This workbook, which is designed primarily for secondary school administrators involved in planning youth apprenticeship programs, explains approaches to youth apprenticeship that have evolved from operation of the Pickens County Youth Apprenticeship Initiative (PCYAI) in Easley, South Carolina. Discussed first are guiding principles regarding the following: youth apprenticeship; tech prep; working structures; standards and portable credentials; insurance, apprentice wages, and labor/union issues; relationship to other types of work-based learning; role of secondary schools, employer sponsors, and postsecondary institutions; and planning youth apprenticeship programs. Presented next is a six-page program planning checklist covering the following items: building interest and setting a direction; developing the program (governance, administration, and budget; school and work-based curricula; guidance and student support services; mentor training and program support activities; and postsecondary oversight and awarding of credentials); and evaluating/expanding the program. Appendixes constituting approximately 75% of the guide contain the following: flowcharts diagramming the Partnership for Academic and Career Education Tech Prep and other apprenticeship program models; insurance and child labor law information; 38-item bibliography of resources and names/addresses of 23 exemplary apprenticeship program sites; PCYAI training agreement; program planning form, budget form; list of PCYAI secondary-level workplace competencies; and tables of contents of PCYAI student and mentor handbooks. (MN)
Getting Started with

Youth Apprenticeship

A "How To" Workbook

BEST COPY AVAILABLE
Getting Started
With YOUTH APPRENTICESHIP
A "How To" Workbook

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July 1993
# GETTING STARTED WITH YOUTH APPRENTICESHIP...
## A “HOW TO” WORKBOOK

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INTRODUCTION

This workbook was designed to provide persons interested in developing Youth Apprenticeship programs with a starting point for discussion and planning. (While the booklet was written primarily for secondary school administrators, it should provide some useful information for anyone interested in Youth Apprenticeship.) The steps outlined here are not intended to be prescriptive, but rather to serve as a guide in adapting key program elements to effectively meet local needs.

Before completing the planning sections of the workbook, please read carefully the following section, Guiding Principles.

I. GUIDING PRINCIPLES

It is important to understand that Youth Apprenticeship (YA), while based on age-old concepts, is a relatively new idea when applied to school-aged youth. Therefore, there is considerable variation across the country in how Youth Apprenticeship programs are defined and implemented.

This guidebook is based on approaches to Youth Apprenticeship that have evolved from the experience of a functioning program—the Pickens County Youth Apprenticeship Initiative (PCYAI) in Easley, South Carolina. (For detailed information on the PCYAI, please contact the Youth Apprenticeship coordinator at the address listed in the front of this booklet).

Before using this guidebook to plan your own Youth Apprenticeship program, it is important to understand the guiding principles and perspectives that shaped our initiative. It is also important to recognize that most Youth Apprenticeship programs are less than five years old, and so all approaches are still evolving. Our program certainly fits that description. In order to help you understand our perspective and be better able to judge where your ideas and needs differ from ours, we have defined a number of key elements, or guiding principles, that have shaped our program.

A. Youth Apprenticeship

The Pickens County Youth Apprenticeship Initiative is best defined from two perspectives.

From the student/parent/school perspective, Youth Apprenticeship:

1. is a four-year program (grades 11-14) providing graduates with a recognized, portable credential;

2. builds strong academic and technical skills as well as the personal and professional attributes required for success in the "transformed workplace;"
3. requires redesigned school environments that integrate academic and vocational content and stress contextual learning;

4. provides stronger, more focused career counseling and planning;

5. features work-based learning experiences that build in scope and sophistication throughout the program;

6. enables students to enter and complete associate degree programs with advanced standing;

7. provides paid work experience and tuition assistance for postsecondary study; and

8. results in a smoother transition from school to work and improved opportunities for full-time employment.

From the employer perspective, Youth Apprenticeship:

1. results in a better supply of entry-level employees who are well-prepared and fully-oriented to the needs and requirements of the business;

2. reduces costs associated with in-house training/retraining for new employees, poor performance, and turnover;

3. requires staff time to develop, implement, and monitor the program; and

4. requires financial outlay for apprentice wages and postsecondary tuition assistance.

B. Tech Prep

We use a comprehensive definition of Tech Prep as the umbrella concept for Youth Apprenticeship programs. Tech Prep provides the academic, vocational, and guidance foundation that enables students to participate effectively in an apprenticeship experience. (See APPENDIX A for a graphic representation of our Tech Prep model.)

Key elements of a comprehensive Tech Prep program include:

1. strengthening the core academic curriculum in grades 9-12 (through applied academics, traditional college preparatory courses, or a combination);

2. strengthening occupational curricula, both technically and academically, and integrating academic and vocational education;

3. expanding age-appropriate guidance and planning activities on the K-12 level, stressing the benefits and requirements of mid-level technology careers;
4. blending classroom learning with diverse work-based learning experiences, such as shadowing, internships, co-op, and Youth Apprenticeship;

5. increasing options for advanced standing into postsecondary programs through articulation and the increased availability of college courses for high school seniors; and

6. enhancing academic and technical content as well as utilizing applied teaching methodologies at the postsecondary (community college) level, continuing work-based learning assignments, and expanding articulation with senior colleges.

C. Working Structures

The availability of a consortium office and staff have been invaluable in developing the Pickens County Youth Apprenticeship Initiative. Staff members from the Partnership for Academic and Career Education (PACE), the consortium serving Anderson, Oconee, and Pickens counties, provide technical assistance and an important liaison function among the key YA partners—the district/career center, the sponsoring businesses, and the technical college.

The consortium office, while established primarily to support Tech Prep program development among seven diverse school districts and a comprehensive community college, actively encourages expansion of Tech Prep to include Youth Apprenticeship and other types of structured work-based learning.

Technical assistance provided by the consortium office has included:

1. researching successful practices in YA from other states and assisting program staff to make appropriate adaptations to meet local needs;

2. assisting faculty and administrators to analyze and enhance current occupational curricula at the secondary and postsecondary levels and to modify and/or expand articulation agreements;

3. assisting in the development of informational and promotional materials for students, parents, and community members;

4. assisting faculty and program coordinators to develop workplace competencies, mentor training and materials, and YA agreements; and

5. identifying strategies and materials to enhance curriculum integration, expanded guidance services, and staff development needed to support the YA program.
While the consortium office provides important support and technical assistance, the PCYAI relies on effective and coordinated administrative leadership at the school district, the technical college, and participating companies. For the secondary component of the program, administrative leadership is provided by the school district and the B.J. Skelton Career Center, particularly through the center's director and the Youth Apprenticeship coordinator. (The coordinator is a full-time, nine-month employee who is responsible for YA and cooperative education.)

For the postsecondary component of the program, administrative responsibility is assumed by the technical college, particularly through the efforts of the director of Cooperative Education and the division chairman for Industrial and Engineering Technology.

D. Standards and the Portable Credential

Most YA programs stress the importance of a portable credential for program completers. The PCYAI is a locally-designed program that uses the associate degree as the portable credential. Workplace competencies and curriculum standards are determined jointly by the school/district, the technical college, and participating employers.

Determining whether or not to register the YA program through the Department of Labor/Bureau of Apprenticeship and Training (BAT) is, in our area, a function of employer preference and occupational speciality. (Because most of our students are likely to remain in the local area after graduation, an industry-recognized credential that is portable nationwide, such as journeyman certification, has not been a priority thus far.)

At this point, we are considering occupational specialities without direct links to an associate degree program, such as masonry, as areas particularly appropriate for registered apprenticeship. We also recognize that it is possible to design YA programs that lead to both an associate degree and journeyman certification. (See APPENDIX B for an illustration for one occupational specialty.)

E. Insurance, Apprentice Wages, and Labor/Union Issues

Before student apprentices are placed on the worksite, adequate insurance coverage must be provided. In the PCYAI, students are covered through school district insurance policies against accidents which may occur while traveling to and from the worksite. Insurance to cover worksite accidents is provided by the sponsoring companies' workers' compensation plans. Special liability insurance (to cover equipment damage caused by an apprentice) is not required at this time for the PCYAI apprentices. Please refer to APPENDIX C for information on insurance liability and child labor laws prepared by Jobs for the Future in Cambridge, Massachusetts.

An important part of any Youth Apprenticeship program is designing a progressive wage schedule for program participants. The wages for Pickens County student apprentices are paid by the employer at a starting rate of $6 per hour. (Each company has its own progressive wage scale for continuing Youth Apprenticeship participants.)
Throughout many areas of the country, program coordinators work very closely with representatives of labor unions in planning, developing, and implementing Youth Apprenticeship. Because the companies currently participating in the PCYAI are not unionized, representatives from labor unions have not been involved in this Youth Apprenticeship program.

**F. Relationship to Other Types of Work-based Learning**

Our approach to Youth Apprenticeship involves some significant differences, compared with other types of work-based learning. (This should not be interpreted to mean that other activities are of lesser importance when compared with Youth Apprenticeship. In fact, we think that YA increases the need for cooperative education and other types of work-based learning in order to give students and employers multiple options for involvement.)

In comparing YA with approaches typically used in cooperative education, internships, and other types of work-based learning, we believe Youth Apprenticeship:

1. is a program of longer duration;
2. requires more curriculum development and/or modification;
3. involves greater collaboration among diverse partners—schools, college(s), and employers;
4. stresses more formal linkages between classroom learning in different disciplines and between the classroom and the workplace; and
5. results in more broad-based exposure to the workplace and more sophisticated technical skills.

**G. Role of Secondary Schools**

As is true with the PCYAI, secondary school systems often assume a key leadership role in developing Youth Apprenticeship programs. The role of secondary schools is to:

1. provide adequate career guidance and planning services to students and comprehensive orientation programs for parents;
2. develop, refine and/or integrate occupational and academic curricula to support YA;
3. provide flexible course scheduling, if necessary, to facilitate worksite learning;
4. coordinate planning and program/student evaluation processes;
5. provide apprentices with structured opportunities to analyze and reflect upon their worksite learning experiences;

6. coordinate student selection processes with input from postsecondary and business partners;

7. provide adequate staff development for faculty and counselors and comprehensive training/materials for worksite mentors;

8. develop articulation agreements collaboratively with postsecondary partners;

9. develop and maintain adequate advising and promotional materials;

10. secure commitments from area employers to participate in program development and to sponsor apprentices;

11. identify and implement appropriate measures to ensure adequate insurance coverage for all student apprentices; and

12. provide overall administrative leadership for the program.

H. Role of Employer Sponsors

One of the components that differentiates Youth Apprenticeship from other educational initiatives is the active and meaningful involvement of employers. The role of employers in the PCYAI is to:

1. hire and train youth apprentices in a progressive learning experience for a period of three years (beginning in the fall of the student’s senior year through completion of an associate degree);

2. participate actively in the development, implementation, and evaluation of YA programs;

3. provide worksite supervisors and/or mentors who will guide and help evaluate apprentices’ formal and informal learning experiences;

4. select apprentices on a nondiscriminatory basis and in accordance with criteria agreed upon jointly with secondary and postsecondary partners;

5. structure worksite learning assignments, not to exceed 20 hours per week, so that they support classroom learning at the school site(s);

6. participate in training activities for mentors and others associated with the YA program;
7. provide input to secondary and postsecondary partner institutions regarding modifications in school curriculum needed to support worksite learning;

8. assist in the development of worksite learning competencies that increase in scope and sophistication throughout the duration of the program and that provide apprentices with broad-based exposure to company functions;

9. provide tuition assistance to assist apprentices with related associate degree study when possible and appropriate; and

10. offer program completers full-time employment when possible and appropriate.

I. Role of the Postsecondary Institution

In the Pickens County Youth Apprenticeship Initiative, the community college is actively involved in planning, implementing, and monitoring the YA program. We believe the role of postsecondary (community college) institutions is to:

1. participate in joint planning for coordinated curriculum, work-based competencies/standards, and mentor training;

2. participate in joint development of student assessment and orientation procedures;

3. assist in the development of advising and promotional materials;

4. coordinate articulation opportunities with secondary curriculum (including work-based learning competencies);

5. develop tuition assistance and/or scholarship opportunities with business partners;

6. develop advanced technology certificates (post-associate degree) corresponding to specialized needs of area employers.

7. monitor/coordinate/co-evaluate learning experiences of apprentices when they progress to the postsecondary level;

8. develop mechanisms enabling flexible course scheduling for postsecondary apprentices;

9. provide postsecondary apprentices with structured opportunities to analyze and reflect upon their worksite learning experiences;
10. expand academic advising and counseling services for postsecondary apprentices;

11. develop processes to transcript credit for work-based learning;

12. develop/expand transfer opportunities with four-year colleges;

13. coordinate development and awarding of certificates of completion for workplace competencies; and

14. develop and maintain mechanisms to inform secondary partners of progress of postsecondary apprentices.

J. Words of Caution

As a result of our experience in developing and implementing Youth Apprenticeship programs, we have identified a few issues that may be helpful for others to consider.

1. While some employers may express interest in Youth Apprenticeship, they may be reluctant to participate in all that is required of a business sponsor. In such cases we have encouraged those employers to participate in other options, such as cooperative education and student internships. (In a few instances employers may be seeking part-time employees, rather than an opportunity to become active partners in an educational initiative.)

2. An early surge of enthusiasm may cause faculty, administrators, and others to jump on the Youth Apprenticeship band wagon. Because YA programs require considerable time and effort to develop, it is important to begin with one pilot area so that a solid foundation is established before the program is expanded.

3. Program coordinators may be tempted to select an occupational area for YA that is experiencing enrollment declines or that suffers from an image problem within the school community. It is suggested that YA areas be selected based on the support of area employers and the extent of their interest in hiring program completers.
K. Words of Advice for Planning Youth Apprenticeship Programs

As with any new educational initiative, it is important to have a common vision for change and to encourage its acceptance by those individuals who will help turn the vision into a reality. Staff at Jobs for the Future in Cambridge, Massachusetts, suggest that in order to promote your vision, you should:

1. Start at the top.
2. Start at the bottom.
4. Determine when and how to involve others.
5. Be genuine about involving others.
6. Make the message clear and compelling.
7. Deliver the message often.
8. Deliver the message again.
9. Share credit.
10. Keep the initiative visible over time.
II. PROGRAM PLANNING CHECKLIST

The activities in this checklist assume that some foundation for Youth Apprenticeship already exists as a result of developing a comprehensive Tech Prep program. You should also understand that the checklist is not intended to represent linear, sequential activities. In other words, a number of activities should occur simultaneously in order to develop an effective YA program.

A. Building Interest and Setting a Direction

1. Gather and review published material on Youth Apprenticeship. (See bibliography in APPENDIX D.)

2. Talk with others (school/district, community college, business personnel) to inform and stimulate interest; send articles and general information to key individuals.

3. Get support from appropriate school/district administrators to pursue program development.

4. Form a small school/district-based task force to begin developing a working definition of YA that meets the needs of your area. (Suggestion: Read professional publications as well as materials from exemplary programs.)

5. Identify district/school, state, and other policies which might affect your YA program development.

6. Expand a school-based task force to include other key partners (business, community college, Tech Prep consortium) needed for a planning team.

7. Continue refining your approach, including definitions and desired program elements. Consider the following issues:
   - What will the target student population be?
   - What will the primary purpose be? (Education for high-skilled careers? Intervention and training for at-risk students?)
   - What credentials will be provided to program completers?
   - Will the program be registered?
   - How will standards for workplace training be determined?

8. Determine whether or not there is sufficient interest and commitment from all partners to continue developing YA.

9. Identify an interim YA coordinator who will devote at least half-time to program development. (Note: Individual should have access to a reasonable amount of office/clerical support.)
10. Identify areas of responsibility for all major partners; develop written agreements. (See sample in APPENDIX E.)

11. Based on key elements outlined in Section B (Developing the Program), design an implementation plan and identify timeframes for completion of objectives. (See sample form in APPENDIX F.)

B. Developing the Program

1. Governance, Administration, and Budget
   a. Identify administrative responsibility for the secondary portion of the YA program.
   b. Identify administrative responsibility for the postsecondary portion of the YA program.
   c. Determine how apprentices will be paid and their hourly wage at each stage of the apprenticeship program.
   d. Identify how transportation issues will be addressed for participating students. (Will they be expected to provide their own transportation? What contingency plans can be made when students experience temporary difficulty with their planned mode of transportation?)
   e. Identify ways to shelter apprentices from company layoffs.
   f. Develop comprehensive, on-going marketing and informational campaigns for internal audiences (school community) and external audiences (local community).
   g. Identify ways in which special needs students may participate and accommodations which must be made in order to support their participation.
   h. Develop an estimated budget to support the first year of YA implementation. (See sample form in APPENDIX G.) Areas to consider when building a budget are:
      - personnel costs (staff salaries/fringe)
      - contractual services (consultant fees, substitute teacher/release time costs, professional development of videos and/or brochures)
      - travel (local, regional/national)
      - staff development (purchased materials, printing for locally-developed materials, registration fees for conferences)
      - office supplies/support (envelopes, stationery, postage, computer diskettes, word processing software, postage)
      - equipment (PCs for coordinator, secretary)
2. School Curriculum (Grades 11-14)

a. Identify the occupational specialty area for Youth Apprenticeship. (Analyze employer needs and strength of current secondary/postsecondary curricula in each area being considered.)

b. Analyze current exit outcomes (grade 14) against employer requirements and exit competencies for grade 12 for selected occupational area.

c. Improve secondary and/or postsecondary occupational curriculum based on analyses.

d. Expand integration of academic and occupational curricula appropriate to support the YA program; identify ways of integrating workplace assignments with school-based applied academic and occupational curricula.

e. Expand articulation agreements, if appropriate, enabling greater opportunities for advanced standing in community college programs.

f. Design one or more advanced technology certificates (post-associate degree) corresponding to specialized technical needs of area employers.

3. Work-Based Curriculum (Grades 12-14)

a. Secure commitments from multiple business partners to sponsor apprentices; determine the number of apprenticeship slots per sponsoring company.

b. Based on analysis of current curriculum (2-b), determine when students should be placed in YA assignment (i.e., related to understanding/competence in technical area).

c. Develop work-based competencies that students should master during grade 12 and the summer after high school graduation. (NOTE: It is recommended that business partners agree on a common core of competencies, including broad-based exposure to company functions, as well as develop elective skills unique to each company. See APPENDIX H for a sample of work-based learning competencies for the secondary level of the PCYAI.)
d. Based on analysis of postsecondary curriculum (2-b) and employer needs, identify work-based competencies that students should master during grades 13 and 14 and during the summer between those years. (NOTE: It is recommended that business partners agree on a common core of competencies, including broad-based exposure to company functions, as well as develop elective skills unique to each company.)

4. Guidance and Student Support Activities

a. With input from all key partners, design a process for identifying YA participants. Some areas/issues to consider are:

- Should students complete an application stating why they want to participate, what they can offer a sponsoring employer, and how YA relates to their career goals?

- Should specialized testing be required? If yes, what is being measured and what instruments are the most appropriate?

- Should other criteria be required? (Overall grade point average or grades in specific courses? Attendance records? Teacher recommendation? Parent recommendation/letter of support?)

- How should the company sponsors be involved in selecting apprentices? (Should students submit resumes to prospective employers? Complete on-site interviews?)

b. Develop informational and promotional materials to support the YA program. (Examples: program brochure, video)

c. Conduct awareness activities designed to increase student, parent, counselor, and teacher understanding of YA and corresponding career opportunities. (NOTE: If students do not have clear career goals which correspond to their involvement in YA, they will view their worksite assignment simply as a part-time job.)

d. Develop a student handbook. (See APPENDIX I for a summary of contents from the PCYAI student handbook.)

e. Design an orientation program for students based on review of similar activities used in other programs, teacher input, community college input, and employer input. (Suggestion: The Workplace Readiness curriculum developed by the Agency for Instructional Technology can be a worthwhile part of a student orientation program.)

f. Design an orientation program for parents based on review of similar activities used in other programs and input from teachers, business partners, and community college partners. (Active support from parents is essential to an effective YA program!)
5. Mentor Training and Program Support Activities

☐ a. Define appropriate roles and responsibilities for mentors and supervisors. (NOTE: In some situations, these functions are performed by the same person.)

☐ b. Identify appropriate persons at the worksite to act as mentors and/or supervisors to student apprentices.

☐ c. Develop a mentor guide. (See example of mentor guide topics in APPENDIX J.)

☐ d. Design and conduct mentor training.

☐ e. Identify and implement processes for mentors.supervisors to provide feedback to schools regarding the effectiveness of school curriculum and any problems that may arise with student performance or program administration.

☐ f. Develop and/or refine processes to provide employer-sponsored tuition assistance for postsecondary apprentices.

6. Postsecondary Oversight and Awarding of Credentials

☐ a. Identify someone at the postsecondary institution who will coordinate program activities for postsecondary apprentices.

☐ b. Implement procedures, in collaboration with business partners, required to develop and award certificates of completion for worksite learning.
C. Evaluating and Expanding the Program

1. Identify and implement methods of continually assessing effectiveness of specific program components and communication mechanisms between schools and employers/mentors.

2. Examine program evaluation processes used by other sites and determine what should be evaluated for your program. (Student performance and satisfaction with the program? Employer/mentor performance and satisfaction with the program? Full-time employment rates for completers?)

3. Develop surveys and other data collection devices to gather information required for evaluation.

4. Develop methods of reporting results and identify key persons/groups that should receive evaluation outcomes.

5. Implement procedures to utilize evaluation outcome information in planning program revisions.

6. Identify appropriate occupational areas for program expansion. (NOTE: Review Section I-J, Words of Caution.)

7. Repeat steps outlined in this booklet to complete planning required for program expansion.
Dotted lines indicate areas where business/industry involvement occurs.
P.A.C.E.
TECH PREP Components

- Curriculum Enhancement (secondary/postsecondary)
- Technical Advanced Placement (articulation)
- Tuition Assistance through Local Industries
- Course Planning and Career Understanding (middle/junior high, high school)
- Technical Advanced Study (college courses in high school)
- Activities for Parents

School-to-Work Transitions Activities

- Youth Apprenticeship
- Adult/registered apprenticeship
- Coordinated co-op (secondary/postsecondary)
- Shadowing
- Community service
- [Summer internships]
P.A.C.E. MODEL FOR TECH PREP

Career Understanding for Mid-level Technologies
(grades 6-8)

Tech Prep Curriculum
(grades 9-12)

Introduction to Technologies
(grade 9)

Academic Base + Technology Base

- sequentially build students' academic skills
- use applied academics, CP courses or combination
- use local and other applications to enhance academics and provide career understanding
- use existing occupational courses
- students select courses to meet career goals and to qualify for advanced standing

Postsecondary (two-year college) with advanced standing
- Technical Advanced Placement (articulation)
- Technical Advanced Study (college courses taken during grade 12)

- certificate
- diploma
- associate degree
  + option to earn certificate in advanced technologies

workforce / mid-level technology positions:
- industrial/engineering technologies
- health technologies
- public service technologies
- business technologies
Machine Tool Technology (MTT) APPENDIX B

Apprenticeship Options

**YOUTH APPRENTICESHIP**

9-10 Grade HS Tech Prep

↓

11 Grade Machine Shop (Career Center)

↓

Evaluation & Selection

↓

12 Grade 1/2 day High School/Career Center

↓

High School diploma/Vocational Certificate

↓

Technical Advanced Placement (TAP)

↓

Related Curriculum Courses & Advanced MTT Core courses

↓

Associate Degree

↓

Advanced MTT Core Courses

↓

20-40 hr/wk Apprenticeship

↓

DOL or Local Apprenticeship Credential

↓

Associate Degree

**ADULT APPRENTICESHIP**

Asset Testing & Mechanical Testing

↓

First Semester MTT Courses

↓

Evaluation & Selection

↓

Basic MTT Courses

↓

Advanced MTT Core Courses

↓

Related Curriculum courses

↓

Associate Degree

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(May 1993)
Youth Apprenticeship and Insurance Liability

A Fact Sheet Prepared by Jobs for the Future National Youth Apprenticeship Initiative

This fact sheet presents general guidelines for understanding liability issues surrounding youth apprenticeship. Also included are innovations at the state and local level that have tried to lessen the costs and responsibility of employers. The final section points out ways in which practitioners feel their programs could benefit from changes in state or federal laws and policies.

Readers of this fact sheet should also see the JFF Fact Sheet entitled "Youth Apprenticeship and Child Labor Laws" and the matrix "10 Site Practices on Employment, Pay and Insurance Liability for Youth Apprentices."

Liability issues can be broken down into three general categories—a student’s transportation to and from the jobsite; the time spent on the job; and post-employment. While many initial questions have been raised about the added expense or complication of having students on the jobsite, youth apprenticeship program designers have found most of the legal issues straightforward and costs minimal (with the exception of transportation). In fact, a brief inquiry conducted by the youth apprenticeship program in Pennsylvania found that the addition of 16-year-olds to a workforce would not increase insurance premiums.

Liability is largely dependent on who is the actual employer of the youth apprentice. Aside from the company itself, a school or a third-party might also act as the employer. In Maine, technical schools will act as the agent for the student apprentice. The schools will bill the employers for hours worked by the student. In the Tulsa Craftsmanship 2000 program, a 501(c)(3) acts as the employer and is thus responsible for all liabilities.

Transportation

In general, the party responsible for transportation is also liable in the case of an accident. If the school is transporting the student, then normal school bus coverage applies. The same is true if the employer covers transportation.

Some programs have students sign an agreement at the beginning stating that they are responsible for their own transportation. Teachers and administrators cite precedent for this in cooperative education programs. In the case of a student driving him/herself to the workplace during the school day, there should be no difference from liability issues for students getting to school or an extra-curricular activity.
Under an up-front agreement, some programs state that if a student chooses to transport her/himself, then the school is not liable and the student’s own insurance should apply.

The Careers and Occupational Awareness-Check into Health (COACH) program in Michigan has a letter from the school system’s insurer stating that it would cover students participating in the program except when they are actually on the job and being paid by the employer. In the absence of a student’s own insurance, the school would, in that case, be the liable party.

In Philadelphia the school has had to provide urban students with costly transportation to workplaces in outlying areas, because local auto insurance rates are prohibitively high for youth.

Project ProTech students in Boston rely on public transportation to their jobs in city hospitals. The school system provides students with a transit pass.

Oakland, CA, Health and Bioscience Academy students are provided with a transit pass for the first month of their paid internship, either by the school system or the employer.

Cambridge-Lesley Careers in Education students either walk or ride the elementary school bus to the schools where they work as teacher’s aids. As unpaid volunteers, they remain under school liability policies.

When mentors of Oakland, CA, Health and Bioscience Academy transport students, they are required to notify the school district of their plans ahead of time, in writing. Provided they do this, the school district provides insurance coverage, similar to a school field trip.

Workers' Compensation

A student in an observer or volunteer role in the workplace is, in effect, still in an extension of the school. Once the student becomes actively involved in the work, and/or begins to operate equipment, or is paid by the employer, then s/he becomes an employee of the firm. The student then comes under the employer’s workers’ compensation coverage.

Oregon legislation on youth apprenticeships specifically states that the training agent—the employer—shall provide workers’ compensation coverage for youth apprentices.

As the employer, Maine technical schools are legally responsible for workers' compensation coverage. This is structured into the program so as
to avoid the disincentive of workers' compensation costs to the employer. Health insurance may eventually be done in a similar manner.

♦ In Pickens County, SC, students working for very small employers unable to provide workers' compensation will be covered under the State School Board Association's policy. The state board is self-insured, and cooperative students have been added to the policy in the past for no extra charge.

♦ Some Oakland, CA, Health and Bioscience Academy students are paid by the school district with federal grant money. These students are covered by the school district.

Unemployment Insurance

Unemployment insurance is generally not provided to youth apprentices, either by specific state legal exemption or by the fact that they are part-time employees.

♦ In Pennsylvania, the work of a student learner under 22 who is enrolled at a non-profit or public education institution that grants credit for academic/work experience activities is not considered when determining the eligibility of an individual for unemployment compensation benefits.

♦ Michigan law states that student learners are not eligible for unemployment insurance.

♦ Project ProTech employers in Boston have agreed to make youth apprenticeship students immune to any company lay-offs.

Liability for student actions on the job

An employer is liable for the finished product or service produced in her/his establishment.

Policy Changes recommended for youth apprenticeship

♦ State coverage of transportation reimbursement for schools.

♦ State insurance coverage for employers and/or students who wish to provide their own transportation.

♦ State provision of workers' compensation in situations in which employers are unable to provide coverage because of their size.
Since youth apprenticeship is designed to give students paid work experience, program planners must be well-versed in existing federal and state laws regarding the employment of minors. Statutes and administrative regulations establish legal guidelines on the number of hours minors may work, the types of jobs they can perform, necessary safety precautions, and the amount and form of compensation. The guidelines can affect both program and system design.

This fact sheet summarizes some basic aspects of federal law and presents the experience and innovations of ten different sites in developing youth apprenticeship within the guidelines of this law. The final section lays out how federal and state law regarding child labor and work-based learning might be changed to help support youth apprenticeship while maintaining the protections for minors that are the goal of child labor laws.

Readers of this fact sheet should also refer to the JFF Fact Sheet entitled "Youth Apprenticeship and Insurance Liability" and the matrix "10 Site Practices on Employment, Pay and Insurance Liability for Youth Apprentices."

Federal and State Laws

Laws regarding the employment of minors exist both at the federal and the state levels. The federal and state governments share jurisdiction in this area. Federal law on the employment of minors in nonagricultural work is summarized in "Child Labor Bulletin No. 101: Child Labor Requirements in Nonagricultural Occupations," based on the Fair Labor Standards Act (FLSA) (See Appendix 1). Readers interested in agricultural employment of minors should see "Child Labor Bulletin No. 102." References to the employment of minors hereafter will be to nonagricultural employment.

All states also have child labor laws. Individual state laws on youth employment are issued by the state department of labor and can be easily obtained. State child labor laws and/or other federal laws, such as those relating to occupational health and safety, etc., may have higher standards. In general, the more stringent standard must be observed. This is also true for state vs. federal minimum wage laws—the higher minimum applies.
Federal law establishes standards for two distinct groups of youth—14 and 15 year-olds and 16 and 17 year-olds. The law treats persons who are at least eighteen years of age as adult workers.

In general, minimum age standards are as follows:

- **Ages 14 or 15.** A minor must be at least 14 years of age to be employed in specified occupations, outside school hours, for limited periods of time each day and each week. The FLSA limits 14 and 15 year-olds to specific occupations when employed in retail, food service or gas establishments. The law forbids employment in most other industries, including manufacturing, processing, transportation and communication, unless the youth is involved in a Work Experience and Career Exploration Program (see below). In addition, 14 and 15-year-olds are prohibited from working in any of the occupations deemed by the U.S. Secretary of Labor as hazardous, with no exceptions.

- **Age 16.** Sixteen years is the basic minimum age for employment in the United States. At 16 years of age, youths may be employed in any occupation other than one declared hazardous by the Secretary of Labor. (The sections below list Hazardous Occupations and Exemptions).

- **Age 18.** Minimum age for employment in nonagricultural occupations declared hazardous by the Secretary of Labor.

**Time and Hour Restrictions**

Federal law restricts the number of allowable work hours for 14 and 15 year-olds. Fourteen and 15-year-olds are *not permitted to work*:

- during school hours;
- before 7 a.m. or after 7 p.m. (except 9 p.m. from June 1 through Labor Day);
- more than three hours per day on school days; or
- more than 18 hours per week during school weeks.

Students enrolled in Work Experience and Career Exploration Programs (see definition below) may be employed during the school day and up to 23 hours in a school week. (Appendix 2 lists federal and individual state hour restrictions).

Federal law does not restrict the time or duration of employment for 16 and 17-year-olds. Some states have set limits for this group. Wisconsin, for example, limits 16 and 17-year-olds to 4 hours of employment on school days.
Hazardous Occupations

The Secretary of Labor has declared 17 occupations to be particularly hazardous or detrimental to the health and well-being of 16 and 17-year-olds. These include, for example, manufacturing and storing explosives; motor-vehicle driving and outside helper; exposure to radioactive substances; power-driven hoisting apparatus; mining (other than coal mining); power-driven bakery machines; manufacturing brick, tile and kindred products; and wrecking, demolition and shipbreaking operations.

In some cases, careful structuring of the workplace component can ensure that students do not operate certain machinery, thus satisfying U.S. Department of Labor concerns. States may have additions to this list. Exemptions exist for apprentices and student learners in some of these occupations (see "Exemptions" below).

Youth apprenticeship programs geared toward manufacturing, metalworking and health care bear the greatest concern for specifics of this section of the law, since occupations that involve power-driven metal forming, punching and shearing machines and those involving exposure to radioactive substances and to ionizing radiations are considered hazardous. Exemptions exist in the former category, but not the latter.

Legislation establishing youth apprenticeship in the State of Oregon states that "in licensed trades and in hazardous occupations, on-the-job training for students 16 years of age may be simulated cooperatively at industry training centers." Discretion as to where this training will take place—on the job site or in the training center—lies with the apprenticeship committee employing the youth.

Exemptions for Educational Programs: WECEP, Apprenticeship and Student Learner

Minors enrolled in certain kinds of school or apprenticeship programs are exempt from some provisions of federal and state laws.

Work Experience and Career Exploration Programs. WECEP programs provide 14 and 15-year-olds with exposure to the workplace, linked with classroom job-related and employability skills instruction for which credit is granted. The FLSA states that WECEP programs must be administered by a school under the authority of the State Educational Agency and with approval of the Wage and Hour Division Administrator of the U.S. Department of Labor. Enrollment allows a student to work during school hours, up to 3 hours in a day and 23 hours in a school week. Students also may work in certain occupations
otherwise prohibited for which a variation has been granted by the Administrator of the Wage and Hour Division.

Apprentices. The 16 or 17-year-old apprentice must be employed in a craft recognized as an apprenticeable trade and registered by the Bureau of Apprenticeship and Training (BAT) of the U.S. Department of Labor or the state equivalent. Apprentices are permitted to perform some of the occupations deemed hazardous by the law, provided they are employed under a set of specified conditions.

An apprentice is permitted to perform some of the occupations deemed hazardous by the law, provided the work is incidental to his or her training; such work is intermittent and for short periods of time; and that the work be performed under the direct and close supervision of a journeyman.

Practitioners and Department of Labor officials interpret the terms “incidental” and “intermittent” to mean that a minor may operate certain types of machinery, for example, in order to learn about it, but should not be employed as a regular operator. Case law may further clarify these definitions.

The link of this apprentice status to apprenticeable occupations and to BAT places limits on its applicability to youth apprenticeship. Most apprenticeship programs require entrants to be 18 years old and hold a high school diploma or equivalent.

Student learner. The student learner is also permitted to be employed in certain hazardous occupations. S/he must be:

(1) enrolled in a cooperative vocational program recognized by the state or local educational authority, or in a similar program conducted by a private school; or

(2) employed under a written agreement that contains the student's name and is signed by the employer and the school coordinator or principal. The agreement must provide that:

(i) the work in hazardous occupations is incidental to the training;

(ii) such work is intermittent and for short periods of time, and under the direct and close supervision of a qualified and experienced person;

(iii) safety instruction must be given in schools and integrated with on-the-job training; and

(iv) a schedule of organized and progressive work processes to be performed on the job is prepared.

The student learner status is the one most frequently used by youth apprenticeship programs in that most (though not all) states have cooperative education programs in place. Some states are working toward development of
youth apprenticeship programs that satisfy the requirements of the student learner provisions under the federal law.

- The State of Oregon hopes to gain Department of Labor approval for its 18-week career exploration and work experience program, leading to youth apprenticeship with a certified training agent.

- The proposed National Youth Apprenticeship Act of 1992 (S.2745 and HR.5220) would amend FLSA to recognize youth apprentices enrolled in certified youth apprenticeship programs as student learners. Youth apprentices would receive the same protections and be treated the same as student learners under existing law.

- Proposed Pennsylvania legislation regarding secondary education would recognize youth apprenticeship as a means of secondary education completion. This would permit the youth apprentice to operate under the same exemptions as the "student learner."

Safety and Health

Safety instruction must be provided to the student learner by the school and correlated by the employer with on-the-job training. OSHA regulations do not apply to schools since they are public employers. However, if a student's school experience is at work, then whatever OSHA regulations apply to the workplace are relevant.

- The Careers and Occupational Awareness-Check into Health (COACH) program in Kalamazoo, MI has found that in order to work in health occupations, students must have a TB test, a second MMR (Mumps, Measles, and Rubella) vaccination, and a Hepatitis B vaccination. The Hepatitis B vaccination costs approximately $120. For students not covered by their parent's or social service plans, the school system will have to pick up the bill.

- Project ProTech students working in Boston hospitals were given various tests, and/or immunizations prior to commencing work.

Work Permits and Agreements

The federal laws allow employers to protect themselves from unintentional violation of the child labor provisions by keeping on file an employment or age certificate for each minor employed. States often go beyond this to require that
minors obtain a work permit or educational certificate from their school district prior to gaining employment.

In accordance with federal law, the student learner must be employed under a written agreement providing for safety instruction, supervision and an schedule of organized and progressive work processes for the student. This agreement must include the student's name and be signed by the employer and the school coordinator or principal.

Youth apprenticeship programs have developed their own training agreements that include further clarification of expectations, rules and responsibilities (See Appendix 3 for Pennsylvania sample).

- The Pasadena, CA School District issues work permits to all students under 18 seeking any type of employment. Undocumented foreign students in the Partnership Academy have been unable gain a permit because they do not have a social security number.

- Foreign-born Pasadena Partnership Academy students have been unable to gain employment in defense-related industries due to citizenship requirements.

Stipends and Wages

The FLSA requires the payment of minimum wage. Federal exemptions do exist for trainees and student learners, although individual state laws may override them. According to Department of Labor officials, the key determinant to the appropriate form and level of payment is the employment relationship, that is whether the student is a regular employee, a trainee or a student gaining work-related experience as part of her/his education.

Under certain conditions as specified in Section 14 of the FLSA, employers may pay a training wage of at least 85 percent of the minimum, but not less than $3.35 an hour for up to 90 days to employees under the age of 20. The FLSA prohibits employers from displacing employees in order to hire employees at the training wage. Provisions regarding the training wage expire March 31, 1993.

Section 14 of the FLSA also allows for the payment of a sub-minimum wage to student learners under certificate of the Department of Labor. Such certificates are granted only if the students' work is seen and treated as part of their education.

Student learners in some youth apprenticeship and cooperative vocational education programs are given a stipend—payment not linked specifically to hours or production. This is done in the interest of cost, and of not adding students to employers' payrolls.
Students in Broome County, NY receive a stipend that is below minimum wage. Parents and students are made aware of this ahead of time. The school bills the employer for a student’s time and, in turn, pays the student.

Massachusetts requires that an employer pay at least minimum wage to students enrolled in any type of educational work program.

In Oregon, where youth apprenticeship is linked to certified adult apprenticeship programs, legislation mandates that the student youth apprentice “. . . shall begin at a wage that is 80 percent of the first period of the apprenticeship wage established by the appropriate apprenticeship committee for the applicable standards, but shall not be less than the state minimum wage.” In addition, “youth apprentices shall be evaluated for wage increases consistent with the policies established by the participating local apprenticeship committee.”

Maine plans to stretch students’ pay over 52 weeks of the year, although students will be working fewer weeks. This will be done under an initial overall agreement among the student, parent or guardian, employer and school.

All Tulsa youth apprentices are given a stipend equal to minimum wage for 40 hours per week, 220 school days per year. They are paid for school and work time, and can earn a bonus for earning good grades.

Students working in Boston hospitals are evaluated for raises based on work performance.

In certain instances, unions have taken positions on the stipends vs. wage question. In Broome County, NY, unions and workers supported the concept of a stipend because non-hourly workers would not be included in lay-off decisions, etc. At a site in Pennsylvania unions preferred a straight wage accompanying a clearly defined skill level, more in line with standard wage-skill grades for the general workforce.

Families of Oakland, CA, Health and Bioscience Academy students have been reluctant to have them earn wages that may jeopardize the family’s public assistance grant. In some cases, the school system has been able to ensure that the grants would not be reduced, while in other cases the students have had to volunteer rather than be paid a wage.

Thoughts about Child Labor Policy Changes and Clarifications for Youth Apprenticeship

Federal legislation must recognize and allow student learners to be enrolled in youth apprenticeship programs.
State child labor laws that restrict work in certain occupations should be reviewed and updated where appropriate.

Maximum allowable work hours for 16 and 17-year-olds should allow students the option of 2-3 week blocks at work. Some state child labor laws are based on the assumption that students will always spend some part of the school day in school.

Federal law should permit immigrant students awaiting proper documentation to gain employment. Precedent for this exists for foreign college students in the U.S. Under federal law, foreign students are permitted to work at jobs related to their curriculum, provided they are granted credit for such work from the post-secondary institution.

States should ensure that wages earned by students of families on public assistance do not reduce or jeopardize the family's aid package.
## Jobs for the Future Youth Apprenticeship Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Contact Information</th>
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<tbody>
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<td>Careers in Education, Cambridge, Massachusetts</td>
<td>Ms. Maria Ferri&lt;br&gt;Mr. Larry Rosenstock&lt;br&gt;Rindge School of Technical Arts&lt;br&gt;459 Broadway&lt;br&gt;Cambridge, MA 02138&lt;br&gt;Phone: (617) 349-6717 or 6751&lt;br&gt;Fax: (617) 349-6770</td>
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<tr>
<td>Cornell Youth Apprenticeship Demonstration Project, Broome County, New York</td>
<td>Dr. Stephen Hamilton&lt;br&gt;Ms. Mary Agnes Hamilton&lt;br&gt;Cornell Youth and Work Program/Dept. of Human Development and Family Studies&lt;br&gt;Cornell University&lt;br&gt;G-62B Martha Van Rensselaer Hall&lt;br&gt;Ithaca, NY 14853&lt;br&gt;Phone: (607) 255-8394&lt;br&gt;Fax: (607) 255-9836</td>
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<tr>
<td>Craftsmanship 2000, Tulsa, Oklahoma</td>
<td>Mr. A. Wayne Rowley, Executive Director&lt;br&gt;Metrol. Tulsa Chamber of Commerce&lt;br&gt;616 South Boston&lt;br&gt;Tulsa, OK 74119&lt;br&gt;Phone: (918) 585-1201&lt;br&gt;Fax: (918) 585-8016</td>
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<tr>
<td>Health Occupations Program, Kalamazoo County, Michigan</td>
<td>Mr. Thomas B. Conor, Director&lt;br&gt;Career-Technical Education&lt;br&gt;Comstock Public Schools&lt;br&gt;301 North 26th Street&lt;br&gt;Comstock, MI 49041&lt;br&gt;Phone: (616) 388-9484&lt;br&gt;Fax: (616) 383-4490</td>
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<tr>
<td>Oakland Health and Bioscience Academy, Oakland, California</td>
<td>Ms. Patricia Clark, Director&lt;br&gt;Oakland Technical High School&lt;br&gt;4351 Broadway&lt;br&gt;Oakland, CA 94611&lt;br&gt;Phone: (510) 658-5300 Ext. 300&lt;br&gt;Fax: (510) 524-0734 ring 6x</td>
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<td>Pasadena Graphic Arts Academy, Pasadena, California</td>
<td>Dr. Judy Coddin, Principal&lt;br&gt;Pasadena High School&lt;br&gt;2925 E. Sierra Madre Blvd.&lt;br&gt;Pasadena, CA 91107&lt;br&gt;Phone: (818) 798-8901</td>
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<tr>
<td>Pennsylvania Youth Apprenticeship Program Sites, Pittsburgh, Philadelphia (2), Williamsport and York-Lancaster</td>
<td>Ms. Jean Wolfe, Program Director&lt;br&gt;Ms. Sharon Wherley, Project Coordinator&lt;br&gt;c/o Mantec, Inc.&lt;br&gt;P.O. Box 5046&lt;br&gt;York, PA 17405&lt;br&gt;Phone: (717) 843-2898&lt;br&gt;Fax: (717) 854-0087</td>
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<tr>
<td>Pickens County Youth Apprenticeship Program, Easley, South Carolina</td>
<td>Ms. Frances Stokes, Apprenticeship Coordinator&lt;br&gt;School District of Pickens County&lt;br&gt;1348 Griffin Mill Road&lt;br&gt;Easley, SC 29640&lt;br&gt;Phone: (803) 855-8150&lt;br&gt;Fax: (803) 855-8159</td>
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<td>Project ProTech-Health Care, Boston, Massachusetts</td>
<td>Ms. Lois Ann Porter, Program Director&lt;br&gt;Boston Private Industry Council&lt;br&gt;2 Oliver Street&lt;br&gt;Boston, MA 02109&lt;br&gt;Phone: (617) 423-3755&lt;br&gt;Fax: (617) 423-1041</td>
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<tr>
<td>Roosevelt Renaissance 2000, Portland, Oregon</td>
<td>Mr. James Wermersing, Director&lt;br&gt;Roosevelt High School&lt;br&gt;6941 North Central Street&lt;br&gt;Portland, OR 97203&lt;br&gt;Phone: (503) 280-5138&lt;br&gt;Fax: (503) 280-7800</td>
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U.S. Department of Labor Youth Apprenticeship Sites

The Quality Connection
DuPage County, Illinois
Ms. Tana Petrich, Regional Manager
National Alliance of Business
11 E. Adams, #1008
Chicago, IL 60603
Phone: (312) 341-9766
Fax: (312) 341-3491

Gwinnett County Youth Apprenticeship Program
Lawrenceville, Georgia
Mr. Roger D. Sartor, Project Director
610 West Crogan Street
Lawrenceville, GA 30245
Phone: (404) 822-6421
Fax: (404) 822-6408

Illinois Youth Apprenticeship Program
Springfield, Illinois
Ms. Fran Beauman
Illinois State Board of Education
100 North First Street
Springfield, IL 62777
Phone: (217) 782-4620
Fax: (217) 782-0679

Manufacturing Technology Partnership Program
Flint, Michigan
Ms. Susan Richvalsky, Business/Industry Liaison
Flint Board of Education
GASC Technology Center
G-5081 Torrey Road
Flint, MI 48507
Phone: (313) 760-1444
Fax: (313) 760-7759

Middle Georgia Technical Institute
Warner Robins, Georgia
Mr. Billy G. Edenfield, Project Director
1311 Corder Road
Warner Robins, GA 31088
Phone: (912) 929-6800
Fax: (912) 929-6835

OaklandWorks
Oakland, California
Ms. Allie Whitehurst-Gordon
Manager, Magnet Programs
Oakland Unified School District
1025 Second Avenue
Oakland, CA 94606
Phone: (510) 836-8614
Fax: (510) 836-8607

Pennsylvania Youth Apprenticeship Program
Sites in Pittsburgh, Philadelphia (2), Williamsport
and York-Lancaster
Ms. Jean Wolfe, Program Director
Ms. Sharon Wiserley, Project Coordinator
c/o Mantec, Inc.
P.O. Box 5046
York, PA 17405
Phone: (717) 843-2898
Fax: (717) 854-0087

MechTech, Inc.
Baltimore, Maryland
Mr. Bob Fiaella, Director
800 S. Rolling Road
Baltimore, MD 21228
Phone: (410) 455-4548
Fax: (410) 455-4952

Project ProTech–Financial Services
Boston, Massachusetts
Ms. Lois Ann Porter, Project Director
Boston Private Industry Council
2 Oliver Street
Boston, MA 02109
Phone: (617) 423-3755
Fax: (617) 423-1041

Scripps Ranch High School
San Diego, California
Ms. Barbara Brooks, Project Director
c/o Mission Beach Center
818 Santa Barbara Court
San Diego, CA 92109
Phone: (619) 621-9020
Fax: (619) 488-3925

Jobs for the Future: LEARNING THAT WORKS
U.S. Department of Labor Youth Apprenticeship Sites continued

Seminole County School District/
Siemens Stromberg-Carlson
Sanford, Florida
Ms. Betty Hogle, Project Director
1211 Mellonville Avenue
Sanford, FL 32711
Phone: (407) 322-1252, Ext. 240
Fax: (407) 322-1252, Ext. 426

Toledo Private Industry Council
Toledo, Ohio
Mr. Robert Roman, Director
Youth Apprenticeship Program
331 14th Street
Toledo, OH 43624
Phone: (419) 244-5900
Fax: (419) 241-7865

Workforce LA Youth Academy
Los Angeles, California
Mr. James Konantz, Project Director
Los Angeles Unified School District
644 W. 17th Street
Los Angeles, CA 90015
Phone: (213) 765-3494
Fax: (213) 744-0534

Department of Labor Contact
Ms. Donna Walker, Education Specialist
Office of Work-Based Learning
U.S. Department of Labor
200 Constitution Avenue, NW, Rm N
Washington, DC 20210
Phone: (202) 219-5281
Recommended Reading


### JFF PUBLICATIONS AND PAPERS

#### JFF YOUTH APPRENTICESHIP AND WORK-BASED LEARNING REPORTS

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<td>Learning that Works: A Youth Apprenticeship Briefing Book</td>
<td>1993</td>
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<td>Improving the Transition from School to Work in the United States</td>
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<td>From High School to High-Skilled Health Careers: New Models of Work- and-Learning in Health Care</td>
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<td>Effective Professional Development: A Guide for Youth Apprenticeship and Work-based Learning Programs</td>
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<td>Building A National System For School-To-Work Transition: Lessons From Britain and Australia</td>
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<td>Creating a Youth Apprenticeship Program: A General Guide for Program Design and Implementation</td>
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<td>Pennsylvania Youth Apprenticeship Program: An Historical Account From Its Origins to September 1991</td>
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<td>New Training Strategies for a High Performance Metalworking Industry</td>
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<td>A Feasibility Study of Youth Apprenticeship in Arkansas</td>
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<td>Voices from School and Home: Arkansas Parents and Students Talk About Preparing for the World of Work and the Potential for Youth Apprenticeship</td>
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<td>Voices from School and Home: Pennsylvania Students and Parents Talk About Preparing for the World of Work and a Youth Apprenticeship Program</td>
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<td>Voices from School and Home: Wisconsin Parents and Students Focus on Youth Apprenticeship</td>
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#### JFF STATE REPORTS

**Arkansas:**
- Jobs for Arkanasans’ Future (1986) $3.00

**Colorado:**
- A Call to Action (1990) $10.00
- Education & Training in the Colorado Economy (1990) $5.00
- Developing a Competitive Workforce in Colorado: A Community Workbook (1990) $10.00

**Connecticut:**
- Jobs for Connecticut’s Future (1986) $5.00

**Indiana:**
- Executive Report of the Jobs for Indiana’s Future Program (1989) $10.00
- Education & Training in the Indiana Economy (1989) $5.00

**Mississippi:**
- Seizing the Future: A Commitment to Competitiveness (final report of the Mississippi Special Task Force on Economic Development Planning, 1993) $10.00
- Globally Competitive People (report to the Human Resource Committee, Mississippi Special Task Force on Economic Development Planning, 1993) $5.00
- Report on the Mississippi Employer Survey (1989) $5.00

**Missouri:**
- The Missouri Challenge (1991) $10.00
- Education & Training in the Missouri Economy (1991) $5.00

**Michigan:**
- The Michigan Challenge (1991) $10.00
- Education & Training in the Michigan Economy (1991) $5.00

**Evaluating the Public:**
- Voices From Across America: A Series of Focus Groups on the Economy From Colorado, Indiana, Michigan & Mississippi (1989-1990) $10.00

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<th>Cost</th>
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Subtotal: 

Add 5% sales tax or enclose a tax-exempt certificate  
Tax:  

Add $3.50 for postage if ordering more than three publications  
Shipping:  

Total amount enclosed: 

Please ship to:

Name

Title

Organization

Address

City State Zip Code

Telephone

Jobs for the Future: LEARNING THAT WORKS 46
As a part of a comprehensive Tech-Prep program developed to improve school-to-work transitions, the \textit{Pickens County Youth Apprenticeship Initiative} is designed to benefit the students, employers, schools, and colleges. In a collaborative effort to achieve a successful educational program all parties jointly agree to:

### Business/Industry Site

1. Provide apprenticeship opportunities for the above-named student enrolled in the \underline{program} during the senior year of high school and during the postsecondary segment.
2. Assist educational agencies (secondary and postsecondary) in designing the curriculum for the \underline{program}.
3. Provide the youth apprentice paid work experience and guided learning opportunities of the total manufacturing enterprise.
4. Provide the apprentice with a mentor and participate in appropriate training for workplace mentor/supervisor(s).
5. Monitor progress of the apprentice and work with all partners in evaluating effectiveness of the initiative.

### Instructor/Coordinator - Career Center

1. Provide student with technical instruction related to apprenticeship and work with postsecondary institution to obtain maximum articulation of course work.
2. Coordinate adequate staff development for all parties.
3. Provide adequate counseling and advice to apprentice and to all participants including parents.
4. Monitor progress of apprentice and assist mentor as requested.
5. Act as contact/liaison for all parties named in this agreement.

### Postsecondary (Technical College)

1. Participate in the design and/or refinement of the Pickens County Youth Apprenticeship Initiative.
2. Expand opportunities and ensure smooth transition into postsecondary curriculum.
3. Provide flexible scheduling as appropriate to support apprenticeship activities.
4. Participate in joint staff development programs and assist in the development of activities to support the initiative.
5. Assist partners in development of secondary workplace curriculum and assessment documents.
Parent (s) / Guardian

1. Grant permission and give support for the apprenticeship participation.
2. Inform instructor/coordinator of facts vital to the performance and success of the youth apprentice.
3. Provide transportation for the youth apprentice.
4. Attend any meetings or activities designed to promote or assist the Youth Apprenticeship Initiative.

Student (Youth Apprentice)

1. Be regular and prompt in attendance at school and at the workplace.
2. Obey all rules and regulations at school and at the workplace.
3. Maintain scholastic averages acceptable to school and the workplace.
4. Communicate honestly with workplace mentor regarding job performance.
5. Communicate to Apprenticeship Coordinator or Instructor any concerns or conditions that are interfering with your progress at school or at the workplace.

NAME OF BUSINESS / INDUSTRY

Business/Industry Representative

Career Center Instructor

Youth Apprenticeship Coordinator

Career Center Director

Postsecondary Representative

Parent (s) / Guardian

Student (Youth Apprentice)

Date

The School District of Pickens County does not discriminate in regard to race, color, national origin, or handicapping condition.
# Youth Apprenticeship Program Planning

## Phase:

(Pre-planning, program development, etc.)

## Focus:

(Governance, curriculum development, etc.)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Action Steps</th>
<th>Person(s) Responsible</th>
<th>Resources/Support Required</th>
<th>Time Frame</th>
</tr>
</thead>
</table>
| Develop a mentor handbook | a. review examples from other programs  
b. obtain input from key partners  
c. write and revise draft | Interim Youth Apprenticeship Coordinator | • clerical help  
(for desktop publishing)  
• printing/binding for approximately 50 copies | Sept. - Nov., 1993 |
APPENDIX
## Youth Apprenticeship Program Planning/Budget Development

for ________________ to ________________ (budget period)

<table>
<thead>
<tr>
<th>Program Activity or Service/Explanation</th>
<th>Projected Source of Funding</th>
<th>Amount of Funding Required</th>
<th>Sub-Total Per Category</th>
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<tbody>
<tr>
<td><strong>Personnel</strong></td>
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<td>YA Coordinator Salary (50%)</td>
<td>District Office</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>fringe at 29%</td>
<td>Smith Mfg. Co.</td>
<td>4,390</td>
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</tr>
<tr>
<td>YA secretary (25%)</td>
<td>District Office</td>
<td>4,000</td>
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<tr>
<td>fringe at 29%</td>
<td>Smith Mfg. Co.</td>
<td>1,000</td>
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</table>

Personnel Sub-total: $24,390

APPENDIX G
## Youth Apprenticeship Program Planning/Budget Development

for __________________ to __________________ (budget period)

<table>
<thead>
<tr>
<th>Program Activity or Service/Explanation</th>
<th>Projected Source of Funding</th>
<th>Amount of Funding Required</th>
<th>Sub-Totals Per Category</th>
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<tr>
<td>Contractual Services</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Student Salaries/Stipends/Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Contractual Services Sub-total</th>
<th>Student Salaries/Stipends/Insurance Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>
## Youth Apprenticeship Program Planning/Budget Development

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<th>Projected Source of Funding</th>
<th>Amount of Funding Required</th>
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</tr>
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<td>Staff Development</td>
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<td>Travel Sub-total</td>
</tr>
</tbody>
</table>

58

59

Staff Development Sub-total

APPENDIX G
<table>
<thead>
<tr>
<th>Program Activity or Service/Explanation</th>
<th>Projected Source of Funding</th>
<th>Amount of Funding Required</th>
<th>Sub-Totals Per Category</th>
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<td></td>
<td></td>
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<td>Equipment Sub-total</td>
</tr>
</tbody>
</table>
Youth Apprenticeship Program Planning/Budget Development

for ___________ to ___________ (budget period)

<table>
<thead>
<tr>
<th>Program Activity or Service/Explanation</th>
<th>Projected Source of Funding</th>
<th>Amount of Funding Required</th>
<th>Sub-Totals Per Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
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</tbody>
</table>

Other Sub-total

62

Program Development Sub-total

Other Sub-total
# Youth Apprenticeship Program Planning/Budget Development

for __________________ to __________________ (budget period)

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-Totals Per Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
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<tr>
<td>Contractual Services</td>
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<td>Student Salaries/Stipends/Insurance</td>
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<td>Travel</td>
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<td>Equipment</td>
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<tr>
<td>Program Development</td>
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</tr>
<tr>
<td>Other</td>
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</tbody>
</table>

64  

Grand Total  65
APPENDIX H

PICKENS COUNTY YOUTH APPRENTICESHIP INITIATIVE

Workplace Competencies
Guidelines

The workplace youth apprenticeship experience is designed to augment the academic learning experience. It gives the youth apprentice the opportunity to put into practice the skills learned in the classroom. It exposes the youth apprentice to a variety of workplace skills and provides the opportunity for each apprentice to move to more advanced skills as he/she progresses through the program. The workplace competencies form enumerates the competencies to be demonstrated in the workplace. It is structured as a check-off list broken into two time periods. It is not necessary that the apprentice exhibit all competencies in each time period; however, some competencies may be demonstrated in both. All competencies should be demonstrated at least once during the combined period. Most of the stated competencies are self-evident, but several, such as those filled in by the company, need explanation. Below are some guidelines for those company-specific competencies.

I. Documentation

A. State the specific activity that fulfills the competency.
B. Specify how well the competency has been achieved.

II. Test equipment indigenous to the specific job.

A. List all other equipment used in addition to the voltmeter, ammeter, and multimeter.
B. List general types, not a specific variation of the same type.
C. If more than four types are to be listed, use the back of the paper and provide appropriate documentation.

III. Workplace orientation

A. The apprentice is to be able to spend time in all areas of the enterprise. At least one work period should be spent in each of the other work areas of the company.
B. The time spent in other work areas may include:
   1. Demonstrations
   2. Shadowing
   3. Discussion
   4. Working with employees

IV. Elective Skills

A. Each company may have specific skills required of a technician that are not listed in the checklist. If so, then those skills should be listed here.
B. One such skill would be gaining an international perspective.
C. The apprentice will be sharing these unique skills with the other apprenticeship students in group meetings.
Pickens County Youth Apprentice Initiative

Name

Reporting Period

Workplace Competencies Grading Scale

<table>
<thead>
<tr>
<th>NO</th>
<th>OS</th>
<th>OM</th>
<th>OW</th>
</tr>
</thead>
<tbody>
<tr>
<td>not observed</td>
<td>observed with minimum supervision</td>
<td>observed with supervision</td>
<td>observed without supervision</td>
</tr>
</tbody>
</table>

**Technical**

Read and interpret electronic schematics and electrical diagrams relevant to the specific job site.

---

Read various calibrated scales.

---

Utilize standard test equipment to check for proper operation.

- Voltmeter
- Ammeter
- Multimeter

---

Utilize test equipment indigenous to the specific job.

- Type

---

Check operation of and calibrate transducers.

---

Utilize manufacturers technical data in the maintenance of equipment. (IPBs, parts list, operational theory, etc.)

---

Replace/repair defective components.

---

Determine normal system/circuit operational values.

---

Use common electrical/electronic hand tools.

---
Perform calculations necessary to determine proper system/circuit values.

Utilize basic electrical/electronic relationships (Ohm's law, Kirchhoff's laws, etc.) to isolate malfunctions.

Utilize digital principles (thumbwheel inputs, displays, etc.) as they apply to the work place.

Utilize computer operation appropriate to job site.

Problem Solving

Apply proper problem techniques and logical process to problems.

Identify the physical/mental tools necessary to solve problems.

Master job appropriate procedures used to isolate malfunctions.

Technical Reading

Demonstrate the ability to use technical manuals and data to determine proper methods and procedures for application to job-related problems.
Mathematics

Demonstrate the ability to use basic mathematical skill to perform calculations for problem solving appropriate to the job.

Communications

Uses proper and effective written communications in job-site situations.

Uses proper and effective oral communication in job-site situations.

Team Work

Demonstrate the knowledge of and the need for effective team work.

Works well in a team and is an effective member of the team.

Workplace Orientation

Areas

Elective Skills (Company-Specific)

Skill Type

(August 1993)
APPENDIX I
The purpose of the Student Handbook is to provide information which will help students be successful in their youth apprenticeship experience. The handbook is used in conjunction with the orientation program designed for students who are beginning the youth apprenticeship program.

To obtain a complete copy of this handbook, please contact the Pickens County Youth Apprenticeship Coordinator, Ms. Frances Stokes, at (803) 855-8195.
APPENDIX

J

73
Pickens County Youth Apprenticeship Initiative

Mentor Guide

Summary of Contents

- Foreward
- Program background
- A note to our mentors
- Mentoring program objectives
- The role of a mentor
- Tips for mentors

The purpose of the Mentor Guide is to provide worksite supervisors with important information to help make the Youth Apprenticeship experience successful for students as well as the sponsoring company. The Mentor Guide is used in conjunction with an orientation program offered to all newly-assigned workplace mentors.

To obtain a complete copy of the Mentor Guide, please contact the Pickens County Youth Apprenticeship Coordinator, Ms. Frances Stokes, at (803) 855-8195.