

YOUTH
&
PREPARATION
for
EMPLOYMENT

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A POLICY REFERENCE DOCUMENT

COUNCIL OF CHIEF STATE SCHOOL OFFICERS (CCSSO)

The Council of Chief State School Officers (CCSSO) is a nationwide, nonprofit organization of the 57 public officials who head departments of public education in the 50 states, five U.S. extra-state jurisdictions, the District of Columbia, and the Department of Defense Dependents Schools. It has functioned as an independent national council since 1927 and has maintained a Washington, D.C., office since 1948. CCSSO seeks its members' consensus on major education issues and expresses their views to civic and professional organizations, to federal agencies, to Congress, and the public. Through its structure of committees and task forces, the Council responds to a broad range of concerns about education and provides leadership on major education issues.

Because the Council represents each state's chief education administrator, it has access to the educational and governmental establishment in each state and to the national influence that accompanies this unique position. CCSSO forms coalitions with many other education organizations and is able to provide leadership for a variety of policy concerns that affect elementary and secondary education. Thus, CCSSO members are able to act cooperatively on matters vital to the education of America's young people.

The CCSSO Resource Center on Educational Equity provides services designed to achieve equity and high-quality education for minorities; women and girls; and for disabled, limited-English-proficient, and low-income students. The Center is responsible for managing and staffing a variety of CCSSO leadership initiatives to ensure education success for all children and youth, especially those placed at risk of school failure.

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In 1991, the Council of Chief State School Officers (CCSSO) established a multiyear priority to improve connections between school and employment for all students. This policy resource document on youth preparation for employment represents a synthesis of the new knowledge and issues that have surfaced since CCSSO's 1991 statement was released.

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Introduction

Virtually everyone who seeks employment aspires to a rewarding career, and advanced preparation is increasingly necessary to achieve that goal. Education, no matter its genesis—in the home, the community, and the school—is the beginning of employment preparation, an endeavor that will last a lifetime. The Council of Chief State School Officers supports the ongoing partnership of the home, school, community institutions, and employers in preparing young people for productive lives and sustaining their development over time.

Since 1991, a major focus of the Council has been improving the connections between school and employment to ensure structured and successful transitions of youth to adult roles. Through a series of state leadership development, research, and information dissemination activities, we have sought ways to:

1. Improve the passages through which American youth prepare for productive employment;
2. Restructure schools to support this goal; and
3. Define new relationships with stakeholders (schools, other human service agencies, youth organizations, businesses, unions and employee organizations, and postsecondary institutions) and their roles in this process.

This document presents many ideas and issues surrounding the public debate about how best to structure a system of school-to-work transition from which all young people can benefit. It provides guidance to a range of policymakers, educators, and other practitioners on important elements of the school-to-work continuum and their role in it. It reflects an ongoing dialogue among chief state school officers; state education agency staff; policy advisors expert in areas of youth development, service learning, occupational education, and other youth employment preparation schemes; and representatives of government, business, and labor. Finally, it builds on and expands the vision described in our 1991 policy statement on connecting school and employment. This statement called for the following:

- Schools that promote a quality primary and secondary education and an early orientation to

work that enable all youth to pursue continued education and challenging employment.

- Broad curriculum changes that integrate learning in the classroom and learning through experience in the workplace.
- Major modifications in how instruction is organized and integrated across the academic and vocational curriculums.
- The expanded use of proven structures to introduce and develop the skills, knowledge, and behavior youth will need in their adult years.
- A shared responsibility and commitment among schools, employers, and employee organizations in bringing about these changes.

The Emerging Framework

Since the 1991 policy statement was issued, numerous events have fueled our efforts; and a potential framework has emerged to support and extend this vision. Two landmark national legislative initiatives require the reexamination and rethinking of how the United States educates and prepares children and youth for productive employment and responsible citizenship. The Goals 2000: Educate America Act supports greater coherence in education programs and policies and aligns them within the context of the National Education Goals and the states' education reform agenda. The School-to-Work Opportunities Act of 1994 establishes mechanisms whereby high-quality, statewide school-to-work opportunity systems can be designed to help youth identify and select paths to productive and progressively more rewarding workplace roles. Each act provides unprecedented federal venture capital to initiate comprehensive systems development and create panels of stakeholders to structure interagency state and local efforts, as well as new public-private partnerships that change the very nature of schooling and its outcomes. Each provides leverage for effecting institutional change, creating broad participation, and restructuring and coordinating existing but disparate programs to appropriately serve the needs of our youth.

Other legislative initiatives provide further support and substance to this framework by availing new in-

structional strategies, sources of staff development and student financial assistance, links to community learning sites, and expanded contexts for building the skills and attitudes necessary for individuals to become work ready. (This legislation includes the Improving America's Schools Act of 1994, amendments to the Elementary and Secondary Education Act of 1965; National and Community Service Trust Act of 1993; Job Training Partnership Act; Federal Pell Grants and Guaranteed Student Loans; College Work-Study Program; and Family Support Act of 1988.)

Still other legislation to be reauthorized (e.g., Carl D. Perkins Vocational and Applied Technology Education Act of 1990, and Adult Education Act) will provide additional foundation stones for the framework. This legislation is expected to provide cadres of knowledgeable stakeholders, as well as service providers that address the needs of out-of-school youth and adults; and sources of best practices, reformed curriculums, and services necessary for a comprehensive system of employment preparation.

When viewed in the broader context of other existing federal and state resources supporting education, training, and related services, as well as the available research and evaluation of successful practices and program components, the vast resources and capacities of our various institutions to ensure successful preparation for employment become evident. The abundance of resources, however, has not resulted in a seamless and comprehensive system of youth preparation for employment that is accountable to the needs of all youth and employers.

A Vision

Our goal is to support the development of a more systematic and orderly transition from school to employment for *all* young people through a continuum of coordinated education and services that begins in the early grades and continues into adulthood. We envision this continuum as flexible, providing clear pathways leading to self-sufficiency and continued learning, linking educational reform and economic development, reflecting high expectations in all its components, and offering sustained and ongoing career development opportunities.

We place value on *both* academic and occupational learning, and we recognize that preparation for today's workplace will require measures of both. We do not view the decision on the part of a young person to move directly into postsecondary education or the world of work as mutually exclusive and the decisive factor in their life circumstances. We consider both work and education as critical elements in the development of the individual's growth and personal productivity. It becomes the responsibility of educators, employers, and other stakeholders, however, to help blend these experiences so that they reinforce each other and ensure maximum individual and employee development. We must combine our efforts to develop and implement quality programs that capture the best experiences and learning acquired in a variety of contexts (school, community, and workplace). Through such collaborations, we can begin to model our vision to parents and communities and demonstrate the power of a systemic approach for preparing youth to enter careers.

A Coordinated Continuum of Education and Services

Isolated institutions or policies that foster categorical thinking or approaches will not contribute to building a system of youth preparation for employment. Neither can this system be grafted onto secondary-level education. It must be purposefully crafted and infused into all levels and existing sources of schooling, which then must be fashioned to work as a whole. It requires integrated and interlinking components that function over time to produce commonly agreed-on outcomes but that allow for individual support, choice, and success. In this system, schools cannot be viewed as standalone and independent entities; nor can educators, employers, or community-based organizations. Each must be viewed as part of a broad web of service providers—each dedicated, organized, and prepared to assist young people, among other clients, as they move toward adult roles and productive employment.

Learning in schools, communities, and workplaces must be synchronized to prepare youth for success in college, careers, and immediate employment. To be effective and to offer maximum routes to success, there must be a coordinated effort across schools, colleges, community-based organizations, youth or-

ganizations, social service agencies, and the public sector and business employment communities. Each must work to provide a seamless educational experience without barriers and gaps in service and with appropriate bridges across each transition point. The system must represent a continuum of restructured education, training, and employment experiences, supported by the health, social, and family services that make it possible for all young people, including those with special challenges, to access these opportunities, succeed in them, and attain the recognition and benefits of participation.

A system of youth preparation for employment must be directed by a comprehensive competency-development strategy whose objective is “fully prepared,” not just “problem free,” adolescents (Pittman & Cahill, 1992). The strategy would systematically and concurrently build the competencies needed for successful adulthood, including health/physical, personal/social, cognitive/creative, vocational, and citizenship competencies in the context of basic human development needs. In this manner, the credentialed competencies—academic and vocational—typically the charge of education institutions, would benefit and be reinforced by the noncredentialed competencies. These outcomes—personal health and social development, and the promotion of connections and commitments to individuals, family, and community—have typically been the focus of youth-serving organizations.

Such a continuum of experiences would take youth:

- Through high school completion (or its equivalent) with the academic, experiential, and human service supports they need to be ready to enter specific career areas (should they choose).
- Into a range of postsecondary options that include education and training, immediate employment, or both. These options should lead to or result in occupational certificates or academic and professional degrees.
- And beyond, to a continuous and lifelong learning process of upgrading and acquiring new skills, competencies, and further specializations, as needed. This lifelong learning process should be supported by learning and training oppor-

tunities on the job and in education and training institutions in the community.

Flexibility

The system must be flexible, offering a number of routes with a series of milestones (such as degrees and recognizable competencies and certificates), as well as links across and within sectors. It must have multiple entrances and exit points with systems of assessment that reward performance and effort and make it possible for youth to build toward higher levels of knowledge and proficiency. It must provide flexibility for looping back, stopping, and reentering as personal conditions dictate. It must contain mechanisms for participation by young people who lack a high school diploma or have special challenges to successful education, training, and employment.

The system cannot have a time or age limitation on services that help youth access these opportunities, but must provide them when they are needed and to the extent necessary to ensure success for all. Hence, a teenager with limited basic skills or limited English proficiency would be accorded the full range of supports and services necessary to access the school-to-work opportunity curriculum—in much the same way as supports are provided in the elementary grades to remediate and accelerate student learning and success. The system must provide ample opportunities for young people to learn and to practice, reinforce, and build on their experience, knowledge, and skills in a variety of settings and conditions.

Clear Pathways

These options, though they may be different, must be of equal high quality and must have characteristics, entrance requirements, and outcomes that are readily apparent to young people and their families. This clarity allows for informed choice and planning in the career development process.

If learning is to be relevant enough for young people to sustain their motivation and commitment, it must be part of a clear pathway to success, replete with real opportunities that are worthwhile and attainable. Youth should have access to broad career pathways that offer a range of job preparation and credentialing opportunities and stop-off points at which young people can begin initial employment or

continue to higher levels of employment preparation and credentialing.

Young people must be able to see the prospects for real jobs with career potential. They must be able to see opportunities for advanced education and training in the workplace, as well as opportunities for employer-supported coursework outside the workplace that enhances career potential. They must be exposed to role models in those careers with whom they can relate, preferably in a mentoring capacity. To create this reality, we must link educational reform and practice to economic development and employment prospects. We must establish clear pathways between youth preparation and the economic and service opportunities within communities and regions.

Educational Reform and Economic Development

Where there is little economic viability, there is little hope and personal investment on the part of youth. If mechanisms do not already exist for youth to be part of local economic development enterprises or other workplace opportunities, creative approaches must be designed to provide simulated work experiences, youth entrepreneurial enterprises, and service activities of value to the community. If necessary, young people should be given routes to access work-site learning opportunities outside of their localities, in much the same way that youth access postsecondary options outside their local areas.

High Expectations

Our vision must entail uniformly high expectations for young people and assurances that no matter which pathway they take, the end result will be the attainment of world-class standards of performance. Although standards will not vary, we must be open to variations in the place, time, and learning approach individuals will need to reach these standards. These high program standards must be consistent and must exist in all parts of the system—in schools, in community-based organizations, and on the job. Our efforts must result in high-wage, high-skill career opportunities for young people in high-performance workplaces.

To realize this vision, we must have in place high-quality curriculums, programs, and services in our

schools and communities that support employment preparation and continued education for all youth—especially those underserved by our current systems of education, training, and employment. To ensure maximum opportunities for success for all youth, we must base this transition on a strong elementary, middle grade, and secondary school experience. We must provide a purposeful, developmentally appropriate continuum of activities and interventions designed to gradually introduce young people to opportunities in the workplace—its expectations of them, supports, and requirements for success.

Sustained and Ongoing Career Development

To participate and succeed in school-to-work transition activities, all youth should have access to systematic and continuous programs of career development that include awareness, exposure, exploration, and guidance. The National Career Development Association (Engels, 1994) has approved a policy statement that describes the nature of and the need for career development for all persons across the life span. The policy emphasizes the importance of the freedom of career choice; the availability of equity of career development opportunities; and the partnerships among the school, the home, and the community needed to provide career development assistance to young people.

According to the American Counseling Association, we should design programs to integrate career development competencies and outcomes (such as work readiness in areas of work ethics, attitudes, and job-seeking skills) into curriculums and specific academic subjects for *all* students. The business-industry-labor community should be directly involved in developing and implementing career exploration strategies, including innovations like job shadowing and “boss for a day.” Other kinds of work-based learning include field trips, paid work experience, education-business partnerships, and apprenticeships. Where necessary, additional initiatives should be designed for students with special career development needs and objectives, such as girls and women in preparation for nontraditional careers, and students with disabilities. Finally, all students and their parents must be provided access to comprehensive and accurate information about labor market and workplace trends.

Our continuum of youth preparation experiences should draw on multiple strategies, previously developed but not fully implemented. These strategies include integrating career concepts developmentally through the curriculum, providing career centers and career counselor assistance, providing mentors and role models, and encouraging business-industry-labor partnerships. We can offer peer tutoring, peer facilitating, and cross-age teaching. We can implement problem-solving and decision-making models, provide exploratory work experience at different developmental stages, and offer apprenticeships and other work-based learning. Other approaches include assisting in job search and placement and providing community service programs and action learning (American Counseling Association, n.d.).

The Strategy

We now have the theoretical and practical experience to make the commitment necessary to prepare all youth for lifelong learning in schools, communities, and workplaces through combinations of academic and experiential learning, with appropriate supports from various sources. The potential has never been greater for making substantial changes in schools, particularly in schools with sizable numbers of children in poverty and in schools that have traditionally reflected low levels of expectation and success for students.

We embrace and advocate a belief system that “all children can learn more, that virtually all children can learn at high levels, and that there is a solid foundation of knowledge on which teachers and principals can draw to make this happen in every one of our schools” (Commission on Chapter 1, 1992, p. 7). The work of many researchers and practitioners has shown how this belief system can be realized through:

- Acceleration of student learning (e.g., the work of Henry Levin and his associates in developing schools that build on students’ strengths, rather than focusing on their weaknesses);
- Responsibility and accountability of the school site to guarantee the success of each child;
- Recognition that success will require additional resources to support immediate and intensive assistance;

- Greater emphasis on prevention so that remediation is a last resort;
- A focus on classroom change to maintain student gains (Slavin, 1989); and
- The development of schools with strong and respectful links to their communities and its services (e.g., the work of James Comer).

We must now use the potential inherent in the Goals 2000: Educate America Act and in the Improving America’s Schools Act of 1994 (the reauthorized Elementary and Secondary Education Act) to support the development of quality staff development to ensure learning success for all children, create new assessment systems to determine the effectiveness of schooling and the achievements of our children, and develop the necessary linkages with community services and families to reinforce and continue our efforts.

This challenge has been taken up at the middle-grade level in initiatives to help schools make changes necessary to provide all youth in grades six through nine with educational experiences of high expectations, high content, and high support (Mizell, Hatano, & Kirkwood, 1994). We are greatly indebted to the middle-grade school reform movement spurred by the *Turning Points* (Carnegie Council on Adolescent Development, 1989) recommendations that have forced changes in the organization and curriculum of middle-grade schools to make them more compatible with the intellectual and emotional needs of young adolescents. Among the many driving forces of this reform is the reality that young people “will seek jobs in an economy that will require virtually all workers to think flexibly and creatively as only an elite few were required, and educated, to do in the past” (Carnegie Council, p. 8). The *Turning Points* recommendations are designed to not only create better learning and social environments for young adolescents, but also to create a foundation of strong middle-grade education on which higher levels of education can build.

Many of these reforms are now reflected at the upper secondary level. We are seeing new configurations of schools-within-schools; new relationships between schools and communities through service learning; and new relationships between schools and employers through work-site learning. Many schools are detracking and merging the college prep, general, and vocational education tracks through rigorous new

career-focused programs of study. Schools are providing new sequences of courses that span secondary and postsecondary education and training; new strategies for teacher development to support integrated curricula that span academic and occupational education; and integrative approaches to youth development.

Changes in federal law now make it easier to address the needs of disadvantaged students through secondary-level, schoolwide enrichment programming under Title I of the Improving America's Schools Act and the 1992 Job Training Partnership Act (JTPA) reform amendments authorizing schoolwide projects and more recent changes to the summer youth employment and training program. In addition to the availability of summer jobs, programs allow for contextual learning opportunities that integrate the development of general competencies and academic skills. It is now possible for schools in high-poverty areas to create schoolwide, year-round, developmentally appropriate school-to-work activities and services.

JTPA funds can support many of the services necessary for youth to be successful in school-to-work programs. These services include youth and family outreach; comprehensive assessment and referral to social, health, child care, and recreational service providers; remediation and academic support to enable attainment of core academic standards; compensatory education support to facilitate progress toward achievement of skill certification; mentor training; job-readiness and job-retention skills training; needs-based financial support; subsidized initial work experiences; and post-program employment, education or training in placement assistance (Brown, 1994).

Welfare reform efforts provide support for young parents receiving public assistance to stay in school and continue preparation for employment and self-sufficiency. Through the Family Support Act of 1988, eligible teen parents and young adults can participate in programs that combine academics, occupational training, life skills development, and employment. As dropouts, they are at greatest risk of remaining on welfare for long periods of time.¹ Programs that have been shown to be effective for youth at risk of dropping out include comprehensive service-based interventions (such as high-quality education; career development; reproductive health, mental health, and child care services; and employment). These services are usually accompanied by financial bonuses and

penalties that reward high school completion and then employment. Unfortunately, these measures have shown little effect for women who have already dropped out (Granger, 1994).

Retaining parenting youth in school and providing high-quality services and incentives must be a high priority for policymakers and practitioners. Responding to the education, services, and training needs of young public assistance clients and their children represents a serious challenge that must be met by education institutions and service providers. Appropriate programming may require redesigned school schedules, small classes, special tutoring and mentoring, education and vocational assessments, and case management strategies to ensure access to and coordination of necessary services. Programming may require the active involvement and cooperation of job training agencies, literacy service providers, schools and community colleges, and health care providers. To reinforce the utility of learning and maintain motivation, we will need a range of instructional strategies and creative approaches to learning and acquiring competencies. These strategies may include hands-on experiences; computer-assisted learning; on-the-job training; and instruction that is individualized, self-paced, and competency based. We may need to provide varied contexts for learning (e.g., through child development instruction in specially designed family education programs or within the context of occupational skills training). To participate in welfare-to-school-and-work efforts, these youth will also need a range of services, such as child care and family education either at the learning/work-site or nearby.

Some schools and communities have developed promising initiatives and faced new challenges in the way they provide education and services to in-school youth. Our response to a new economic mission for schools and other service providers, however, demands nothing short of major, systemic reform. We need new linkages among schools, communities, employers, social service agencies, and postsecondary education to ensure that young people still in school can realistically choose among and successfully pursue a number of high-quality postsecondary school options.

The picture is more bleak for out-of-school youth. For these young people, we need to totally rethink the structure of services. We need to fashion ways to re-

capture them in education and employment preparation that lead to the same high expectations and outcomes we want for youth within our “first-chance” systems.

The Challenge

Education systems are increasingly accepting the challenge of a new economic mission: Old standards and expectations are no longer appropriate for a global economy that increasingly depends on broadly educated workers with high skills, in conjunction with more powerful and flexible technologies and work formats. According to Carnevale and Porro (1994), not only have educational requirements increased for front-line employees, but these employees are increasingly supported by a cadre of highly educated sales, managerial, professional, and technical workers. All employees are involved in the chain of work necessary to provide “quality, variety, customization, convenience, speed, innovation, and social responsibility in the final value of products and services” (p. 9).

Among the critical components of competitive performance valued by corporations are generic cognitive skills (including problem-solving and decision-making abilities). Businesses and corporations value these skills because they allow entry-level employees to start their employment in a learning mode. Businesses also value social skills, particularly communication, personal, and interpersonal skills. Increasingly, corporations look for cross-cultural competence—as a critical human resource requirement and a reflection of the growing diversity of the work force (Bikson & Law, 1994).

Education systems have begun to respond to this economic challenge by instituting reforms aimed at improving the quality of education for an expanded—not a restricted—number of our youth. Many of these reforms grow from findings of cognitive science and changing assumptions about how people learn. These new assumptions—based on the proposition that most students learn best when knowledge is made concrete and is related to a clear goal or context—make learning more inclusive, not exclusive, for larger numbers of youth. They have profound implications for the current structure of knowledge and practices in our schools and communities. These reforms re-

quire changes in the way schools present and deliver instruction, as well as greater reliance on more authentic learning environments, such as those available through service/community and work-site learning opportunities.

Models of cognitive apprenticeship require schools to expand the *content* of subjects beyond exclusive reliance on concepts, facts, and procedures. Such models include *problem-solving and strategies acquired through experience*; *cognitive management strategies*, such as goal setting, strategic planning, monitoring, evaluation, and revision; and *learning strategies*, such as knowing how to learn and reconfigure knowledge already possessed. Implementing these models requires changes in teaching *methods* that give students opportunities to observe, invent, discover, and engage in expert strategies in context. They require learning *sequences* that allow the learner to build multiple skills required for performance at high levels and discover the conditions to which these skills apply. They require learning *environments* that reflect the social, technological, time, and motivational characteristics of the real world where the skills and knowledge being learned are applied (Berryman, 1994).

Changes in the Structure and Organization of Secondary Schools

In recent years, many schools have undergone reforms in an effort to make better alignments with the needs of students and economic challenges. Schools have begun to elevate their role in preparing youth for the workplace. Many schools have revised their instructional philosophies, curriculums, and structures to reflect a mission of dual preparation for careers and continued education and training. Some schools have pared down the general curriculum or eliminated it in favor of more rigorous, applied sequences of courses and a focus on workplace know-how and career preparation.

Many districts and schools have begun to document the employability, occupational, and academic skills of students and create new ways (e.g., through career passports, portfolios, certificates of core competency, initial and advanced mastery, etc.) of displaying and credentialing the skills and competencies of school and program completers. They have begun the process of integrating generic, workplace readiness skills into the school curriculum and creat-

ing learning environments that make knowledge more concrete and related to a clear goal or context.

Among the reforms in secondary level education is the *integration of vocational and academic education* that is reflected in models such as Tech Prep, career magnet schools, career partnership academies (schools-within-schools), youth apprenticeship, school-to-apprenticeship, and restructured vocational education programs.²

In the High Schools That Work Consortium of the Southern Regional Education Board,³ the integration of academic and vocational education is a mechanism for addressing the differences between how high schools teach and what workers are expected to do on the job. Through *applied learning*, the essential elements of the college-preparatory curriculum are combined with effective learning and problem-solving strategies in a broad technical or business field of study.

Curricular integration becomes a way of reforming job-specific vocational education by making visible the intellectual content of occupations and providing students with work readiness skills and the knowledge to take charge of their own career decisions. Bottoms, Presson, and Johnson (1992) state:

The academic subject matter includes the essential concepts, facts, and procedures normally identified with college preparatory language arts, mathematics, and science courses. Students become familiar with ways to use academic knowledge to perform tasks and solve problems within a business or technical field. They are introduced to skills and procedures for reading and writing for learning, as well as techniques teachers and experts find useful for learning and using subject matter knowledge (p. 50).

Curricular integration not only requires changes in the structure of the curriculum but also affects the structure of school schedules and the nature of teacher relationships. In the *career academy model* (see Appendix for definition), part of the program structure involves block scheduling of academy classes (typically a set of academic and technical courses) to allow for team teaching and scheduling of related activities such as speakers from the business community or visits to work sites. It also requires close alliance between academic and technical teachers, often requiring a common planning period each day to coordinate efforts (Stern, Raby, & Dayton, 1992).

The structure of this model also addresses the social, psychological, and motivational needs of youth. Stern et al. (1992) state:

The school-within-a-school structure and smaller classes let students stay with the same classmates through four classes each, so that they become a cohesive group. The fact that the teachers work closely with one another enhances this effect. Teachers get to know their students well, a process that builds over the course of three years (p. 28).

The successful integration of academic and vocational education assumes great changes within schools and the systemic assumptions that support secondary level education. First, we need to see integration as a part of fundamental systemic change, not an add-on program. Integration ultimately forces changes in the organization of academic and vocational departments, course sequences, curriculum frameworks, teacher collaborative behaviors, assessment practices, and credentialing. It also must be undertaken in tandem with efforts to restructure large secondary schools into smaller units with greater curricular integrity. The career academy model extends curriculum integration into elementary and middle schools; community colleges; and, as it relates to work-site learning, the workplace (Ascher & Flaxman, 1993). Once accomplished, it renders the general curriculum unnecessary because students can now prepare for college entry and for more immediate employment, with the academic foundation to pursue postsecondary education and training. Participating students may further their education while they are working, or continue education or training after an initial employment period.

To fully implement these reforms, however, requires new approaches to staff development that allow teachers wide latitude and time to plan collaboratively; break down departmental barriers; problem solve; create networks within and across schools and with industry partners; and create new school structures and ways of sharing, acquiring, and assessing knowledge.

Another important reform in secondary education is the *Tech Prep/Associate Degree model*. Tech Prep is a sequence of courses beginning in the 9th or 11th grade and extending through the 14th year (and the Associate Degree), hence the 4 + 2 or 2 + 2 program models. This model was developed to address the

need for better continuity and communication between secondary and postsecondary levels of education and to provide for a more highly educated work force, a more focused high school curriculum, and a redefinition of excellence that is not limited to preparation for university-oriented programs and specific professions (Hull & Parnell, 1991).

Tech Prep uses context-based (applied academics) and competency-based teaching built around career clusters designed to help secondary level students develop broad-based competence in a career field. Because programs must align with technical education programs on the postsecondary level, students are prepared for the more intense technical specialization they will receive there. The linkages between secondary and postsecondary education provide students with extended depths of experience and opportunities for attaining higher levels of academics and occupational training leading to degrees and certificates. Among the major outcomes of effective Tech Prep programs are:

- Curriculum modifications at both the secondary and postsecondary levels;
- Stronger student academic foundations, the result of applied teaching methods and higher expectations;
- Quality, work oriented curricular sequences that prepare students for college as well as for work;
- Progress toward seamless secondary and postsecondary curriculums with less duplication and delays; and
- Better understanding on the part of students of the purpose and direction of their education (Hull, n.d.).

The successful implementation of Tech Prep has forced a greater awareness of the need for appropriate foundation courses and career exploration, beginning no later than the middle grades, so that students are well positioned to access and succeed in this curriculum model. Tech Prep students are often exposed to higher levels of academic content and skills development in an applied context in the early secondary school years. Thus, these students need more demanding vocational technical offerings in the upper secondary-level years. Like other reform models, Tech Prep requires extensive staff development and time

for curriculum development across secondary and postsecondary levels.

School, Community, and Workplace Learning

Whereas curricular integration, as well as opportunities for postsecondary education and training leading to degrees and credentials, represents a beginning of the change we seek, integration of school (both academic and occupational) and work- and community-site learning represents still another extension of experience and knowledge application for young people. Taken together, they represent the elements of a comprehensive school-to-work strategy that results in multiyear programs of sequential and integrated courses that can build toward career interests and majors with related workplace and community experience (paid and unpaid) of increasing intensity and responsibility. Through these experiences, young people develop the cognitive, social, and occupational skills, as well as real work perspectives needed for successful adult roles.

Work-Site Learning. Well-constructed, work-site learning components of comprehensive school-to-work programs offer access to work placements that are high-quality learning environments where youth can receive structure and support.⁴ They also create an employment history and provide an important source of income for many youth.

Since many youth have some form of employment, ways must be devised to make these existing experiences of greater value. Formal mechanisms are needed within schools, in school-to-work partnerships, or through independent, nonprofit entities to create and provide the necessary connecting supports from the school to the work or community site and from the work or community site to the school. This connection allows for coordination of workplace opportunities; support to workplaces and to young people; mechanisms for improving the quality of the work experience for youth already in the workplace; and outreach efforts for getting out-of-school youth back into some form of basic education.

Beyond the benefits of using workplaces and other community settings as learning environments and linking work experience to academic instruction, other outcomes exist. Among the effects of youth apprenticeship are fostering close relationships be-

tween youth and adult mentors, and giving youth constructive roles as both learners and workers with real responsibilities (Hamilton, 1990). According to Hamilton, “Apprenticeship can motivate youth to perform well and behave responsibly by giving them a clear vision of adult opportunities and the paths leading to them, and by interacting harmoniously with constructive influences from the family, community, and peer group (p. 16).”

Using work sites as places of learning, however, requires a major direct role for business partners—much beyond the “adopt-a-school” model. Employer commitments must often be of extended duration, and employers must be involved formally in planning and governing the programs, as well as shaping what students learn. Their responsibility includes providing opportunities for youth to learn about careers, experience various work environments, and often receive financial compensation (Goldberger, Kazis, & O’Flanagan, 1994).

If we are to provide the scale of work and learning placements that are required for larger numbers of youth, we must find ways to increase and deepen the involvement of employers. Many employers cite the following barriers to participation: the cost of supervising and training students, as well as student wages; fear of high student turnover (especially to other businesses once the training investment is made); insurance costs; the low maturity and limited job skills of some students; and federal or state regulations. Many employers, however, provide work experiences for young people because of the desire to help students and the local community, an interest in recruiting potential young workers into their industry, and the convenience of employing students as part-time workers. In providing work to students, some employers give as their reason their dissatisfaction with the general academic and work readiness of job applicants.

Research on efforts to recruit employers for school-to-work programs indicates the need for extensive work by program staff and leading employers who function as persuasive advocates for the programs. In this regard, business-related intermediary organizations serve as efficient vehicles for coordinating local business involvement, developing training plans for students, serving as communications links between schools and businesses, and spreading the costs of

training students widely among employers (Pauly, Kopp, & Haimson, 1994).

Linking school and work affects the way we assess knowledge and creates expanded opportunities for innovative instructional methods. Such approaches include project-based assignments, hands-on tasks, teamwork, instruction in problem-solving and communication skills, multiple methods of presenting course material, and instruction aimed at achieving competence in skills rather than memorizing information. School-to-work programs require new approaches to staff development that provide teachers with paid time to create and adapt experiential lessons for courses and to learn new instructional techniques complementary to the student’s workplace experience. Teachers and work-site supervisors and mentors may require extensive visits and internships at their respective workplaces for program planning and for developing a well-integrated set of learning experiences.

Participation of large numbers of young people in work-site learning will greatly affect the traditional schedule of schooling as blocks of time are carved out for school, community and work-site learning. We may eventually change our traditional notion of the length of the school day and the school year as “schooling” conforms more to the realities of the workplace.⁵ Beyond the logistics of identifying and cultivating quality work-site learning environments and the placement of young people at these sites, we face transportation and safety issues. Left unresolved, these issues may limit the accessibility of work-site learning for many youth.

If we are to maximize learning opportunities for our youth to gain valuable work readiness skills, knowledge of careers, and employment experience, we must develop varied strategies and explore many options. We must begin early to acquaint our children with the world of work in age-appropriate ways. Early and continuing career education and service-learning opportunities are important strategies and approaches that contribute to employment readiness of young people.

Service Learning and Service Corps. Service represents a point of interface between school-, community-, and work-site learning and can be used at almost any point in the youth development continuum, kindergarten through post-high school.

Service learning represents an opportunity for schools and postsecondary institutions to work with employers and young people to provide meaningful opportunities for community service, combined with the academic and technical skills that employers require. For children, it offers exposure to the world of work and community and provides a context for building academic and work-readiness skills. For youth, it offers valuable exploration into and experience with real-world needs that can be addressed through action and initiative, while further solidifying their work-readiness, academic and technical skills. Service represents a holistic approach to youth development and the building of multiple competencies. It is not limited to unpaid experiences or internships in nonprofit or public sectors; many programs offer stipends or other benefits and can be found in numerous sectors. In many areas, students receive formal high school credit for participation in service activities.

Because of the commonalities between service learning and work-site learning, students can benefit from greater collaboration between them. Both are

potent experiential educational methodologies, best incorporated into a total curriculum. Both involve students in filling real-world roles, in one case as community volunteers, in the other as workers. They also share other elements, including:

- A focus on the strengths and contributions of young people rather than on the problems;
- A need for strong, supportive adult guides as supervisors in service or work settings;
- The importance of structured, thoughtful reflection on service or work experiences;
- A focus on immediate outcomes for the community or employer, in addition to outcomes for the learner;
- A need for an active student role in program development, planning, evaluation, and improvement;
- An ability to engage and motivate students (Minnesota Department of Education & Minnesota Commission on National and Community Service, 1994, p. 1).

Service learning has been used in many areas as a thematic focus for restructured schools. Among the states, Minnesota has developed a comprehensive youth service and service-learning program that includes school-age, higher education, Youth Works, and service corps programs. The school-age program

provides elementary and secondary age youth with opportunities to develop general skills in preparation for employment, enhance self-worth, and give genuine service to the community. Since 1993, the focus has been on linking youth service and service learning to work-site learning. The Youth Works component or corps, for high school graduates (17–24 years old) or youth working on their graduate equivalency degrees, is designed to improve the life options of these youth through the learning of essential skills while participating in full-time community service work that meets “human, educational, environmental, and public safety needs.” Benefits for full-time programs include living stipends; post-service funds for repaying student loans, higher education costs, or expenses for adult apprenticeship programs; and points on the civil service examination. (Part-time programs also exist for 15–24-year-olds.)

The youth conservation and service corps available nationwide represent an important contribution to youth development by involving young people in work projects to help improve conditions in communities and the environment, develop the required skills to make these contributions, and create an understanding of and respect for team structures. Though the corps are open to all youth, research has documented significant increases in the post-program income of economically disadvantaged corps members. However, research has documented limited success in improving basic skills and educational attainment for these youth (Branch, Leiderman, & Smith, 1987). Nonetheless, youth corps represent a strategy for improving the earning prospects and long-term employment of at-risk youth. These service corps offer a transitional point in time when any young person can develop, mature, and discover value in their own efforts and contributions to communities.

Services for Out-of-School Youth. The corps represent one approach within our sizable “second-chance” system of education and employment preparation for out-of-school youth. The system exists in schools, community-based organizations, and correctional institutions, among other sites. It is designed to address the needs of youth with the most serious challenges to productive employment. Our greatest attention, of course, should be placed on *preventing* early school leaving and failure through reforms in elementary and secondary schools (as discussed previously).

But we need to rethink our second chance systems so that they are not second-class systems, but truly different approaches to achieving success and competence.

Alternative programs represent avenues to advancement for youth who were “pushed out” or could not succeed in the environment of regular schools. Outside of the Job Corps and a few other programs, alternative schools or programs that combine basic education and training have been tried repeatedly and have failed to produce positive impacts on employment, earnings, or reduced welfare receipt, other than the GED.⁶ Critics indicate that many second-chance programs rely primarily on work experience divorced from a strong academic learning component; are expected to reverse years of inadequate education and alienation in a few weeks; and build success in the labor market in the absence of appropriate diplomas and credentials (Goldberger et al., 1994).

Years of research by the Manpower Demonstration Research Corporation (MDRC) have identified the following critical building blocks for effective youth employment programs:

- A flexible, not linear system, to respond to the varying interests and needs of youth at various stages of development, and a range of options, not a fixed sequence of activities.
- Interim rewards and benchmarks to address attendance and retention problems.
- A work environment in training classes, education focused on the demands of the workplace, applied or experiential learning, involvement of business in the training, and willingness to adapt training classes to changes in the labor market.
- Work experience or work-based learning that provides income support while in training and opportunity to apply classroom learning to the workplace, orientation to the work culture, and access to jobs with career potential.
- A focus on building positive affiliations with adults and peers through strengthening family relationships, mentoring, community service, volunteer work, clubs, and cultural and recreational activities.
- Peer support, leadership development, recognition and respect, and a focus on building on personal strengths.

- Connecting activities at key transition points—between school years, high school and post-secondary education, and training programs.
- Ongoing support after job placement or the transition from one component to another.
- Staff development to further professionalize the field in areas of adolescent development, counseling, and clinical or mental health skills.

Because of the related expense, the more successful programs serve a very small portion of the youth with special needs. Many programs and sources of funds, however, are available. If we coordinate these programs, we can provide support for the necessary components of a comprehensive approach to providing extended, high-quality education and employment preparation services for out-of-school youth.

A Design for an American System of Youth Employment Preparation

Given the outcomes we seek for all young people—to be prepared to enter careers and continue to post-secondary education and training—and given the inputs and interventions we have at our disposal, what would an American system of youth preparation look like? In developing a system of youth employment preparation, we must ensure the proper placement of many interlinking pieces of a great puzzle. We must seek answers to the following questions:

- How and what programming should we provide at critical stages of youth development to ensure the development of a range of competencies necessary for adulthood?
- How do we structure a system that is flexible, not a lock-step approach that assumes that all youth will move uniformly in one direction at a particular time, and that provides opportunities for stopping and reentering?
- How do we ensure membership and engagement of all young people in pathways to employment?
- How do we coordinate efforts among schools, colleges, community-based organizations, social service agencies, and the business community to effect structured and smooth transitions for youth?

- What strategies are needed to communicate regularly with families about the importance of education in preparing young people for employment and careers, as well as the family’s role in supporting the career development of their children?
- How do we address the related logistics, such as issues of advance placement, credit for applied courses and learning in the workplace, portability of credentials, transportation to work sites, and child labor concerns?
- How do we expand current reforms to improve the quality of elementary and secondary education? To address the scale and quality of opportunities for learning in the workplace and community, and for early orientation to work and knowledge of careers?
- How can we expand and make available the number of proven structures (e.g., restructured vocational education, career academies, high schools with a career focus, quality cooperative education programs, youth apprenticeship, Job and Service Corps, etc.) that provide mentoring, academic and career direction, integrated curriculums, and skills?
- What strategies are necessary to change the organization and content of instruction and the manner it is delivered (in schools and other sites) to maximize the preparation of youth for the workplace and other postsecondary endeavors?
- What are the staff development requirements of a school-to-employment system?
- How should the funding of a school-to-employment system be shared among the various stakeholders, and what problems and strategies need to be addressed?

Following is a suggested schema indicating a variety of interventions and activities suitable at various ages of development (see Figure 1).

Recommendations for State Action

Coordinated and reinforcing strategies and contributions from many sectors

To create a seamless continuum of programs, structures, and services that span the elementary, middle,

secondary, and postsecondary grades and support the development of young people who are ready to succeed in postsecondary education, training, and employment, we need coordinated and reinforcing strategies and contributions from many sectors. Comprehensive planning is necessary for systemic reform in state education systems affecting elementary through adult education, economic development, social services, and the public and private employment and training sectors. Each must bring to the continuum its own area of authority and resources to provide the necessary foundation materials, reinforcements, and connectors.

Educators will need advice from and better links to the youth service sector on the appropriateness and timing of interventions that support the full development of competencies for all children and youth. Education policies must be considered in tandem with the development of children and youth service policies so that coherence is achieved. Parallel and coherent youth development must take place in schools and in community agencies to ensure that no child is left without the necessary supports to succeed.

Educators will also need the advice of the business and labor communities on the type of skills and competencies required of future employees. They will also need accurate labor market information to plan and implement programs that are in demand and that provide career potential, and to counsel students appropriately.

All sectors must contribute to the comprehensive competency development of youth by providing ample opportunities along the continuum to master high-level content; develop performance and broad-based or more specific occupational skills (as appropriate); be exposed to careers and systematic career development; and have opportunities for community and work-site learning.

Restructured education systems

Education systems must experience profound change to provide curriculums and instructional strategies that are developmentally appropriate to students, beginning in the earliest grades on through young adulthood. These strategies must make use of and build on integrated academic and occupational learning; applied and experiential learning, using the classroom, community, and the workplace; and generic, work-

Figure 1

Continuum of Activities

This chart represents a continuum of activities and interventions suitable at various stages of development. Elements of the early stages apply throughout a youth's development with varying degrees of focus and intensity, thus creating a seamless and comprehensive system of youth preparation leading to productive employment, responsible citizenship, and lifelong learning. Activities listed under alternative education are targeted to youth who are no longer in regular education and employment preparation programs, and they complement the elements of the continuum.

K - 6 Elementary

Child-centered school environment.

Safe and structured school environment.

Uniformly high expectations for all children.

Child and youth serving organizations address human development needs not met in school.

Counseling and referral to human service agencies as necessary.

Strong family, community, and school partnerships.

Community partnerships designed to support civic responsibility and career exploration strategies.

Development of positive relationships and close and sustained interactions among peers and adults.

Academically challenging, integrated, applied, and hands-on core curriculum.

Cooperative learning and flexible school schedule.

The fostering of health and fitness.

Restructuring schools into small learning communities.

6 - 8/9 Middle Grades

Support for transition to middle grades.

Use of authentic assessment and student portfolios to document progress.

Adaptive learning/instruction strategies to accommodate individual styles and needs.

Tutoring and other supports to ensure that students progress on grade level.

Instruction in generic cognitive skills (problem-solving, decision-making, goal-setting, and planning) and communication skills.

Work concepts and career awareness integrated into the core curriculum.

Engagement of families in education.

Increase the involvement of employers, businesses, and related intermediary organizations.

Establish advisor/mentor relationships for every student.

Integration of work-readiness skills into core curriculum.

Begin the development of an individual education and career plan.

Recognition of student's individual responsibility and independence.

Access to accurate and comprehensive information about labor markets and workplace trends for all students and their parents.

Extensive use of career exploration that includes work-site exposure and experience.

Opportunities for mentoring and building relationships among students, staff, and adults in the community.

Intimate and continuous teacher/student relationships.

Supports for accelerated student learning, achievement, and empowerment.

Schools provide flexible times, places, and strategies for learning.

Pathways to success that are clear, attainable, and worthwhile and that lead to degrees and credentials.

Multiyear, quality, work-oriented curricular sequences that span secondary and postsecondary education and training.

Detracking, merging, and replacement of the college prep, general, and vocational education tracks with new, high-quality, academic-career majors.

9/10 - 12 High School

Support for transition to high school.

Interdisciplinary teaching and teaming.

Occupational/technical clusters based on strong academics and broad occupational knowledge and skills.

Contextual and applied learning in diverse settings and conditions.

Instruction and work experiences become more focused to reflect student interest, but maintain broad occupational/career cluster orientation.

Planning time for collaboration between academic and technical teachers to support integrated curriculum.

All students prepared for immediate entry into workforce.

All students have access to postsecondary education and training.

All students have opportunity to complete an academic core, career major or occupational-specific program, and a work-site learning component.

Community-based, continuous case management and financial incentives for at-risk youth.

High-quality avenues of access to learning and work experience.

Instructional practices, programs, and services tailored to the special needs of youths.

Empowering youth to advance their careers.

Post-job placement support to help with retention and career advancement.

Alternative Education

Well-structured and coordinated on-the-job training and school-based learning must be available.

Admission requirements to postsecondary institutions move to performance-based assessment, accepting applied learning and work-site learning experiences for admission.

Stronger articulation between high school and postsecondary curriculum and credit and advanced standing in the postsecondary system.

13 - 14 Postsecondary School and Work

Support for transition to post-high school education, training, and work.

readiness skills. This will require the broad advent of structured programs of school-to-work transition that reflect these strategies, such as career academies, Tech Prep, and youth apprenticeship. It will require vocational/technical education that is reshaped to reflect these reforms and the need to prepare all youth for maximum employment options and success in demanding and profitable career fields.

To embrace new curriculums, strategies and program structures may require changes in the way we staff our schools, in course sequences and curriculum frameworks, in teacher collaborative behaviors, and in the way we assess and credential young people. The structure of these programs should also reflect the social and developmental needs of youth. Schools-within-a-school, clustered around occupational and academic areas, as well as small teacher-student groupings provide intimate, family-like structures of support. There should be greater flexibility in the school schedule and the length of the school day and year to allow for block scheduling, team teaching, and a greater reliance on learning in the community and work site.

The design and implementation of these programs should be full collaborative efforts of schools, communities, labor organizations, and workplaces. The basic knowledge and career exploration prerequisites for programs designed to transition youth from school to the workplace should begin early and be a part of the education foundation of all children so that every young person can access these options.

New state and local capacity development

States and local districts must develop the capacity to fully transform curriculums, programs, and services in support of this continuum of learning. Through state and local policies and staff development activities, state agencies must encourage and support the use of innovative instructional methods. These approaches should include project-based assignments, hands-on tasks, teamwork, instruction in problem-solving and communication skills, multiple methods of presenting course material, new kinds of assessments to determine the effectiveness of instruction, and instruction aimed at achieving competence in skills rather than memorization of information.

Other supports for instructional staff include giving teachers time and responsibility to work on

students' problems, keeping students and teachers together for multiple-year program sequences, and providing tutoring for students. Policymakers and local school officials should assist in the development of new student support and program structures by providing technical assistance and appropriate funds to schools and alternative learning sites to support these organizational changes.

Staff development

New forms of staff development must be considered that provide teachers with paid time to plan, develop, and adapt experiential lessons for courses, learn new instructional techniques (e.g., through visits to workplaces and interaction with workers and work-site mentors), integrate career development strategies for students into coursework, and study these efforts and effects on the achievement and success of their students. Linking school and work-site learning requires new levels of interface between teachers at the school site and supervisors or mentors at the work site. It requires substantive rethinking about curriculums and how learning at each site is reinforcing and complementary. It requires the development of new responsibilities and competencies among school and workplace staff.

Strategies for aligning and coordinating learning

We need to develop formal strategies for aligning and coordinating learning in schools, community colleges, alternative settings, communities, and workplaces. We need new strategies assessing and recognizing student effort and mastery through the award of credits, certificates, and other forms of acknowledgement. Student records must be illustrative of these accomplishments and undertakings and the appropriate outcomes and competencies noted. Change will be required in high school exit and post-secondary entrance requirements from time-based (i.e., Carnegie units) to performance-based, including work-related, measures. Exit standards should be developed to ensure that students have mastered important skills.

State education agencies must be enablers of this change by creating waivers and other regulatory changes affecting credit for graduation and work-based learning, admission to postsecondary institutions, teacher certification, formal agreements, and

incentives to accept and recognize effort across the various sectors.

Reinforcing standards

Academic, work-readiness, and occupational skills standards should build on and reinforce each other. Together, they should represent a blueprint of valued and necessary knowledge and competencies to inform young people and their families, as well as educators and other service providers, of what must be learned and demonstrated to be successful in school and in the workplace.

Connecting mechanisms

We also need formal mechanisms, through school-to-work partnerships or independent, nonprofit entities, to create and provide the necessary connecting supports from the school to the work or community site and back to the school. This kind of support allows for determination of the number and quality of workplace opportunities available in communities; recruitment of additional employers and community-based learning sites; and coordination of workplace opportunities. These mechanism should provide support to workplaces and to young people; improve the quality of the work experience for youth already in the workplace; and provide outreach efforts for getting out-of-school youth back into some form of basic education and training.

Access and participation

Equitable access to and participation in quality programs should be a major concern of all system stakeholders. Programs should ensure student diversity by providing access to college and other post-secondary options, using open eligibility and admissions policies. Multiple supports, reinforced through continuous academic, work readiness, social skills development and social services, are necessary to ensure that all students are successful. Students should have access to a wide range of progressively challenging and responsible work-site and community-based learning placements to develop appropriate workplace comportment and attitudes.

Career development and up-to-date labor market information

All youth should have access to systematic and continuous programs of career development that include

awareness, exploration, and guidance. Programs should be designed to integrate career development competencies and outcomes (such as work readiness in areas of work ethics, attitudes, and job-seeking skills) into curriculums and specific academic subjects for *all* students. The business-industry-labor community should be directly involved in developing and implementing career exploration strategies, such as job shadowing, boss-for-a-day, field trips, paid work experience, education-business partnerships, apprenticeships, and other kinds of work-based learning. Where necessary, additional initiatives should be designed for students with special career development needs and objectives, such as girls and women in preparation for nontraditional careers, and students with disabilities.

All students and their parents must be provided access to comprehensive and accurate information about labor market and workplace trends. To promote informed decisions by students and to avoid wasteful expenditures, school-to-work programs should provide students with full information about the careers they are considering and should expose them to those careers through workplace visits, before they enter an intensive and expensive training program in the workplace or a community college. Continuing career exposure and college counseling should be part of school-to-work programs.

Family involvement

Families play a vital role in helping their children prepare for meaningful work and productive careers. Schools should communicate regularly with families and family organizations about their role in the career development of their children and suggest activities and strategies that will help families carry out this role. Parents, in their roles as employees, should be viewed as resources for career development, mentoring, and identifying workplace learning sites.

Resources and funding

Schools, communities, and workplaces must be provided appropriate levels of resources and support to ensure learning success for all youth and should be held accountable for their success.

Comprehensive programs of youth employment preparation should be funded from a variety of sources, with no one entity required to be the sole source.

Whereas extra resources, including intensive staff time and funding, may be needed to start programs, the implementation of core and support components should come from existing federal and local elementary, secondary, vocational, and adult education funds; social services; and job preparation programs. Many existing program funds should be redirected for use in new programs, in line with the comprehensive vision of youth competence and preparation for employment. As well, staff roles should be redirected to address the new expectations and responsibilities of this vision.

Business, labor, and employee involvement

We can do none of this without a strong commitment from businesses (large and small), labor unions, and employees, including parents, to embrace this vision of a continuum of education and services. All must accept their roles and responsibilities as major players in providing large numbers of youth with valuable community and work-site experiences to ensure their successful development and movement from school to successful employment and lifelong learning.

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APPENDIX

Definition of Terms

Career. The sequence of occupations and other life roles that combine to express one's commitment to work in his or her total pattern of self-development (National Occupational Information Coordinating Committee, 1994).

Career Academies. Schools-within-a-school organized around a broad occupation or industry theme. Academies typically begin in 10th grade and integrate academic and occupational learning around a single industry cluster delivered by a group of teachers who closely coordinate their instruction. Employers usually participate in the development of the curriculum, serve as mentors, and provide employment for students.

Career Guidance and Counseling. Programs (a) that pertain to the body of subject matter and related techniques and methods organized for the development in individuals of career awareness, career planning, career decision making, placement skills, and knowledge and understanding of local, state, and national occupational, educational and labor needs, trends, and opportunities; (b) that assist individuals in making and implementing informed education and occupational choices; and (c) that aid students to develop career options with attention to surmounting gender, race, ethnic, disability, language, or socioeconomic impediments to these options and encouraging careers in nontraditional occupations (School-to-Work Opportunities Act of 1994, Sec. 4).

Career Major. A coherent sequence of courses in a field of study that prepares a student for a first job and that (a) integrates academic and occupational learning, integrates school-based and work-based learning, and establishes linkages between secondary schools and postsecondary educational institutions; (b) prepares the student for employment in a broad occupational cluster or industry sector; (c) typically includes at least 2 years of secondary education and at least 1 or 2 years of postsecondary education; (d) provides the student, to the extent practicable, with strong experience in and understanding of all aspects of the industry the student plans to enter; (e) results in the award of a high school diploma or its equivalent, a certificate or diploma recognizing successful completion

of 1 or 2 years of postsecondary education (if appropriate), and a skill certificate; and (f) may lead to further education and training (School-to-Work Opportunities Act of 1994, Sec. 4).

Career Planning. Students use information gained through self-knowledge and occupational and educational exploration to develop and revise plans to reach their career goals. School counselors provide help and training in career decision-making and planning. School counselors coordinate the development of career plans and portfolios with students, parents, and teachers. Counselors recognize and reinforce the important role that parents play in their children's career planning and goal setting (American School Counselor Association, National Career Development Association in collaboration with the Association for Counselor Education and Supervision and the National Employment Counseling Association, n.d.).

Content Standards. Broad descriptions of the knowledge and skills students should acquire in a particular subject area (Goals 2000: Educate America Act, 1994, Sec. 3).

Integration. Integration eliminates the distinction between abstract (academic) and functional (vocational) education by constructing course work and course sequences in which all students achieve both academic and technical competencies and generic skills in what can be called work-related education (Ascher & Flaxman, 1993).

Occupational and Educational Exploration. Students investigate qualifications for various occupations and learn about requirements for further education and training. School counselors work with teachers to infuse career awareness and exploration activities into the curriculum. School counselors identify or provide opportunities for experiential learning, mentoring, community service, internships, job shadowing, career seminars, and peer teaching. School counselors support and coordinate the collaborative efforts of administrators, teachers, parents, and business and industry representatives (American School Counselor Association et al., n.d.).

Occupational/Academic Cluster Programs. These programs offer all students in a high school a choice of several distinct career pathways, each based on a sequence of related courses tied to a cluster of occupations. Each cluster offers students occupation-

specific courses or training in vocational skills after they complete introductory courses while integrating academic and occupational instruction and sometimes using applied learning techniques (Goldberger et al., 1994).

Performance Standards. Concrete examples and explicit definitions of what students have to know and be able to do to demonstrate that such students are proficient in the skills and knowledge framed by content standards (Goals 2000: Educate America Act, 1994, Sec. 3).

Service Learning. A form of experiential education in which participants gain and apply knowledge and skills as they seek to meet real community needs. Service learning differs from conventional community service or volunteerism by incorporating structured reflection and links to the academic curriculum. It emphasizes concrete outcomes both for learners and for the community. Service learning is an educational methodology rather than a new subject area.

Skill Certificate. A portable, industry-recognized credential issued by a School-to-Work Opportunities program under an approved state plan, that certifies that a student has mastered skills at levels that are at least as challenging as skill standards endorsed by the National Skill Standards Act of 1994, except that until such skill standards are developed, the term “skill certificate” means a credential issued under a process described in the approved State plan (School-to-Work Opportunities Act of 1994, Sec. 4).

Skills Standard. A standard that specifies the level of knowledge and competence required to successfully perform work-related functions within an occupational cluster (Goals 2000: Educate America Act, 1994, Sec. 508).

Tech Prep. Links high school with community colleges and businesses in 4 + 2 (grades 9–14) programs

with a strong academic foundation in math, science, and communications using work-related situations as the context for teaching content and ways of thinking. The 4 + 2 curriculum structure supports all school-to-work initiatives through integration of vocational and academic education and by including work-site learning components.

Vocational Technical Education. A process that produces the combination of academic, theoretical, occupational, and employability skills necessary for success in a chosen occupation or occupational cluster. It is a “first-chance” system that prepares youth and adults for the workplace of today and tomorrow. Vocational technical education trains youth in skills needed to enter the work force or an institution of further learning. Vocational technical education prepares adults in need of retraining or skills upgrading.

Youth Apprenticeship. Links school-based and work-based learning with paid employment. Programs generally begin in the 11th or 12th grade, provide structured links to postsecondary programs, and stress the importance of industry-recognized credentials of occupational skill mastery.

Work-Based Learning. Provides specific job skills and experience through a combination of school-based training and actual work experiences in real work settings, usually at off-school sites. Work-based learning programs cooperatively involve student, school, and employers.

Workplace Mentor. An employee or other individual, approved by the employer at a workplace, who possesses the skills and knowledge to be mastered by a student, and who instructs the student, critiques the performance of the student, challenges the student to perform well, and works in consultation with classroom teachers and the employer of the student (School-to-Work Opportunities Act of 1994, Sec. 4).

