DOCUMENT RESUME

ED 378 376 CE 068 000

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TITLE Improving the U.S. System of School-to-Work Transition for Youth and Young Adults: A Consideration of the Federal STWOA.
PUB DATE Dec 94
NOTE 26p.; Paper presented at the Annual Convention of the American Vocational Association (Dallas, TX, December 9-13, 1994).
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Education; Apprenticeships; Articulation (Education); Cooperative Education; Corporate Support; Educational Legislation; *Education Work Relationship; Federal Legislation; *Integrated Curriculum; Internship Programs; *Models; *On the Job Training; Postsecondary Education; School Business Relationship; Secondary Education; *Vocational Education

ABSTRACT

As schools attempt to foster smoother transitions for youth into the workplace, differing realities must be considered. A school-to-work opportunities system cannot be restricted to those occupations meeting an elusive definition of "high wage." Three possible workplace learning opportunities are as follows: the high-skill, high-wage workplace; the community-building workplace; and the capacity-building workplace. Each offers the potential for work-based learning where young people would be able to develop skills that are needed to work in high performance workplaces and that meet the requirements of broad clusters of related occupations. At present, there are at least eight strategies for connecting school-based learning (SBL) to work-based learning (WBL), including job shadowing, internship, youth apprenticeship, school-based enterprise, and cooperative education. Explicit in the current federal legislation is the integration of academic and vocational curriculum and the integration of SBL and WBL--a double integration model that integrates academic and vocational SBL with WBL. Barriers to double integration include the following: lack of continued, meaningful, and expanded business involvement; resistance to new methods of education by school-based educators; uneasy relationships between secondary and postsecondary institutions; and a lack of an identifiable credential. (A list of recommendations or best practice in combining SBL and WBL is included. Contains 29 references. (YLB)

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ED 378 376

Improving the U.S. System of School-to-Work Transition for Youth and Young Adults:

A Consideration of the Federal STWOA

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Paper Presented at the 1994 Annual Convention

of the American Vocational Association

Dallas, Tx. December, 1994

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Improving the U.S. System of School-to-Work Transition

Much of the current discussion regarding school to work transitions uses language like "high performance workplace" (U.S. Congress-HR 2884) or "high-skill, high wage" workplace (National Center on Education and the Economy, 1991). Finch (1993) offers a useful description of the direction in which the workplace is evolving and argues it is for this workplace we must prepare our youth. This *high performance workplace,* he describes is characterized by employees who make significant decisions regarding production and managers who are facilitators and coaches.

However appealing a high performance workplace might be as a site for adolescent development, the stark reality is that not all workplaces, in fact few workplaces meet that definition. More problematic still is that much of the work that needs to be done in our society or that will be available neither requires high skill nor pays high wages.. As point of fact, most of the net new jobs being created in our economy do not meet these criteria (U.S.D.O.L, 1993). This does not mean however, that the workplace is not a viable educational venue for youth nor that a focus on developing high performance skills in our youth is not a desirable end. The issue is, which workplace do we consider, can we consider, in constructing work-based learning opportunities.

Learning in The Workplace

Differing realities: local economic and employment conditions, geographic constraints,

organizational patterns, as well as social and cultural influences must be taken into account as schools attempt to foster smoother transitions for youth into the workplace. One reality that must be accommodated is the nature of the evolving work opportunities. While high skill-high wage jobs are certainly desirable as targets for employment, there may not be a sufficient quality high skill workplaces that can provide work-based learning opportunities. This dilemma is a direct result of changes in nature of work as we move into the 21st century: Higher productivity with fewer workers.

A second reality is that in some communities, there are few work-based learning opportunities for youth because there are not enough jobs for adults. This problem is particularly acute in the urban core of many cities. This condition exists despite the need for "work" to be done: houses in disrepair, crumbling infrastructure, meeting the needs of children and elderly - the list is quite extensive. The dilemma is that much of the work that needs to be done in our urban areas does not attract the sort of private investment necessary to create traditional private sector jobs.

A school-to-work opportunities system cannot be restricted to those occupations meeting an elusive definition of "high wage." Such a plan severely limits the likelihood of expanding a work-based learning system beyond a few demonstration programs . Such restrictions deny urban core youth and our rural youth, the possibility of alternative work-based learning where they can develop the skills required for tomorrow's workplace.

Rather than restrict work-based learning opportunities, three possible workplace learning opportunities are proposed: the high-skill, high wage workplace; the community building workplace; and the capacity-building workplace. Each offers the potential for work-based learning where young people will be able to develop skills needed to work in high performance workplaces and that meet the requirements of broad clusters of related occupations.

The High Skill, High Wage Workplace

Even as the national economy continues to grow and most major corporations are doing well, they are not necessarily generating net new jobs. Typically large business have achieved efficiency and productivity through considerable "downsizing." In fact, recent statistics suggest that Fortune 500 companies have been shedding, not adding workers for the past decade in order to become more competitive in the global market.

The definition of "high skill, high wage" occupation has proven elusive, (in one state it has been operationalized as any job that pays at least double the minimum wage). A number of pilot programs, primarily a result of youth apprenticeship efforts, have targeted machining, medical technology, and printing and graphics. For some youth, there will be opportunities for work-based learning in these and other capital equipment-intensive industries. COOP or its look-alike companion. youth apprenticeship offer one structure for connecting school to work in these environments.

In addition to existing "high skill" workbased learning opportunities, there is the potential for school-business partnerships to be formed that might focus on high skill occupations not presently in existing in any great number, but for which predictions assure us of their coming such as telecommunications. Partnerships could evolve between businesses representative of such future industries and schools. In this approach, schools could foster the creation of what labor secretary Reich has called, "symbolic-analytic zones" (1992) and build a workforce for the future. In this approach, partnerships with local community development corporations (CDCs), enterprise zones, and other economic development initiatives will be developed to create pools of skilled workers and attract new work opportunities to the community. These partnerships may take the form of incubator centers such as sponsored by the Fox Valley Technical College in Wisconsin. In these centers, students would work in internships or COOP like arrangements with small startup entrepreneurial firms.

Community Building Workplace.

This orientation begins with the assumption that in the process of building our nation's economic capacity, we must also build or re-build, where necessary, our local communities. Through this approach, schools become an economic partner, and economic engine for local communities. "Community Building" employment opportunities are proposed as an important part of a school-based and work-based learning opportunity system. By using the community as a "text-book," as developed by the Cambridge-Rindge Vocational School in Boston or by the Rothsay High School in Minnesota, new school-community based

enterprises will be created that meet real local needs for manufacturing and services.

This is a useful way to combat what Wagner (1992) called inert knowledge: to have students apply the new knowledge or skill in a problem-solving context. This approach is also consistent with Dewey's (1959) argument that students should be brought into contact with more adults and other students to facilitate social learning: attitudes or predispositions to behavior. Social learning is developed, according to Dewey through interacting with the environment and through modeling.

Through creation and operation of these enterprises, students can develop technical skills, learn "all aspects of the industry," develop latent entrepreneurial talent, and through more contact with adults, develop social learning as well. One such example is the Phantom Bike Shop in Minneapolis. Here a local non-profit organization working in partnership with the City of Minneapolis, the University of Minnesota, the University of St. Thomas and local businesses have created an opportunity for disadvantaged adolescents to establish their own business that also contributes to local economic development.

We also find examples of this approach in Phoenix, Arizona (housing rehabilitation), Baltimore, Maryland (restaurant and food service), Cambridge, Massachusetts (transportation-energy conservation), and Milwaukee, Wisconsin (individual entrepreneurial activities), and Rothsay, MN (hardware and grocery retailing). School sponsored economic development and enterprise incubation could be the second focus of a comprehensive work-

based learning system. The opportunity to create enterprises as a focus for learning exist in virtually all communities.

Capacity Building Workplace.

The third option in this system is "Capacity Building Work." This orientation acknowledges the realities of today workplace opportunities. Most young people are confined to what has been called the "youth labor market." This secondary labor market is characterized by jobs that require little formal education, little in the way of specific skills, and offers little in the way of pay or benefits. These are the fast food, retail, and lower level service jobs the economy is producing at record rates. This is also where most kids will find initial employment. The educational question is how to make these work experiences educative.

How can schools take advantage of this lived reality of young people? Can real learning take place in routine, lower level work? One option is to recognize the learning that can take place in this context and shape these work opportunities to better fit the broader societal goals made explicit in the Goals 2000: Educate America Act and the School-to-Work Opportunities Act of 1993. How can these workplaces and the jobs they offer be enhanced to provide academic, occupational, and social development opportunities for young workers and improve profitability of participating firms?

Three recent studies have hinted at the value of enhancing workplaces by improving the job

quality of youth jobs. Mortimer (in-press) found a positive association between job quality and psychosocial development and other developmental outcomes. Stern, et al (1994) and Stone, et al (1992) in a series of analyses found higher job quality to be associated with participation in vocational cooperative education and participation in COOP to be positively associated with a variety of social, academic, and occupational development dimensions. A proposed NCRVE study, *High Performance Learning in the Fast Food Industry*, will more closely examine these and enhanced productivity issues during 1995 and 1996.

Existing Strategies for Connecting School and Work

At present, there are at least eight strategies for connecting school based learning to work based learning. These include job shadowing, school-based enterprises, internships, cooperative vocational education, youth apprenticeship, and adult apprenticeship. One way to conceptualize the similarities and differences among these strategies is to view each as a relationship between time spend in SBL and time spent in WBL (see figure 1). Each is briefly described below.

Job Shadowing

Job shadowing has a long history of use in career education, vocational education, and other programs designed to acquaint young people with the workplace. In some instances, students will simply shadow or follow an adult worker around for a period of time, usually less than a

day. In other instances, students combine job shadowing with academic class requirements and may engage in work-based research for an English, history, or science class. In still other instances, students may be rotated through a particular industry, or among a variety of industries or career opportunities. Regardless of its use, shadowing tends to involve small amounts of time actually learning in the workplace.

Internship

According to Hartley (1983), an internship is a one-time, short-term placement, directly related to participants' academic professional goals, which is institutionally structured and monitored. Internships typically occur toward the end of participants' academic/professional training. Students are usually not paid, or are offered only small stipends. Typically, students' participation is project-oriented and observatory in nature, with little on-going connection to their schools or teachers during their internships. In many two year occupational programs, students spend the last academic term (quarter or semester) in the workplace.

Youth Apprenticeship

Numerous attempts have been made to define youth apprenticeship. Some definitions deal with overall goals and vague aims of youth apprenticeship, while others show an attempt of

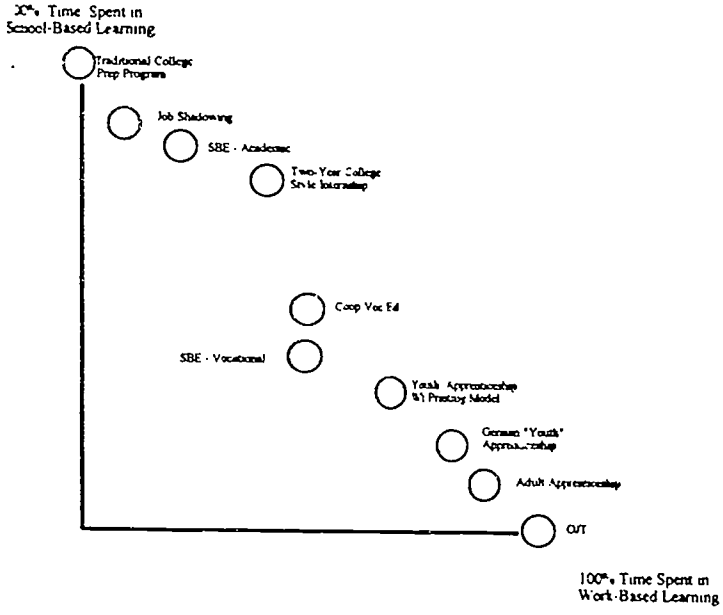

Figure 1. ***Relationship between WBL and SBL in Programs Designed to Connect School to Work***

detailed descriptions. It is in the latter that we find disagreements on working/ education ratio, as well as on weighing the importance of key participants.

Most authors agree that youth apprenticeship programs are designed to link education and work and give young students on-the-job training while they are still in school. Roditi (1991) explains the concept of youth apprenticeship as:

> 'apprenticeship because at the heart of these systems is the integration of school and workplace learning and an emphasis on learning-by-doing under the tutelage of experts; and youth, because these systems address the personal and professional development of young people' (p. 3).

Disagreements on whether youth apprenticeship represents an educational or a working experience are evident throughout the existing literature. One view sees the program as 'extension of 2+2 tech prep models to include work-based learning opportunities' (Kazis, 1991), while the other considers youth apprenticeship to be a preparation for a traditional, or registered apprenticeship program. As programs begin to develop, we see a wide variation in the amount of time spent in WBL in relation to the amount of time spent in SBL. In an early Wisconsin program, students spend three days in the workplace and two full days in school-based learning.

School-Based Enterprise

School-based enterprise (SBE) programs have come into existence for a variety of reasons, but can generally be ascribed to one of four reasons: to teach entrepreneurship, provide application of classroom developed skills, enhance social and personal development, and to

support economic dev lopment. Within these four proposes, we also find the driving paradigm to be either an "academic" approach or a "vocational" approach.

Much of the evidence suggests that the intent to impart entrepreneurial skills is a primary factor. Entrepreneurship courses are viewed as a means of giving students a practical insight into the curriculum. Kuratko (1989) observed that the number of colleges and universities offering courses related to entrepreneurship reached 3000 in 1987. But the interest in teaching entrepreneurship exists at the secondary level as well (Stone, 1980). The initial objective in most of these programs is "to develop basic skills relating to starting and managing a small business" (McFarlane 1981,p.138).

The work experience gained through SBEs takes on even more importance when we realize that of today's entrepreneurs, 40% of them are high school graduates only and another 26% have some college (Ashmore, 1988). And they are often young. Thus, the school based enterprise experience is an opportunity for potential entrepreneurs to gain experience in operating a small business. Indeed, Buzzell (1989) argues that entrepreneurship should be center stage in all vocational education.

The application of classroom skills was highlighted by Rallo (1986) in his discussion of several SBE programs where the primary emphasis was on providing an opportunity to practice the use of class taught skills. Stone (1980) discussed the application of marketing and business skills in the operation of a school store. And Cooper (1988) described the

application of basic skills in a middle school repair shop enterprise. Stern, Stone, Hopkins, Crain, and McMillion (1994) documented examples of English classes writing and marketing books, Economics classes conducting business climate surveys, and advanced science students creating "new knowledge" in functioning science labs.

A third objective pursued through SBEs is personal and social development. Moskowitz (1982) described at some length, a program using a school store SBE in a drug rehabilitation program. Stern, et al (1994) described a diner operation operated by adjudicated youth in a major urban area.

A fourth objective found to be associated with SBEs was economic development. Nappi (1986) described a college program that he felt was easily transferrable to a secondary setting where business students adopted a small town and went about a series of activities designed to rejuvenate a declining downtown. Stern, et al (1994) described such a project in Rothsay Minnesota where high school students reopened a closed lumber yard (as an advanced accounting project); acquired the local grocery store as it was going out of business; and have considered other enterprise ventures as ways of both reinvigorating the economy of the town and providing real-world learning opportunities for adolescents.

Academic driven SBEs tend to use more SBL and provide less time for WBL. By contrast, vocationally driven SBEs tend to provide students more time in the enterprise (WBL).

Cooperative education, a method of instruction imbedded in the American education system for almost 100 years, can be defined as 'the integration of classroom theory with practical experience under which students have specific periods of attendance and employment' (Stone & Wonser, 1990). A more formal, extended definition is provided by the National Commission of Cooperative Education (in Ricks, Gyn, Branton, Cut, Loken and Ney, 1991). High schools and two-year colleges usually operate their co-op programs on a parallel basis (school in the morning and work in the afternoon), while baccalaureate programs, and some two-year programs usually operate on a full-time, or alternate basis (full-time schooling and full-time work). The two-year community college programs presently represent the biggest growth potential in co-op programs. According to the recent figures (General Accounting Office, 1991) however, only 8 percent of high school juniors and seniors participate in co-op programs, while in community colleges less than 3 percent of all students take a co-op credit. Such low numbers, Grossman, Warmbrod and Kurth (1988) rightly conclude, limit the impact of co-op education in the postsecondary environment. The same can be concluded for the secondary programs.

The term "cooperative education" means a method of instruction of vocational education for individuals who, through written cooperative arrangements between the school and employers, receive instruction by including required academic courses and related vocational instruction alternation of study in school with a job in any occupational field. The two

experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his or her employability.

An important issue related to cooperative education programs is the role of employing firms. As more employers become formally involved in connecting school to work, there is a need to identify internal obstacles they encounter and how they can be overcome. A very real potential problem is that firms where learning is an integral part of the job may have low turnover and therefore few openings to offer student-learners. By contrast, other firms that do not reflect the characteristics of a "learning organization" and are characterized by high turnover, may therefore seek out student-learners to augment their labor pool (Stone and Madzar, 1994).

Double Integration: A Strategy for Improvement

Explicit in the current federal legislation is the integration of academic and vocational curriculum and the integration of School-based Learning (such as Tech Prep) and Work-based learning (such as coop; youth apprenticeship, school-based enterprise, shadowing, internships, and the like). Taken as a whole, the proposed efforts constitute a structure for the systemic reform of adolescent education. We might call this a *double integration* model (Figure 2): Integrating academic and vocational SBL with WBL.

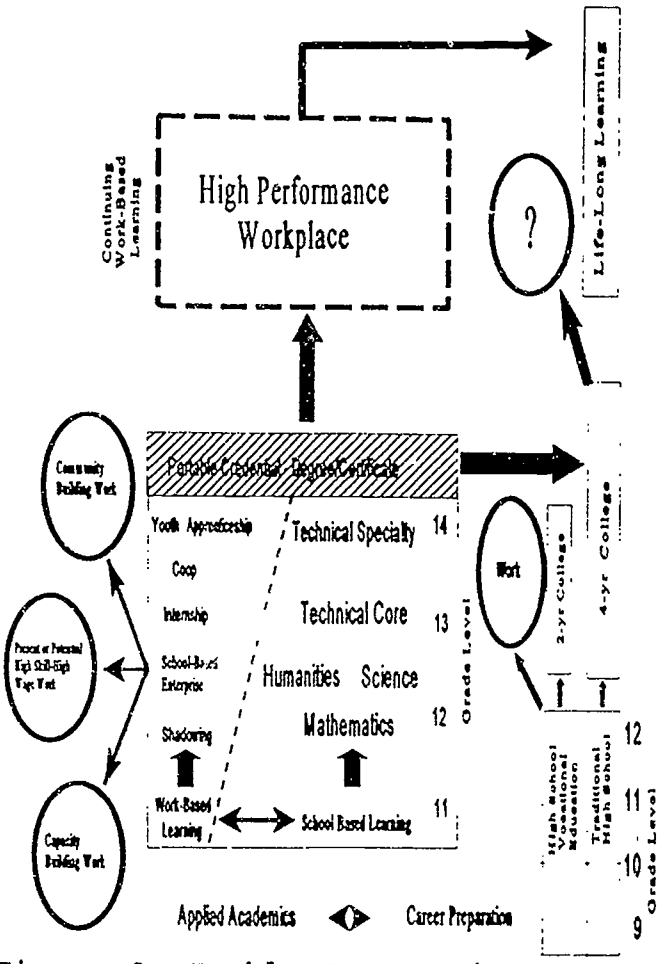

Figure 2. *Double Integration*: Occupational and Academic Learning + School-Based Learning and Work-Based learning

Integrating Academic and Vocational Learning

Integrating the curriculum is part of many TechPrep efforts, charter schools, youth apprenticeship pilots, academies, and school-based enterprises. There are a myriad strategies for integrating curriculum. The simplest is to infuse more academic learning into vocational classes or more vocational learning into academic classes. The more complex strategies require reorganizing entire schools into career academies or career magnets. This is the first kind of integration in a proposed model of school reform.

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Integrating SBL and WBL

Present school reform efforts are seeking to provide more formal links between schools and the workplace as a strategy for improving the transition of youth into the adult role of productive citizen. Traditional models of connecting school-based learning with work-based learning include cooperative vocational education, registered apprenticeship, school-based enterprise, and internships. While quality varies widely among these approaches, each offers potential for effectively connecting what is learned in school to what is learned on the job. This is the second kind of integration in a proposed model of school reform: integrating school-base learning (SBL) and work-based learning (WBL).

As shown in Figure 2, the school-to-work transition process is built upon a tech-prep, four year experience beginning in what is now 11th grade. As the student moves through the four years of focussed learning, the time spent in work-based learning increases while the time spent in school-based learning decreases. The three possible work-based learning options are shown in ovals on the left. As the curriculum is integrated internally for the four years, the progressively intensive work-based learning is integrated with the school-based learning. This experience concludes with a portable credential that must differentiate the successful student in the labor market. Current credentials, e.g., two year AAS, AS, or AA degrees may be inadequate to the task. What will need to be created is a credential with the occupational power of a registered apprenticeship and the academic power of a college-transfer degree.

The model is built on the assumption that the rigor of the four year, double-integrated program is sufficient to permit lateral movement into related four year degrees - without this, any school-to-work program is doomed to become marginalized in the public schools. There is also the assumption of the need for life-long learning where future workers will move back and forth between work-based learning and more formal school-based learning.

Barriers to Double Integration

Recent experience in implementing STWT programs at a localized level suggest a number of probable barriers to double integration. Prominent among these are: (1) continued, meaningful and expanded involvement of the business community, (2) resistance to new methods of education, such as curriculum integration, by school-based educators, (3) uneasy relationships between secondary and postsecondary educational institutions, (4) a lack of an identifiable credential that would provide an appropriate signal to the labor market that an individual is truly different (ie. better prepared) than another young adult. A side bar to this problem is the lack of a portable credential between and amongst different school systems. There are sure to be additional barriers encountered as states move to implement a state-wide system.

Best Practice in combining SBL and WBL

The following recommendations are based on two recent NCRVE studies (see Stone, Madzar, Cagampang, and Smith, 1994; and Crain and Stone, 1994).

Best Practice in Youth Apprenticeship

- Paid work experience and guided worksite learning
- Integrated vocational and academic curriculum
- Coordinated SBL and WBL
- Articulated secondary and postsecondary learning experiences
- Credential at conclusion
- 3-4 years in duration

Best Practice in Cooperative Vocational Education

- Training Agreement
- Training Plan
- Coordinator who teaches related class
- Placing students (not accepting those who already have jobs)
- Monitoring students on the job
- Related instruction

Best Practice in Working with Mentors

- Recruited through organizations, not on a one-at-a time basis
- Concentrate on youth who need adult connections
- Clear goals for mentor and mentoring relationship
- Continuing staff support for mentors
- Work or school context is required

Best Practice in School-Based Enterprise

- Balance the focus on production with a focus on learning
- Rewards and sanctions should be used to promote quality work
- Focus training on marketing, customer satisfaction, job quality, marketing research, and communication skills.
- Adult supervisors should mirror a real workplace and treat students as adults in the work setting
- Develop an advisory committee for the operation of the enterprise

Best Practice in Double-Integrated Programs

- Use of industry lecturers (early results show a strong relationship between this methodology and gains in reading and math scores in the 9th and 10th grade).

- Creating vocational cohorts of students to study academic subjects integrated with vocational focus (integrated curriculum in computer applications is linked to good scores in math and reading, and low absenteeism)
- Set high standards in the classroom and the school
- Mirror collegiate models of teaching professional/occupational core

Summary

If work and working as a part of the formal educational process for adolescents is to support middle class values as Levitan (1992) has argued, then society must demonstrate persuasively that rectitude pays. Further, it is argued, that society has an obligation to make obstacles surmountable and the prospects of success believable. Just the opposite is happening. There are disincentives at work: lack of access to meaningful employment, limited payoff for playing by the rules, lack of access to schools that offer necessary preparation for postsecondary education, and a lack of availability of appropriate programs within the schools. Carlson (1990) among others notes that the typical work-bound urban high school graduate faces a gloomy prospect of a shrinking work opportunities in the primary labor market. More generally, society at large has created perverse incentives to teen pregnancy and poverty is a real obstacle to marriage and family formation.

Schools cannot create long-term real employment for youth. Through double integration, using COOP and other models of connecting school to work, schools can help students develop the knowledge and understandings necessary for success in the evolving high performance workplace. It remains for other societal institutions to create the hope needed by young people to make all the effort seem worthwhile.

References

Ashmore, C. (1988). Enterepreneurship: Future directions. Journal of Education for Business. 63(4), 149-152.

Buzzell, C.H. (1989). A question for the field. Vocational Education Journal, 64(8), 12.

Finch, C. (1993). The high performance workplace and the evolving nature of vocational education research. Journal of Vocational Education Research. 18. (2), 1-20.

Carlson, C.G. (1990). Beyond high school: The transition to work. Focus 25, 1990. ERIC Document Reproduction Service (ED325716).

Cooper, C. (1988). We're in business! Academic Therapy, 24(1), 43-48.

Dewey, J (1959). My pedagogic creed. In L.A. Cremin (Ed.), Dewey on education. (Clasics in Education Series). New York: Teachers College. (Original published in 1897)

Grossman, G.M., Warmbrod, C.P. & Kurth, P.K. (1988). Postsecondary cooperative education: An examination of survey results and policy implications. National Center for Research in Vocational Education, Columbus:OH (ERIC Document Reproducation No. 335609)

Hartley, M.P. (1983, February-March). Introducing the student to unfamiliar ground: Cooperative education and internship programs. Workplace Education, 4-7.

Kazis R, & Roche, B. (1991). New U.S. initatives for the transition from school to work. Occasional Paper No. 8. Geneva: International Labour Office.

Kuratko. D.R. (1989). New venture creation: A laboratory course for entrepreneurship education. Journal of Education for Business, 64(6), 248-250.

Levitan, S. (1992). Economics of rectitude: Necessary but not sufficient. An Occasional Paper. ERIC Document Reproduction Service (ERIC No. ED351513).

McFarlane, C. (1981). Stimulating entrepreneurship awareness in high school students. Journal of Career Education. 8(2), 135-143.

Moskowitz, J.M. (1982). Evaluation of two service opportunity programs for junior high school students: First year results. Napa, CA: Pacific Institute for Research and Evaluation (ERIC Document Reproduction Service No. 213740).

Mortimer, J., Finch, M.D., Dennehy, K., Lee, C. & Beebe, T. (in-press). Work experience in adolescence. Journal of Vocational Education Research.

Nappi, A.T. (1986). Teaching small business through experiential learning. Journal for Education for Business. 61(5), 224-225.

National Center on Education and the Economy. (1991) America's choice: High skills or low wages. Rochester,NY: Author.

Rallo, A.F. (1986). Business management in the high school curriculum. Business Education Forum, 40(7), 29-30.

Reich, R.B. (1992). The work of nations. New York: Vintage Books.

Roditi, H. F. (1991). How much does a youth apprenticeship rpogram cost and who will pay for it? Lessons from some long-standing school-to-work programs and youth apprenticeship programs under development. Boston: Jobs for the Future.

Stern, D. & Stone, J.R. III (1993). School-to-work transition and the relevance of vocationaleducation to subsequent employment. Washington, D.C.: U.S. Department of Education, Office of Adult and Vocational Education, National Assessment of Vocational Education.

Stern, D., Stone, J.R. III, Hopkins, C., Crain, R., and McMillion, M. (1994). School-Based Enterprise: Productive learning in American high schools. San Francisco: Jossey-Bass Publishers.

Stone, J.R. III (1980). The evolution of a school business enterprise. VocEd, 55(2), 47.

Stone, J.R. III. (1991) Stern, D., Hopkins, C., & McMillion, M. (1990). Adolescents' perceptions of their work: School supervised and non-school supervised. Journal of Vocational Education Research, 15(2), 31-53.

Stone, J.R. III & Madzar, S. (1993). School-owned and student operated enterprises. Epsilon Pi Tau, 19(2).

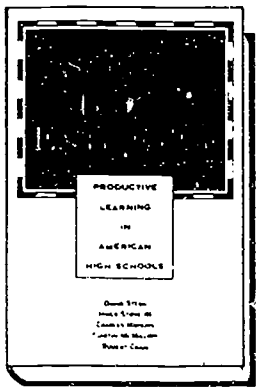
Stone, J.R. III, Madzar, S., Cagampang, H. & Smith, C. (1994). Continuous improvement in programs connecting school to work. National Center for Research in Vocational Education, University of California at Berkeley.

Stone, J.R. III & Wonser, R. (1990). Alternative strategies for providing work experience. St. Paul, MN: Minnesota Research and Development Center for Vocational Education, Department of Vocational and Technical Education, University of Minnesota.

United States Congress (May 4, 1994). School-to-work opportunities act of 1993. Washington, D.C.: Author.

United States Department of Labor (1993). Employment in occupations. Occupational outlook quarterly.37(3), 20-34.

Wagner, W. (1992). Educational techology: A broader vision. Education and Urban Society. 24, (4), 454-465.



David Stern, James Stone III, Charles Hopkins, Martin McMillion, Robert Crain

School-Based Enterprise

Productive Learning in American High Schools

"From Bill Clinton to local educators, many are singing the virtues of school-linked apprenticeship. Finally, we have a hard-headed guide to what works and why."
--Bruce Fuller, associate professor, Graduate School of Education, Harvard University

Every year, tens of thousands of high school students across the country participate in school-based enterprises (SBEs). They build houses, publish books, run restaurants, produce original scientific research, staff child-care centers, and provide other goods and services under school auspices.

Like teaching hospitals attached to medical schools or law review journals produced by law students, many high school SBEs have been part of vocational programs. However, productive activities can also help students learn academic subjects and develop general intellectual abilities. This book describes the potential use of school-based enterprise across the high school curriculum.

Drawing on observations and interviews with students and faculty at sixteen sites—urban, suburban, and rural, rich and poor, with college-bound and low-achieving students—the authors illustrate how SBEs work and describe the range of benefits they offer. Educational benefits include applying and extending knowledge acquired in the classroom, solving problems in the context of real social transactions, and working in teams. SBEs also produce tangible economic rewards and positive social outcomes. Despite these advantages, SBEs currently involve only a small percentage of high school students, and these only for a small part of their time. The authors explain the difficulties and dilemmas encountered by these projects, and they envision an expanded role for SBEs in helping to create a new relationship between education and work.

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January 1994 ISBN 1-55542-597-6 LC 93-29489 About 246 pages $29.95

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