, such as automotive factory work, are gone or quickly disappearing (Levy & Murnane, 2006). Levy and Murnane (2006) reported that job growth is concentrated in higher-skilled occupations, which translates into earning power for individuals with higher skill levels and a dangerous decline for those without.

The benefits of closing the skills gap extend beyond individuals. If the country can provide a workforce proficient in the skills needed, there will be tremendous economic benefits. Countries that can produce and fill the faster-growing information and knowledge intensive jobs will innovate, thrive, and grow in the global economy (America’s Promise, 2006; BHEF, 2003). American voters recognize this by voicing almost unanimous support for teaching 21st century skills as being important to our country’s economic success (Partnership for 21st Century Skills, 2007). This trend suggests an economic rationale for investing in young people. According to America’s Promise (2006), the economic case is much like compounded interest yielding dividends over time. Steady human capital investments pay dividends and “learning begets learning. Skills beget more skills. The cumulative result becomes greater than the sum of the individual investments” (America’s Promise, 2006, p. 45).

Clearly there is a disconnect between what young people are learning and what they need to learn for successful employment, and it is evident when employers report that new entrants to the workforce are not prepared. We have sound information describing a set of important skills we need to invest in that cuts across a wide variety of jobs. Basic skills (e.g., reading, writing, and math) are important as a foundation, and job-specific skills are also necessary. But when basic knowledge and applied skills were combined, those skills cited most frequently by employers as important across all educational levels were the applied skills (Casner-Lotto & Barrington, 2006). In the next section, we will examine selected research over the last twenty years that identifies a relatively consistent set of skills young people need to succeed in the 21st century, and we present a framework for categorizing and describing these skills.

**Defining workforce skills.** Youth development professionals have long referred to leadership, decision-making, problem solving, and other similar skills as life skills, and they have developed several ways to classify them (e.g., Barkman & Machtmes, 2000; Hendricks, 1996). Table 1 summarizes key terms that have been used in youth development, education, and business to describe general sets of skills important for life and work. In the business world, non-technical skills have often been described as soft skills. It is evident, as noted by Conrad (1999), that soft skills involve interaction with people, are environment specific, and are difficult to assess. Recent frameworks (see Table 1) have described sets of skills including those referred to as soft skills (e.g., communication or teamwork) but also skills that might be considered hard skills such as written communication and information technology application. As suggested by Casner-Lotto and Barrington (2006), the skills shared in recent frameworks can be categorized as those based on cognitive abilities (e.g., thinking skills), those based more on social and
behavioral skills (e.g., work ethic), and those that combine both cognitive abilities and social skills (e.g., communication skills).

The studies and reports summarized in Table 1 all essentially began by assembling a group of experts (e.g., business people, educators, scholars, or policy makers) to generate a set of skills necessary for the workforce. While the language or organizing frameworks differ, SCANS (1991) and other national studies (Carnevale, 1991; National Academy of Sciences, 1984) from the same time period identified communication skills, thinking skills (e.g., problem-solving, creativity), teamwork, and personal characteristics and attitude (e.g., self-esteem, motivation, work ethic) as necessary workforce skills. For the purpose of this paper, we use the terms applied skills, 21st century skills, or skills for success in the knowledge economy to describe a common set of skills reported by a number of authors as important skills for success in the 21st century workplace, an environment driven by information and knowledge. These frameworks align well with current research that has identified skills such as leadership, teamwork, problem solving, time management, initiative, communication, and career planning (ASTD, 2006; BHEF, 2003; Casner-Lotto & Barrington, 2006). Publications that focus on specific audiences such as urban and minorities (Moss & Tilly, 2001) also suggest that similar qualities and skills like motivation and the ability to interact with others are the most important skills employers seek. Even frameworks focused on living in a digital age (International Society for Technology in Education [ISTE], 2007; Levy & Murnane, 2006) propose skills such as communication and collaboration, critical thinking, and problem solving.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Skills Included</th>
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<tbody>
<tr>
<td>Life skills (Barkman &amp; Machtmes, 2000; Hendricks, 1996)</td>
<td>Life skills are defined in the Targeting Life Skills Model (Hendricks, 1996) as “skills that help an individual to be successful in living a productive and satisfying life” (p. 4).</td>
<td>Examples: leadership, teamwork, decision making, and problem solving</td>
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<tr>
<td>Workforce competencies (SCANS, 1991)</td>
<td>This report identifies “five competencies which, in conjunction with a three-part foundation of skills and personal qualities, lie at the heart of job performance today” (p. ii).</td>
<td>Foundation Skills – basic skills, thinking skills, and personal qualities Competencies – resources, interpersonal skills, information, systems, and technology</td>
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<tr>
<td>Soft skills (Conrad, 1999; Moss &amp; Tilly, 2001)</td>
<td>Defined as nontechnical skills, abilities, and traits that pertain to personality, attitude, and behavior required to function in the workplace.</td>
<td>Grouped into two clusters (interaction and motivation) or framed using four workplace competencies: thinking and cognitive skills, oral communication skills, personal qualities and work ethic, and interpersonal and teamwork skills</td>
</tr>
<tr>
<td>New basic skills (Murnane &amp; Levy, 1996)</td>
<td>Identified three basic skills that young people must develop to succeed in the workplace: hard skills, soft skills, and computers skills.</td>
<td>Skills include: hard skills (math, problem solving and reading), soft skills (oral and written communication and teamwork), and computer skills (the ability to use personal computers at a basic level) Expert thinking – ability to solve new problems that cannot be solved by applying rules Complex communication – ability to transmit and convey a particular interpretation of information to others</td>
</tr>
<tr>
<td>Cross-functional skills and attributes (BHEF, 1997, 2003)</td>
<td>Identified nine “cross-functional skills and attributes that college graduates need to compete in the workplace” (p. 11).</td>
<td>Skills include: leadership, teamwork, problem-solving, time management, self-management, adaptability, analytical thinking, global consciousness, and basic communications</td>
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<tr>
<td>Applied skills (Casner-Lotto &amp; Barrington, 2006)</td>
<td>These skills are defined as “skills that enable new entrants to use the basic knowledge they have acquired in school to perform in the workplace” (p. 15).</td>
<td>The 11 applied skills include critical thinking/ problem solving, creativity/innovation, communication/ diversity, leadership, lifelong learning, technology, teamwork/ collaboration, professionalism, and ethics.</td>
</tr>
<tr>
<td>Skills for success (ASTD, 2006)</td>
<td>Defined as skills workers need to help their organizations grow and succeed.</td>
<td>Skills include: critical skills and competencies, business acumen, leadership skills, technical capacity, adaptability, innovative thinking, and personal responsibility for learning</td>
</tr>
</tbody>
</table>
Although studies over the last twenty years have described skills in similar ways, we saw a need to synthesize across sources and identify a framework and a set of descriptors of the necessary skills. To add validity to our synthesis, we identified a group of Ohio State University Extension professionals to review the key literature (see Table 1) and come to a consensus on a framework of skills supporting the knowledge economy. The team consisted of professionals representing expertise in youth development, workforce development, and community development. Drawing from the current literature and programming experience in Ohio, this group identified six general categories of skills including thinking skills, communication, teamwork and leadership, lifelong learning and self-direction, technology adoption and application, and professionalism and ethics (Table 2). Going through the process in this manner allowed us to build a shared understanding and created ownership in the final product.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Skills for Success in the Knowledge Economy</th>
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<tbody>
<tr>
<td><strong>Thinking Skills</strong></td>
<td>Thinking skills include critical thinking, problem-solving, creativity, and innovation. Expert thinking skills involve the ability to:</td>
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<td>• evaluate relevance, assess accuracy, and use information to solve problems.</td>
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<td></td>
<td>• think creatively and generate new ideas and innovative solutions.</td>
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<td></td>
<td>• understand how systems (e.g., social, organizational) work, how to operate within them, and how to make improvements.</td>
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<td><strong>Communication</strong></td>
<td>The ability to communicate effectively using the range of methods and tools available in today’s environment. Communication skills include an ability to:</td>
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<td>• listen, interpret, and convey information to others.</td>
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<td></td>
<td>• articulate thoughts and ideas clearly and effectively orally and in writing (e.g., one-on-one communication and larger group public speaking skills, writing instructions).</td>
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<tr>
<td><strong>Teamwork and Leadership</strong></td>
<td>The interpersonal skills to work effectively in a team and provide leadership include an ability to:</td>
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<td>• work cooperatively with others and contribute to a group effort.</td>
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<td></td>
<td>• build collaborative relationships, work with diverse teams, negotiate, and manage conflict.</td>
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<td></td>
<td>• motivate an individual or group; bring out the best in those around them to inspire innovation and performance.</td>
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<td></td>
<td>• leverage the strengths of others to achieve common goals; use interpersonal skills to coach and develop others.</td>
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<tr>
<td><strong>Lifelong Learning and Self-direction</strong></td>
<td>A willingness to take responsibility for continually improving capabilities and skills which includes:</td>
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<td></td>
<td>• taking responsibility to set goals and improve skills through mentoring, training, formal education, or other learning activities.</td>
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<td></td>
<td>• showing initiative by soliciting and receiving feedback and learning from one’s mistakes.</td>
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<tr>
<td><strong>Technology Adoption and Application</strong></td>
<td>A firm foundation of technology skills includes:</td>
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<td>• a sound understanding of technology concepts, systems, and operations.</td>
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<td></td>
<td>• selecting and using appropriate technology to accomplish a given task.</td>
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<tr>
<td></td>
<td>• identifying and solving problems with technology.</td>
</tr>
<tr>
<td><strong>Professionalism and Ethics</strong></td>
<td>Demonstrate personal accountability, effective work habits, and ethical behavior (e.g., punctuality, working effectively with others, time and workload management, acting responsibly with larger community in mind).</td>
</tr>
</tbody>
</table>

Source: Cochran and Lekies (2007)
In summary, knowing what young people need to be successful is not the barrier. Although different terms are used, there is widespread agreement as to the type of skills and personal qualities needed to be successful. Research from the 1990’s through today has built a solid foundation. Employers, supervisors, workers, and other key stakeholders have spoken and their message about what skills are needed is consistent. According to employers, there is a widening gap between the skills employers need and the capabilities of new entrants to the workforce, and therefore, addressing the skills gap is very important for our future.

WORKFORCE PREPARATION IN THE CONTEXT OF YOUTH DEVELOPMENT

There is a prevailing view that adolescents can benefit from programs that attend to their developmental needs, and thus they can benefit specifically in the area of workforce preparation. Youth can develop the workforce skills necessary for success through active participation in experiences encompassing career awareness and exploration, skill development and work readiness, and work-based learning. These experiences may vary in their frequency and duration, but collectively they contribute to the transition from adolescence to the world of work. In this section we will present a rationale for situating workforce preparation programming within the context of youth development organizations, describe what this foundation in positive youth development should look like, and discuss several key theories that can inform youth development practice, in this case, workforce preparation in the context of youth development.

Skills for Work Are Skills for Life

As we engaged our co-workers in discussion on workforce preparation, there was some concern expressed that a focus on skills to make young people better workers is too narrow. However, many of the skills discussed as critical for success in the 21st century workforce are the same skills needed to be capable, competent, and contributing citizens, parents, neighbors, and friends (Kazis & Kopp, 1997; Levin, 1994). The skills demanded in the business world are mirrored by those required for everyday life. While technology has simplified or eliminated routine tasks, social issues have become increasingly complex. Even personal affairs including shopping and financial decisions require people to acquire new knowledge from a variety of media and process complex information (Partnership for 21st Century Learning, 2003). Levy and Murnane (2006) suggested that these skills are exactly the kind of skills we need in citizens to deal with complex issues in our society.

It is important to recognize the important role that learning opportunities play—both in formal education and non-formal education—not only in developing skills for the workforce but also beyond the workforce (Casner-Lotto & Barrington, 2006). While our discussion will focus on helping young people develop skills employers need, it is clear that both schools and community-based programs are also preparing young people to be better citizens and contributing members of society, in addition to preparing them with skills for success in the workforce. Development of these skills and personal qualities has long been the focus of youth development programs, and their acquisition much wider implications than simply preparing good workers. The possession of these skills and qualities basically defines what we envision for healthy development of young people to be not only successful workers but competent and contributing family members and community citizens (Kazis & Kopp, 1997).
Making the Case – Why Workforce Preparation in Youth Development Organizations?
Youth development programs have been suggested as the ideal place to focus on developing skills needed for the 21st century workforce (Schwarz & Stolow, 2006). Business leaders also recognize the role that youth development organizations play in providing important opportunities for skill development. For example, business leaders recognize that leadership and professionalism are two skills that are critical to young people’s success in the workplace and in life. Supporting positive youth development is one way that business can help ensure that young people get the opportunities they need to develop these important skills. (Casner-Lotto & Barrington, 2006, p. 39)

We propose that youth development programs provide an ideal context for workforce preparation programs for a variety of reasons. First, there is a growing body of research that points to the ability of youth development programs to serve as positive developmental settings, (e.g., Durlak & Weissberg, 2007; Hansen, Larson, & Dworkin, 2003; Little & Harris, 2003; Scott-Little, Hamann, & Jurs, 2002). Young people derive a multitude of developmental benefits from participation in organized youth programs, such as interpersonal skills, social competence, and connections with adult role models (Hansen & Larson, 2007). Research suggests that to derive these benefits youth must participate with sufficient frequency, over a long enough period of time, and in a variety of activities (Fredricks, & Eccles, 2006; Rose-Krasonor, Busseri, Willoughby, & Chalmers, 2006; Vandell, Reisner, et al., 2005). Studies show that youth desire new and challenging activities, responsibility, and opportunities for leadership (Chaskin & Baker, 2006; Hansen & Larson, 2007; Pearce & Larson, 2006). Youth are able to meet needs for relatedness, belonging, independence, and mastery through their participation (Eccles & Gootman, 2002; Kress, 2006).

Youth development professionals recognize that adolescence is a time of major developmental changes. Identity development is a major adolescent developmental task (Harter, 1993; Kroger, 2000; McIntosh, Metz, & Youniss, 2005; Thomas, 1992; Zimmer-Gembeck & Mortimer, 2006). As well, adolescents are expected to acquire a range of skills that will help them to make a successful transition to adulthood (Zarrett & Eccles, 2006). 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). Studies show that these conditions are present in youth development programs (Hansen, Larsen, & Dworkin, 2003), but not often in the jobs typically available to teens (Bryant, Zvonkovic, Raskauskas, & Peters, 2004).

Youth development programs are in a good position to ensure that workforce preparation programs are in alignment with adolescents’ developmental needs. Youth development professionals view positive development as a long-term goal for their programs. They are interested in providing support and opportunities to meet youths’ needs, therefore they have a role to play in assisting youth to be successful in their transition to the workforce. Overall, though fewer after-school programs target middle school and high school youth, interest is growing in programs that address their unique needs (Hall, Israel, & Shortt, 2004; Miller, 2003; Pittman, Yohalem, Wilson-Ahlstrom, & Ferber, 2003; Wynn, 2003).
Evidence from a variety of studies shows that when teens do participate in programs, they indicate they have learned valuable skills. Examples include 4-H camp counseling (Ferrari & McNeely, 2007; Forsythe, Matysik, & Nelson, 2004; Garst & Johnson, 2005), community service (Hairston, 2004; Zaff, Moore, Papillo, & Williams, 2003), and arts programs (Fredricks, Alfeld-Liro, Hruda, Eccles, Patrick, & Ryan, 2002; National Governor’s Association, 2002). Furthermore, research has shown that alumni of youth development programs believe their participation influenced the skills they developed (Fox, Schroeder, & Lodl, 2003), as well as their education and career choices (Digby & Ferrari, 2007; Matulis, Hedges, Barrick, & Smith, 1988; McKinley, 1999). Finally, some youth development organizations develop programs explicitly to develop workforce skills (Blalock, Streiter, & Hughes, 2006; Ferrari et al., in press; Kraft, 2001; Lobley & Peronto, 2007).

In contrast to school, youth development programs are characterized by voluntary participation, and youth experience higher levels of motivation and interest in these activities (Larson, 2000; Vandell, Shernoff, Pierce, Bolt, Dadisman, & Brown, 2005). These organized, structured activities are often challenging and require focused attention, conditions that allow for initiative to develop (Larson, 2000). Program offerings of youth development organizations are often comprehensive and long-term. Sustained engagement in such programs is thought to lead to more positive outcomes than casual or irregular participation (Miller, 2003; Weiss, Little, & Bouffard, 2005). Research on after-school programs found that there is a significant positive relationship between time spent in a program and developmental outcomes (Little & Harris, 2003). Additionally, breadth and intensity of participation were found to be related to more positive well-being, higher academic orientation, stronger interpersonal bonds, and less risk behavior involvement (Rose-Krasnor et al., 2006). Furthermore, youth development programs often have the autonomy to create a curriculum that is tailored to the community and audience needs. These characteristics make them suited to playing a role in workforce preparation.

Youth development advocates note that learning cuts across both the school day and after-school hours (Pittman et al., 2004). The term complimentary learning is used to describe a network of supports for children and youth from birth through adolescence including families, early childhood programs, K-12 schools, out-of-school time programs, community institutions, and higher education (Harvard Family Research Project, n.d.; Pittman et al., 2004; Wynn, 2003). Children and youth benefit from a coherent continuum of learning opportunities in various contexts, the type generally provided by youth development programs. Authentic learning experiences provided by youth development programs can help reduce boundaries between formal and non-formal education (Partnership for 21st Century Skills, 2003), thereby serving to connect the various contexts of adolescent life.

In our review, we found that much of the existing literature addressed the issues from a school-based perspective. However, many interventions in schools are low-dosage, short term experiences, and the outcomes are unclear (Hughes & Karp, 2004). We do not want to diminish what is already happening in schools, but rather to emphasize the complementary nature of what such a focus represents. A focus on youth development programs does not substitute for the need to make changes within the school system. As such, workforce preparation takes on a somewhat different meaning than when viewed through a school-based lens that is prevalent in much of the literature.
In summary, when they are situated in the context of positive youth development organizations, workforce preparation programs can engage youth through distinct but connected experiences. Our conception of workforce preparation programs is not simply about getting a job, nor is the focus to prepare youth for specific jobs. Rather, through intentional programmatic efforts, youth development professionals can create authentic learning experiences that complement the formal education system and facilitate the development of skills necessary for success in the 21st century.

**Positive Youth Development – Key Features**

A positive youth development approach is based on the premise that youth are resources to be developed (Hamilton, Hamilton, & Pittman, 2004; Lerner, 2005; Lerner, Dowling, & Andersen, 2003; Witt & Caldwell, 2005). In contrast to the deficit perspective, current models focus on the concept of thriving, which goes beyond simply eliminating negative behaviors. Youth development organizations aim to promote “Six Cs” in youth (Lerner, 2004; Lerner, Fisher, & Weinberg, 2000; Pittman, Irby, & Ferber, 2001).

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. Programs that provide these elements address young people’s needs for belonging, mastery, independence, and generosity (Kress, 2006) and in turn enable them to develop positively and contribute to society (Lerner, 2006; Lerner et al., 2005). These features, needs, and outcomes are presented in Figure 1.
Key among these features is the involvement of supportive adults. Quality youth development programs are characterized by positive adult-youth interaction (Eccles & Gootman; Ferrari & Turner, 2006; Grossman, Campbell, & Raley, 2007; Paisley & Ferrari, 2005) and typically have better adult to youth ratios (Hansen & Larson, 2007). The quality of opportunities that adolescents are afforded by adults is an essential factor in promoting adolescent development. We know that such relationships are critical in providing a safe and supportive environment for youth to take on new challenges and develop their skills (Grossman & Bulle, 2006; Pearce & Larson, 2006; Rhodes, 2004). Adults provide both caring and instrumental support (Eccles & Gootman, 2002). However, adults walk a fine line as they offer the appropriate balance of guidance as young people take on new responsibilities (Larson, Hansen, & Walker, 2005). Larson (2006) explains the dilemma: “too much structure or direction from adults can lead to loss of youth ownership, whereas supporting youth ownership as the top priority can mean that youth are not being challenged to grow and develop” (p. 683). Put another way, “the $64,000 question for adults who work with youth is when to push and when to hold back and support” (Larson, 2006, p. 686). Such a position does not advocate that youth are left to their own devices, but rather that adults must guide youth to develop in appropriate ways. To address this dilemma, workforce preparation programs should be built on a program model that engages youth as partners with adult mentors who share common goals. Furthermore, these relationships should allow youth to develop human capital, meaning they accumulate personal resources that have value within a workforce setting (Entwisle et al., 2000; Jarrett, Sullivan, & Watkins, 2005).
Youth development programs emphasize learning in a fun way and feature an embedded curriculum (Hamilton et al., 2004). There is an emphasis on learning new skills with opportunities to showcase accomplishments and gain recognition, but the emphasis is on mastery, not on being tested and graded. The activities provide opportunities for participants to exercise self-determination and leadership, learn how to make decisions, and work cooperatively with others. Often, they assume leadership positions where they serve as role models for younger participants, as well as interacting with adults (Digby & Ferrari, 2007). Overall, these experiences enhance adolescents’ needs for identity development because they test out new roles and relationships.

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. Youth development programs have the opportunity to assist in this transition by helping youth to make connections between what they are learning in school and what employers require for success in the world of work. Before we explore workforce preparation in more detail, we will share several key theories that should serve as a foundation for workforce preparation programming.

**Relevant Theories**

Theories are tools for understanding the abstract, hard-to-see processes of development. Human development is complex, and no one theory covers all aspects. In the next section, we review several theories that have relevance for our subsequent discussion of adolescent workforce preparation. Taken together, these theories provide a foundation for creating programs that seek to influence adolescents’ developmental outcomes in a positive way.

**Ecological theory.** Bronfenbrenner’s ecology of human development (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998) provides an overarching perspective from which to view workforce preparation in general and within the context of youth development programs. Bronfenbrenner proposed a set of nested systems that influence development. These immediate contexts are known as microsystems because they require the individual’s participation and interaction and therefore have a significant impact on development. Beyond simply the physical environment, this is where the individual experiences activities, roles, and interpersonal relationships with others within the settings of family, peers, school, and neighborhood. As they enter adolescence, youth development programs and part-time work take on more significance as developmental settings. These microsystems are characterized by activities, interpersonal relationships, and roles, which play a vital role in the processes that drive development.

The term *proximal process* is used to describe the process of development through interaction between an individual and the persons, objects, and symbols in its immediate external environment. These processes include social interaction with numerous people of varying types as well as engagement in activities. To produce development, these interactions and activities must become progressively more complex over time (Bronfenbrenner, 2005). In other words, active participation in one’s environment allows one to develop relationships and skills.
While the microsystems are the contexts within which the individual experiences direct interactions, the outer and connecting systems can be just as important in the development process. When there is connection between two or more microsystems such as work and school, a mesosystem is formed. Bronfenbrenner (1979) argued for the necessity of connections between different settings. Such connections ensure that systems are provided the needed support and opportunities. The interaction of the individual and the work setting, the interaction of multiple settings, and the process that takes place within these settings, are central to understanding workforce preparation issues. The interconnection between the work setting and the youth development program represents an example of such system. Hansen and Jarvis (2000) argue that these “merged” contexts appear to provide support for adolescents during their work experiences, but research shows that such support is not typical of adolescent employment opportunities.

He [Bronfenbrenner] suggested that individuals who were negotiating transitions between different settings (such as adolescents in a new work role) may find it developmentally beneficial and less stressful when participants from different contexts know each other, when there is shared common knowledge between contexts, and when there is familiarity with events between settings. Ecological theory also holds that a person’s development is most influenced by activities in which others from familiar contexts are participating alongside, or merely in the presence of, the other person. Thus, work is most likely to have greater developmental benefits when it is merged with other roles, such as family member or student. (Hansen & Jarvis, 2000, p. 418)

Another important system is the exosystem, which despite an individual’s indirect participation, still plays an important role. For example, decisions made by advisory boards, governmental bodies, and businesses may create policies that expand or restrict opportunities for young people. In addition, ecological theory also directs us to pay attention to the larger social forces operating in society (i.e., the marcosystem). Clearly, work must be viewed in cultural and historical perspective (Warren & Cataldi, 2006; Zimmer-Gembeck & Mortimer, 2006). Thus, within this systems perspective, one seeks to enhance conditions at the individual, organizational, and societal levels.

**Stage-environment fit.** A theory aligned with the human ecological perspective is that of stage-environment fit (Eccles et al., 1993). Although the authors discuss this fit in terms of the relationship between school and home environments, it is reasonable to assume that this theory can be extended to non-school settings as well. Eccles and her colleagues hypothesize that some of the negative psychological changes associated with adolescence result from a mismatch between the needs of developing adolescents and the opportunities afforded them by their social environment. Individuals are not likely to do well in environments that do not meet their needs. Stated another way, environments suited for adolescents’ developmental needs must provide sufficient amounts of both support and challenge.

Stage-environment fit is a useful perspective for examining programs in youth development organizations. Programs for teens must respond to their changing interests (Chaskin & Baker, 2006) and developmental tasks to be a good fit. This perspective takes into account the adolescents’ current needs, while also considering preparation for their future roles. 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, 2006).

**Transfer of learning.** With a focus on preparing for the workforce, how do we ensure that what youth are learning is actually practiced on the job? The body of literature on transfer of learning is useful here. Mayer & Wittrock (1996) defined transfer as “when a person’s prior experience and knowledge affect learning or problem solving in a new situation” (p. 48). Transfer has been described as the ultimate goal in teaching and at the same time is regarded as one of teaching’s most difficult problems (Haskell, 2001; Macaulay, 2000). The transfer of skills from youth development experiences to the workforce would be an example of far transfer, that is, it involves learning skills and knowledge in one context and applying it to one different from that in which it was learned (Haskell, 2001). The concerns about the lack of connection between school and work worlds implies that at least part of the problem is with transfer of learning.

Among the strategies suggested to facilitate transfer of learning are having opportunities for practice (Nokes & Ohlsson, 2005), developing an action plan (Gardner & Korth, 1997), engaging in reflection (Caferella, 2002; Gardner & Korth, 1997; Gilbert & Trudel, 2005), and using the problem-solving method (Mayer & Wittrock, 1996). Educators should seek to maximize these strategies. Although certain conditions or strategies make transfer of learning more likely, it does not always occur (Salomon & Perkins, 1989).

There is support in the literature that the best way to learn is through actual experience (Caferella, 2002; Carlson & Maxa, 1998), and thus another model underlying processes in positive developmental settings is that of experiential learning. Models of experiential learning indicate that this process can be particularly powerful when it involves actions in real-life contexts occurring over time (Priest & Gass, 1997). Youth development programs that are organized around real work experiences will afford the opportunity to learn cooperation and teamwork by living it. 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). Larson (2006) states that a main role of adults in the learning process is that of encouraging and assisting with the final element in the cycle—reflection—and notes that they

> can help see that reflection occurs, and they may help youth interpret the experience in ways that draw out the salient lessons. They can assist youth in formulating metacognitive skills and strategies to help them better navigate similar situations in the future. (p. 686)

The body of literature on transfer of learning is particularly relevant in light of Berryman and Bailey’s (cited in Hughes, Moore, & Bailey, 1999) point that individuals do not necessarily transfer knowledge between school and work settings; “They do not predictably transfer school knowledge to everyday practice, they do not predictably transfer sound everyday practice to school endeavors, even when the former seems clearly relevant to the latter” (p. 6). Therefore, workforce preparation programs should incorporate active learning strategies and reflection to promote the transfer of workforce skills from one setting to another.
Assuming a new role as an employee is a major transition for adolescents (Hansen & Jarvis, 2000). However, many jobs available to teens do not provide them with opportunities that might enhance their development (Bryant et al., 2004; Greenberger, Steinberg, & Ruggerio, 1982). Contemporary theories of human development suggest that workforce preparation programs can support this transition by preparing for it in advance and by connecting the various contexts occupied by adolescents. The theories presented here are by no means the only theories that relate to adolescence and workforce preparation. Another useful discussion of theories is provided by Larson and Walker (2005). Furthermore, theories such as situated cognition (Lave, 1988), motivation (Ryan & Deci, 2000), career development (Sullivan, 1999), and adaptive transition (Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997) are useful as well.

WORKFORCE PREPARATION: A FOCUS ON WORK-BASED LEARNING PROGRAMS

Viewed from a youth development lens, workforce preparation is inclusive of a variety of ages from early childhood through adult learning experiences and is focused on non-formal educational settings that involve active participation in intentional learning experiences. As described in the introduction, our work is aligned with a definition of workforce preparation that includes a network of programs designed to help young people to do the following:

- Explore career opportunities
- Acquire applied skills needed for success in the knowledge economy
- Develop work readiness skills (e.g., how to get a job, interview, complete applications)
- Gain experience in the workforce

Furthermore, workforce preparation is best viewed not as a one-time event, but as a process consisting of a range of experiences that introduce young people to the world of work (DeCoursey & Skyles, 2007; Ferrari, 2003).

This continuum does not begin with immediate involvement with employers. Rather, youth are encouraged to explore their interests with educators and program providers while learning about the behavioral expectations of the workplace. Only when youth have achieved greater knowledge of and practice in meeting workplace expectations coupled with an understanding of their own interests and identity are they connected to employers. This approach to providing workforce preparation experiences is intentional and requires great commitment of funders, program administrators, and program providers. Such an approach will likely increase commitment among employers to remain involved and perhaps expand their involvement and should be explored by program providers seeking to improve their engagement with youth and employers. (DeCoursey & Skyles, 2007, p. 47)

Workforce preparation in its broadest sense encompasses a continuum of options (DeCoursey & Skyles, 2007; Ferrari, 2003), however, our review will focus on a subset of programs that we define as work-based learning.
Work-Based Learning

Work-based learning can encompass a wide variety of program models (Hamilton & Hamilton, 1997), all of which are “occurring intentionally in a location where the primary activity is producing goods or services” (p. 6). All such programs bring employers and youth into contact in the work setting. Further expanding on this definition, work-based learning is described as activities that occur at a workplace, providing structured learning experiences for students through exposure to a range of occupations. Students learn by observing and/or actually doing real work. Learning in the workplace supports learning in the classroom and promotes the development of broad transferable skills. (New Ways to Work, 2003, p. 4)

Work-based learning programs involve teens in practical experiences that integrate work and learning. They are real-life experiences that are structured, supervised, and evaluated. Successful programs use the experiential learning model—doing real work, reflecting on these experiences, and generalizing to future life situations (Ferrari et al., in press). The work experiences may be paid or unpaid, but they are clearly viewed by both participants and employers as real work—that is, youth are actively engaged in producing goods or services. The focus of work-based learning is not simply on working for the sake of having a job, but on an experience that takes into account the developmental needs of youth participants.

Whalen et al. (2003) distinguish between exposure programs and preparation programs, which they define as follows (p. 80):

Exposure programs – focus primarily on introducing youth to varieties of careers and workplaces, with the goal of deepening career awareness. It encompasses two subcategories of career education identified in the literature, namely exposure to career options and exploration of specific options through information gathering and “hands on” experiences.

Preparation programs – focus primarily on enabling youth to acquire necessary knowledge, skills, and credentials to successfully make the transition from high school to a specific career pathway.

Finally, Keating (2006) makes an important distinction in his review, which describes the shift “from a model of work experience that emphasizes learning about and for work to using the workplace as a context where students can learn in and through work (p. 1).

Table 3 provides examples of work-based learning. The three categories vary by purpose, the types of activities participants engage in, the nature of their connections with school, and the investment of resources (e.g., time, money) required by the employer and the youth.
Table 3
Examples of Work-Based Learning

<table>
<thead>
<tr>
<th>Visits to Workplaces</th>
<th>Work-Like Experiences</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field trips</td>
<td>Service learning and unpaid internships</td>
<td>Youth jobs</td>
</tr>
<tr>
<td>Job shadowing – to spend time following workers at a work site</td>
<td>Youth-run enterprises – production of goods or services by students for sale to or use by others. School-sponsored enterprises typically</td>
<td>Subsidized employment training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cooperative education and paid internships – combines academic and vocational studies with a paid job in a related field</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Youth apprenticeships – working for an employer to learn about a particular occupation or industry</td>
</tr>
</tbody>
</table>

Hamilton & Hamilton, 1997

Although many of the approaches are school based, we specifically focus here on work-based learning that occurs in conjunction with an out-of-school learning opportunity. Youth development programs can promote work-based learning experiences as practical opportunities that integrate work and learning. Because paid employment often conflicts with teens’ participation in out-of-school time programs (Pittman et al., 2003), it makes sense for those who run such programs to keep teens engaged by offering activities that develop work readiness and by providing supervised work-based learning experiences. Experiences offered through youth development programs can involve performing real work that is structured, supervised by an on-site adult mentor, and evaluated. Participants’ learning is facilitated by reflecting on what they have learned through their experiences. An important aspect of work-based learning programs as we will define them here is that the work experience is a learning experience. While the work is important, as it provides the real-world context for skill development, it is not simply an end in itself, but viewed as the means to the end of positive youth development.

Why should youth development organizations consider work-based learning programs? Casner-Lotto and Barrington (2006) suggested that educational approaches that include real-world experiences are important for the development of 21st century skills. A brief discussion of why work-based learning is important, the benefits, and the challenges is included here.

**Why is work-based learning important?** Many of the skills needed for workforce success develop over time and must be learned through active participation. That is, youth are afforded the opportunity to learn interpersonal skills, cooperation, and teamwork by actually having to work as a team with others in the workplace. Because of their relative inexperience, the potential
for youth to contribute to the workplace is often underestimated. However, studies show that work experiences can have a positive impact on both the young people and the businesses or organizations that participate hosting teens as employees in work-based learning programs (DeCoursey & Skyles, 2007; Ferrari et al., in press).

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, work-based learning 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.

**Benefits of work-based learning.** Those with experience conducting work-based learning programs perceive multiple benefits. Halpern (2006) found apprenticeships for teens created a rich learning environment where participants developed skills in areas such as teamwork, professionalism, and communication. Partee (2003) described work-based learning as adding authenticity and relevance to the learning experience. Other potential benefits for participants in work-based learning experiences are:

- Making connections between real work expectations and the classroom;
- Beginning to pursue education with a greater sense of purpose;
- Interacting with positive adult role models;
- Developing new skills and experiences;
- Experiencing enhanced self-esteem; and
- Expanding their horizons and awareness of future work options.

New Ways to Work, 2003, p. iii

Employers are often pleasantly surprised with the contributions that youth make to the workplace, often exceeding employers’ expectations (Ferrari, et al., in press; Whalen et al., 2003). Employers are often motivated to give back to the community, and they derive satisfaction from supporting youth in their learning process. Furthermore, employers note benefits for their own employees, such as learning to supervise others.

Achieving these benefits is recognized as being contingent on the presence of strong adult supervision and mentoring practices and skill development opportunities (Bryant et al., 2004; Ferrari et al., in press), in essence, the positive youth development approach described earlier. An intentional focus on positive youth development principles will ensure that the tasks and the staff are supportive of adolescents’ developmental needs. Halpern (2006) further concluded that the work-based learning model was a good developmental fit for teens because it provides an opportunity to get good at something, experiment, and receive just-in-time teaching through feedback and learning from mistakes.

**Challenges with work-based learning.** Work-based learning is not without its challenges. Employers vary in their willingness and ability to support youth on the job. Youth development professionals can assist employers in understanding the needs of youth so that employers are ready as well.
In Ohio, we have experienced funding bodies that are resistant to paying teens, arguing that they should not have to pay teens to participate in a youth development program. Susan Matloff-Nieves (personal communication, December 19, 2007) described challenges in New York City with the Beacon Community Centers Concept Paper (New York City Department of Youth and Community Development, 2006) requiring paid staff to be 18 years of age. This presents challenges for youth development programs that are trying to provide work-based learning experiences for participants within their own programs. While it is heartening that the New York City Department of Youth and Community Development listened to advocacy groups and made changes to the final Request for Proposals, which allowed programs to hire teen employees provided they had adequate supervision (S. Matloff-Nieves, personal communication, December 19, 2007), we are concerned about this specific barrier. Another concern is how minor employees are screened for working with young people in out-of-school time programs (S. Matloff-Nieves, personal communication, December 19, 2007). Most programs now require some type of criminal background check for employees. While this requirement cannot be translated as is to minor employees, there are valid concerns about appropriately screening teens who will be working directly with children. Other barriers include:

- Short time frames for producing program results;
- Paperwork accompanying incentives to work with the neediest youth for whom fewer opportunities exist to engage with employers (DeCoursey & Skyles, 2007); and
- Hesitancy to hire youth.

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.

**Program Profiles**

To illustrate what workforce preparation looks like in practice, we have selected three examples out of many high quality programs that provide work-based learning experiences for teens. These profiles provide a glimpse into the various kinds of workforce preparation programs (e.g., large scope program to small scope, different types of partners involved) occurring in the out-of-school time context. Other profiles of work-based learning efforts can be found in Whalen et al. (2003).

**Chicago’s After School Matters.** Created in 2000 as a nonprofit organization with a mission of expanding out-of-school time opportunities for teens, Chicago’s After School Matters (ASM) program was designed to help high school students learn work skills. ASM is made possible through leadership of Chicago’s First Lady, Maggie Daley, and partnerships with the City of Chicago, the Chicago Public Schools, the Chicago Park District, Chicago Public Library, and community-based organizations. ASM offers a program that allows students to be introduced to specific disciplines and trades while exploring and discovering their own interests and talents. Apprentice-like learning experiences are offered to low-income high school youth throughout some of Chicago’s most underserved schools.
To provide apprenticeships, ASM partners with working professionals and specialized non-profit organizations to provide 10- or 20-week apprenticeships (3 hours a day, 3 days a week) to groups of about 20 youth. Paid internship job training for teens is offered in areas of the arts, technology, sports instruction, communications, and life guarding. Youth can earn a stipend of up to $450 to recognize the value of the work they produce, to show that hard work gets rewarded in the workplace, and to encourage low-income teens (who might otherwise be obligated to find paid employment) to participate. ASM stresses the importance of school by requiring participants to attend school on any day they participate in the program. ASM seeks to engage teens in programs that offer positive relationships with adults, opportunities to acquire skills that translate to the workplace, and chances to learn about career and educational opportunities in their neighborhood and the city.

Scope & Impact:
The ASM program serves approximately 3,000 teens through formal apprenticeships (R. Halpern, personal communication, January 24, 2008). Results from a recent study of the program (Goerge, Cusick, Wasserman, & Gladden, 2007) focusing on academic impact suggested that students who participated in ASM missed fewer days of school, tended to fail fewer core academic courses, had higher graduation rates, and had lower dropout rates as compared to similar students who did not participate. In a two-year qualitative study, Halpern (2006) found that ASM apprenticeship experiences strengthened technical knowledge and skills; as well, the program had some effects in areas such as skills needed to carry out complex tasks (e.g., managing time and teamwork), prevocational skills, and social skills. In addition, ASM experiences had self-effects that resulted in participants taking more responsibility for themselves, learning to pay attention more deeply, learning that it is ok to do new things, and learning that expressing oneself honestly will not have negative consequences.

Sources:
Goerge, Cusick, Wasserman, & Gladden, 2007; Halpern, 2006; R. Halpern, personal communication, January 24, 2008; Wynn, 2003

Queens Community House (formerly Forest Hills Community House). Located in Queens, New York, the Queens Community House (QCH) was founded in 1975 and provides services to 20,000 residents of all ages in the area. Offering a variety of afterschool, summer day camp, and youth development programs for youth ages 5-12, the agency maintains activities at a main site, two community centers, a facility operated by the NYC Parks Department, and youth programs based in public school buildings. Participants in the programs are primarily immigrants or children of immigrants. The programs reflect a racially, ethnically, and economically diverse population, with the majority of participants coming from working class families.

The staffing of such a wide range of programs requiring many employees is possible because the organization hires some of its former participants as staff. Teens who graduate from programs have an opportunity to be hired as staff members to work with younger children in the program. Integrating what they learned in QCH programs into their work, former participants provide the agency with workers who are already oriented to the program’s and agency’s missions, policies, procedures, and philosophy of youth development. Youth workers’ jobs are structured like an
apprenticeship with younger staff members paired with more experienced staff. The experienced staff member is charged with the development of the newer staff member’s skills. Less experienced staff members learn their jobs through experience and observation along with the guidance provided by those supervising them. The importance of having supervisors and establishing trust are common themes of the youth employment program. Universal training gives all staff a common set of expectations while supervision may need to be tailored to the young person. A formal evaluation system is used that incorporates self-reflection and a joint process with the supervisor to plan for growth. Another prominent theme is that of the importance of education. Youth employees must attend school to be employed, and their academic progress may be tracked. If their grades drop, their work schedules may be adjusted accordingly. The agency also offers college and career counseling to youth employees and often provides a stepping stone for careers in related – and unrelated – fields. Youth employees of the program benefit from a program that offers them the opportunity to make a contribution to their community while developing their social, cognitive, and employability skills.

Scope & Impact:
Research on QCH and Beacons programs in New York City documented that a staff role for teens can reinforce a reduction in risk taking behavior (e.g. fighting, alcohol or drug use). According to Matloff-Nieves, “This strategy, which builds on young people’s assets and ability to contribute, is the essence of a youth development approach.” In her qualitative study, Matloff-Nieves (2007) found that the benefits of working as a staff member in after-school programs go beyond the basic need for a job. “Assuming a staff position meets an essential developmental need of older adolescents: the opportunity to take on adult roles” (p.18). Matloff-Nieves described the impacts of employment as a youth development strategy as facilitating individual development, supporting educational and employment goals, building community, and reinforcing families, as well as benefits to the youth development programs themselves.

Sources:

**Adventure Central – Job Experience and Training.** The Job Experience and Training (JET) program is a work-based learning opportunity for adolescents embedded within the context of a comprehensive youth development program at Adventure Central, located in Dayton, Ohio. Adventure Central is a partnership between Ohio State University Extension, 4-H Youth Development and Five Rivers MetroParks. Overall, Adventure Central has been successful in developing a core program based on a foundation of principles of positive youth development described previously. Serving as a hub for out-of-school time programming, Adventure Central brings the 4-H youth development 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.

JET is essentially a program within a program, building on existing after-school programming, conducted over a six-month period, culminating in an eight-week summer work experience in collaboration with a urban park district. The JET program has two major goals: (a) to develop meaningful job skills in teens and (b) to provide a service to the public. In addition to an
application and interview skills session and an informational open house, 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. Participants are selected as Teen Assistants (volunteer positions receiving an incentive) or Teen Apprentices (employees paid minimum wage). A small number of Teen Apprentice positions provide an opportunity for increasing responsibility and reward. 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. All JET participants complete self-directed learning journals and attend team meetings every two weeks to enhance the experiential learning process. Supervisors and teens complete a performance appraisal based on 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.

Scope & Impact:
Approximately 20 teens have been selected to participate in JET each year. Overall, the experience appears to have produced improvements in teens’ workforce skills, as evidenced by their own self-assessment and that of their supervisors. While not all participants improved in the same areas or to the same degree, many areas of improvement noted by teens and supervisors were strengthened by the end of the program. Gains most frequently reported by supervisors were in the areas of meeting deadlines, teamwork, and problem-solving.

Sources:
Cochran, Arnett, & Ferrari, 2007; Ferrari et al., in press; N. Arnett, personal communication, January 7, 2007

Work-Based Learning – Principles and Key Ingredients
Principles are those elements that are consistent across programs (Hamilton, Hamilton, & Pittman, 2004). Specific practices will differ depending on particular community situations and goals of the sponsoring organizations. Hamilton and Hamilton (1997) recommended several principles of work-based learning, such as challenging work, an opportunity to gain personal and social competence, and clear expectation and feedback. When we reviewed recommendations about work-based learning programs from a variety of sources, some of which were community based and others were school-based programs, several themes were evident. Table 4 is a synthesis of ten key elements, brief descriptions, and examples of what these principles might look like in practice.
### Table 4

**Principles and Key Ingredients for Work-based Learning**

<table>
<thead>
<tr>
<th>Principle/Key Ingredient</th>
<th>Description</th>
<th>Examples from Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ground work-based learning programs in principles of positive youth development.</strong></td>
<td>Youth development principles (e.g., caring and supportive adults and experiential learning) are important to workforce programs. Ensure programs are developmentally appropriate. Having a job meets a developmental need of having increasingly responsible roles, providing a level of challenge.</td>
<td>All three programs profiled emphasize the importance of relationships with supportive adults. The JET profile describes a number of ways (e.g., performance discussions, to make the work experience a learning experience through experiential learning).</td>
</tr>
<tr>
<td><strong>Provide opportunities for career awareness and skill building.</strong></td>
<td>Work-based learning programs are ideal places to teach teens workforce skills that will be applied immediately including work readiness skills and 21st century skills (e.g., employability skills, social skills, teamwork.). These may be taught in specific skill-building sessions or embedded in the work experience.</td>
<td>JET includes opportunities for applicants to learn work readiness skills (completing an application and interviewing) prior to applying. Through ASM, QCH, and JET programs, teens acquire skills that translate to the workplace.</td>
</tr>
<tr>
<td><strong>Provide authentic work experiences with high expectations.</strong></td>
<td>Research and our experience suggest that students who face high expectations are more likely to feel well prepared for future expectations in work and life. Provide real experiences for young people and hold them to high expectations, including challenging experiences and honest evaluations.</td>
<td>The ASM, QCH, and JET programs involve teens doing valuable work and making meaningful contributions. Matloff-Nieves describes paths of progressive responsibility at QCH that provide an increasing level challenge.</td>
</tr>
<tr>
<td><strong>Consider opportunities for increasing responsibility and reward.</strong></td>
<td>Gradually build levels of responsibility through scaffolded leadership opportunities. The practice of paying or providing incentives can be an important part an authentic experience, is a practice that creates an incentive to keep teens connected at a time when many loose interest, and provides opportunities to gradually build levels of responsibility and reward.</td>
<td>Apprentices in Chicago’s ASM earn stipends of up to $450 to recognize their work and encourage participation. QCH hires teens as employees, and JET uses two levels – one set of positions that receive incentives (gift cards) and another set of paid positions.</td>
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<tr>
<td><strong>Establish partnerships for worksite placements.</strong></td>
<td>Successful work-based learning programs require strong community partnerships to provide worksite placements. The strength of these partnerships, based on relationships and communication, will affect program quality.</td>
<td>Chicago’s ASM and Ohio’s JET partner with individual professionals, non-profits, and local government. QCH and JET involve teens in their own OST programming.</td>
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<tr>
<td><strong>Make good matches between youth and employers.</strong></td>
<td>Gather enough information to understand the work sites, the work environment, job duties, and the young person being placed there. Ensure a balance between sufficient challenge and enough support for the young person to succeed.</td>
<td>QCH is intentional about making pairings with older staff who are a good fit. QCH also recognizes a need to tailor supervision to the young person (e.g., experience, abilities).</td>
</tr>
<tr>
<td><strong>Provide orientation and training for adult staff and teens.</strong></td>
<td>Site-based supervisors are an integral component of work-based learning programs. Orientation and training provides clear expectations and builds skills for youth and adults to support the experience.</td>
<td>JET includes a series of training opportunities for teens, adult supervisors, and both groups together to set the stage for the learning experience.</td>
</tr>
<tr>
<td><strong>Monitor and support participants throughout the experience.</strong></td>
<td>Recognize the need to support participants and employers and create a plan for such support. Many employers are not prepared to deal with issues teens bring to the workplace. Teens may require support to be successful on the job.</td>
<td>Examples of supports include arranging logistics (e.g., transportation), checking in with for employers during the work experience, and facilitating reflection sessions for teens.</td>
</tr>
<tr>
<td><strong>Understand legal issues and comply with state and federal labor laws.</strong></td>
<td>Be aware of child labor laws; distinctions between employee (paid) and non-employee (unpaid) experiences; and requirements for work permits, insurance, what minors can and cannot do, etc.</td>
<td>Teens employed in JET are required to obtain a work permit. See also tool kits from New Ways to Work (<a href="http://www.newwaystowork.org">www.newwaystowork.org</a>) for additional resources.</td>
</tr>
<tr>
<td><strong>Evaluate and provide feedback.</strong></td>
<td>Evaluation and feedback makes the work experience a learning experience, engages adults, can meet both formative and summative evaluation needs, and helps with accountability to funding bodies and other key stakeholders.</td>
<td>QCH uses self-reflection and plans for growth jointly developed with a supervisor. JET uses performance appraisal and self-assessment strategies, including reflection.</td>
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Opportunities for Youth Development Organizations

DeCoursey and Skyles (2007) suggest that youth program providers view their role as multidimensional – that is, to prepare youth to be ready to participate in the workplace (e.g., how to dress, workplace etiquette) as well as to work closely with employers to ensure young people’s successful experience in the workplace. Thus, there are a variety of roles for youth development organizations. Two particular approaches that bear mentioning here are the concepts of “value added” and “growing your own.”

Value added: From leadership or community service to work-based learning. Some programs are clearly designed for the express purpose of developing workforce skills (e.g., Chicago’s ASM and Adventure Central’s JET program). These programs are designed specifically to develop workforce skills through supervised apprenticeships or worksite placements. However, many organizations have the opportunity to move existing programs, where teens are involved in leadership roles and community service, to high quality work-based learning experiences. Hamilton and Hamilton (2004) particularly note that service experiences and work experiences have many overlapping characteristics (e.g., both provide opportunities for gaining competence). Examples of programs within 4-H include camp counseling, CARTEENS (a teen-led vehicular safety program), 4-H Ambassadors, and Junior Fair Board. Service-learning and volunteering use the community as a context for helping youth to develop and apply critical skills that are important in the workplace and in life in general, and can therefore be part of a comprehensive approach to workforce preparation. While many of these existing 4-H programs are already high quality experiences, by viewing them through a workforce lens they can serve two purposes.

Even if programs were started for different reasons, a work-based learning approach can add value. An example of applying this intentional focus is Greene County’s Friends Care Intergenerational Garden (Beth Bridgeman, personal communication, January 10, 2008). This program was originally designed primarily as a community service project and a way to learn gardening skills. With an intentional focus on workforce preparation, performance appraisals, self-assessment, and reflection opportunities were added, and it became a work-based learning program as well. By adding these components, the program accomplished its original goals and much more, resulting in a richer experience for the participants. Other organizations likely have similar programs that can grow from good teen programming to high quality work-based learning experiences that continue to meet early goals (e.g., youth development outcomes or teaching subject matter content) but also provide opportunities to develop and practice 21st century skills.

Growing your own. Growing your own is a natural progression from participant to teen leader to teen employee to adult staff member. From a practical standpoint, the concept makes sense as a way to address current staffing needs. However, it also makes sense as a way to develop future employees who have a commitment to the mission and goals of the organization. From a youth development perspective, it is a means to provide young people with increasingly challenging roles and responsibilities that can facilitate their development of important workforce skills and dispositions. Thus, youth development organizations that employ teens should be intentional in implementing this practice and should be mindful of work-based learning principles to ensure that the work experiences they provide are positive ones.
Assessing Workforce Skill Development
Twenty-first century skills are difficult to measure (Partnership for 21st Century Skills, 2003). However, assessing workforce skill development is important for at least two reasons. In this era of accountability, it is important to be able to document the results of workforce preparation programming. Youth development professionals want to know the extent to which program goals have been accomplished and they have a need to provide feedback to key stakeholders, including employers and funders. Just as important is having a tool that provides the type of feedback necessary to make the experience a learning experience for youth participants and to make adjustments for program improvement purposes. Youth development professionals may be interested in developing a broad array of skills, thus the program goals and the purpose of the assessment are important to consider.

Several authors describe a process of developing a performance-based tool designed for assessing youths’ progress in youth development programs that are building work readiness skills and are experiential in nature (Blalock, Strieter, & Hughes, 2006; Ferrari et al., in press). Essentially this process consists of matching an existing skills framework like SCANS (1991) with desired outcomes of a specific program. Then the tool is used to assess performance while youth are actually engaged in using the desired skills in a work setting. Although our primary interest is in youth development programs, school-based programs have followed a similar model (Massachusetts Department of Education, n.d.). Based on the reported usefulness of this approach, we suggest that practitioners follow a similar process.

First, as part of their planning process, program developers should identify the skills framework most relevant for the program goals (e.g., SCANS, 21st century skills, the skills synthesis presented here). This decision should be based on the framework that aligns best with skills emphasized in a given program as well as those desired by external stakeholders such as a funding agency. Once the skills framework is chosen, a checklist could be created by aligning examples of tasks in a given skill area with program skills. This process is easily adaptable by undertaking the following steps:

1. Identify goals and objectives of the work-based learning experience.
2. Create a job description that outlines expectations for youth.
3. Identify tasks and skills youth can learn, develop, and practice in the work setting.
4. Match identified skills to relevant 21st century skill categories.
5. Add appropriate program-specific skills.
6. Create an assessment tool incorporating both 21st century skills and program-specific skills.

Finally, the assessment should include a response scale to rate the youth’s performance on the job. For comparison purposes, three different scales are included in Table 5. The anchors for the scale should reflect a progression of skill level.
Table 5
Sample Response Scales for Performance-Based Assessments

<table>
<thead>
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<tbody>
<tr>
<td>Not Applicable – skill not observed or not required</td>
<td>(does not include a similar category)</td>
<td>Not Exposed</td>
</tr>
<tr>
<td>Needs Improvement – needs more practice or constant reminders</td>
<td>Performance improvement plan needed – is not yet demonstrating the skill</td>
<td>Training Level</td>
</tr>
<tr>
<td>Shows Improvement – demonstrates skill or attribute with some reminders</td>
<td>Needs development – beginning to demonstrate the skill</td>
<td>Improving Toward Entry Level</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>Competent – demonstrates the skill</td>
<td>Entry Level</td>
</tr>
<tr>
<td>Outstanding – demonstrates skill or attribute with no reminders; helps others acquire skill</td>
<td>Proficient – consistently demonstrates and shows initiative in improving own skills</td>
<td>Exceeds Entry Level</td>
</tr>
<tr>
<td></td>
<td>Advanced – consistently demonstrates and shows initiative in improving own skills and using these skills to support the work of the organization</td>
<td></td>
</tr>
</tbody>
</table>

A recommended procedure for using the assessment is for adult supervisors to rate each participant’s progress towards acquiring identified skills. Participants also complete a self-assessment. It is helpful if supervisors and youth record additional comments to expand upon their observations. At a minimum, the checklist is completed twice. Blalock and her colleagues (2006) had a minimum of two adults complete their checklist, with scores averaged to minimize potential biases. They completed the checklist three times during the program and a total score was derived per assessment. Ferrari et al. (in press) found that although teens rated themselves more positively in general than their adult supervisors, they agreed on the nature and direction of their performance. In addition to numerical ratings, they analyzed open-ended responses for themes relative to changes in workforce skills, which expanded on the numerical ratings. The Massachusetts Department of Education (2007) found that students who participated in work-based learning experiences gained skills. Average ratings for foundational skills (e.g., attendance, motivation, initiative, listening) and workplace/career specific skills (e.g., time management, computer technology, project management) were higher at the second review than at an initial review.

Performance-based tools are an authentic means of assessment. A strength of this strategy is the use of multiple sources of data and multiple methods (i.e., self-report by youth and observations by adult worksite supervisors, using both numerical ratings and written responses) as well as multiple assessments. An assessment early in the work experience helps to provide a benchmark for comparison purposes and also indicates if program changes are needed (e.g., if youth do not have an opportunity to demonstrate the skill their work tasks may be adjusted). A later assessment provides a sense of the level of skill development, as well as a point of comparison.
with the first assessment as a way to capture the relative amount of progress. Ideally, the young person and the worksite supervisor or mentor complete the assessment and use it as a basis for a discussion. Although it has its advantages, we should note that this means of assessment is based on individuals’ perceptions of skill development, not an actual objective measure of that skill. Here again, we reiterate that measuring such skills is challenging (Partnership for 21st Century Skills, 2003). O’Neil, Allred, and Baker (1992) developed a general methodology to generate prototype items to assess work readiness skills, but the continued results of that work are not known.

An important point to stress when using performance-based measures is that the purpose is developmental, not punitive. That is, adult mentors who are unsure how results will be used may give high ratings at the beginning, even if the youth’s performance is not what it should be (Blalock et al., 2006; Ferrari et al., in press). From a developmental perspective, a “needs improvement” rating allows adult supervisors to target their support to achieve the desired results; it is not a sign of failure. This is all the more reason that workforce preparation programs should be conducted from a youth development perspective. Youth should not be expected to get it right the first time, and adults who have their best interests at heart will be able to convey this perspective.

Those who are interested in other measures may want to consider the Youth Experiences Survey developed by Larson and his colleagues at the University of Illinois (Hansen & Larson, 2005). In addition, Mincemoyer and Perkins (2005) at Penn State University have developed a national life skills evaluation system with evaluation instruments for decision making, critical thinking, communication, problem solving, goal setting, and leadership. Both of these instruments have demonstrated adequate psychometric properties. As well, they were developed particularly for use with out-of-school time programs.

**IMPLICATIONS**

We have described how youth development programs are in an ideal position to bring together different sectors of the community to address the need to assist adolescents with preparing for a successful transition to the workforce. In order to do so, they require support from a variety of sources (e.g., businesses, community organizations, and parents). Youth development programs and the professionals leading them can draw on their community-based approach to bring together the right resources and they can help young people make connections between areas of their life like parents, school, and workforce preparation programs. In this next section, we suggest implications and recommendations based on what we have shared about skills for success in the knowledge economy and what we have discussed here about workforce preparation in the context of youth development programming. The implications we share are drawn from literature related to workforce preparation as well as our own experience as researchers, faculty members who train youth development practitioners, and most importantly as practitioners ourselves. We encourage individuals, groups, organizations, and policy makers to consider these recommendations as they have opportunities to influence youth workforce preparation programming.
Implications for Practitioners, Employers, and Key Stakeholders
In relation to applying the principles and practices of work-based learning, we want to emphasize three related concepts.

- **Embed workforce preparation within a larger foundation of positive youth development programs.** An intentional foundation of best practices in positive youth development is critical for effective workforce preparation programs. Workforce preparation programs are stronger when they are based on youth development principles and therefore are more likely to accomplish their objectives. Likewise, ensuring that 21st century skills are an intentional part of youth development programs strengthens program implementation, outcomes, and support from stakeholders who are typically more attuned to workforce skills and economic issues than broad youth development outcomes.

- **View employers as important partners in providing work-based learning experiences.** Casner-Lotto and Barrington (2006) suggest that business leaders must take an active role in supporting adolescents’ workforce preparation. From outlining the skills needed to creating opportunities for young people to obtain these skills, employers can play a key role in identifying innovative and creative solutions to enhance and expand workforce preparation opportunities. Employers should orient their business practices toward providing teens an opportunity to contribute and learn through their work experience. Youth development practitioners should recruit employers by appealing to their mission, civic interest, and community commitment; businesses with such a focus would also be predisposed to working with youth to enhance their development (DeCoursey & Skyles, 2007; Whalen et al., 2003). Finally, practitioners should provide training and other support to employers who may not be well prepared for working with young people and the associated challenges that go along with supporting their development.

- **Plan programs to address 21st century skills.** Workforce preparation programs should address skills needed to succeed in the 21st century and focus on those that transcend specific jobs.

In addition to key ingredients of workforce preparation programming, we propose that those involved with workforce preparation should consider the following points.

- **Use 21st century skills as an organizing framework.** First, youth development practitioners need to inform themselves so they are able to plan and communicate using a 21st century skills framework. With this knowledge, they will be able to align program planning, opportunities, evaluation, and reporting with goals that explicitly relate to 21st century skills. We need to use 21st century methods and tools—in a digital world young people need to learn to use tools essential to everyday life and productivity. It is important to teach and learn in a 21st century context. Students engage, learn, and retain more when learning is relevant, interesting, and meaningful to their lives (Partnership for 21st Century Skills, 2003). Youth development professionals should use 21st century assessments to measure 21st century skills and evaluate their programs based on findings from studies on applied skills.
• **Involve all sectors of society and build connections among them.** Viewing workforce preparation, in the broader context of youth development, as one part of a network of connected learning opportunities strengthens youth workforce development (DeCoursey & Skyles, 2007; Hamilton & Hamilton, 2004; Harvard Family Research Project, n.d.; Wynn, 2003).

• **Connect with parents.** Several authors (America’s Promise, 2006; Casner-Lotto & Barrington, 2006; James, 1997) point to the critical role parents can play in supporting adolescents’ workforce preparation. Parents should seek relevant and creative ways, at home and through other opportunities, for their teens to develop and practice 21st century skills. With 40% of adolescents saying they do not have parents involved in their education (America’s Promise, 2006), and parents expressing concern that they cannot provide appropriate guidance for their children without assistance (Reagor & Rehm, 1995), there is clearly work to be done and youth development practitioners have a role to play.

• **View workforce preparation as a process, not an event.** There needs to be multiple opportunities for youth to develop the skills they need for success in their future – in the workplace and in life. Once is not enough: Use a developmental model of progressively more complex experiences occurring over time.

• **Consider a “growing your own” philosophy** that involves moving through a natural progression from participant to teen leader to teen employee to adult staff member. This is a powerful concept. Keeping teens engaged by offering work-based learning programs within the context of comprehensive youth development programs makes sense for at least two reasons: (a) because youth development programs have been suggested as an ideal place to focus on developing skills needed for the 21st century workforce (Schwarz & Stolow, 2006), and (b) because work often conflicts with teens’ participation in out-of-school time programs (Pittman, et al., 2003).

• **Consider a value-added approach to existing teen programming.** Look for opportunities to move existing programs where teens are involved in leadership roles to those that are high quality work-based learning experiences. This concept can foster a shift from good teen programming to high quality work-based learning experiences that are still meeting early goals (e.g., youth development outcomes) and providing opportunities to develop and practice 21st century skills.

**Implications for Policy**
There are important policy implications that will influence the future for workforce preparation programs. Those involved in the policy arena should consider the following points.

• **Use knowledge from research and practice to drive funding priorities.** There was an increase in school-to-work programs following the School-to-Work Opportunities Act of 1994 (Hughes & Karp, 2004), however, much of the focus remained in the schools. An emphasis on the benefits of embedding workforce preparation within youth development programs could encourage a shift in priorities (Schwarz & Stolow, 2006).
• **Consider funding and employment policies that accommodate teens as paid employees** (e.g., allowing teens to be paid with program funds or addressing issues around background checks for employees working with youth) while maintaining quality and safety standards. Consider employment policies and practices that recognize the centrality of paid work as a motivator and venue for learning (James, 1997).

• **Look beyond simple solutions** (e.g., work hours and quantity of opportunities) to more complex solutions that **give greater attention to and focus on quality of work experiences** for young people. This could include incentives or other support for employers to get involved, offering training for employers to understand adolescents’ developmental needs, and offering work readiness sessions to ensure adolescents are ready to meet employers’ expectations; these are strategies that have worked well as part of organized efforts to promote workforce preparation (Cochran, Ferrari, et al., 2007).

• **Make workforce preparation programs a funding priority in communities and within youth development organizations.** Invest with a pay it forward philosophy. Research tells us that those without the skills for success in the 21st century knowledge economy will pay a steep price personally. This lack of skills will also impact the ability of businesses, communities, and countries to remain competitive. Investments in workforce preparation – increased skills for putting knowledge to work – have tremendous long-term payoffs. Providing young people with adequate resources and opportunities “will pay dividends in the form of children who are fully prepared for life and who are equipped to lead a stronger America at home and in the world” (America’s Promise, 2006, p. 56).

• **Support the role of intermediaries** in encouraging systems collaboration. Intermediaries can convene partners, make connections, and measure effectiveness (De Coursey & Skyles, 2007; Partee & Halperin, 2006), ensuring that youth can successfully navigate the transition from adolescence to adulthood and full-time employment. Working across the silos of education, youth development, and employment is challenging and will require ongoing hard work. State and local government decisions affect the context for workforce development programs. Coordination strategies (e.g., intermediary organizations, policy frameworks, or youth budgets) can provide leaders with opportunities to advance the agenda for workforce preparation (Relave, 2006).

**Implications for Research, Program Development, and Training**

Research should be conducted to inform practice in youth development programming — in the way workforce preparation programs are structured, curricula that are used, and connections that are made to provide workforce-applicable learning opportunities. These research efforts might include the following areas.

• **Develop content and teaching strategies to teach 21st century skills and emerging content areas** in workforce preparation programs (Casner-Lotto & Barrington, 2006; Kay & Honey, 2006). As Kay & Honey (2006) suggested for K-12 education, youth development professionals in non-formal settings need to develop content and strategies to teach 21st century skills in workforce preparation programming. The new
content areas identified by the Partnership for 21st Century Skills (Casner-Lotto & Barrington, 2006) should be considered for inclusion in out-of-school time programming, especially those topics rated by employers as most critical in the future. Workforce preparation programs in the context of youth development organizations are well suited for building skills, and they can provide hands-on experiences in these emerging content areas: personal financial responsibility, health and wellness, and entrepreneurial skills (Casner-Lotto & Barrington, 2006).

- Research on how to best facilitate **learning opportunities that develop skills like thinking, learning, and innovation** may be the most important from a research and development perspective, and the results of such research would have clear implications for workforce preparation programming (Kay & Honey, 2006).

- **Prepare practitioners through professional development.** Similar to Kay and Honey’s (2006) suggestions for preparing classroom teachers as a necessary part of a research agenda, the same should be true for youth development practitioners who should be teaching and assessing 21st century skills in their programs. Make a commitment to ensure practitioners are prepared to employ these strategies in their programs.

- **The role of parents** is another topic that has received relatively little attention. Parents are primary figures in the lives of their children, and an ecological approach establishes that parents are indeed a potential influence on workforce preparation, particularly in terms of decision making about the future. On the one hand, parents intentionally act to support aspects of their children’s career development in a number of ways (Palmer & Cochran, 1988; Young, 1994; Young & Friesen, 1992; Young, Friesen, & Dillabough, 1991; Young, Friesen, & Pearson, 1988). On the other hand, some youth indicate that they lack family involvement during the career choice process (Ferry, 2006). However, educational programs that specifically address the role of parents in workforce and career development are virtually nonexistent (Ferrari, 1992). Thus, this area is wide open for exploration. Youth development professionals are in an ideal position to work in collaboration with parents.

In addition, we propose that those involved with applied research on workforce preparation should investigate the following areas.

- More information is needed about the **nature and extent to which youth are working as volunteers, apprentices, interns, or employees in out-of-school time youth development programs.** While we know teens are working in youth development programs, we don’t know the real scope of how many teens are actually employed in these setting, their characteristics, and their contributions (Dennehy & Noam, 2005). This knowledge will aid in advancing the concept of growing our own and in how best to facilitate adolescents’ transition into the workforce while concomitantly supporting their development. Some of these teens may be employed in the context of a specific work-based learning effort; more often, teens may be employed to meet a basic staffing need without much thought given to what is needed to ensure their work experience is a
learning experience. It is important to better understand the nature and extent of youth working in out-of-school time programs to inform policy and practice.

- Research to **better understand factors important for engaging and retaining young people** is needed. If higher participation means higher impact (Goerge et al., 2007), we need to learn more about how to get youth involved and keep them, specifically in out-of-school time workforce preparation programs.

- There is continuing need to explore and refine **effective ways to assess 21st century skills** that are being developed through participation in out-of-school time programs.

- **Follow-up studies** to find out how young people who participate in workforce preparation programs fare in the workplace as compared to their peers are needed.

**CONCLUSION**

In this paper, we discussed the changing nature of jobs, reviewed research on the skills gap, and examined the broad set of skills young people need to succeed in the 21st century. We also discussed the research on adolescent employment and how an approach grounded in principles of positive youth development can be applied to workforce preparation, specifically work-based learning programs for teens. The interest in adolescent employment and workforce preparation issues is not new. However, there is a renewed focus on these areas because of the changing nature of work in the knowledge economy.

We have shown there is a basic set of applied skills that employers are looking for and that these skills are the same ones needed to live as a successful adult in the context of one’s family, community, and the larger society. Research over the last fifteen years supports the fact that there is a skills gap, and this gap has serious implications for individuals, communities, businesses, and the economy. Employers, the general public, and young people point to educational institutions when discussing responsibility for addressing the skills gap. The common message is that the world is changing and work is changing, but most schools are not changing fast enough. We have made a case that this same call to action is relevant for youth development practitioners who are leading out-of-school time programming and for key stakeholders who may be parents, educators, business leaders, or policy makers in a position to support such programming. We need to hold a mirror to ourselves and reflect on what this message means for how we (i.e., youth development organizations) need to change in order to have the biggest impact on workforce skills.

Schwartz and Stolow (2006) have made a case for workforce preparation, using 21st century skills, as an organizing principle for after-school programs. In our synthesis we have shared key concepts about workforce preparation as intertwined with youth development, provided specifics on program practices in work-based learning, and presented profiles showing what good work-based learning programs look like in action. More than fifteen years ago, the SCANS Report (1991) said that “learning through experience is okay only if all students and workers are exposed to the right experiences” (p. 16). We agree. However, when asked about changes they think schools should make, teens have said they need more preparation for the real world and
more opportunities to see people work in the real world (America’s Promise, 2006). This then represents a call to action for youth development professionals to provide such experiences.

One of the prevailing notions in the research is that employment is harmful for teens and should therefore be limited. Only a small portion of the literature on adolescent employment views it in a positive light. It is true that all teenage jobs are not created equal. But teens are working, and work is a good developmental fit for teens. Because the potential exists for both positive and negative outcomes of adolescent employment, we have addressed how to maximize factors that contribute to a positive work experience and minimize those that create negative conditions. Workforce preparation programs provide a means to bridge the concern about potential negative outcomes and the need to prepare for the 21st century workplace by creating a supportive environment from which to engage with the world of work. Against the backdrop of 21st century skills, opening doors to high quality jobs through experiences that build applied skills and expands young people’s views of career opportunities is critical. We believe that workforce preparation programming opens this door and opens it wide.

A recent report from America’s Promise (2006) describes an alignment of purposes: “What should be a moral imperative for Americans is now also an economic necessity” (p. 47). Preparing good citizens is the right thing to do and will benefit society. Preparing good workers is necessary for the future of our businesses, our communities, and our country. The skill sets needed are the same. One of the real challenges employers face is the rapid pace of change and how to ensure workers keep up with business needs. Toffler (as cited in Partnership for 21st Century Skills, 2003) said, “The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn” (p. 4). Programs described as workforce preparation represent one promising avenue for young people to learn through experience, and to develop into young adults that are learning how to learn outside the formal classroom.

What can youth development practitioners or key stakeholders do? We can commit ourselves to learning about the issues and current context, and we can apply the information presented here to improve current programs or add new programs. The perspective gained can then inform future programmatic efforts. There are also opportunities for youth development programs to be the bridge by serving in intermediary roles, working with parents, and working with employers. By making an intentional link both between workforce preparation and youth development (Ferrari, 2003) and between learning experiences in non-formal education and the applied skills need for success in the 21st century workplace, educators will be more prepared to develop, implement, and evaluate programs designed to narrow the skills gap. However, this is only the first step. What we have done here is to summarize the issues, approaches, and key principles in order to get the process started. The nature of most out-of-school time programs is that they are designed to meet the needs of a local community and that is where the rest of the work remains in order to realize the full potential of workforce preparation programming.

The time is right for youth development organizations to consider their role in supporting workforce preparation more intentionally. Workforce preparation and youth development are really two sides of the same coin. The process of using a workforce preparation lens will improve both workforce preparation and youth development programs. High quality work-based
learning programs are an opportunity to build the capacity of tomorrow’s workforce. Not only will our young people be better prepared, our country will benefit from having young people who are prepared not only for the challenges of the workforce, but also for the responsibilities of life in a civil society.

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