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ABSTRACT

Several decades of studies evaluating youth employment programs funded through the nation's second-chance system have demonstrated the shortcomings of programs that concentrate on work experience alone and try to reverse years of inadequate education, discrimination, and alienation in a few weeks or months. The School-to-Work Opportunities Act identifies a comprehensive, multiyear, youth-focused, community operated, state-organized, and federally supported model linking school-based, work-based, and "connecting" activities to a range of postsecondary education and training opportunities. The model and the school-to-work programs based on it contain important lessons on providing high quality on-the-job learning that can benefit planners/providers of Job Training Partnership Act (JTPA) programs. JTPA programs are facing the challenges posed by moving from funding of separate programs, which allows some coordination, to a specific emphasis on being part of a unified, multiyear youth development system serving a variety needs. At the level of JTPA program operations, work-based learning should include the following elements: integrated of academic and occupational training; broad, transferrable skills development; adolescent development focus; preparation of adult participants; program management; and linkage into a comprehensive youth development system. (Appended are lists of 10 elements of quality work-based learning and 9 technical and social competencies identified as learning objectives for youth apprenticeship.) (MN)

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How Can We Adapt the Positive Experiences of School-to-Work Programs, Especially Work-based Learning, to JTPA Programs?

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Boston, Massachusetts
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Prepared for the National Youth Employment Coalition and the
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Executive Summary

This paper begins with an introduction to the comprehensive, multi-year youth development model embodied in the School-to-Work Opportunities Act of 1994. It then describes six lessons for providing quality on-the-job learning that have emerged from the demonstration school-to-work projects that informed the STWOA. It then outlines implications for JTPA program operation and reauthorization.

The School-to-Work Opportunities Act: A Comprehensive Youth Development Model.

In the School-to-Work Opportunities Act (STWOA) passed earlier this year, the Administration and Congress have identified an alternative youth development model which is **comprehensive, multi-year, youth-focused, community operated, state-organized, and federally supported**. Under this model, school-based, work-based, and "connecting" activities (counseling, support, job-matching, administration, etc.), and a range of postsecondary education and training opportunities are combined to provide clear, long-term developmental pathways for youth.

The STWOA is a specific attempt to address the shortcomings of previous short-term, isolated job-training programs and of existing school programs that fail to retain increasing percentages of young people. It also recognizes that young people looking to succeed in tomorrow's economy will need to use more skills—academic, occupational, and social—than their forebears did. It thus incorporates on-the-job training into a more comprehensive youth development system. It is the thrust of this paper that JTPA services should be informed by and consistent with this new federal model.

Six Lessons from School-to-Work Programs on Providing Quality On-the-Job Learning.

Many school-to-work programs originated as alternative education and career preparation strategies for at-risk adolescents. And the lessons drawn from these work-based learning programs are consistent with those drawn by others researching JTPA and other youth development programs. For these reasons, we believe the following lessons from work-based learning initiatives are germane to the broader discussion of JTPA and youth development through on-the-job training:

1. Work alone is not enough—workplace experiences should be integrated with academic preparation to yield necessary practical and theoretical skills.
2. Narrow job-training is not enough—because the world of work is changing rapidly, work-based experiences should build broad, transferable skills.

3. Adolescents have particular developmental needs—preparation for the worksite, adult mentorship, and ongoing support and counseling are vital.
4. Adult workplace staff need help adjusting to new roles—staff development should properly prepare those who will be teachers and mentors to adolescents.
5. Just putting people in work settings does not ensure quality learning—management of work-based experiences is a complex task, requiring clear goals and expectations, structured training plans, carefully designed administrative capacity, and quality assurance mechanisms.
6. Short-term, fragmented interventions are insufficient—institutions and resources need to be merged to provide ongoing youth development and support.

Implications for JTPA reauthorization and program operation.

The challenge for JTPA is to move from funding separate programs which allow some coordination to a specific emphasis on being part of a unified, multi-year youth development system serving a variety of needs. The following are some implications for JTPA reauthorization:

- Language to require coordinated planning between education entities, employers, and JTPA providers at the state, SDA, and local levels should be inserted. JTPA providers should be partners in the comprehensive planning that is encouraged by the STWOA and other integrative initiatives.
- In general, definitions and reporting requirements for JTPA, Title I, Perkins, and the STWOA should be unified. Specifically, eligibility requirements for JTPA school-wide projects should be made identical to those for Title I school-wide projects, to reduce confusion and paperwork.
- Title IIB summer and Title IIC year-round programs should be linked, to support participation by disadvantaged young people in multi-year youth development programs, consistent with the school-to-work model. One specific implication is that the age requirements for the two programs need to be reconciled—Title IIB currently serves ages 14-21, while Title IIC serves ages 16-21.
- Based on reports that many operators are confused about how to coordinate various current resources and programs, a line item for technical assistance on using JTPA to support multi-year youth development programs should be added.
- Time limitations on on-the-job training (6 months or 499 hours) should be relaxed to facilitate longer-term training-and-education plans.

At the level of JTPA program operations, work-based learning should include the following elements:

Integration of academic and occupational training

- integrated academic-vocational curriculum, to employer standards
- student development of personal portfolios containing demonstrations of skills mastered and recommendations from employers
- group projects
- presentations of work to peers and adults
- scheduled times to discuss and reflect upon work experience

Broad, transferrable skills development

- targeting social competencies, not just technical
- job shadowing
- rotations through different departments or workplaces
- placements in technical and professional departments where multiple company operations can be overseen

Adolescent development focus

- workplace mentors
- support by program staff (counselors, tutors, case managers)
- peer support groups
- career counseling
- prepare orientation and recruitment materials

Preparing adult participants

- train trainers
- prepare orientation and recruitment materials

Program management

- written expectations agreement signed by all parties
- structured plan for sequential, integrated education and training
- recruiting and managing workplace supervisors and mentors
- scheduling student work and training placements
- coordinating communication among partners
- facilitating employer involvement in curriculum development
- evaluating program—processes and outcomes

Linking into a comprehensive youth development system

- Accessing all available resources
- Student retention
- Out-of-school reentry
- Alternative schools for out-of-school youth
- Variety of routes to postsecondary training options
- Focus wage subsidies on early portion of longer-term placement with an employer

This paper begins with an introduction to the comprehensive, multi-year youth development model embodied in the School-to-Work Opportunities Act of 1994. It then describes six lessons for providing quality on-the-job learning that have emerged from the demonstration school-to-work projects that informed the STWOA. It then outlines implications for JTPA program operation and reauthorization.

The School-to-Work Opportunities Act: A Comprehensive Youth Development Model

Several decades of evaluation studies of youth-employment programs funded through the nation's "second chance" system yield the following observations:

- Work experience alone is generally ineffective (and typically, youth-employment programs have been divorced from any academic learning component);
- Interventions that try to reverse years of inadequate education, discrimination, and alienation in a few weeks or months are ineffective; and
- It is difficult to succeed in the labor market after exiting the educational system without a diploma, and even the prospects for high school graduates are declining.

In the School-to-Work Opportunities Act (STWOA) passed earlier this year, the Administration and Congress have identified an alternative youth development model which is comprehensive, multi-year, youth-focused, community operated, state-organized, and federally supported. The STWOA seeks to build stakeholder partnerships at the community, state, and federal levels to meet the needs and align the expectations of young people, employers, educators, and other service providers. This approach intertwines two goals: (1) improving education through more experiential learning, thus reducing dropouts (and encouraging "drop-ins"), and (2) improving employment prospects, by building young people's connections to employers, career information, and the full variety of further education and training opportunities.

The author would like to thank the following individuals for their contributions to the ideas and information presented here: JFF staffers Sue Goldberger, Richard Kazis, and Hilary Kopp; David Brown of the National Governors Association; Marlene Seltzer of Seltzer Associates; and David Gruber.

The STWOA is a specific attempt to address the shortcomings of previous short-term, isolated job-training programs and of existing school programs that fail to retain increasing percentages of young people. It also recognizes that young people looking to succeed in tomorrow's economy will need to use more skills—academic, occupational, and social—than their forebears did. It thus incorporates on-the-job training into a more comprehensive youth development system.

Under this model, school-based, work-based, and "connecting" activities (counseling, support, job-matching, administration, etc.), and a range of postsecondary education and training opportunities are combined to provide clear, long-term developmental pathways for youth. The STWOA also includes an innovative governance partnership between the federal Education and Labor departments and a waiver provision to encourage more integration of existing federal and state programs, including JTPA, whose youth development responsibilities overlap.

Although many school-to-work programs are relatively young, the evidence of the value of a more comprehensive approach to worksite learning is promising. For example, after its first year of providing all 9th graders with an integrated careers course and three job-shadowing experiences with community employers, Roosevelt High School in Portland, Oregon, cut its freshman summer dropout rate in half—from 13.9 to 6.2 percent. Roosevelt staff say that the program works because it helps young people to (1) experience the working world, (2) have positive peer relationships with adults, and (3) understand the workplace and academic skills they will need in order to participate productively in the future.

Six Lessons from School-to-Work Programs on Providing Quality On-the-Job Learning

Over the past four years Jobs for the Future has assisted more than 20 states and 30 demonstration programs with their school-to-work initiatives. One of our areas of particular focus has been how to improve the quality of worksite learning placements for adolescents.¹ (A list of ten elements of quality worksite learning from this work can be found in Appendix 1.)

To some extent, the populations served by school-to-work programs may be seen as being "higher up the queue" than the general JTPA population—they are generally still in school, for example. But in many cases, the school-to-

¹For a full discussion of this topic, see *Learning Through Work: Designing and Implementing Quality Worksite Learning for High School Students*, by Jobs for the Future's Susan Goldberger, Richard Kazis, and Mary Kathleen O'Flanagan (Manpower Demonstration Research Corporation: January, 1994). Some of the information in this paper is summarized from this publication.

work student profile parallels those of JTPA participants: economically disadvantaged, academically deficient, at-risk. Many school-to-work programs originated as alternative education and career preparation strategies for at-risk adolescents. And the lessons we have drawn from these work-based learning programs are consistent with those drawn by others researching JTPA and other youth development programs.²

For these reasons, we believe the following lessons from our work-based learning initiatives are germane to the broader discussion of JTPA and youth development through on-the-job training.

1. Work alone is not enough—workplace experiences should be integrated with academic preparation to yield necessary practical and theoretical skills.

Many "at-risk" or "non-college-bound" young people served by JTPA and other youth programs have turned off to school and see little connection between it and the world they understand in the neighborhoods and on the streets. Conversely, on-the-job training for adolescents has generally shown poor outcome results because such training has not equipped poorly prepared young people with the core academic skills (literacy, numeracy, critical thinking, etc.) increasingly needed in the changing world of work.

The skills required for work and the skills required for college are converging. Success in the working world increasingly requires having the ability to learn on the job and in postsecondary classrooms, to understand manuals and technology, to communicate with others, to solve problems. The U.S. Department of Education estimates that between 1992 and the year 2000, 89 percent of the jobs created in America will require post-secondary levels of literacy and math skills, but only half of the new entrants to the labor force are likely to possess such skills.

Therefore, to really serve the needs of young people in the new economy, work experience programs should not be designed to stand alone, but should have a connected academic learning component. School-to-work programs have incorporated methods of experiential learning that are particularly well-suited for at-risk and out-of-school youth who have not responded to conventional academic classroom experiences.

These include the use of: integrated academic-vocational instruction; portfolios that collect and document samples of student work; reflection

²See, for example, Weinbaum, Alexandra, Vernay Mitchell and Ruth Weinstock, *Learning Work: Breaking the Mold in Youth Employment Programs* (Academy for Educational Development: 1992); Gambone, Michele Alberti, *Strengthening Programs for Youth: Promoting Adolescent Development in the JTPA System* (Public/Private Ventures: February 1993); and Pauley, Edward, Hilary Kopp and Joshua Haimson, *Home-Grown Lessons: Innovative Programs Linking Work and High School* (Manpower Demonstration Research Corporation: 1994).

seminars, in which young people explicitly make connections between specific job experiences and academic and social learning; group projects based on work themes, which require cooperative learning and complex skills; and presentations of work to audiences of peers, parents, and workplace adults.

2. Narrow job-training is not enough—because the world of work is changing rapidly, work-based experiences should build broad, transferable skills.

Employers often want to train workers to perform narrow, firm-specific tasks. This is how they have organized work in the past and it is often the easiest training to design. For high-school-aged young people, though, the goal should be the acquisition of more generic skills they can take with them from one work setting to the next, one employer to another.

Two often-cited weaknesses of traditional workplace education are its focus on narrow, technical training for specific occupations and its emphasis on basic employability over higher-order skills. Larry Rosenstock, director of Rindge School of Technical Arts in Cambridge, Massachusetts, presents a compelling rationale for emphasizing broad skills training:

Given the speed of technological change, narrow training leaves students with soon-to-be obsolete skills. Throw-away skills for throw-away workers come at the expense of academic skills and problem-posing skills for the new workplace—an environment that requires self-learning. ³

The programs we studied are taking steps to ensure that worksite learning fosters the development of broad, transferable skills that expand rather than restrict students' career and educational options. These steps include:

- Exposing students to all aspects of an industry rather than a single occupation;
- Stressing the development of the social skills needed to work effectively in any organization (the ability to work in teams, communicate clearly, and manage one's time); and
- Providing work assignments that push students to develop higher-order thinking skills.

We have seen a number of creative strategies for building broad skill development into work-based learning programs. These include: rotations through different jobs and departments; job shadowing opportunities that augment young people's understanding of the organization that employs

³Rosenstock, Larry, The Walls Come Down: The Overdue Reunification of Vocational and Academic Education, *Phi Delta Kappan* 72(6): February 1991, 434-436.



them; specification in the written learning plans of social skills and competencies as well as technical ones; and placements in technical or professional departments where the work routinely requires employees and trainees to apply "higher order" cognitive skills, such as problem-posing, problem-solving, and trouble-shooting.

All these techniques--many of which can be thought of as encouraging "experience in and understanding of all aspects of an industry," as specified in the Carl D. Perkins Vocational and Applied Technical Education Act--can increase the likelihood that workplace assignments and experiences will be of significant value and benefit to participating students. Some examples include the following:

- Students in the Wisconsin Printing Youth Apprenticeship Programs rotate through the business office, customer services and estimating, pre-press, the press room, and the bindery department in their first semester. In the Cornell Youth Apprenticeship Demonstration Project in the Binghamton, New York region, students spend six months in each of three departments, then select one of those departments for six more months of training.
- At Crater High School in Central Point, Oregon, students are often paired with professional employees who introduce students to the whole industry. For example, the advertising manager from a radio station serves as a mentor and has an intern work with her from the contract with a new client through the plan for the campaign and the development of an ad copy.
- Students in the Heating, Ventilation, and Air Conditioning Youth Apprenticeship Program at the Little Rock (Arkansas) Metropolitan Vocational Center learn human relations skills as well as the technical skills of installation and equipment repair. Students go out on service calls, and they are expected to handle customer questions and complaints about the work. Similarly, students working in clinical laboratories in Boston's ProTech program don't just run tests; they also field requests from physicians and communicate the test results.

3. Adolescents have particular developmental needs—preparation for the worksite, adult mentorship, and ongoing support and counseling are vital.

The workplace can be a hostile environment for young people, particularly for those who come from ethnic and social groups underrepresented in primary labor market jobs or those with a history of problems with adult authority. Many high school age youth require special attention and support during their introduction to the atmosphere, norms, and expectations of

adult workplaces. Students should be oriented and prepared both socially and psychologically before entering the workplace.

One way to provide this support is through orientation programs that motivate young people to identify with the program and commit to staying with it. In addition, some programs have found it effective to provide students with some training in basic job-related skills before they begin an intensive work-based learning placement. Training can include tips on how to listen and take direction, observe safety precautions, ask questions and seek help, act in a professional manner, and handle interpersonal conflicts.

Once in the workplace, young people need several different forms of support, including: on-going help navigating the formal and informal arrangements that constitute a firm's culture; help in conflict resolution on the job; counseling on career directions and opportunities; and social supports to help cope with family or personal crises that may interfere with their performance at work.

For teenagers, peer group relations are paramount. The peer group is the medium through which many of the developmental objectives of adolescence—including acquisition of critical thinking and reasoning skills, acquiring a sense of self, and establishing a network of relationships with others—are achieved. Work-based learning programs should seek to use the power of peer relationships: (1) among adolescents, through group orientation, support, and reflection sessions, and (2) across generations, creating new peer relationships between young people and working adults.

The following examples of support for adolescents have been found to be useful in the programs JFF has studied:

Mentoring by adults in the workplace: A major benefit of worksite learning is the rich network of supportive adults it provides students. Time and again in interviews, students and employees described with pride the relationships they had formed with each other. Below are just a few examples of the types of support and advice worksite mentors provide to students:

- A metalworking apprentice, upset after being "chewed out" by a work supervisor, turned to his mentor. The mentor explained that this supervisor often loses his temper when under pressure and told the student not to take the criticism personally. In addition to soothing the student's feelings and providing encouragement, the mentor suggested tactics the student could use with this particular supervisor. Following that advice, the student improved his relationship with the supervisor.
- Career advice from a mentor helped a student visit the radiology department and speak with staff about what he would need to do to

become a radiologist. The student eventually secured a paid internship in the department and gained admittance to a college training program in radiological technology.

- A student who wanted to pursue a nursing career overcame her fears and took the chemistry course she had been avoiding after receiving encouragement from the nurses at work.

Support by program staff: While a network of supportive adults at the workplace is vital, it is not sufficient. Students need more help than employers can realistically provide. In programs with a large proportion of disadvantaged students, a counselor or case manager often helps students cope with work, school, and personal issues.

- The Children's Hospital Fenway Collaborative, in Boston, which targets students at serious risk of dropping out of school, has had remarkable success turning students' lives around. Hospital and program staff attribute much of this success to the support system they have put in place. The program employs a half-time job counselor to support students at the workplace. She contacts parents, tracks down absent students, and initiates student meetings with herself, the lead teacher, and hospital staff. The Children's Hospital program coordinator regularly consults with the job counselor about student issues and often asks her to mediate discussions between students and job supervisors.

While the job counselor plays a critical role, school and hospital staff supply the basic network of support for students. Hospital employees who participate in the program understand the need to provide extra encouragement and attention. The hospital coordinator carefully selects employees who are positive and supportive toward adolescents, as well as being skilled trainers and supervisors.

Finally, the program provides individualized tutoring to students with academic deficiencies. This is an important component of the support system in programs serving at-risk youth.

Peer support: Many programs encourage the development of peer support networks and group orientations.

- Students in the Professional and Career Experience (PaCE) program in Fort Collins, Colorado, meet weekly to discuss problems and issues at their work sites and to share ideas on how to work through those issues. The school's PaCE coordinator organizes the sessions. Relationships with co-workers is a common topic of discussion.

- Drawing on the Outward Bound model for developing group cohesion, participants in the Pennsylvania Youth Apprenticeship Program spend a week camping together and tackling a series of physical challenges and problem-solving activities that require cooperation. In debriefing sessions after the activities, participants reflect on their work styles and roles, as well as the team process. The group explores risk-taking and problem-solving strategies and their application to the workplace. Program rules and regulations are discussed at the end of the week. One program staffer said that the positive peer group unity developed in this one week would have taken months to develop otherwise.

Career counseling: Through participation in work-based learning programs, students can become more directed and motivated about career and educational goals. However, to realize these ambitions, students need help navigating the post-secondary education and training system.

- Boston's ProTech program employs a full-time career counselor to help the 200 high school juniors and seniors in its health and financial-services programs select a career path and secure post-secondary training placements. Workplace mentors can also provide valuable career guidance.

4. Adult workplace staff need help adjusting to new roles—staff development should properly prepare those who will be teachers and mentors to adolescents.

Just as students need orientation and support, so do the worksite staff who take on new responsibilities as supervisors and educators of young people. Worksite staff need to be familiar with the design and objectives of the work-based learning program; with their particular roles as supervisors, assessors, and mentors of workplace learning; and with the typical behaviors and ways of working with adolescents.

Some programs have designed formal orientation sessions for workplace personnel; others have prepared handbooks and newsletters to convey basic information; still others have turned to one-on-one coaching of work site staff, designed to model for them the behaviors and techniques they will be expected to use with young people who spend time with them.

- Work supervisors in the Wisconsin Youth Apprenticeship Programs in printing attended training sessions in preparation for their work with young people. Scenarios such as a student's first day at work were played out, and worksite staff gave and received feedback on their ideas and had opportunities to try out new approaches. Topics covered included: communicating with students, building student motivation, providing

constructive feedback, and teaching and assessing specific printing competencies.

5. Just putting people in work settings does not ensure quality learning—management of work-based experiences is a complex task, requiring clear goals and expectations, structured training plans, carefully designed administrative capacity, and quality assurance mechanisms.

Clear goals. All participants in a community work-based learning program need to agree on the goals of the program and how they will be achieved. It is critical that these goals and strategies be put in writing so that program partners mutually agree to the mission and basic design of the work-based learning component and have a clear understanding of their own and other partners' role assignments.

- The Cornell Youth Apprenticeship Demonstration Project, for example, has students, school administrators, employers, and students' parents or guardians sign a "mutual expectations agreement" specifying the roles and responsibilities of each partner.

Structured training plans. JFF has found that one of the most useful tools for structuring workplace learning is the written training plan. While it takes significant time and effort to create a document that describes in detail the competencies, skills, and knowledge that the student will be expected to learn--and the employer to impart--at the work site, these plans function at work as curricula and lesson plans do in school.

A training plan makes explicit the learning goals of the work placement and makes it easier for all parties to be held accountable. The process of writing a learning plan encourages work site staff to think ahead and prepare training activities and work assignments that are substantive and directed. Once written, the learning plan becomes the tool for organizing regular meetings and review sessions between a young person and his or her supervisor. It can also make it easier to structure academic connections to students' work experiences.

Good learning plans tend to be more than a checklist of isolated tasks to perform at work. They address not just the "how" of a task, but also the "why." They describe sequences of activities that build upon each other in ever-increasing complexity. And they incorporate methods for documenting and assessing student progress.

A written plan should include:

- learning objectives for the placement;
- activities and work tasks intended to achieve these objectives; and
- methods for documenting and assessing mastery.

- In the Cornell Youth Apprenticeship Demonstration Project, department managers in participating firms were asked to describe the assignments a student might perform to master the nine technical and social competencies the program had identified as learning objectives: procedures, computer use, principles, excellence, systems, rules, teamwork, communication, and responsibility. Using a framework detailing these competencies as a guide (see Appendix 2), managers generated a list of work assignments and activities to structure placements in their departments. The learning plan then allows evaluation of the performance on each assignment as satisfactory and encourages additional comments by worksite supervisors.

Carefully designed administrative capacity. The best-intentioned programs can unravel if some basic managerial details are not attended to. Administration of a work-based learning program requires, at a minimum: recruiting supervisors and trainers and managing their participation; arranging and scheduling student work and training placements; coordinating communication among the work site staff and the other program partners; facilitating employer involvement in curriculum and other design challenges; and identifying problems and organizing timely responses to problems in the implementation of the work site learning component.

From our field experience, we have drawn certain general conclusions about administering quality learning at work. First, employers should designate only one employee to manage the work-based learning component for the firm. Second, while a student may come into contact with many different trainers, he or she should have only one supervisor responsible for coordinating and monitoring his or her learning experiences. Finally, if quality learning is to be the rule rather than the exception in these complex partnerships that often involve multiple partners, some centralized administration is needed. Intermediary organizations respected by both employers and educators may be best-suited to play this role.

Quality assurance mechanisms. Quality never comes automatically. It must be built-in and it must be monitored and continually reinforced. Because so much of the value of the workplace experience hinges upon the relationships forged between young people and their supervisors or mentors, careful selection of work site staff who will participate in a work-based learning program is critical. So, too, is careful selection of work site placements. Placements in departments that have more interesting and challenging work, greater control over schedule and work flow, and adequate staffing for supervision are likely to provide higher quality learning experiences for participating young people.

The main vehicle for monitoring the quality of work experiences is regular contact in person and by phone between work site and program personnel. Written evaluations of progress also help to some extent, as can regular, written evaluations and assessments of young people's workplace learning experiences.

Ultimately, it is advantageous to incorporate into program design regular reviews of the program as a whole and of individuals' outcomes in particular. Because it is often difficult for program managers to achieve sufficient distance and calm, outside evaluators can also help structure and facilitate needed reflection and redirection.

- The Kalamazoo, Michigan, Health Occupations Program uses several tools to gauge the quality of each work experience component. Evaluation forms, completed by both the worksite trainer and the young person every six weeks, allow program staff to regularly monitor work placements. Participants also keep journals, which facilitate both reflection on the work experience and communication of satisfactions and dissatisfactions with the training experience. Exit interviews are conducted by program staff with all participating young people to discuss what they liked about the program and suggestions for change. And an advisory committee evaluates each of the programs in Kalamazoo County every three years, with a mini-review occurring annually, to confirm that recommended changes have been implemented from year to year.

6. Short-term, fragmented interventions are insufficient—institutions and resources need to be merged to provide ongoing youth development and support.

There are a number of intensive, highly organized, and beneficial short-term programs for young people. However, as Public/Private Ventures has noted regarding its own high-quality STEP summer program, once the intensive, short-term involvement ends, the positive impacts are not reinforced and continued, thus dissipating program impact. Short-term programs can have a positive impact as part of a young person's growth, but in order to yield long-term benefits for at-risk youth, programs must be organized and connected in a way that serves the ongoing developmental needs of adolescents.

In order to make this happen, existing resources need to be merged in a way that allows a less intermittent approach to youth development. Federal funding sources such as JTPA, Perkins, School-to-Work, and Chapter 1 should be working in concert with state and local education and jobs funds to meet the developmental and career needs of all young people. Currently, confusion about different regulations, jurisdictions, and performance requirements often prevents these funds from being combined into more

comprehensive programs providing the broad range of services and connections that young people need to succeed.⁴

Of course, care must be taken to make sure that the populations for which such aid is currently targeted are served by the resulting system, but this can be done by requiring clear outcome evidence of progress for targeted populations, rather than by dividing existing resources into separate, and often stigmatized, categorical programs.

In addition to resources, institutions—schools, businesses, community-based organizations, and other career training and placement entities—must be linked in a way that facilitates educational, career, and social development that is accessible, ongoing, and geared to the particular needs of young people.

Implications for JTPA reauthorization and program operation

The 1992 JTPA amendments and subsequent guidance letters have made it simpler for JTPA and school-to-work programs to be integrated. Many states are using Title IIA 8% funds to support school-to-work system efforts. Title IIB summer program funds can support academic enrichment, career preparation, skill development, and work experience (now including private-sector work placements) for eligible recipients. And Title IIC year-round program funds may be used to support pre-employment preparation, academic enrichment, internship placements, and work maturity skills training for in-school and out-of-school disadvantaged youth.

The challenge for JTPA is to move from funding separate programs which allow some coordination to a specific emphasis on being part of a unified, multi-year youth development system serving a variety of needs. The following are some implications for JTPA reauthorization:

- Language to require coordinated planning between education entities, employers, and JTPA providers at the state, SDA, and local levels should be inserted. JTPA providers should be partners in the comprehensive planning that is encouraged by the STWOA and other integrative initiatives.
- In general, definitions and reporting requirements for JTPA, Title I, Perkins, and the STWOA should be unified. Specifically, eligibility requirements for JTPA school-wide projects should be made identical to those for Title I school-wide projects, to reduce confusion and paperwork.
- Title IIB summer and Title IIC year-round programs should be linked, to support participation by disadvantaged young people in multi-year youth

⁴See also Gruber, David, *Toward a Seamless System for Youth Development: A New Strategy for Integrating Resources, Programs, and Institutions* (Jobs for the Future: May 1994).

development programs, consistent with the school-to-work model. One specific implication is that the age requirements for the two programs need to be reconciled—Title IIB currently serves ages 14-21, while Title IIC serves ages 16-21.

- Based on reports that many operators are confused about how to coordinate various current resources and programs, a line item for technical assistance on using JTPA to support multi-year youth development programs should be added.
- Time limitations on on-the-job training (6 months or 499 hours) should be relaxed to facilitate longer-term training-and-education plans.

At the level of JTPA program operations, we believe that on-the-job training should be designed to contain the elements addressed above in the "lessons" section: it should be integrated with academic preparation; it should develop broad, transferable skills, not narrow job-training; it should be focused on adolescent developmental needs; it should prepare worksite adults to meet those needs as trainers and mentors; it should be administered in a structured, goal-driven way; and it should integrate short-term experiences into an ongoing youth development progression.

Within these categories, work-based learning should include the following elements:

Integration of academic and occupational training

- integrated academic-vocational curriculum, to employer standards
- student development of personal portfolios containing demonstrations of skills mastered and recommendations from employers
- group projects
- presentations of work to peers and adults
- scheduled times to discuss and reflect upon work experience

Broad, transferrable skills development

- targeting social competencies, not just technical
- job shadowing
- rotations through different departments or workplaces
- placements in technical and professional departments where multiple company operations can be overseen

Adolescent development focus

- workplace mentors
- support by program staff (counselors, tutors, case managers)
- peer support groups
- career counseling
- prepare orientation and recruitment materials

Preparing adult participants

- train trainers
- prepare orientation and recruitment materials

Program management

- written expectations agreement signed by all parties
- structured plan for sequential, integrated education and training
- recruiting and managing workplace supervisors and mentors
- scheduling student work and training placements
- coordinating communication among partners
- facilitating employer involvement in curriculum development
- evaluating program—processes and outcomes

Linking into a comprehensive youth development system

- Accessing all available resources
- Student retention
- Out-of-school reentry
- Alternative schools for out-of-school youth
- Variety of routes to postsecondary training options
- Focus wage subsidies on early portion of longer-term placement with an employer

In the end, these linkages of resources and institutions will not happen unless youth programs stay focused on what young people need in order to make the transition through adolescence to productive, positive adulthood. Work-based learning can be an important integrative factor, both for young people and for the institutions and resources that support them. By providing peer relationships with working adults; by reinforcing the acquisition of academic, social, and workplace skills; and by opening a variety of career options—work-based learning can serve as an important part of a comprehensive, effective youth development approach.

Appendix 1

Ten Elements of Quality Work-based Learning*

- Element 1: Partners formally agree on the goals of the work-based program and how to achieve them.
- Element 2: Student learning at the workplace progresses according to a structured plan.
- Element 3: Work-based experiences promote the development of broad, transferable skills.
- Element 4: School-based activities help students distill and deepen lessons of work experience.
- Element 5: Student learning at the worksite is documented and assessed.
- Element 6: The program prepares students to enter the workplace.
- Element 7: Students receive on-going support and counseling.
- Element 8: The program provides orientation, training, and on-going support to worksite and school staff.
- Element 9: Administrative structures are established to coordinate and manage the worksite component.
- Element 10: Mechanisms exist to assure the quality of students' work-based learning experiences.

*From *Learning Through Work: Designing and Implementing Quality Worksite Learning for High School Students*, by Jobs for the Future's Susan Goldberger, Richard Kazis, and Mary Kathleen O'Flanagan (Manpower Demonstration Research Corporation: January, 1994).

Appendix 2

Cornell Youth Apprenticeship Demonstration Project Competencies: Learning Objectives for Youth Apprenticeship*

Technical Competencies: Perform Work Tasks

1. Procedures: Follow steps to accomplish a task.
2. Computer use: Use computer technology efficiently and effectively.
3. Principles: Understand reasons for procedures.
4. Excellence: Commit to high standards of practice and to continuous improvement.

Social Competencies: Participate in an Organization

5. Systems: Understand the organizational context.
6. Rules: Adhere to professional norms.
7. Teamwork: Cooperate with others in a variety of roles.
8. Communication: Use written and spoken language to give and receive clear messages.
9. Responsibility: Act independently. when appropriate, take initiative for work and learning.

* From Hamilton, Stephen and Mary Agnes Hamilton, "Learning at Work," *Youth Apprenticeship in America: Guidelines for Building an Effective System* (William T. Grant Foundation Commission on Youth and America's Future: 1992), p. 5.