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ABSTRACT

Youth jobs can serve as an introduction to employment, but few jobs for young adults in their 20s make use of their skills. Young people will be motivated to succeed in school only when they can find employment in jobs that pay well above minimum wage and provide benefits, security, and opportunities for advancement. In order to improve the prospects of youth, a career opportunity system is needed. Work-based learning is at the core of an effective career opportunity system, and youth apprenticeship is the most highly developed form of work-based learning. Tech prep is another means of relating school to employment, and cooperative education is a related approach. The challenge is for all educators and employers to bring existing components together as a coherent whole that serves the needs of all young people. The components of a career opportunity system should include the following: career information and advising, high academic standards for all, career majors and career academies, and work-based learning. Partnerships must be formed among schools, employers, government, the community, students, and parents, with defined responsibilities for each partner. An organizing mechanism is needed to provide overall support and coordination for the system. The School-to-Work Opportunities Act provides a basis but not a blueprint for starting a career opportunity system for noncollege-bound youths. (Contains 30 references.) (KC)

Career Paths

What Can Be Done? Who Can Do It?

Stephen F. Hamilton
Mary Agnes Hamilton

AUTHORS' INTRODUCTION

Our experience in Broome and Chenango counties, New York, has shaped our thinking about systems. We are grateful to the members of the project steering committee for help with planning institutional arrangements and responsibilities and especially to the governance subcommittee: Ron Carlson, Heidi Bowne, Jim Lee, Brenda Margolis, and Chris Powers. Firm coordinators and managers and school coordinators and advisers helped determine responsibilities of apprentices, parents, employers, and schools as stated in our Mutual Expectations Agreement. Financial support for the demonstration project has come from the state of New York, the Pew Charitable Trusts, and the Charles Stewart Mott Foundation. Francille Firebaugh, dean of the College of Human Ecology, has steadfastly encouraged, advised, and supported our work. Laurie Ray and Trudie Calvert assisted with design and editing this publication.

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Samuel Halperin of the American Youth Policy Forum suggested that we revise an early draft of this paper, which was written for local planning purposes, and gave us critical questions and editing suggestions to make it more universal. Sam has been spectacularly effective at focusing and maintaining attention on the needs of American youth. We are proud to be on his team.

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OPENING CAREER PATHS FOR YOUTH:

WHAT NEEDS TO BE DONE?

WHO CAN DO IT?

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President Clinton's School-to-Work Opportunities Act provides "venture capital" to stimulate the creation of *systems* in every state to connect school with work. Although the legislation refers to movement from school to work, the real challenge facing young people is to enter attractive *career paths*. Most young people can find work; indeed, the majority work extensively while enrolled in high school.

Youth jobs can serve as an introduction to employment, teaching basic work skills and attitudes such as punctuality and customer relations. But they rarely require or teach advanced technical skills. Employers define such jobs to accommodate workers with less than a high school diploma and to minimize their investment in training. Sadly, most employers believe these are the only jobs teenagers and young adults are qualified to hold. Therefore, most young people must work in low–skill, low–wage jobs for years after their initial work experience. High school graduates are more likely to find jobs than dropouts, but dropouts who are able to find jobs do the same work as graduates. This gap between school and work inhibits the productivity of young workers, squanders society's investment in their education, isolates youth from adults, and undermines high school students' motivation to achieve.

When entire communities are bereft of legitimate economic activity, young people may logically conclude that nothing they do will improve their life chances. Young people who live in economically devastated urban and rural areas, whose families are unable to nurture them, and who face serious personal impediments to employment (e.g., physical or mental challenges, criminal records, drug addiction, premature parenthood) need all the support that their more fortunate peers need plus remedial education and social support. Special programs for such youth will be more effective when they augment and lead into mainstream career opportunity systems that serve everyone.

The prospect of an attractive and attainable career gives young people an incentive to gain academic competence and to behave in a socially responsible manner. Connecting school more closely to employment will provide this incentive, thus enhancing the educational quality of the American work force. Whether they earn A's or D's, whether they say no to drugs or yes, will begin to matter only when people in their early twenties can find employment in jobs that pay well above minimum wage and provide benefits, security, and opportunities for advancement.

For the past three years, we have directed Cornell's Youth Apprenticeship Demonstration Project in Broome County, New York, which has been implementing the three essential components specified in the new federal legislation: work–based learning leading to formal credentials; school–based learning organized around career majors; and strong connections between school and work. This essay conveys some lessons we have learned.

We have found that employers are willing and able to provide carefully planned and supervised work–based learning experiences for young people beginning in high school and that those experiences are highly beneficial.

Youth apprentices gain work-related knowledge and skills, and they are inspired to take harder courses and continue their education. When workplaces become learning environments for youth, they also become learning organizations for adults.

Participants in our project are predominantly C students, "middle kids," who need an extra boost to achieve their full potential, to foster their transition from school to career. *All young people need help to enter rewarding career paths; those without four-year college degrees need the most help.* Our enrollees become apprentices in manufacturing and engineering technology, health care, or administration and office technology. We have had about 20 students in each cohort from six different high schools. Ten different firms now participate: Anitec, Imaging Products Division of International Paper; Upstate Medial Division, Blue Cross and Blue Shield of Western New York, Inc.; Columbian Mutual Life Insurance Co.; Doron Precision Systems, Inc.; Good Shepherd Fairview Home (a long-term care facility); IBM Corporation, Endicott, New York; Lourdes Hospital; The Raymond Corporation; Security Mutual Life Insurance Company of New York; and United Health Services Hospitals.

We use the term "youth apprenticeship" because it manifests our intention that participants who complete the program after two years of high school and two years of community or technical college will be fully certified in highly skilled occupations. It also emphasizes the centrality of work-based learning. Youth apprenticeship, however, should be seen as the keystone of a larger structure, which the new legislation calls a school-to-work opportunities system.

To emphasize the distinction between finding work and entering a career path, we use the term, "career opportunity system." "Career" here means a lifelong occupational journey involving both education and employment. It does not mean a single job or even a single occupation. By this definition, everyone has a career, but some careers are chaotic while others are orderly; some are well-paid and prestigious while others are not. Some people move randomly among unrelated jobs with no perceptible advantage, while others steadily gain more skills, responsibility, and compensation. In an era of downsizing, plant closings, and technological obsolescence, lifelong learning is no longer the preserve of the ambitious; it is a necessity for all. Initial education and training are essential to a contemporary career, as are continuing education and training.

This essay sets out the rationale for a career opportunity system and identifies its key components, emphasizing the complementary contributions of organizations and individuals participating in it. We hope by sharing these ideas to stimulate discussion and to guide planning toward the creation of career opportunity systems across the country.

Why a Career Opportunity System?

To make the most of the present, *young people need to have a hopeful vision of the future and an idea about how to get from where they are now to where they would like to be.* They need not, indeed cannot, know precisely what the future holds and how to prepare for it, but they should have enough information to make wise choices. For example, several participants in our demonstration project have observed and assisted physical therapists, learning knowledge and skills essential to that profession. More important, they have learned that physical therapy assistants must have two years of college, physical therapists four years, and orthopedic surgeons six or eight years of medical school after college. They learn that they must take courses that open other options in the future such as college preparatory biology and math to qualify for admission to the community college program, in contrast to taking the fewest general-level courses required for high school graduation and a diploma that usually leads nowhere.

Our society provides reasonably *transparent* career paths for the quarter of our youth who earn baccalaureate degrees. Even college graduates who do not have specific career plans obtain entry-level professional positions because of their learning and credentials. In contrast, we offer little guidance to the remaining three-quarters of young people who complete their formal education without a bachelor's degree. Many of the occupations open to them have no specific educational requirements.

Such an unsystematic transition from school to work wastes the productive potential of youth and young adults and the tax money spent for their education — and often spent again for remedial courses they take as adults. The absence of clear connections between school performance and employment opportunities makes career paths *opaque* for high school students who do not plan to enroll in selective colleges and leads them to believe they need not exert themselves. They drift through high school taking the minimum number of the easiest courses and doing the smallest allowable amount of work. Only after several years of work experience in jobs typically held by youth do they begin to gain access to jobs that require communication and reasoning skills, mathematics, and science. The most ambitious return to school to try to fill these gaps, but at great personal and societal cost because they must earn a living at the same time to meet financial and family obligations they did not have as teenagers.

Other countries' career opportunity systems demonstrate that this problem can be addressed institutionally; it is not an inevitable consequence of youthful indecision and irresponsibility. To make the most of our human resources and educational spending, the United States

must design and build an effective career opportunity system that matches our economic system and our societal values.

Connecting School with Work

Work–based learning is at the core of an effective career opportunity system, and youth apprenticeship is the most highly developed form of work–based learning. Work–based learning opportunities vary in their duration, intensity, and formality so they can meet the needs of young people of different ages and with different future plans. Ideally, every community should offer an array of work–based learning opportunities. Recognizing that the terminology is not precise, we envision that array as including community service, field trips and job shadowing, youth–run enterprises, exploratory work, youth jobs, employment training programs, unpaid internships, cooperative education, and youth apprenticeship (see Figure 1).

Community Service gives young people experience that is like work even though it is unpaid. They can learn planning, teamwork, responsibility, and specific work–related skills. In addition to schools, youth organizations such as 4–H, scouts, vocational clubs, and church groups sponsor community service. Its most elaborate forms are national service and conservation corps, which may be residential and carry a stipend for living expenses and an opportunity to earn a scholarship for postsecondary studies.

Field Trips and Job Shadowing enable young people to observe adults in work settings, learn the requirements of various jobs, and experience the flow of a typical workday.

Youth–run Enterprises teach basic work skills and also managerial and entrepreneurial skills. An advantage of school–based enterprises, Junior Achievement, and related programs is that they give young people highly responsible roles that would not be accessible to them in adult workplaces.

Exploratory Work involves actual work in addition to observation and may last for a few days or a few weeks. Exploration entails spending time in a variety of workplaces. Exposure is the main outcome rather than skills.

Youth Jobs are those already available to high school students, typically in food service, retail, and clerical fields. They seldom require or teach specific job skills, but young workers often gain personal and social skills such as punctuality, teamwork, responsibility, and responsiveness to supervisors and customers.

Employment Training Programs are usually reserved for disadvantaged youth. They include summer programs for in–school youth as well as programs for high school dropouts and graduates. As part of a career opportunity system, such programs would give completers certified skills enabling them to find jobs or continue their education and training.

Unpaid Internships give young people workplace roles that sometimes are more responsible than they would have as paid workers.

Cooperative Education is a formal arrangement in which students earn both school credit and pay for work related to their studies.

Youth Apprenticeship is of longer duration than cooperative education, is organized around the mastery of specific competencies, and leads to formal, portable credentials.

Like registered apprenticeships that train highly skilled craft workers in construction and manufacturing, youth apprenticeship offers well–planned, carefully supervised work experiences designed to impart specific knowledge and skills whose mastery is attested by formal skill certification. Youth apprenticeships are different from currently registered apprenticeships because they engage high school students in a wide range of occupations, including technical and white–collar administrative occupations, and they combine work–based learning with both secondary and postsecondary education. Youth apprenticeship is a logical extension of cooperative education, which is shorter and less formal than apprenticeship and does not yield a widely recognized credential.

A comprehensive career opportunity system will make available to all young people a form of work–based learning that is appropriate to their age, capacity, and future plans. All young people should engage in community service. Unpaid work experience may lead to paid work experience for some young people, but it could be the only form of work–based learning for others. Cooperative education and youth apprenticeship could enrich all students' education but are most important for those who do not expect to graduate from a four–year college. Less intensive forms of work–based learning may serve as preapprenticeship experiences for those who will subsequently become youth apprentices and as apprentice–like experiences for those on career paths that do not require apprenticeships or for which apprenticeships may not be feasible.

To assure that work–based learning contributes significantly to a broad education, rather than serving simply as exposure to work, it must be closely tied to school–based learning. Several approaches now being used to relate academic and vocational education are promising for this purpose. The new federal legislation calls for "career majors," which organize students' course work around a particular career area, providing greater coherence, relevance, and sense of

direction than most high school students now find in their courses. Career majors are also a means of integrating vocational with academic courses.

Career academies take this idea a step further. They are schools within schools based on occupational themes, such as health care, electronics, tourism, or finance. Career academies give high school students a small community of teachers and students with whom to identify and a career focus for their learning. They also demonstrate that an occupational theme need not constrain students' career paths. For example, one student in a health care academy might plan to become a physician and another a nurse, but both take demanding courses in biology and chemistry that will serve them well even if the first student decides to go into business rather than medicine and the second decides to become a diagnostic imaging technologist.

Tech prep is another means of relating school to employment. Its central idea is that high school students with vocational inclinations take courses that prepare them for postsecondary education as well as employment. A continuous, related set of courses in high school and in two–year college provides a clear path through school into desirable employment. Encouraged by federal legislation (the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990), tech prep is a way of upgrading the academic content of vocational education and including work–based as well as classroom learning in the curriculum.

Choosing a Career Path

Youth apprenticeship, cooperative education, career majors, career academies, tech prep, and related approaches share an occupational focus, raising the question of whether it is realistic to expect high school students to decide on an occupation. They should avoid choosing an occupational focus in high school that will limit their future directions. As implied in the career academy example above, limitations can be avoided by setting high academic standards and defining occupational areas broadly.

The majority of high school students limit their future prospects by choosing the general curriculum, which allows them to select courses from the "shopping mall high school" without a clear plan or purpose. Even vocational students tend to browse casually among unrelated courses, preparing to do nothing in particular after graduation. The results of the Broome County demonstration project confirm that far more high school students are capable of satisfactorily completing courses at the college preparatory level than are now enrolled in them.

Taking a full complement of challenging academic courses opens options for young people, giving them real choices, both immediately and in the future. Employers advise apprentices and teachers that they need technicians who know calculus, physical therapy assistants with deep knowledge of anatomy, and claims adjusters who can write coherent letters. General courses are not enough. The availability of such advice is a key component of a career opportunity system. Most high school counselors are already overburdened helping students plan their courses and apply to colleges. Few have the time or the knowledge to do career counseling.

Defining occupational areas broadly is also critical. Students should not aim for a specific job, because it may not be available or even exist by the time they complete their preparation, but for a cluster of related occupations. Specialization within the occupational area can be delayed until after high school graduation. For example, during her first two years a manufacturing and engineering technology apprentice might learn basic drafting, electronics, and machining. Upon entry into community college she could begin to specialize in one of those three areas. Leading European apprenticeships are increasingly structured this way, with early breadth and later specialization. In this country new associate degree programs will help to prepare flexible specialists in such occupations as mechanical–electronic technician or chemical manufacturing technician.

Another key to an effective occupational focus for high school students is to provide sufficient information, career advising, and firsthand experience before requiring them to make a choice. Purely school–based career education does not work well because it is disconnected from real career choices. Fourteen–year–olds have trouble taking career education seriously when they do not expect to make career decisions for ten years or more. If those same young people anticipate choosing a career academy and an apprenticeship within a year or two, then information about careers, advising, classroom visits from adults to talk about their work, site visits to a range of workplaces, mentoring, job shadowing, trial apprenticeships, and similar experiences will be much more effective learning opportunities.

Creating a System

Because many components of a career opportunity system already exist, we do not need to build a system from the ground up. *The challenge facing us is to bring existing components together as a coherent whole that serves the needs of all young people.* Those components currently are freestanding programs in scattered communities, usually serving only a small proportion of those who could benefit from them.

Systems, in contrast to demonstration programs, are big enough to serve everyone. They include the entire range

of components, organized so that participation in each leads logically to the next. A genuine career opportunity system is connected with the educational system on one side and the employment system or labor market on the other. To illustrate, a young person might enter the career opportunity system by participating in career education activities in middle school. By ninth or tenth grade she would have a basis for making a choice, with help from parents and a school adviser, of a career academy in the high school. Further information about her chosen occupational area, including field trips, job shadowing, and extended unpaid experience, would substantiate her decision about which apprenticeship to choose. That apprenticeship would entail taking specific courses in high school and postsecondary education. Having mastered a rigorous set of academic and work competencies, she would be prepared by age 19 or 20 both for skilled employment and for education continuing throughout her lifetime.

Creating such a system will require an unprecedented level of collaboration between schools and employers and must also include parents, employees' and professional organizations, and community groups. Responsibility for coordinating the multiple components and fostering communication among partners is best lodged in a sponsoring organization that is trusted by all but controlled by none. An ideal sponsoring organization acts as an intermediary among the partners and spans an entire labor market area, something few school districts do. It assures that responsibility for the transition from school to career is not left to schools alone and that employers provide truly educational work experience, avoiding the temptation to exploit cheap labor. Another function of a sponsoring organization is to foster constant communication among all partners in the system.

Standards are at the center of a career opportunity system. They make the system's objectives concrete and provide a basis for assessing both the system as a whole and the performance of young people in it. The content of academic and occupational education and of work experience is derived from the specification of competencies associated with each occupation. Those competencies, in turn, are best identified by employers and by experienced skilled workers in each occupation.

Standards can be set locally, but ultimately they must be adhered to at least statewide and, ideally, nationally. There is no need for each community to invent standards anew. Furthermore, in addition to their function as targets for instruction and milestones for assessment, standards substantiate credentials. Only national standards enable a person to transfer skill credentials from one state to another, as is now possible for many professionals (e.g., physicians) and for skilled craft workers who have completed registered apprenticeships.

When standards are carefully selected and defined and their mastery is assessed with valid measures, they serve as milestones marking career paths. But standards and credentials can also be roadblocks, impeding movement along career paths. One way to make career paths both clearly visible (transparent) and easily traveled (permeable) is to define standards broadly so that as many as possible apply to multiple career paths. Another is to organize standards into "modules," related sets of competencies that constitute freestanding units. When career standards are arrayed in modules, they can be combined in a variety of ways to constitute standard, customized, and multiple credentials. Modules facilitate cross–training, transfer, and upskilling.

The School-to-Work Opportunities Act of 1994 envisions integrating new local and state–level efforts with current education and employment training programs rather than constituting a new and autonomous system. Although many different challenges lie ahead, the greatest is securing strong and lasting commitments from employers.

Work–based learning absolutely requires employer participation, which will occur only if employers believe that they will gain more by investing in the education and training of young people than by trying to compete in the global economy with uneducated and unskilled workers. If employers are not prepared to make this commitment, schools alone cannot make a sufficient difference. Dependence on employer participation has been identified as a weakness of youth apprenticeship because of some indications that most employers are content with low–skill workers. If employers are unwilling to pay high wages for highly skilled workers, however, no education reform, whether school–based or work–based, will improve the lot of workers in the United States because the economy's base will erode.

Components of a System

Career information and advising

Before they can make sound choices about their education, young people need a sense of where it can lead them. Everyone needs to become familiar with possibilities, even long before specific career choices are necessary (see Figure 1). Career information should be

- Broad and varied enough to include the entire range of career pathways
- Age appropriate
- Started in elementary school and continued through higher education
- Based on observation and experience as well as information
- Organized to include parents

High academic standards for all

Career pathways should open doors, not track some young people into low–level and dead–end positions. The need for standards has become more important as employers increasingly seek workers for positions that do not require four years of college but who are well–educated, good problem solvers, cooperative, and capable of continuous learning. New technology and new forms of work organization are rapidly closing the gap in educational requirements among different levels of workers. High academic standards mean that

- All high school graduates earn diplomas qualifying them for higher education
- Work–related or vocational education is an alternative means to the same high standards held for college–prep students
- Students may follow different educational pathways (and take different lengths of time) to achieve the same high standards
- Academic courses are related to career paths
- Community college courses may be taken during high school

Career majors and career academies

Career majors and career academies enable students to organize their education around a career area, giving them an increased sense of purpose and a clearer target to aim for. Career academies also provide a greater sense of belonging and more flexible schedules than conventional schools offer. They have the advantages that

- High school students have the option of organizing their studies around a career major
- Flexible scheduling allows opportunity for work–based learning

Work–based learning

The range of work–based learning opportunities has been described above. Two points deserve emphasis. One is that each community should offer a variety of work–base learning opportunities to meet the different needs and capacities of all young people. Second, the keys to making work experience an opportunity for learning include

- Careful planning of what young people will learn and how
- Competent supervision, coaching, and mentoring by adults
- Evaluation and documentation of learning
- Opportunities at school and at work for thoughtful reflection on what has happened and what it means
- Multiple connections between school–based and work–based learning

Connections between school–based and work–based learning

As former U.S. commissioner of education Harold Howe has said, "The marriage between school and work enriches both." A system requires multiple effective links between the two learning settings, including the following:

- School credit granted for work–based learning
- School courses teach knowledge and skills used at work
- School courses and projects draw on work experience and work issues
- Parents are knowledgeable about both school and work
- Case management provides support and problem solving across both settings and involves parents
- School coordinators and workplace coordinators communicate frequently
- Reports on work–based learning are shared regularly with school and parents
- Students receive advice and encouragement (mentoring) at work and school on course selection and performance and on career planning

Institutional Arrangements and Responsibilities

Partnership is the key to constructing a system out of already existing programs and new components. The most challenging new component is systematic work–based learning, epitomized by youth apprenticeship. Securing opportunities for large numbers of young people to engage in work–based learning entails multiple new connections among existing institutions and a solid institutional foundation. The following entities must be involved.

- Employers (individual employers, industry or trade associations)
- Schools (school systems, area vocational centers, community, technical, and vocational colleges)
- Employees (unions, professional organizations, representatives of employees without formal organizations)
- Young people
- Parents
- Community organizations (school/business partnerships, neighborhood organizations, affinity groups, Cooperative Extension)
- Government (federal, state, and regional Departments of Education, Labor, Economic Development, and related agencies)

This partnership plans, negotiates, and helps implement the system. It forms a governing body with the following responsibilities.

- Set policy for the career opportunity system, especially youth apprenticeship
- Participate in program development and implementation
- Constitute subcommittees to pursue topics, issues, and policies, for example, program expansion, education, industry standards, devising credentials, career pathways
- Review plans and implementation reports from project staff and subcommittees

Key responsibilities of each partner are listed below.

Employers

- Work with other partners to plan and implement the system
- Identify occupational areas and competencies needed now and in the future
- Help set and assess work–related competence standards
- Organize learning by assigning appropriate work tasks, supervising, and assessing performance
- Communicate regularly with parents, schools, and the sponsoring organization about progress and problems
- Support career education and exploration with information, personnel, and placements
- Use the career opportunity system as the major source for hiring
- Accord young people equal opportunity in all phases of work–based learning without discrimination because of race, color, religion, national origin, age, sex, disability, or marital status
- Refrain from replacing incumbent workers with student learners

Schools

- Set high academic standards
  - ▸ Provide appropriate career majors and, where possible, career academies
  - ▸ Provide support and alternative means to enable all students to meet those standards
  - ▸ Integrate academic and vocational education
  - ▸ Give credit for appropriate work–based learning
- Advise about career paths and personal and social problems that impede learning (see Figure 2)
  - ▸ Institute case management methods to support students in career planning and work–based learning
  - ▸ Connect youth to support services (for example, tutoring, counseling, community services)
- Work with employers and other organizations to implement work–based learning

Employees

- Participate in design and implementation of the system
- Help identify occupations and standards
- Support career education and exploration
- Help teach young people about working life

Young people

- Strive to meet high performance standards in schools and workplaces
- Participate in system planning and improvement
- Participate responsibly in work–based placements
- Seek assistance from the school or the workplace adviser for personal and social developmental needs

Parents

- Work with counselors and others to help children think about and plan for careers
- Encourage and support children's school performance, including academic, personal, and social behavior
- Become informed about career paths
- Support children's participation in work–based learning

Community organizations

- Provide career education, exploration, and counseling as appropriate
- Provide worklike experiences
- Contribute to positive socialization of youth
- Participate in design and implementation of the system
- Coordinate programs with other organizations for optimal impact and efficiency

Government

- Inform partners of relevant laws and regulations
- Grant waivers when appropriate
- Provide data for planning
- Offer consultation on their areas of expertise
- Provide work-based learning opportunities as an employer

A sponsoring organization should be identified or created to coordinate the actions of the partners and to carry out responsibilities beyond the competence or range of responsibilities of the partners. In some communities, this will be a new organization founded expressly for this purpose. In others it will be an organization that is already well positioned to take on the functions. Because work–based learning is the most challenging component of a career opportunity system, the sponsoring organization must be capable of developing and sustaining youth apprenticeships and other forms of work–based learning.

Criteria for a sponsoring organization

- Strong commitment to the development of a career opportunity system in the region
- Capacity to support the functions associated with the governing body and the staff (including networking with partners)
- Legitimacy in the eyes of all partners
- A mission aligned with the goals and objectives entailed in creating and implementing a career opportunity system

Functions of the sponsoring organization

- House the staff
- Oversee finances, help secure funding as needs arise
- Convene partners to plan, make policy, and assess progress

Functions of staff

- Build and support partnerships
  - ▸ Establish and sustain issue committees
  - ▸ Recruit partners
  - ▸ Serve as an advocate and spokesperson for the system
  - ▸ Handle fund raising, inquiries, information releases, media
- Manage and develop the system
  - ▸ Report to the governing body and enable it to carry out its functions
  - ▸ Facilitate implementation of the governing body's policy decisions
  - ▸ Manage daily operations of the office
  - ▸ Articulate directions for system development
  - ▸ Develop, support, and assess work–based learning
  - ▸ Identify career areas and competencies
  - ▸ Facilitate skill certification
  - ▸ Provide or facilitate staff development (employers, schools, colleges)
  - ▸ Resolve problems
  - ▸ Assess the relevance, effectiveness, and quality of the program (in specific schools and workplaces and as a whole)
  - ▸ Market the system to help it expand
  - ▸ Work with partners to identify courses and to create an advising structure
  - ▸ Facilitate research and development

Scale and Sequence

Ultimately, *a career opportunity system must serve all young people*. Those who expect to enter the full–time work force without a four–year college degree are the most in need of youth apprenticeship. Eventually between one–quarter and one–half of the youth population might be enrolled in youth apprenticeships, depending primarily on employers' demand for well–educated and highly skilled workers and the availability of effective school– based learning opportunities. This would require places amounting to up to 5 percent of the American work force.

Although this goal sound ambitious, if work–based learning lasts for four years and 80 percent of participants complete that period of training and apply for regular positions with their training employers (a very high percentage), then employers would need only a 1 percent annual replacement or expansion in their work force to absorb all their trainees. A system of this magnitude clearly cannot be created in a year or two. The process of system building and the growth of employer commitment and capacity will take at least a decade. The best way to initiate this process is for employers to begin on a small scale and gradually develop needed staff skills. As they do so, they will discover the multiple benefits of becoming learning organizations. Planners must set out a challenging but feasible time frame and anticipate the sequence in which components of a system will be put in place.

Conclusion

The School-to-Work Opportunities Act will not automatically produce precisely the system it calls for, which we have outlined. Many people and organizations must take action before this vision can become a reality; it cannot be legislated into existence. But, the legislation and its modest funding will reinforce some current efforts and stimulate new activity that may lead eventually to the establishment of new and more effective ways for young people to initiate and sustain their occupational careers. At this stage in a new movement, debates are common about whether enough is known to act or whether more research and development are needed before proceeding. We believe the time has come to design and implement career opportunity systems on a large scale but that all the partners should act in a reflective and exploratory manner. A national discourse among all the partners about insights gleaned from their actions should guide the evolution of local, state, and national systems that open career paths for all youth.

For Further Reading

Brunet, C. (1991). *Thinking collaboratively: Ten questions and answers to help policy makers improve children's services*. Washington, DC: Education and Human Services Consortium.

Council of Chief State School Officers and American Youth Policy Forum. (1994). *Building a system to connect school and employment*. Washington, DC:*

Forte, L. (1993). *Improving the school–to–work transition: A Chicago perspective*. Cambridge, MA: Jobs for the Future.**

Goldberger, S., Kazis, R., & O'Flanagan, M. (1994). *Learning through work: Designing and implementing quality worksite learning for high school students*. New York: Manpower Demonstration Research Corporation.**

Grubb, W. N., Davis, G., Lum, J., Plihal, J., & Morgaine, C. (1991). *The cunning hand, the cultured mind: Models for integrating vocational and academic education*. Berkeley: National Center for Research in Vocational Education.

Hamilton, M. A., & Hamilton, S. F. (1993). *Toward a youth apprenticeship system: A progress report from the Youth Apprenticeship Demonstration Project in Broome County, New York*. Ithaca: Cornell University.***

Hamilton, S. F. (1990). *Apprenticeship for adulthood: Preparing youth for the future*. New York: Free Press. [Order directly from publisher: 1–800–323–7445; ISBN: 0–02–913705–5]

Hamilton, S. F. (1992, Spring). Apprenticeships for American youth? What the U.S. can learn from Europe. *Transatlantic Perspectives*, No. 25, pp. 6–9. (Newsletter of the German Marshal Fund of the United States)

Hamilton, S. F. (1993). Prospects for an American–style youth apprenticeship system. *Educational Researcher*, 22 (3), 11–16.

Hamilton. S. F. (1994). Employment prospects as motivation for school achievement: Links and gaps between school and work in seven countries. In R. K. Silbereisen & E. Todt (Eds.), *Adolescence in context: The interplay of family, school, peers, and work in adjustment*. New York: Springer.

Hamilton, S. F., & Hamilton, M. A. (in press). Learning from work: Strategies for making work experience educational. In L. Mahdi (Ed.), *It takes the whole village to bring up a child*. Peru, IL: Open Court.

Hansen, J. S. (Ed.) (1994). *Preparing for the workplace: Charting a course for federal postsecondary training policy*. Washington, DC: National Academy Press.

Howe, H. (1993). *Thinking about our kids*. New York: Free Press.

Jobs for the Future (1991). *New training strategies for a high performance metalworking industry*. Cambridge, MA: Author.**

Jobs for the Future (1992). *From high school to high–skilled health care careers: New models for work and learning in health care*. Cambridge, MA: Author.**

Jobs for the Future (1993). *Learning that works: A school–to–work briefing book*. Cambridge, MA: Author.**

Kazis, R. (1993a). *Two–year colleges: What role will they plan in improving the school–to–work transition?* Paper prepared for the American Association of Community Colleges Tech Prep Roundtable. Cambridge, MA: Jobs for the Future.**

Kazis, R. (1993b). *Improving the transition from school to work in the United States*. Washington, DC: American Youth Policy Forum, Competitiveness Policy Council, and Jobs for the Future.*

Lempert, W., & Hamilton, S. F. (1994). *The impact of apprenticeship on youth: A prospective analysis*. Working paper. Ithaca: Cornell Youth and Work Program.***

Lynn, I., & Wills, J. (1994). *School–work–transition: Lessons on recruiting and sustaining employer involvement*. Washington, DC: Institute for Educational Leadership.

McKay, E. G. (1993). *The forgotten two–thirds: An Hispanic perspective on apprenticeship, European style*. Washington, DC: National Council of La Raza.

Melaville, A. I., Blank, M. J. (1991). *What it takes: Structuring interagency partnerships to connect children and families with comprehensive services*. Washington, DC: Education and Human Services Consortium.*

Pauly, E., Kopp, H., & Haimson, J. (1993). *Home–grown lessons: Innovative programs linking work and high school*. New York: Manpower Demonstration Research Corporation.

Rosenbaum, J. E., Stern, D., Hamilton, S. F & Hamilton, M. A., Berryman, S. E. (1992). *Youth apprenticeship in America: Guidelines for building an effective system*. Washington, DC: William T. Grant Foundation Commission on Youth and America's Future.*

Ryan, P. (Ed.) (1991). *International comparisons of vocational education and training for intermediate skills*. London: Falmer Press.

Sashkin, M., & Egermeier, J. (1993). *School change models and processes: A review and synthesis of research and practice*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, Programs for the Improvement of Practice. (U.S. Government Printing Office, ISBN 0–16–042919–6)

Schorr, L. B., with Schorr, D. (1988). *Within our reach: Breaking the cycle of disadvantage*. New York: Anchor Press/Doubleday.

Sizer, T. R. (1992). *Horace's school: Redesigning the American high school*. Boston: Houghton Mifflin.

Stern, D., Raby, M., & Dayton, C. (1992). *Career academies: Partnerships for reconstructing American high schools*. San Francisco: Jossey–Bass.

Whiting, B. (1993). *School–to–work transition: Reaching for scale in big cities*. Cambridge, MA: Jobs for the Future.**

* Available from the American Youth Policy Forum, Suite 719, 1001 Connecticut Avenue, NW, Washington, DC 20036–5541; 202–775–9731.

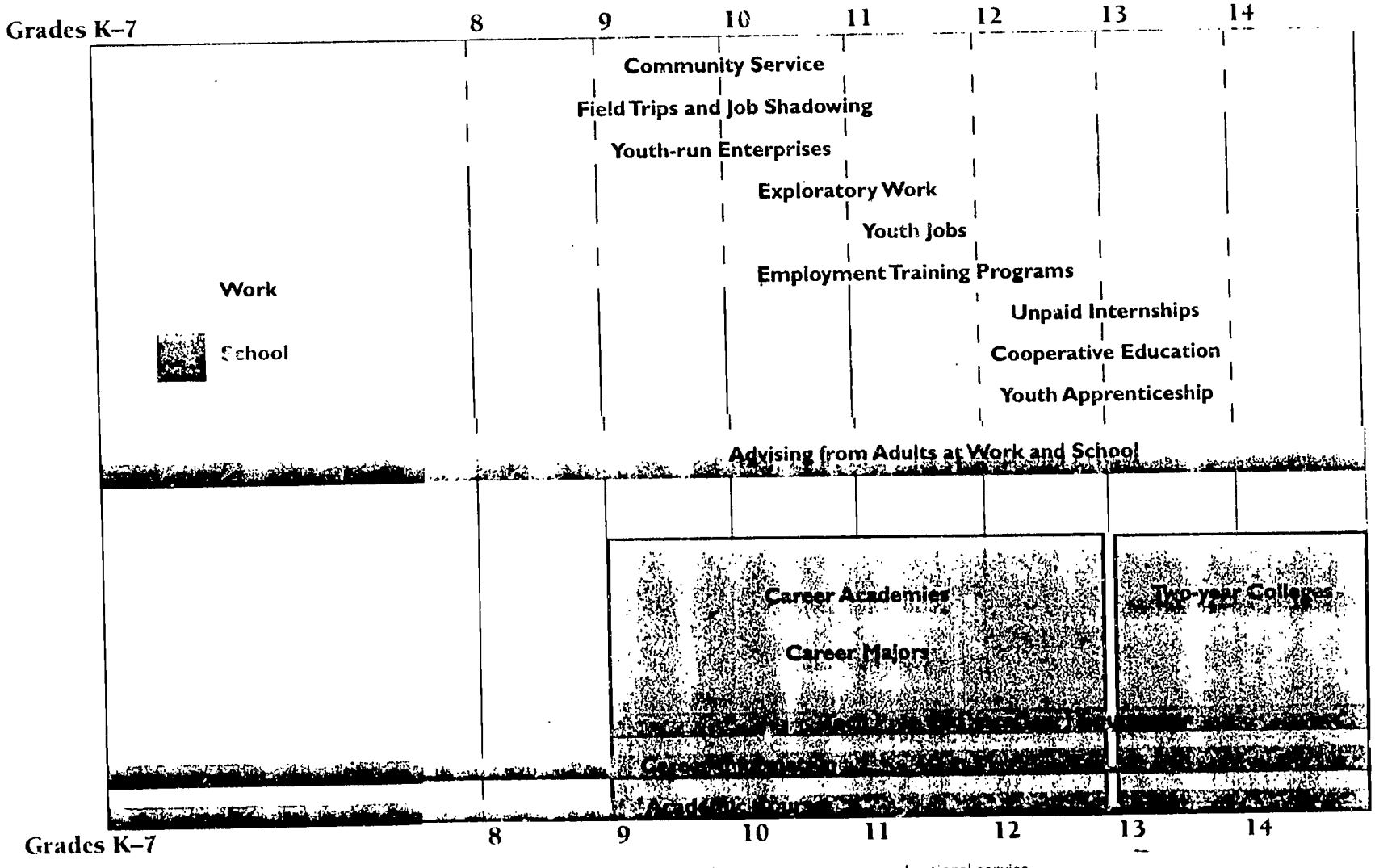
** Available from Jobs for the Future, 1815 Massachusetts Avenue, Cambridge, MA 02140; 617–661–3411

*** Available from Cornell Youth and Work Program College of Human Ecology, Cornell University, Ithaca, New York 14853–4401; 607–255–8394

CORNELL YOUTH AND WORK PROGRAM
PREPARING YOUTH FOR THE FUTURE

Figure 1

Learning Opportunities at School and Work



Notes: Community service may be sponsored by schools or youth organizations. It includes conservation corps and national service.

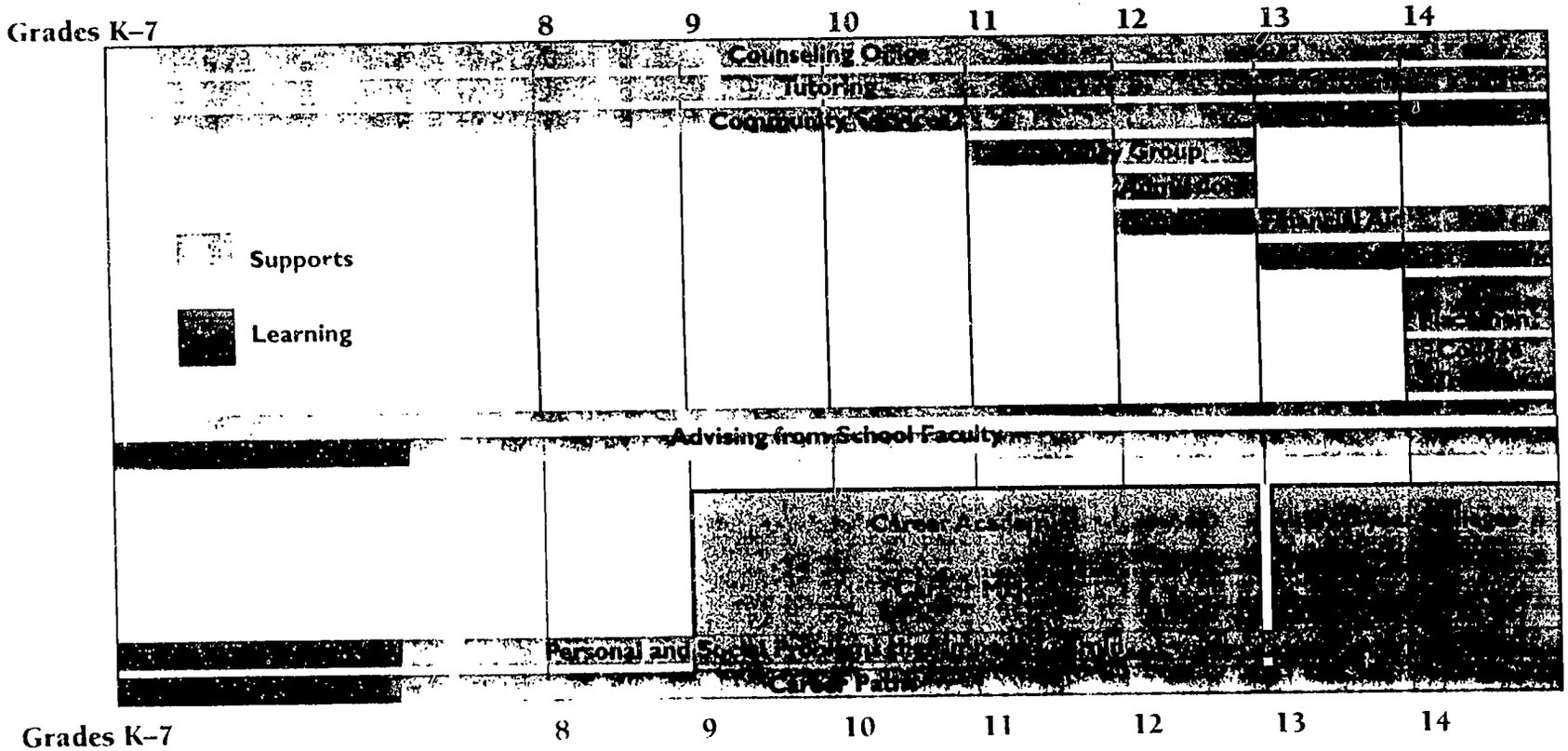
Advising includes mentoring and counseling.

Career academies, tech prep, and career majors are all strategies for integrating academic and vocational courses and focusing them on careers.

Career information includes classroom visits from adults who talk about their work, infusion of career information into academic courses, and information and training for a job search.

Figure 2.

School-Based Advising



Functions of High School Adviser

- *Career path:*
  - Direction, educational plan
  - Academic courses requirements performance, schedule
  - College application, financial aid
  - Senior project logistics timeline, choice of youth partners, choice of coaches at work and school, and exhibition
  - Portfolio development worksite evaluations resume, special project documentation, work samples
- *Personal and social problems that impede learning*
  - Listen
  - Respond to journal
  - Connect youth to support services (tutoring, counseling, community services etc.) when needed
  - Advisory groups forum for discussion reflection, and guidance about personal and social behavior in the workplace
  - Case management
    - Coordinate meetings with apprentice, family firm and school personnel, and others as needed
    - Communicate with parents and employers as needed

Functions of College Adviser

- *Occupational preparation:* career path, college program, courses, performance; connect to support services
- *Personal and social problems impeding learning:* listen, connect to support services