

Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project

Volume I



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Robert T. Jones, Assistant Secretary
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Raymond J. Uhalde, Administrator

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Each volume contains five issue papers. The full table of contents for the series, the introduction to the series and the bibliography are contained in both volumes.

Contractors conducting research and evaluation projects under federal sponsorship are encouraged to express their own judgment freely. Therefore, this report does not necessarily represent the official opinion or policy of the Department of Labor.

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INTRODUCTION

Since the 1960s, the U.S. Department of Labor has underwritten a variety of programs and strategies designed to help youth make fii connections with the labor market. These programs have been enacted under a succession of policy mandates, administrative structures, funding levels and political philosophies. Thus, their focus, scope and results have shifted, often dramatically, over the years.

In the sixties, the programs were, in many ways, experiments; their impetus ranged from labor market concerns to interest in poverty reduction. In the mid-seventies, widespread youth unemployment emerged as a full-fledged policy issue, and major resources were expended through the Youth Employment and Demonstration Projects Act (YEDPA) to explore systematically the potential of federal/local programming to combat youth employment problems.

In the late eighties and early nineties, the focus shifted to issues of international competitiveness and the capacity of the nation to produce new workers capable of meeting the challenges of the workplace.

Attempts to develop useful knowledge about how well youth employment programming has succeeded reflect the relative newness of the field and the varied environments in which such programming has grown up. Although the field has benefitted from research efforts of varying intensity and quality, the base of knowledge on which policy, legislative and program decisions are built remains incomplete, and is often not well known among decision-makers and practitioners.

The nineties will see continued and, indeed, heightened interest in finding effective ways to connect youth to the labor market--particularly the economically disadvantaged youth who are the major target of federally funded employment training efforts. Thus, it is essential to take stock of what we know, to view our current knowledge clearly and realistically, and to use it to forge better policies for the future.

This was the aim of the U.S. Department of Labor's Employment and Training Administration when it undertook a project to conduct a broad review of what is known in the field, and contracted with Brandeis University's Center for Human Resources and Public/Private Ventures (P/PV) to design and carry out the work. Within this joint contract, P/PV assumed responsibility for organizing and overseeing the production of this review.

The Department sought not only an exploration of studies and evaluations related to youth training and employment programs, but a broader synthesis of evidence, findings and research from related fields and disciplines, including sociology, education and

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psychology, as well as from the numerous reports and studies that have been commissioned by foundations and interest groups in the field. This wider examination was to identify research and evidence in other disciplines that would enrich the youth employment training findings and help us interpret them more fully and realistically; and to produce ideas and guidance for both future research and future programming.

A secondary aim of the review was to identify findings of interest not just to policy and research analysts but to practitioners as well. Wherever possible, the work was to crystallize recommendations, based on research findings, that practitioners might adopt in their day-to-day design and management decisions. This latter aim was somewhat more difficult to attain than the first. Due to limitations in information on specific program practices, the review tended to focus more on theory and policy than on practice, though a number of papers recommend specific improvements or modifications in programming.

Finally, the Department wanted the review to identify areas where future research should concentrate. One product of the review was a multiyear research strategy paper, prepared for the Department's use, identifying major policy areas that might be the focus of research efforts in future years.

The Department gave P/PV latitude in how the review was to be carried out, within agreed-upon parameters. The work was cast in a manner that would produce pragmatic findings relevant to program planning and policy considerations. Thus, the history and the major legislative and programmatic structures of employment training programs in the United States were a starting point and focus for the review.

To carry out the retrospective research review effectively, it was necessary to be selective, "Youth" is a complex subject, one that is treated extensively (and not always with complete agreement) in a number of different disciplines. With limited time and resources, it was impossible to be exhaustive. Rather, the aim was to frame the most critical questions in a manner that would permit them to be addressed thoroughly, and to summarize the major findings in a pragmatic fashion that would produce insights and directions that could be used in a "live" policy and programming context.

An Advisory Group, composed of both research experts and practitioners in the youth employment field, aided the project and was periodically consulted about the research agenda and the actual work of the project.

The organizing framework for the research and the products to be delivered rested on three broad questions:

- What programs, services and techniques best prepare youth for jobs and careers?
- What strategies of governance and management offer greatest opportunity for effective delivery of these services?
- What factors regarding youth, their environment and the labor market must be addressed in providing these services?

RESEARCH PAPERS

Under each of these broad questions, the key issues were identified. The issues in turn generated additional questions of concern to both research and practice in youth employment and training. Most of the issues and questions were organized to form the basis for ten research syntheses, which are presented in these two volumes. The following topics were selected:

Programs, Services and Techniques

1. Effectiveness of youth employment training strategies
2. Supportive services in youth employment programs
3. Program length and sequence
4. Educational skills
5. The school-to-work transition

Governance and Management

6. Program coordination and collaboration
7. Performance measures and standards
8. National laws and local programs

Youth, Their Environment and the Labor Market

9. Youth in the nineties
10. Youth and the labor market

As part of the process leading to the development of the individual papers, P/PV worked with Brandeis University in defining their broad parameters. Experts in the relevant fields were identified, consulted and hired as needed for specific papers. Early attention to the organization of individual papers by the contract staff minimized overlap (a

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critical consideration, for the topics tend to be fairly closely related),’ and provided individual authors with a well-defined area to study and analyze. Such an approach also permitted authors flexibility in interpreting and presenting conclusions.

Each paper was prepared using the same guidelines, which called for the issue to be identified and elaborated on, then analyzed, evidence and research from allied fields to be incorporated; and conclusions and recommendations to be presented. The papers largely adhere to this design. There are exceptions--reflecting the complexity of the subject and the variety of authorship--which make summarization of the major findings difficult, especially where the papers’ findings and conclusions reflect multiple perspectives and varying emphases. The diversity of ideas in the papers highlights the complex nature of youth employment and the scarcity of easy, unambiguous answers to basic problems.

It should then come as no surprise that the review uncovered no “magic bullets”--no unequivocal guideposts to following “these” rather than “those” strategies. But the ten papers together reflect one theme: we have much yet to learn about the task of building a resilient and effective youth employment system in the United States.

MAJOR FINDINGS

Most of the papers contain summary sections that draw together their major findings. These sections should be reviewed to gain a full understanding of the scope of the findings and recommendations made by the authors. This introduction is intended only to present several key findings echoed in many of the papers, in order to give readers a sense of the cross-cutting themes affecting youth research.

1. The Current State of Knowledge. The point most consistently raised in the papers concerns the limitations of our current knowledge. Eight of the ten papers report a scarcity of data and reliable research on which to base firm conclusions about the best directions for future policy and programming.

Smith and Gambone, and Nightingale, Cohen and Holcomb are perhaps the most sobering in this regard. They review the specifics of programs for youth and the evidence regarding their effectiveness. They conclude that evidence is sparse, generally focused on short-term effects and sometimes inconsistent. Even reliable descriptive

¹ The intention was to minimize redundancy in the major areas of research. There is, however, overlap in certain areas--such as the history of employment training, the multiple problems of at-risk youth, etc.--that form the critical context in which the issues are considered.

information about participants and actual program services is often missing. Similar conclusions are echoed in most of the other papers.

In part, the limitations in knowledge stem from limitations inherent in evaluation methodology. Net impact evaluation is expensive and deals with relatively few issues in depth; thus, comparatively few programs benefit from the results. But several papers also note that research and data on disadvantaged youth populations (especially ages 14 to 21) are also scarce. Existing research on topics of concern to this project (e.g., education and adolescent psychology) is often limited to populations that are primarily middle-class and white, and thus provides little solid evidence or guidance in thinking about the economically disadvantaged and often minority youth who receive federally sponsored services.

2. Program Effectiveness. The existing research on the training strategies, program structures and supportive services tried in the past leads to sobering conclusions. Smith and Gambone, in their review of employment training programs, conclude that “excluding findings from the Job Corps, there is no evidence that any of the programs [evaluated in the 1980s had] more than a modest and short-term effect” on young participants. These findings are amplified in Higgins, who reviews a variety of well-researched programs and concludes that different program structures have comparatively little effect on youth’s length of stay in programs, or on the impacts programs produce.

3. Reasons for Limited Program Effectiveness. The most commonly cited reasons for the limited results, a number of papers argue, are the serious problems of the youth who come to them. Lerman provides a detailed portrait of at-risk youth in the nineties (as do Holzer, Nightingale, et al., and Smith and Gambone), and he places special emphasis on youth with multiple problems.

These authors conclude that the intersecting problems of poverty, inadequate housing, dysfunctional families and poor education have powerfully negative effects on youngsters drawn to employment training programs, effects the programs often cannot overcome or simply do not seek to address. Limitations in our knowledge about which programs work, and for whom, make it difficult to determine how programs might better respond to multiproblem youth and foster sound development in such participants.

4. Strengthening Program Effectiveness. Many authors argue that multicomponent programs, programs that combine a range of strategies and services, represent the best hope for enhancing the effectiveness of program offerings for youth. Because of the limited information on combining training strategies and support services, the authors are not able to offer firm recommendations about what particular combinations should be tried. However, Nightingale, et al., argue for both wider inclusion and careful testing of

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“supportive” services in the employment training regimen. The papers by de Lone, by Johnson and Gambone, and by Smith and Gambone explore the issue of multiple-strategy interventions and how they might be tested.

A major obstacle to such approaches has been cost. Thus, one approach to enriched services may be through coordination of service agencies--particularly, closer linkages with programs sponsored by the U.S. Department of Education. Bailis reviews the historical difficulties government agencies have had in finding common ground on which to collaborate. He recognizes a critical need for interagency coordination but also notes that, beyond common assumptions, there is little evidence to support conclusions about whether or not such coordination produces tangible benefits.

Finally, the potential of performance incentives for boosting performance (discussed in Melchior), as well as the lessons to be gleaned from closer scrutiny of how other countries approach the youth employment problem (a major theme of Hahn, Ganzglass and Nagle) represent other directions worthy of further pursuit.

5. The Potential of Work Experience. The U.S. approach to employment training has mainly centered on the notion of training--skills training and instruction on how to fill out resumes, seek jobs and behave properly in the workplace. Work experience has a reputation that is at best mixed, and often negative. This clouded reputation has extended to work experience programs for youth.

The evidence from youth employment program evaluations, reported in Smith and Gambone, indeed is generally negative. Yet they, as well as Lerman, summarize social science research from the past decade that paints a far more complex picture and underscores the need to examine the quality, quantity and developmental potential of work experience more carefully.

These authors (joined by de Lone) cite the potential of work experience in the school-to-work transition and in the “apprenticeship” schemes now being discussed as tools for building more capable workers in the future. Together, the papers reflect the controversies that continue to reign in considering the issue; and they reflect, too, a belief that work experience for youth may merit reconsideration in employment training policy in the future.

6. Funding Needs and Availability. Although none of the papers addresses the issue directly, a number touch on the question of whether the limited funding now available for youth employment training efforts is sufficient to meet the needs the papers identify, particularly to undertake the costly, multicomponent programming approaches recommended for youth with multiple needs. No clear evidence is presented, indeed, the issue

is a political as much as a research question, and hence the authors stop short of clear-cut recommendations. Nonetheless, several papers imply that, if more intensive programs and more research to understand them are to be undertaken, the current funding base will have to be expanded.

In short, the papers as a group focus more on needs than solutions, though none shies away from offering recommendations about new directions or initiatives the authors regard as promising and worthwhile. Two broad conclusions arise from reading all the papers together.

The first is that this young field has much yet to learn. Its base of findings is substantial and impressive, in view of the varied political and administrative contexts in which programs have been launched and scrutinized. Yet there remain significant gaps in our capacity to answer the question that has dominated the field since its inception: What works best for whom? Thus far, the available evidence provides only limited encouragement. Few programs seem to have marked and enduring effects. There remain many unanswered questions about how to serve youth effectively.

The second conclusion is that we must continue searching in a variety of different areas. We need to find ways of enriching current employment training efforts with better theory--about how poverty affects young people and how it can be addressed; how programs can shape youth into resilient adults, not just better-trained workers; and how employment training programs can be better integrated into schooling and other services that most authors argue are needed--even if the precise form and nature of those services is not yet understood.

In short, both research and program efforts must be viewed as part of a larger, unfinished agenda to strengthen all youth-serving institutions and to provide them with better tools for enabling youth to grow as individuals, as learners, as workers and as citizens in our society.

The remainder of this introduction presents brief descriptions of each of the papers, which are published in two volumes. The first volume contains the five papers on program services and techniques. The second contains the papers on program governance and management, and youth and the labor market. Both volumes include a bibliography that lists the extensive literature reviewed in the course of this project. Anyone interested in further reading on any of the topics covered here will find this a valuable resource, since it represents the best and most recent work published on many of these issues.

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PAPER SUMMARIES

In Paper No. 1, "Effectiveness of Federally Funded Employment Training Strategies for Youth," Thomas J. Smith and Michelle Alberti Gambone examine the findings from multiple program sources: a comprehensive review conducted by the National Research Council of 28 YEDPA research projects; an analysis by the Urban Institute of the Continuous Longitudinal Manpower Survey; and research on the California Conservation Corps (CCC), JOBSTART and the Summer Training and Education Program (STEP).

They conclude that the knowledge of program effectiveness produced from these research and demonstration projects is of limited value to either the policy or the practice of youth employment training. The findings are often highly qualified, provide evidence of only short-term outcomes and seldom offer insight into program implementation.

The authors suggest that programs providing a combination of employment and training strategies--work experience, on-the-job training, labor market preparation, job placement and occupational training--may be more effective in producing results. Multiple strategies are seen as necessary if programs are to address the multiple problems faced by minority and disadvantaged youth.

Smith and Gambone argue that, due to their adult focus, federally funded employment and training programs have ignored the developmental needs of youth. Evidence from social science research (sociology and psychology) provides support for the authors' argument that impeded cognitive and socioemotional growth results from the psychological and emotional deprivation often associated with negative environmental influences in the family, neighborhood and school.

Smith and Gambone maintain that such negative influences inhibit the ability of minority and disadvantaged youth to derive maximum benefit from employment and training programs. The authors assert, therefore, that to be effective, youth interventions must develop a broader range of services to better address the full range of developmental and social needs of program participants.

The paper makes a strong argument--one that foreshadows the findings and conclusions of several of the papers that follow--concerning the need for long-term research efforts in order to expand current knowledge about the effectiveness of federally funded youth employment training programs. For example, while the number of hours worked has been considered important for program effectiveness, the quality of the work has yet to be entered into the equation. The work experience debate is one area that could benefit from further study.

In Paper No. 2, "Supportive Services for Youth," Demetra Smith Nightingale, Barbara Cohen and Pamela Holcomb provide a useful discussion of the purposes of, need for and possible impact of supportive services on youth in employment and training programs. They review 14 employment and training programs or projects from the Manpower Development and Training Act, the Comprehensive Employment and Training Act and the Job Training Partnership Act (JTPA). The authors are critical of the paucity of detailed information and evaluation findings necessary to measure the need for, receipt of and potential effectiveness of such services for producing positive program outcomes.

Despite this lack of empirical evidence, however, many employment and training practitioners argue that such services are needed if programs for youth with multiple problems are to be effective. The authors call for further investigation of this critical link. Their analysis supports a movement away from limited supportive services, such as child care and transportation, toward a more comprehensive model that includes postprogram services.

A comprehensive model of supportive services is viewed as a response to the growing awareness that youth entering employment and training programs bring with them multiple problems related to family and neighborhood structure, education and health. Nightingale, et al., echoing Smith and Gambone, provide a good discussion of the multiple problems facing minority and disadvantaged youth and argue that such problems, if not addressed, constitute formidable barriers to positive program outcomes.

Perhaps the most significant contribution of this paper is its comparison of the objective and content of supportive services found in employment and training programs with those in non-employment and training programs, i.e., juvenile justice and delinquency programs, homeless and runaway youth programs and adolescent pregnancy programs. The authors argue that the role of supportive services in employment and training programs has been supplementary; non-employment and training programs are more likely to view supportive services as essential.

Finally, Nightingale, et al., discuss the use of case management, an approach to service delivery widely used in non-employment and training programs dealing with the most disadvantaged or multiple-problem youth. Increasingly viewed by practitioners in allied fields as an effective way of delivering supportive services to this population, this approach--characterized by needs assessment, coordination of services, and monitoring of client progress by a supportive advocate--is proposed as an option to be pursued by youth employment and training programs. The authors also advocate interagency dialogue to address the multiple supportive service needs of disadvantaged youth.

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Paper No. 3, "Structure and Sequence: Motivational Aspects of Programmatic Structure in Employment and Training Interventions for Disadvantaged Youth," by Catherine Higgins, probes the problem of attrition from youth employment and training programs by examining the structural variation of such programs. She surveys the findings from 15 sites in four employment and training demonstrations--Minority Female Single Parent, Supported Work, JOBSTART and STEP--and two independent programs--CCC and the New York City Volunteer Corps--and concludes that there exists no clear successful alternative to the traditional high school model, a didactic training model that has already been rejected by, or proven unsuccessful with, disadvantaged youth.

The solution to the problem of attrition, the author maintains, does not lie in issues of program structure and sequence. Despite diversity, programs have produced a narrow range of outcomes--a six-month average length of stay, a 30 percent attainment rate for participants undergoing GED preparation, and impacts limited to education or training. Practitioners are urged, therefore, to investigate the lessons from academic psychology on achievement motivation.

Higgins' review of recent literature from this field provides important insights into both the maladaptive thinking patterns of low achievers, which often compromise the motivation of such students to address new and challenging tasks, and the strategies that have been used to revise such patterns. By way of example, Higgins analyzes a particular program, the Center for Employment and Training. While success has usually been attributed to the program's practical orientation (i.e., the guarantee of a job motivates a program participant to learn a skill), the author argues that emphasis on the process of mastering a skill may increase participants' belief that their efforts can help them achieve their goals.

The author thus joins with others in this series who argue for broadening the range of professional disciplines involved in program planning. She concludes that knowledge from academic psychology should be considered in the design of second-chance programs for its potential to reduce attrition rates for disadvantaged youth facing multiple problems.

Paper No. 4 seeks answers to two central questions: "Critical Skills for Labor Market Success: What Are They and How Can At-Risk Youth Acquire Them?" While a review of the literature reveals a serious lack of consensus among educators and employers regarding the skills required to enter productive employment (core academic skills and a broader range of competencies, respectively), Amy W. Johnson and Michelle Alberti Gambone echo the findings of Higgins regarding the failure of the traditional approach to educating at-risk youth. Similarly, the authors encourage the employment and training

field to learn from and avoid mistakes made by the traditional school structure--segregation of the lowest achievers, low expectations and inadequate resources, among others.

Instead, comprehensive program models are needed to address the multiple developmental needs of disadvantaged youth. The current school restructuring movement--emphasizing instruction, development, leadership and school ethos--provides a systemwide model that incorporates components rarely addressed by employment and training programs but which have proven effective with at-risk youth.

The authors conclude that policy efforts should be directed toward a preventive rather than a remediation approach, i.e., the focus should be on school retention now, rather than remediation later. They also argue that, when remediation is needed, more effective strategies for providing it should be identified.

In Paper No. 5, "School-to-Work Transition: Failings, Dilemmas and Policy Options," Richard H. de Lone presents a critical, in-depth historical analysis of the past three decades of school-to-work transition as a policy issue. He provides ample evidence of the bias of basic education toward college preparation and the lack of coherent policy and program attention paid to the school-to-work transition system, more accurately dubbed a "non-system" by the author. In addition to more effective basic education, de Lone argues that an effective school-to-work transition system requires transitional assistance, increased employer involvement and an expanded system of post-high school training opportunities for non-college youth.

Opportunities for education beyond high school are essential for young workers, and ways must be found to provide such opportunities. Apprenticeship systems in other industrialized nations are discussed as examples of school-to-work systems that provide non-college-going youth with such opportunities.

The author outlines the three major approaches to improving the school-to-work transition that have characterized the period--reform of basic education, reform of vocational education, and the development of employment and training programs for youth. While questioning the value of research findings associated with the three major approaches that constitute this "non-system," de Lone concludes that lessons to guide program development can be extracted from the maze. For example, multiple-strategy approaches combining work and other activities are again recommended, following a review of the debate over the benefits of work experience. Like others in the series, de Lone calls for further exploration and development of the school-work link.

The author also makes a strong case for effective program implementation, noting that positive effects are found more often among programs characterized by fidelity to

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coherent program models, implemented by strong leadership and with dedicated staff involvement. The current school restructuring movement is again identified as a model based on such concepts. The model is seen as a resource for the school-to-work transition system to tap.

In Paper No. 6, ‘Coordination, Collaboration and Linkages,’ Lawrence Neil Bailis reviews the literature on the dynamics and outcomes of coordination. While maintaining that fragmentation and duplication of services are not always equally harmful, the author offers an analytic framework by which to organize what is known about the dynamics and outcomes of the coordination process.

Federal, state and local agencies seeking to coordinate services must gain an understanding of (a) the technical and nontechnical barriers that retard entry into collaborative relations; (b) the strategies employed to overcome these barriers; and (c) the extent to which efforts to promote coordination succeed in changing organizational relationships and lead to improved quality, accessibility and/or cost-effectiveness of services to young people.

Bailis’s paper represents a useful resource for agencies seeking to build collaborative programs and research projects. Stressing the importance of context, the author cautions against mandating a given approach. While “top down” mandates have proven useful in creating opportunities for collaboration, they are atypical. Financial incentives are one strategy that has been used successfully to encourage community agencies with turf concerns to work together. Voluntary efforts forged out of self-interest appear to be the best approach.

In Paper No. 7, “Performance Standards and Performance Management,” Alan Melchior provides an overview of the history of the JTPA performance standards system. He outlines its key elements and argues that the role of the system has shifted from accountability to performance management, reflecting a change in policy goals that has occurred at the national level.

Melchior reviews the limited research on the current JTPA performance standards system as an accountability tool, addressing issues of the accuracy, validity and impact of the system. He concludes that performance standards have “unintended effects,” i.e., that they encourage less-intensive services as well as reduced services to the hard-to-serve population.

The author also discusses the effectiveness of the system as a performance management tool aimed at shaping local behavior. He determines that incentive grants designed to

reward the performance of local service delivery areas (SDAs) are too small and that the sanctions designed to punish SDAs are weak and ineffective.

In addition to a review of the 1988 national evaluation of the performance standards system, the paper provides a brief examination and assessment of recent changes to performance management systems in the business, health care and education fields.

For example, Melchior argues that JTPA could benefit from peer-review organizations (PROs) similar to those mandated by Congress to ensure that publicly funded health care services are medically necessary and meet quality standards. PROs in JTPA could review enrollments to prevent creaming; review placements to ensure provision of appropriate services; and review pre- and posttest data to ensure that competency deficiencies are real and certifications valid.

Similarly, the growing recognition of the importance of accurate data as a basis for effective performance management is a consistent theme across all three allied fields and has resulted in attempts to address data inadequacies. These and other changes are designed to address many of the same concerns raised about JTPA and may suggest ways for correcting flaws in the current JTPA performance standards system.

In Paper No. 8, "The Mission and Structure of National Human Resource Policy for Disadvantaged Youth: A Synthesis with Recommendations," Andrew Hahn, Evelyn Ganzglass and Gloria Nagle present a historical overview of American youth manpower policy. They use a political science framework to elaborate on the way in which choices--choices of scope, distribution, policy instruments, and restraint and innovation--made by national governments affect their youth manpower systems. The authors' intent is to frame the issues for future discussion and to demonstrate the need for additional research in the area of human resource policy for disadvantaged youth.

Hahn, et al., offer insights into the youth manpower systems of other industrial nations and call on the federal government to assume a greater role in system oversight by investigating and implementing innovative strategies--developed both in alternative service delivery fields at home as well as in the employment and training systems of other countries--directed toward capacity-building and system change.

In Paper No. 9, "Youth in the Nineties: Recent Trends and Expected Patterns," Robert I. Lerman examines the social and demographic characteristics of the current youth population and the implications of these characteristics for future employment and training policy. He draws from the literature to describe and explain the concentration of problem behaviors among certain groups. The field of sociology provides Lerman with important insights into the importance of negative influences--family and neighbor-

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hood instability, early parenthood, criminal activity, drug and alcohol abuse, and the absence of role models--on the development of young people.

Like other authors in the series, Lerman examines the mixed evidence regarding the merits of part-time work for in-school youth. His review of the research leads him to conclude that the weight of the evidence points to benefits for in-school youth who work a maximum of 20 hours a week. He advocates, therefore, second-chance programs built on the school-work link but cautions that, in order to be effective, such programs must address the multitude of family and other environmental influences that affect youth at an early age.

In Paper No. 10, Harry J. Holzer examines the changes in supply and demand that have occurred in the labor market over the past two decades and evaluates the effects of these changes on the employment prospects of young people. "Youth and the Labor Market in the Nineties" builds a strong case for the evolution of a serious skill mismatch: high school dropouts and inner-city blacks from low-income neighborhoods lack the necessary skills for today's labor market. Spatial mismatch, discrimination, lack of work experience and networking opportunities, negative family and neighborhood influences, and the availability of alternative income sources, especially crime, are also discussed as forces contributing to the disadvantaged employment status of minority youth.

Reviewing the literature on growing wage inequality among young workers, Holzer presents a number of possible explanations for the sharp deterioration in income and labor force activity for high school dropouts and black youth overall. Contributing factors include demographic changes, which have led to shifts in labor supply; occupational and industrial shifts, which have led to shifts in labor demand; and declining growth in productivity.

Thus, while shifts in the economy are in part responsible for the deterioration of employment opportunities for young black males, Holzer offers support for the position, taken in earlier papers, that expresses concern about deleterious neighborhood and other environmental influences on the motivation of at-risk youth.

Holzer concurs with de Lone, Hahn, et al., and Lerman in criticizing the limited apprenticeship and on-the-job training opportunities available in this country compared with those in other industrial countries. In the absence of such opportunities, the author argues, improving the high school dropout rate must be a priority; a high school diploma may be the only predictor of job performance and trainability available to an employer evaluating job candidates who lack referrals and previous job experience.

EFFECTIVENESS OF FEDERALLY FUNDED EMPLOYMENT TRAINING STRATEGIES FOR YOUTH

Thomas J. Smith and Michelle Alberti Gambone
Public/Private Ventures

I. THE PROBLEM

Public policy with regard to youth employment has developed fitfully over the past 30 years, as federal commitment has changed with successive administrations and shifting political emphases. The result has been a succession, rather than an evolution, of youth employment policies.

The major programming strategies used to implement these policies--work experience, labor market preparation, job placement, on-the-job training and occupational training--have accumulated as products of this fitful process. These "core strategies" now represent the backbone of most federally supported youth programs. To understand youth policy, it is essential to understand how these strategies have been developed, how well they work (and do not work) and why, and what perspectives and rationales should inform thinking about how they might be improved. Reviewing these issues is the purpose of this paper.

THE STRATEGIES: A BRIEF HISTORY

The establishment of employment programs in the early 60s, with passage of the Manpower Development and Training Act (MDTA) of 1962, was largely a response to the unemployment problems of adults. MDTA originated amid concerns about plant closings, skill obsolescence, automation and technological competition in the international market--concerns that, in retrospect, may have been excessive (Ginzberg, 1980:4). Its target population was, in fact, what today would be called "dislocated workers"--i.e., workers displaced from declining industries and in need of transition to new occupations,

Thomas Smith is Vice President and Director of Policy Studies at Public/Private Ventures. Michelle Alberti Gambone is a Sociologist and Senior Research Officer at Public/Private Ventures. The authors would like to thank Mary Ridge, Lloyd Feldman and Nicholas Kourgialis for their work in reviewing research and reports for this paper. They also wish to acknowledge the critical advice and comments of Gary C. Walker, who was especially helpful in framing the issues and reviewing the paper's recommendations.

Thus, it is not surprising that the earliest strategies developed were narrowly focused on training--occupational training and (always on a more modest scale) on-the-job training (OJT). Such approaches, directed toward unemployed, willing workers who typically had experience in the labor market and suffered only from obsolescent skills, were appropriate. They also made sense when job placement could be used as the sole criterion for judging the value of these programs.

MDTA's youth dimension emerged just one year later. The original legislation, which did not have specific provisions for youth (except to limit to 5 percent the number of young participants), was almost immediately revised to accommodate the growing and increasingly recognized needs of youth. As Mangum (1982:104) has written, "1963 was a very different year than 1962." The first of the baby boom generation turned 16, greatly increasing the number of dropouts and teenagers in the labor force. The unemployment rate of teens rose two percentage points between 1962 and 1963. As a result, MDTA was amended to increase its youth participation limit to 25 percent and add 20 weeks to its remedial education provision.

Another and more fundamental shift in policy thinking began to unfold at the same time. Ginzberg argues that MDTA's first efforts had uncovered "the existence of a considerable number of poorly educated, low-skilled workers with an erratic employment history. MDTA had discovered the hard-to-employ" (1980:4). The policy focus widened beyond filling the skill needs of the labor market; a broader mandate now included meeting the training needs of non-college-bound youth.

MDTA's change in emphasis was but one part of the War on Poverty, a major social thrust of the Johnson administration. An antipoverty theme thus was added to (though not integrated with) the employment training objective that was MDTA's basic rationale. The Job Corps and the Neighborhood Youth Corps (NYC) legislation, enacted during that period, are legacies of depression-era initiatives (the Civilian Conservation Corps and the Neighborhood Youth Administration, in particular); indeed the Job Corps, along with other antipoverty efforts, was initially administered not by the Labor Department but by the newly established Office of Economic Opportunity (Bullock, 1985:78-79).

From 1964 to 1971, the emphasis of federally funded programs was alleviation of poverty and inequality in the labor market. Political concern about the economic well-being of disadvantaged groups was heightened by fears that poverty and unemployment were feeding urban unrest and sparking riots, such as those that occurred in Detroit. Increased attention to at-risk youth was motivated more by the social and political concerns of the era than by demographic or economic pressure.

As the focus on youth and disadvantaged populations broadened, so too did the program mix, which increasingly included ancillary functions, such as outreach, counseling, pre-occupational programs and job development. But even as these new functions were added toward the end of Johnson's presidency, the political impetus for alleviating poverty began to slow and change course with the change in national leadership.

The Nixon administration took office, Levitan and Gallo write, "with only one positive commitment in the employment and training field: to consolidate and decentralize the diverse programs that had emerged during the 1960s" (1988:7). The existing employment and training "system," composed of programs developed under MDTA and the Equal Opportunity Act (EOA), was judged fragmented, redundant and wasteful. Policy-makers set about streamlining these programs and devolving decision-making, program design and implementation to the state and local levels.

The Comprehensive Employment and Training Act (CETA) of 1973 replaced MDTA and EOA as the legislative instrument to achieve these goals. Numerous federally operated categorical programs of the 1960s were replaced with block grants that permitted local prime sponsors to tailor employment and training programs to the needs of the local population. Decategorization meant that, with the exception of the Job Corps, there no longer was a national mandate for youth programs; each prime sponsor decided what proportion of available resources to allocate to youth and whether to serve them in separate programs (Mangum, 1982:107).

Initially, the program mix changed little from that which had evolved in the late 60s. The focus continued to be on classroom training and OJT, along with ancillary outreach, remediation and supportive services. Especially in the early days, CETA programs "largely continued old practices in a new administrative setting" (Anderson, 1980:49). Other than in the Job Corps, the highest youth participation rate was in Title I training programs, which provided mostly short-term work experience and few job-related skills (Bullock, 1985:168). CETA's major innovation, public service employment (PSE), was a countercyclical economic device; an "employment strategy" seldom used for employability development, PSE was mainly for unemployed adults.

The Youth Employment and Demonstration Projects Act (YEDPA) of 1978 represented a major expansion of interest in youth. It increased authorizations for the Job Corps and the Summer Youth Employment and Training Program (SYETP), and created four new programs targeting disadvantaged youth--the Young Adult Conservation Corps, the Youth Community Conservation and Improvement Projects, the Youth Employment and Training Programs and the Youth Incentive Entitlement Pilot Projects (Entitlement).

A call for a major research effort to learn more about the causes and cures for youth unemployment was contained in the Act. However, innovation was not really the hallmark of YEDPA. Mangum and Walsh point out that, "with the exception of the Act's provisions which are strictly research in nature,¹ every type of program called for by the Act . . . has been tried before" (1980:1). Providing services ultimately became the major thrust of the Act. Two million youth, in addition to those served in the Job Corps and SYETP, were served by YEDPA programs between 1978 and 1981.

The programs themselves and the research that accompanied them, however, turned out to be short-lived; YEDPA was terminated by the incoming Reagan administration in 1981. The National Research Council's retrospective study of the results of YEDPA, commissioned by the Department of Labor in 1983, found that YEDPA was implemented under conditions that severely constrained both program effectiveness and research findings (Betsey, et al., 1985). The study concluded that the tremendous fluctuations in policy and funding levels from one administration to the next, perhaps more than any other factor, undermined the employment and training system for youth:

Such fluctuations precluded a more stable and orderly development and institutionalization of the youth employment system. Given the instability of the employment and training system, together with the implementation requirements of YEDPA, it was somewhat unrealistic to expect that within three years these programs would be fully operational and ready to prove their effectiveness (Betsey, et al., 1985:5).

By the end of the 1970s, CETA had lost political support. The Reagan administration argued that since job creation was the responsibility of the market, employment training activity should be shaped by the private sector. It therefore devised an altered system in which business would play a major decision-making role. In 1982, CETA was replaced with the Job Training Partnership Act (JTPA), which redesignated local prime sponsors as service delivery areas (SDAs) and gave ultimate control over job development and training to Private Industry Councils (PICs).

Although it sharply cut back overall expenditure levels for programs, JTPA did make provisions for youth activities. It stipulated that 40 percent of Title II-A funds be spent on youth, retained the politically popular SYETP and instituted a system of youth competencies (which included basic skills enhancement) to direct and measure youth employability attainment. JTPA also explicitly recognized that private sector placements fre-

¹ One such provision was significant: the Youth Incentive Entitlement Pilot Projects, which indeed was a departure from what had been previously tried.

quently were not the most appropriate outcome for disadvantaged youth in employability development programs.

At the same time, however, JTPA eliminated public sector work experience (private sector-based work experience for youth is allowed, but its use is limited) and instituted a system of performance measures that, many observers feel, tended to drive the decentralized system to operate shorter-term programs for better-prepared participants. The remaining strategies for youth under JTPA, however, are the same as those under CETA.

In reviewing this history, several points stand out. First, the most consistent emphasis of youth employment policy has been training (Grubb, 1989:35); work experience and employment--equally plausible approaches in preparing youth for jobs--have never been primary policy aims. The cluster of program elements provided to youth has grown and evolved somewhat from its original orientation to adults. Yet that evolution has narrowly served the aim of employment preparation. The youth competency approach promulgated under JTPA, slowly implemented at the local level and refined during the past seven years, has developmental elements but is still merely "preparatory" for jobs or for transition to OJT or skills training.

With a training focus has come a stress on outcome measures that pertain to the labor market: employment and wages. Since they underlie the performance measures that are applied to programs, they drive programs and their operators to focus on services that seem most directly to contribute to those employment outcomes.

Second, those work experience strategies that have been tried with youth always have had mixed purposes: poverty alleviation and income transfer (NYC, SYETP), economic recovery (PSE) and school retention (Entitlement). Try-out employment, the form now available to youth under JTPA, is limited to the private sector, has received little emphasis from the federal level, seems not to be widely used at the local level and is often limited to in-school youth. The large-scale, nationally available work experience programs seldom have been used in a strategic, development-oriented way. Nor, in the main, has such use been encouraged.

Third, the program strategies, considered as a group, still reflect their genesis as remedies for adult employment problems. In many communities, youth and adults are enrolled in the same labor market preparation, OJT or occupational training programs with no provision for potential differences between the two groups (Berkeley Planning Associates and Public/Private Ventures, 1992).

Finally, youth employment efforts have been part of legislation whose level of funding and breadth of coverage have always been relatively modest. They have never served more than 10 percent of the eligible population and now probably serve no more than 4 percent (Sawhill, 1989:24-25). Other estimates suggest that only about 5 percent of the eligible youth population is served (National Commission for Employment Policy, 1987). The scale of youth employment and training programs in most communities has been small relative both to the problem and to other institutions--particularly schools--that serve youth.

Thus, the field's knowledge and thinking about the effectiveness of its programs is circumscribed by a preference for training over work experience; by reliance on a traditional set of strategies (that in fact relate more to adults than youth) around which knowledge is organized; and by a narrow focus on employment outcomes that excludes attention to developmental and other youth needs.

From a policy standpoint, this employment focus is reasonable: the ultimate outcome of employment programs should be employment. Yet the complex problems and needs of disadvantaged youth may warrant a fuller set of strategies, or changes in the way traditional strategies are shaped and carried out in the field.

ISSUES TO BE INVESTIGATED

In the review that follows, this paper addresses the following issues:

- What does program research tell us, and teach us, about the effectiveness and value of traditional employment strategies--work experience, labor market preparation, OJT and occupational training--for youth?
- What are the findings regarding combinations of these strategies, or enrichment of individual strategies (e.g., work experience with education)?
- Does research in related fields--psychology, sociology, economics and education--complement or dispute these findings? For instance, does it provide developmental grounds for employment strategies that might not be supported by program research alone?
- Are there modifications to the core strategies that should be made to make them more effective for a youth population?
- Are there specific policy steps that can be taken to enhance the effectiveness of these strategies for youth populations?

- What additional research questions are most important to investigate to expand our knowledge of key employment strategies in a useful way?

The next section of this paper summarizes our current knowledge about the core employment training strategies. Section III discusses program findings and other research on work experience. In Section IV, information about adolescent development is explored. And finally, Section V presents a set of recommendations for policy, practice and research.

II. PROGRAM EFFECTIVENESS

The clearest evidence currently available about the effects on youth of the core employment strategies has been produced over the past 15 years. It is based on analysis of results produced under the Comprehensive Employment and Training Act (CETA), particularly those produced by the Youth Employment and Demonstration Projects Act (YEDPA), one of the largest demonstration and research efforts undertaken in the social policy field.

Definitive evidence regarding current programs, those conducted under JTPA, is not yet available. The national JTPA evaluation, now being conducted jointly by the Manpower Demonstration Research Corporation (MDRC) and Abt Associates, is expected to produce systematic, detailed findings about the effects of employment training programs on various subgroups, including youth. Until those findings are published, prior evaluation work remains the best measure of program effectiveness available.

To summarize this prior work, this review presents findings from three main sources. The first is a comprehensive review conducted by the National Research Council (NRC) (Betsey, et al., 1985) of 28 YEDPA research projects. This in many ways is a canon of findings for the field, despite unevenness in the "quality of the available evidence" it reviews.

The second source is an analysis of the Continuous Longitudinal Manpower Survey (CLMS) conducted by the Urban Institute (Bassi, et al., 1984). This analysis is not derived from individual program evaluations. Instead, it is a net impact analysis comparing outcomes for CETA participants in the CLMS sample with those for a comparison group of participants in the Current Population Survey. Its findings are far less clear-cut than those from either YEDPA or more recent demonstration research; issues regarding its methodology have been raised;² and, as noted below, the program elements it analyzes differ from those in the NRC report.

The third source is findings from one research and two demonstration research projects conducted since 1984. The reason for their inclusion is that the research these projects

² Using data from the Supported Work demonstration, Mathematica Policy Research compared results from an authentic control group with those obtained with derived comparison groups, such as those used in the CLMS analyses by the Urban Institute (Bassi, et al., 1984, reported here) and Westat (Fraker, et al., 1984). They conclude that comparison group impact findings differ markedly from those for control groups and are highly dependent on the manner in which the comparison sample is framed (Fraker, et al., 1984:119-123).

have produced meets the criteria established by the NRC's Committee on Youth Employment for its review (Betsey, et al., 1985:100)³

The three projects are the California Conservation Corps, JOBSTART and the Summer Training and Education Program (STEP). Findings presented here are from the most recently published reports on these projects (Wolf, et al., 1987; Auspos, et al., 1989; and Sipe, et al., 1988, respectively). It should also be noted that continuing research on all three projects is expected to produce findings within the next several years that could either change or reinforce the pattern of findings presented here.

The findings are discussed first as a whole, then in terms of the individual employment and training strategies to which they pertain. Finally, some general conclusions regarding the current state of knowledge are presented.

THE FINDINGS

The presentation format adopted here is intended to display findings in a broad pattern and to summarize some of the detail that the sources listed above present. The findings presented concern five major employment and training activities or strategies:

- Work Experience: employment and general work experience in temporary subsidized jobs, full- or part-time;
- On-the-Job Training (OJT): occupation-related training on the job;⁴
- Labor Market Preparation: improvement of attitudes, knowledge and basic skills as preparation for employment;
- Job Placement: activities, such as job search assistance, placement and follow-up, intended to place youth in unsubsidized jobs; and
- Occupational Training: provision of occupational skills and knowledge as a prerequisite to either further training or job placement.

³ Findings from the current work-welfare demonstrations, researched by MDRC, are not included in this review because the major focus of most programs is not youth.

⁴ Tables 1 through 3 do not present findings from the Summer Training and Education Program (STEP) because the program does not fall conveniently into the strategies for which impacts are reported. This definition is highly simplified even though, as the discussion below makes clear, OJT rarely occurs in "pure" form, and existing research accordingly can shed little light on its effects.

These categories span the major functions of employment and training programs as they have evolved through the 80s; they are generally consistent with the framework of the CLMS and NRC findings presented by Bassi, et al., and Betsey, et al., respectively; and they also are consonant with the categories under which Hahn and Lerman (1985) reviewed the results of YEDPA programs and research.⁵

Despite its strengths, such a simplified presentation risks interpretation problems of three kinds, which should be borne in mind:

- The typology of "strategies" for which findings are reported masks the significant fact that most programs combine elements--e.g., occupational training and labor market preparation.⁶
- The nature of impacts varies from program to program. Although, for the most part, employment and earnings are the variables of greatest importance, for some interventions educational impacts or school retention were deemed critical; so impacts presented in the tables that follow, whether positive or negative, are not always comparable.⁷
- The results shown here are average effects, which ignore substantial amounts of detail about subgroups.

The aim of the following tables is to direct attention to the major contours of what we know about youth employment, and to use that as a framework for discussion. A "+" sign indicates findings of positive impact, a "-" means findings of no impact or (in several cases) negative impact, and "NA" means not available. Table 1 presents a summary of overall results for youth.

Table 2 summarizes short-term and long-term findings for each program strategy. "Long-term" here is defined as two or more years postprogram. As the notes to the table

⁵ Bassi, et al., do not report results for either labor market preparation or job placement (though they report, separately from work experience, impacts of public service employment); Betsey, et al., lump OJT under occupational training, though the subjects of their findings are mainly classroom training programs. Hahn and Lerman use categories similar to those adopted by the NRC, though they discuss summer youth programs separately from work experience.

⁶ See Betsey, et al., (1985:103-105) for a more extended discussion of "program types" and the difficulties inherent in classifying programs or findings.

⁷ However, all of the CLMS findings presented here pertain to income increases; for further detail, see Bassi, et al., 1984.

Table 1
SUMMARY OF EVIDENCE REGARDING PROGRAM STRATEGY EFFECTIVENESS

Strategy	National Research Council	Continuous Longitudinal Manpower Survey	Research Since 1984
Work Experience			
On-the-Job Training	NA	NA	NA
Labor Market Preparation	+	NA	NA
Job Placement	+	NA	NA
Occupational Training	+		+ ^a

Sources: Betsey, et al., 1985; Bassi, et al., 1984; Wolf, et al., 1987; Auspos, et al., 1989

^a Shon-term educational gains only from JOBSTART findings.

Table 2
SUMMARY OF EVIDENCE REGARDING PROGRAM STRATEGY
SHORT-TERM AND LONG-TERM EFFECTIVENESS

Strategy	National Research Council		Continuous Longitudinal Manpower Survey		Research Since 1985	
	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term
Work Experience	+ ^a	-	-	-	-	NA
On-the-Job Training	NA	NA	+	-	NA	NA
Labor Market Preparation	+	-	NA	NA	NA	NA
Job Placement	+	-	NA	NA	NA	NA
Occupational Training	+	+	-	-	+ ^b	NA

Sources: Betsey, et al., 1985; Bassi, et al., 1984; Wolf, et al., 1987; Auspos, et al., 1989

a Youth Incentive Entitlement Pilot Projects findings, which are heavily affected by participants in just two sites; the follow-up sample for the analysis was mostly black.

b Short-term educational gains from the JOBSTART demonstration.

indicate, certain findings are highly qualified, and few generalizations should be drawn from them. The one positive finding regarding work experience, for example, appears to depend entirely on findings from one atypical site (Maynard, 1980). Evidence of long-term effects is available only for occupational training;⁸ there is no evidence of long-term benefit from any other program strategy.

Table 3 summarizes findings about program effects and school status. Here, our knowledge derives mostly from the NRC review; CLMS findings are not reported by school status, and post-YEDPA demonstrations have focused on out-of-school youth, with the exception of STEP.⁹ The NRC, it should be noted, is more guarded about findings for in-school programs than about findings for out-of-school programs (Betsey, et al., 1985:117,135-6,172-4).

From these summary data, a number of general conclusions emerge:

1. Our knowledge of "what works" is fragmentary, and in fact depends on results from just a handful of programs.¹⁰ Most findings are only short-term, and impacts differ in quality and in the segments of the youth population to which they apply. Findings can seldom be generalized or compared because of differences among the programs and service elements upon which they are based (Taggart, 1981:20). And the quality of program implementation, undoubtedly a determinant of effectiveness, is seldom measured, thus limiting the value of research findings.

It is tempting, for example, to conclude that occupational training works, based on Job Corps findings. Yet Job Corps programs have important specialized features (a residential dimension and strong basic skills component) that limit the validity of such a conclusion (see Betsey, et al., 1985:115; Hahn and Lerman, 1985:66). It is clear, moreover, that even current demonstration research, however valuable it proves, will not greatly expand our knowledge and understanding of what works.

2. The results thus far are soberingly modest. Hahn and Lerman, from their review of CETA impact findings, conclude that "CETA programs, taken as a whole, failed to improve the early labor market experiences of participants" (1985:36). Bassi, et al., reach

⁸ The long-term results are based solely on the Job Corps evaluation.

⁹ STEP has produced positive short-term educational impacts for its participants, who are 14- to 15-years-old and in school at entry (Sipe, et al., 1988:113).

¹⁰ A table of programs including their key services and effectiveness findings is presented in the appendix.

Table 3
NET EARNINGS IMPACT OF PROGRAM STRATEGIES, BY SCHOOL STATUS

Strategy	National Research Council		Continuous Longitudinal Manpower Survey		Research Since 1985	
	In	Out	In	Out	In	Out
Work Experience	+	-	NA	NA	NA	-
On-the-Job Training	NA	NA	NA	NA	NA	NA
Labor Market Preparation	+	+	NA	NA	NA	NA
Job Placement	+	+	NA	NA	NA	NA
Occupational Training	-	+	NA	NA	NA	+

Sources: Betsey, et al., 1985; Bassi, et al., 1984; Wolf, et al., 1987; Auspos, et al., 1989.

similar conclusions (1984:64). Only the Job Corps among the programs reviewed by Betsey, et al., produces moderate earnings gains, while research since 1985 has found only small positive (and short-term) results or no effects.

3. Evidence of what works for whom is limited. No systematic investigation of program effectiveness by participant age group has been made. Reporting of program effects on racial subgroups is usually limited by the small samples and differing measures used in the evaluations.¹¹

The CLMS analysis did, in fact, disaggregate effects by sex and racial subgroup; these long-term impacts are summarized in Table 4. With only one exception (OJT for black females), the available findings are negative. In particular, the results for minority males are negative, a dispiriting finding in view of the fact that youth unemployment is very largely experienced by minority males.

THE MAJOR STRATEGIES

Examining the findings for each of the major employment training strategies in greater detail yields further insights into our current state of knowledge and some indications for future research.

On-the-Job Training

Definitive knowledge regarding the effects of on-the-job training for youth is virtually nonexistent (Bassi, et al., 1984:44). This may in part be due to the fact that OJT was not used extensively for youth in CETA (Bassi, et al., 1984, point out that, in the CLMS data they analyzed, fewer than 5 percent of youth were in OJT). Earlier research of OJT programs under MDTA indicates positive benefits for adults (Northrup, 1976:114). Taggart argues the benefits of OJT forcefully, and his OJT results (based on CLMS analyses conducted by Westat) show positive impacts for youth (1981:79).

The only YEDPA research that provides any indication of OJT effectiveness is from the Ventures in Community Improvement program, which combined work experience and OJT. Research from the program, which focused on a largely minority dropout population, shows positive short-term results, whose reliability, however, has been questioned (Betsey, et al., 1985).

¹¹ Appendix Table A-2, which presents subgroup findings from the reports in Table A-1, illustrates well the fragmentary quality of our knowledge.

Table 4
LONG-TERM NET EARNINGS IMPACTS OF PROGRAM STRATEGIES,
BY RACE AND SEX

Strategy	White		Black		Hispanic	
	Male	Female	Male	Female	Male	Female
Work Experience	-	-	-	-	-	-
On-the-Job Training	-	-	-	+	-	-
Labor Market Preparation	NA	NA	NA	NA	NA	NA
Job Placement	NA	NA	NA	NA	NA	NA
Occupational Training	-	-	-	-	-	-

Source: Bassi, et al., 1984.

These overall findings provide little clear guidance about how OJT could be more effectively used for youth. This is an area that appears ripe for further research.

Labor Market Preparation and Job Placement

The research here seems clearer and more consistent. These programs produce short-term benefits (stronger for job placement programs), for both in-school and out-of-school youth.¹² It is unclear from the research how sustained the effects of labor market preparation programs are; in the case of job placement programs, benefits appear to decay by two years postprogram. Program length and structure vary widely (Betsey, et al., 1985:11), and the Alternative Youth Employment Strategies program, a YEDPA demonstration, included work experience as a strategy.

In short, these programs as a group appear to provide limited but worthwhile benefits, based on research findings to date. Butler and Mangum argue that such approaches “are of sufficiently universal value that [they] should be available to all youth” (1983:66). It is unclear, though, which design features (mix of services, curriculum and program length) have most to do with producing positive effects.

One of the few non-JTPA labor market preparation programs for youth that has been evaluated is the Experience-Based Career Exploration (EBCE) program. This program does not emphasize vocational skills per se, but rather focuses on broad career, personal and intellectual skills. Activities included earning credits for work at multiple community work sites, goal-setting and personalized education regimens (Bucknam and Brand, 1983:68) A meta-analysis of 80 third-party evaluations of EBCE programs showed that, in contrast to comparison groups, EBCE students showed large gains not only in career skills and life attitudes, but also in academic skills. However, there have been no longer-term studies of employment or wage impacts.

Occupational Training

The most frequently cited evidence regarding the efficacy of occupational training for youth comes from the Job Corps. Yet, in the final analysis, it remains unclear whether it is the program’s residential nature or its occupational focus that most contributes to its effects (Betsey, et al., 1985:118; Hahn and Lerman, 1985:66).

¹² This latter point needs to be tempered by the realization that “out-of-school” in the context of these programs typically includes high school graduates as well as dropouts.

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Burbridge notes that “though young people participated extensively in occupational training programs under MDTA and CETA, these programs were not specifically targeted on youth” (1983:65). Moreover, some analysts believe that, under CETA, participants may have been attracted to classroom training for the stipends rather than the skills (Butler and Mangum, 1983:61).

Taggart estimates positive but small net earnings gains for youth 17 to 21 using CLMS data (1981:77). Hahn and Lerman, analyzing results for dropouts in YEDPA discretionary projects, conclude that training and apprenticeship projects produced better short-term earnings gains for this population than other strategies (1985:68-70). They conclude that “nonresidential training appears to help disadvantaged youth become employed,” though questions remain about both the costs and “which specific training approaches are most beneficial” (1985:71).

Research on vocational education seems to have concluded that the only real wage and employment gains derive from career-specific courses of training (such as secretarial or administrative). Students most often take a disjointed set of courses and, as a result, do not benefit from participation in this type of program (Rumberger and Daymont, 1984). A significant number of vocational education students take less than three credits in their specific area of training, though positive effects occur only with a concentration of three or more courses.

Commercial training for females seems to have a significant positive impact on earnings: wages are 16 to 17 percent higher for females with this vocational training than for those without it. However, technical training or a course of home economics showed zero or negative effects on wages (Mangum, 1988).

The evidence on labor market impacts is less conclusive for males. If employment matches the training received (most likely in the area of agriculture), graduates have higher labor market participation rates, lower unemployment and 7 to 8 percent higher earnings than the comparison group (Mangum, 1988).

Basic Skills

Most reviews of employment training programs for youth arrive at a recommendation that programs focus more or better attention on basic skills. Yet hard evidence about the ultimate effect on employment and earnings is scarce. Barnow concludes: “The role of basic education in training programs has not been well addressed in the national evaluations of CETA. While there is little doubt that a great deal of basic education took place under CETA and is continuing to some extent under JTPA, the Department

of Labor did not collect data on basic education in its primary evaluation data base under CETA” (1989:129).

Available evidence indicates that programs can successfully improve basic skills, at least in the short term (Auspos, et al., 1989; Sipe, et al., 1988). Yet the experience of these programs suggests that many out-of-school youth regard basic skills instruction as a deterrent to participation.

The approach of the Center for Employment Training suggests the effectiveness of careful integration of basic skills instruction into an overall training regimen (Gordon and Burghardt, 1990). Sticht, et al., also make a strong case (in a different context) for this approach, based on their review of training results from the military (1987:239). Still, the paucity of evidence regarding the long-term effectiveness of basic skills instruction remains a significant deficiency and supports the recommendation of Betsey, et al., for research on basic skills programs, particularly programs for out-of-school youth (1985:25).

Combine the Strategies

As noted earlier, there are relatively few program efforts that do not combine employment strategies. Yet systematic or definitive evidence regarding the effectiveness of combinations is nonexistent. One is left to draw inferences from particular programs.

Table 5 presents the available evidence regarding combinations of strategies, based on program evaluations. The general impression one forms from this table is that strategies in combination produce results. All the basic strategies are represented, though there is no authentic private sector example of OJT for which research is available. Results seem strongest for combining basic skills with other components, especially occupational training; and work experience, the table suggests, may combine effectively with other strategies in well-planned programs, a conclusion also reached by Hahn and Lerman (1985:96). As is true of the findings generally, though, one can draw only general inferences; more systematic examination of the potential benefits of combined strategies is clearly required.

Table 5
EVIDENCE REGARDING PROGRAM EFFECTS
FOR COMBINATIONS OF STRATEGIES

Strategies	Program	Impacts
Basic Skills Occupational Training (Residential)	Job Corps	Positive
Basic Skills Occupational Training (Nonresidential)	JOBSTART	Positive (short-term) edu- cational effects
Work Experience Basic Skills	Summer Training and Education Program	Positive (short-term) edu- cational effects
Work Experience Labor Market Preparation	Opportunities Industrial- ization Center Career Exploration Program	Positive (short-term) school retention
Work Experience Labor Market Preparation Occupational Training	Alternative Youth Employ- ment Strategies	Inconclusive
Work Experience On-the-Job Training	Ventures in Community Improvement	Positive (short-term)
Labor Market Preparation Job Placement	Project Steady	Positive (short-term)

Sources: Betsey, et al., 1985; Auspos, et al., 1989; Sipe, et al., 1988

III. WORK EXPERIENCE

Although it has become a commonplace in employment and training policy that work experience fails to produce results, the pattern of evidence is more complex. Moreover, findings from social science raise further doubts about the conclusion reached in employment and training policy.

PROGRAM FINDINGS

Particularly in the case of older, out-of-school youth, the findings of no impact from Supported Work seem clear (Maynard, 1980). These findings are generally reinforced by those from the Entitlement demonstration (Betsey, et al., 1985), by short-term findings from the evaluation of the California Conservation Corps (Wolf, et al., 1987) and by the CLMS findings (Bassi, et al., 1984). Burbridge relates the Supported Work findings to those of earlier evaluations of the Neighborhood Youth Corps and concludes that “for out-of-school and older youth for whom schooling is no longer an issue, work experience alone does not appear to benefit program participants” (1983:65), a conclusion also reached by Hahn and Lerman (1985:38).

Hahn and Lerman argue, however, that enriched work experience--work experience combined with other components, such as occupational training or basic skills instruction--offers significant potential for youth (1985:38) and that further experiments with such programs should be made (1985:100).

Moreover, the Entitlement findings suggest postprogram earnings gains for in-school youth. These findings are qualified in that they are short-term, occur in a sample of largely black youth and are driven by results in only two sites. Nonetheless, in their review, Betsey, et al., recommend: “Programs should be designed to test whether increased in-school employment leads to greater post-school employment,” with an experiment designed to test impacts over a longer term (1985:27).

Evidence regarding the Summer Youth Employment and Training Program (SYETP), the major work experience component of current employment programs, is generally weak and inconclusive (Betsey, et al., 1985:149; Hahn and Lerman, 1985:46). Given SYETP’s long history and steady popularity, and the strong likelihood of its continuation in some form, it is striking that there has been no systematic examination of its impacts, nor investigation of its potential in combination with program elements.

Finally, it should be noted that while CLMS findings regarding work experience were uniformly negative, postprogram earnings for participants in Public Service Employment (PSE) showed large but typically short-term gains for young women, particularly blacks

and Hispanics (the findings were consistently negative for males) (Bassi, et al., 1984:66). These findings are far from conclusive.¹³ They do suggest, though, that public sector work experience may have real (if limited) value when appropriately used, and that it may not entirely deserve its negative reputation as an employment and training strategy.

OTHER FINDINGS

In the social sciences, the dominant view of work experience has come full circle in the last decade. Ten years ago, there were very few assessments of how working during the teen years affects socialization, career choices or work attitudes, even though the number of high school students working during the school year grew steadily between 1950 and 1980 (Greenberger and Steinberg, 1986). In the absence of research showing positive effects from working, developmental researchers became concerned that working would retard some of the necessary psychological growth (identity development, self-esteem, etc.) that should occur during adolescence.

At this point, Greenberger and Steinberg began publishing a series of studies comparing high school workers and nonworkers, which showed that there were modest benefits associated with working: psychosocial growth in the areas of self-reliance, work habits, values and financial decision-making (Greenberger and Steinberg, 1981). However, these gains were accompanied by a drop in school performance, fewer hours spent on homework, school absences, a decrease in closeness to a parent, more cynical attitudes about work and increased drug and alcohol use (Greenberger and Steinberg, 1981; Ruggiero, et al., 1982; Steinberg, et al., 1982). The most important findings in this research were that the largest number of students were working in jobs that required the least use of cognitive skills and little contact with adults. It also found increases in deviance to be associated with stressful work conditions, and negative effects on schooling to be associated with working more than 20 hours a week.

At the same time, other researchers began reporting findings that showed consistent economic benefits in post-high school years associated with having been employed while in school. This led to a flurry of research and controversy which has lasted for a number of years, but which yielded a body of research that more carefully links specific characteristics of work experience with outcomes for high school-aged youth and shows that, under the right circumstances, work experience can be both developmentally and economically advantageous.

¹³ Taggart (1981:130-132) contends that PSE participants were typically older and more job-ready than other CETA participants, which partly explains their superior outcomes. He also contends that “[t]he major explanation for the differing earnings impacts of PSE and work experience lies in their relative effects on transition rates into unsubsidized public sector employment.”

According to this research, adolescents are expected to benefit from early experience in the world of work in three ways: (1) contact with adults leading to socialization in adult attitudes, values and behavior (particularly independence and responsibility); (2) gaining information about career possibilities and educational requirements that facilitates more realistic career decisions; and (3) learning job-related attitudes, behaviors and skills (e.g., punctuality and good work habits) (Hamilton and Crouter, 1980). Research shows, however, that these benefits can be expected only under certain conditions: the amount of time spent working each week and the quality of the job appear to be important factors in how working affects the developmental process of leaving school and becoming a worker.

Hours of Work

Further research supports the finding that the number of hours teenagers work is a pivotal factor in how the experience affects development. Greenberger and Steinberg's studies were done with a relatively small, homogeneous sample of white middle-class youth in California. Studies of larger, more representative samples show that, controlling for social class, students who work more than 20 hours a week have lower grades and academic aspirations, spend less time on homework, report less commitment to education, and have higher dropout rates and lower levels of life-satisfaction than students who work fewer hours or not at all (Steinberg and Dornbusch, 1991; Yamoor and Mortimer, 1990; Mortimer and Finch, 1986; D'Amico, 1984).

However, adolescents who work a moderate number of hours (10 to 15 hours per week) actually have lower dropout rates than those who work more hours or who do not work (D'Amico, 1984). Moderate work schedules do not show negative effects on grades, class rank or commitment to education (D'Amico, 1984; Mortimer and Finch, 1986); and this type of experience is associated with higher levels of self-esteem. Students who work up to 10 hours a week do not show the significant increases in deviance associated with more intensive work experience (Steinberg and Dornbusch, 1991).

The other significant finding regarding work intensity is that work experience in high school is related to favorable economic outcomes after high school. Specifically, the more students work while in school, the fewer number of weeks they are likely to spend unemployed after leaving school and, on average, the higher their wages are likely to be (Stern and Nakata, 1989; Mortimer and Finch, 1986; D'Amico and Baker, 1984; Meyer and Wise, 1982). This has been demonstrated for up to five years following high school and seems to be true whether or not students go on to any postsecondary education.

Overall, the findings of negative impacts of working while in school, which set off so many alarms, are associated with long work weeks but seem not to occur when the

number of hours worked is moderated; and the more quality work experience a youth has while in high school, the better he/she is likely to do in making the school-to-work transition.

Quality of Work

For adults, the amount of complexity and autonomy involved in a job is associated with the capacity to learn on the job and a sense of self-competence, work involvement and job satisfaction (Kohn and Schooler, 1978; Mortimer and Lorence, 1979, 1981; Mortimer and Finch, 1986). If complexity and autonomy are important for adults, then these same characteristics (challenging and interesting work, capacity to use skills with some independence) should also be associated with positive developmental outcomes for youth. Most of the students in Greenberger and Steinberg's sample were working in low-skilled, repetitive, short-term jobs, but most other research does not include information on job characteristics that might affect whether the impact on development is positive or negative.

The limited amount of research that does include some measure of job content shows that the use of cognitive skills and the perceived opportunity to learn significantly increase teens' commitment to high standards at work and decrease cynicism about the world of work (Stern, et al., 1990). These skills are the ones likely to be associated with success in the adult role of worker. In fact, a national study shows that the opportunity to use and develop skills on the job and the complexity of the work are associated with higher hourly wages and lower unemployment up to three years after high school (Stern and Nakata, 1989).

A study with a small sample of females from rural upstate New York showed that those who experienced high quality work experiences while in school were more likely to make a successful school-to-work transition. It also seems that stressful conditions (routinization, lack of autonomy, impersonal organization, low wages) associated with low-complexity jobs are significantly related to deviance inside and outside work (e.g., substance abuse and theft) (Ruggiero, 1984, in Greenberger and Steinberg, 1986). This may, in part, explain the association found between work and deviance, since most teens work in this type of job.

The "naturally" occurring jobs that teenagers hold are mostly low in complexity and autonomy--service worker and retail trade jobs (Hamilton and Hamilton, 1989). There is some evidence that jobs secured through formal training programs can provide a higher quality work experience than non-sponsored jobs. Stern, et al., (1990) compared high school students working in "natural settings" with those working through a school-supervised program. The school-supervised workers rated their jobs higher than the non-

supervised workers in the areas of using skills and abilities, learning new skills and getting to know adults. These were the same elements associated with economic benefits from working.

In the Entitlement demonstration, trained assessors made field visits to 520 worksites and found that the program work settings provided good quality work experiences in regard to job content, supervisor-youth relationships, job satisfaction and the value of the work (Ball, et al., 1980). Again, these were the anticipated benefits to be gained by working while in school. Unfortunately, the impact study did not separate groups by the quality of their work setting when examining program effects.

IV. DEVELOPMENTAL NEEDS OF DISADVANTAGED YOUTH

The preceding sections have presented a picture of interventions for youth that have, to date, been largely unsuccessful in producing the significant impacts that are the goals of the employment and training system. The inability to produce the intended results for disadvantaged youth is tied to the history of how youth programming has been developed over the last two decades. In particular, it is critical to stress that interventions have evolved as variations on the types of strategies used in employment programs for adults. However, there is a fundamental, and critical, difference between the needs of unemployed adults and those of youth (particularly the disadvantaged) having difficulties making the transition into the labor force.

Unlike adults, youth coming to second-chance programs are undergoing the psychological, emotional and social development that is an inherent part of the passage through adolescence. Negotiating the transition from school to the labor market requires more than the acquisition of skills specific to any occupation. It is also necessary for youth to master the developmental tasks associated with achieving the cognitive, emotional and social maturity that is critical to long-term stable employment.

So, unlike programs that serve adults, youth interventions must address the full range of developmental needs associated with this stage of life. For example, youth served by training programs need to establish an independent identity, develop a self-concept and fill the needs for affiliation, acceptance, affection, approval and competence.¹⁴

At the stage when employment programs try to intervene, adolescents are also trying to reason more abstractly, think less egocentrically, see things from others' perspectives, and develop a more sophisticated style of moral reasoning. They must learn to evaluate new situations and make decisions about courses of action based on the potential consequences of their behavior. And they will be absorbing their successes and failures in their roles as son or daughter and student, exploring their new roles as friend or lover, and trying to move into the role of adult worker (and sometimes, parent).

The function of second-chance youth programs is to intervene in the lives of at-risk adolescents and improve their chances for becoming independent, self-sufficient adults--specifically, to socialize them into the role of "worker." But the process of becoming an independent adult starts long before these youth reach training programs and significant-

¹⁴ The critical areas of development listed here represent decades of theoretical work in psychoanalytic, cognitive developmental, social learning and symbolic interactionist theory. Full treatments can be found in the works of S. Freud, A. Maslow, E. Erikson, J. Piaget, L. Kohlberg, B.F. Skinner, G.H. Mead and R. Turner.

ly affects the likelihood that any given strategy will be successful with this population. For the disadvantaged youth who are served by these programs, the process of becoming self-sufficient is further impeded by the circumstances under which it occurs--the severe and persistent poverty in which many of them live.

As a first step to understanding how to design more effective interventions for disadvantaged youth, it is necessary to review the major influences on the overall process of development and to assess the difficulties that are likely to be experienced by the population employment and training programs are serving. This section of the paper reviews what is known about the opportunities for development available to disadvantaged youth.

MAJOR DEVELOPMENTAL INFLUENCES

This section examines some of the areas of life, such as the family, peer groups and school, that are the primary settings where adolescents mature. The goal is to begin to understand the ways in which the life circumstances of disadvantaged youth affect their opportunities for growth, since any shortcomings in the social environment early in the developmental process will need to be addressed by the intervention strategies used to promote growth into self-sufficient adulthood.

The Family

The role of the family in the developmental process of the child is to provide the basic necessities of food, shelter, clothing and protection while fostering the growth of an identity, motivation and values that are necessary to become a self-sufficient adult. Poverty has a clear, direct effect on a family's ability to meet a child's basic needs; poverty also indirectly affects a child's psychological development through its impact on the social and emotional environment in the home.

Over 50 percent of all children will spend at least some portion of their early years very near to, or in, poverty (Duncan and Rodgers, 1988:1009). Many of these children will remain in poverty for between one and four years, but 41 percent of the children experiencing poverty live under these conditions for extended periods of time (5 to 15 years). "Persistent poverty is a way of life for over 2.5 million children under the age of 15," (Duncan and Rodgers, 1988:1018) and a disproportionate number of these children are black.

One of the most fundamental needs--housing--is unmet for a large number of children. An estimated 100,000 to 300,000 children were homeless during a one-week period in 1987 (Burt and Cohen, 1989). This, of course, does not include the children who live in substandard, inadequate housing. Without a safe and stable place to live, physical well-

being is threatened and development is handicapped through a shortage of family and social support networks.

Even when housing is available, the poor in many cities are becoming increasingly concentrated in ghetto areas (Jargowsky and Bane, 1990) and isolated from the mainstream culture. For example, a study of 17- to 24-year-olds in high-poverty neighborhoods in Boston shows that these youth are isolated from both support structures and middle-class role models. Over 50 percent of the youth reported that they did not know anyone in "business, accounting, engineering, science or law," but they did know people in jail or in trouble with the police (Case and Katz, 1990:11). Half of these disadvantaged youth also believed there was no support in their neighborhood or community for people who try to get ahead through schooling or employment (Case and Katz, 1990:12).

Lack of adequate nutrition impedes development through its effects on both physical and cognitive growth. In 1988, an estimated 16 percent of children in low-income families experienced retardation in physical growth due to inadequate nutrition (Children's Defense Fund, 1991). Malnourishment early in childhood is also linked with later IQ deficits (Galler, et al., 1983a), attention deficits, reduced social skills and emotional instability (Galler, et al., 1983b). In the classroom, casualties of early malnourishment exhibit poor attention, impaired memory, easy distractibility, poor performance and restlessness (Galler, et al., 1983b). Children whose nutritional needs for normal growth are not met will undoubtedly be less able to take advantage of any other opportunities for maturation that might be present at home or school.

The deprivation associated with poverty--poor and crowded living conditions, unstable family structures, chronic unemployment, low wages, job insecurity, dependence on welfare, lack of savings and constant shortages of cash--also affects the psychological characteristics of parents (Gecas, 1979). Adults who are poor have more mental health problems than those with higher incomes (see McLoyd, 1990, for a good review of the literature). The chronic, ongoing stressful conditions of inadequate housing, dangerous neighborhoods and shortfalls of money are more debilitating than one-time acute events (Belle, 1984). For example, chronic economic stress (difficulty paying bills, worrying about money, not having money for health care) was found to be the strongest predictor of depression in a southern black community (Dressler, 1985).

Poor children are also more likely to live in single-parent households. In 1985, 54 percent of black and 29 percent of Hispanic children lived in single-parent households (U.S. Bureau of the Census, 1985), and 70 percent of these children lived in poverty. Single parents (mostly female) are particularly vulnerable to psychological distress. They are at greater risk for anxiety, depression, health problems and drug abuse (McLoyd, 1990).

Clearly, the physical deprivations associated with poverty and the psychological distress that accompanies these conditions will affect a parent's ability to provide the support and nurturance necessary to socialize a child into the role of a self-sufficient adult. Disparity in the conditions experienced by families at different socioeconomic levels also leads to different conceptions of social reality, priorities, values and expectations of children (Peterson and Rollins, 1987).

Two areas of parental behavior that affect social and emotional growth have received the most research attention: (1) the amount and kind of control parents exert over children; and (2) the amount of affection and support they show (Gecas and Seff, 1990; Gecas, 1981; Gecas, 1979). Parental control and support are important because these dimensions have been shown, fairly consistently over the last 30 years, to be linked to children's self-esteem, work orientation, achievement motivation, school achievement and delinquency.¹⁵ However, it is also important to note that while these parental factors do influence a child's development, they do not wholly determine it.

Successful socialization--becoming an autonomous, motivated, healthy individual who is successful in school and work--tends to be associated with a style of parenting characterized by support, physical affection, companionship and involvement, coupled with consistent discipline based on clear rules, supervision and protectiveness (for reviews and critiques of this literature, see Gecas and Seff, 1990; Peterson and Rollins, 1987; and Maccoby and Martin, 1983). This style of parenting seems to be less prevalent among families with low incomes than either permissive or authoritarian parenting (based on force, threats or physical punishment) (Lempers, et al., 1989; Dornbusch, et al., 1987; Peterson and Rollins, 1987).

Supportive parenting seems to satisfy the developmental need for close identification with adults in an environment where independent thought, decision-making and roles can be practiced and consequences learned. A longitudinal study of adolescents has shown that parental praise, affection and communication leads to higher self-esteem in children (Felson and Zielinski, 1989). This type of parenting is also associated with higher grades among high school students (Dornbusch, et al., 1987). But, more important for our purposes, research shows that such parenting facilitates academic success through its

¹⁵ As in most areas of research, the work in this area is fraught with shortcomings--some of which are serious. Most of the early studies of the effects of social class on parenting and socialization were done with restricted samples of white middle-class boys. Many of the studies are cross-sectional in design when they should be longitudinal to capture the essence of a process. Social class is often operationalized with weak measures, and some of the measures of socialization outcomes are highly questionable. The findings cited in this section are supported by studies that have large heterogeneous samples, measure social class, preferably are longitudinal and are specifically based on work with adolescents.

effect on the development of a healthy sense of autonomy and a positive orientation toward work (Steinberg, et al., 1989). When the social environment provides the support and opportunities for growth necessary for adolescent development, it appears that the characteristics demanded of an individual who can successfully carry out the role of worker can be promoted.

Unfortunately, disadvantaged youth are less likely to be exposed to this type of environment. Economic hardship has been shown to be associated with less parental nurturance and more inconsistent discipline practices, which directly and indirectly lead to depression, loneliness, delinquency and drug use among adolescents (Lempers, et al., 1989). Rates of problems with substance abuse in school and with the law are also higher among children raised in single-parent (female-headed) households (Garbarino and Sherman, 1980), where children are more likely to make decisions without parental input (Dornbusch, et al., 1985)--the type of family in which many disadvantaged youth reside. Therefore, any strategy to increase the probability that adolescents will be successfully socialized as workers must be developed in a manner that takes into account the necessity of support and democratic discipline in nurturing autonomy and healthy work orientations.

One further area of parental behavior relevant here has been identified by the research of Kohn and others on social class and work. Kohn's general position is that a worker's socioeconomic status influences values and personality traits through the characteristics of tasks performed on the job. Those in blue-collar jobs will tend to value conformity, orderliness, neatness and obedience, while white-collar workers will value self-direction and internalized standards of behavior. Parents in lower socioeconomic positions will tend to stress conformity and discipline their children on the basis of an action's consequences (external factors), while parents in higher socioeconomic positions will tend to stress self-direction and discipline their children on the basis of their interpretation of the child's motives or intentions (internal factors) (Kohn, 1977; Kohn and Schooler, 1973, 1978). So, lower socioeconomic status adults may come to use a more controlling, authoritarian style of parenting not only as a result of the deprivations associated with poverty, but also because they treat their children in the manner demanded for success in their own social environment.

If an individual is expected to be successful in a role, he/she must first develop the characteristics required to succeed. If the family environment does not promote self-esteem, autonomy and a healthy orientation to work, the adolescents who participate in employment and training programs will benefit from strategies that further the developmental process by incorporating the elements of support, affection, involvement, firm but not harsh discipline, praise and communication, all of which are linked to developing these traits.

Other Influential Adults

A growing number of researchers interested in development are beginning to explore the relative importance of nonparental adults in the lives of adolescents. Along with parents, other adults can serve as role models, teachers, sources of social support, and helpers with decision-making (Galbo, 1989, 1986; Garbarino, et al., 1980). Unfortunately, much of the research currently available is limited in its coverage of these potential areas of effect and in the type of samples used; therefore, it is possible to draw only a few conclusions about the importance of nonparental adults in the development of youth.

Research consistently shows that youth are most likely to seek social support and advice from their parents (Galbo, 1989, 1986; Benson and Mangen, 1986a). When asked whom they talk to about problems and turn to for advice, the majority of adolescents mention their parent(s). However, older adolescents also consider their peers to be a significant source of social support, followed by other adults (Galbo, 1986; Benson and Mangen, 1986a).

For our purposes, two of the most interesting findings in this research are: (1) minority youth are more likely than white youth to turn to other adults as providers of support--especially nonparental family members (aunts, uncles, grandparents, siblings, etc.); and (2) higher-income youth are more likely than middle- or lower-income youth to turn to parents for support, while other adults and peers are more important for lower-income youth. Minority and low-income youth used nonparental adults as important sources of support and information in making decisions about life and sex, and in coping with problems or making decisions about drug and alcohol use (Benson and Mangen, 1986a, 1986b, 1986c).

While these results have not yet been widely replicated, they suggest that nonparental adults have a very important role to play in the development of disadvantaged youth; in fact, they seem to be used as an alternate source of social support for these adolescents in areas that can have serious consequences in regard to labor market success. Researchers are also beginning to explore the notion that limited contact with significant adults other than parents can actually slow cognitive as well as social or emotional growth (Galbo, 1986, 1989). If this is shown to be the case, it would be even more critical to ensure that at-risk youth are given as many opportunities as possible to interact and form relationships with adults other than their parents.

Peer Groups

Peer groups are an important context for socialization because they differ from the family setting in critical ways. First, associations with peers are made on a voluntary

basis. Peer groups are independent of adult control, allowing children to exercise independence and autonomy. Second, these groups are based on interactions among individuals who are equal in status. Any hierarchy that evolves in peer groups is not based on age or position (as it is in families) but on expertise or achievement in an area valued by the group.

As children age, they increasingly spend more of their time with peers. High school students spend twice as much of their time with peers (29%) as they do with parents or other adults (15%) (Brown, 1990). Interactions with peers are important in the developmental process primarily because they provide adolescents the opportunity to practice the skills needed in adult roles. Peer groups facilitate development of an independent identity, allow adolescents to practice different styles of social competence and impression management, and serve as an arena for the transmission of values and information in areas omitted by parents. Peer groups are also important in the process of forming a self-concept, specifically self-esteem, because they provide adolescents with a framework for learning how others perceive them and a source of standards against which to measure themselves.

Social science research on different peer group influences among adolescents of different socioeconomic backgrounds is meager.¹⁶ Most research in this area has focused on status within peer groups, formation of cliques and other characteristics of the group, rather than environmental influences on group formation and effects. In this area, we can only relate the general characteristics of the social environment inhabited by disadvantaged youth to their opportunities to practice social roles and develop social skills and values in peer interactions.

The social and geographic isolation associated with poverty inevitably limit the types of individuals youth find available for day-to-day interaction. Lower-income youth have been shown in some studies to be less likely to belong to peer groups oriented toward high achievement and more likely to belong to groups formed around drug or other deviant cultures (for example, see Shrum and Cheek, 1987). Higher drug use rates and crime rates in low-income areas make it more likely that disadvantaged youth will associate with peers who have drug use or criminal histories.

Lower school achievement rates and higher unemployment rates in poverty areas make it less likely that adolescents from low-income families will have the opportunity to interact with individuals who exhibit the characteristics associated with adult success. While

¹⁶ Again, very few studies use heterogeneous samples in which social class is measured. Therefore, it is not possible at this time to reach conclusions about the effects of poverty on peer group processes.

parental influence can be stronger in the areas of achievement, values and goals, peer influence can be stronger in social and recreational behaviors (Kandel, 1986), sometimes leading to what might be competing sources of influence or support.

Schools

Schools are an important context for development because of the effect they have on cognitive growth. Much of the cognitive skills development necessary for success in adult roles, particularly the role of worker, occurs in the school setting.

In the last three decades, research on poverty neighborhoods' effects on schooling has been uneven and plagued by methodological shortcomings that make it difficult to draw conclusions (for a good review and critique of this literature, see Entwisle, 1990; Jencks and Meyer, 1990). As Jencks and Meyer note, 25 years of research in this area has yielded a "thin harvest" (1990:154) with little that informs notions of development or that can be used to guide second-chance programs. What is clear is that there is a severe disparity between education and employment outcomes for adolescents who attend schools in low-income neighborhoods and outcomes for youth in high-income neighborhoods. For example, in 1984, students age 9 to 17 attending schools in disadvantaged metropolitan areas (a high proportion of the population on welfare or not regularly employed) had lower levels of reading proficiency than rural or advantaged metropolitan area students (U.S. Department of Education, 1989:108). In 1988, over 40 percent of eighth-graders from low socioeconomic backgrounds were in the lowest quartile on achievement test scores in history, math, reading and science, compared with about 10 percent of students from high socioeconomic backgrounds (U.S. Department of Education, 1989:118). Dropout rates are also higher among minority and disadvantaged populations than they are among other groups.

But even when disadvantaged youth complete high school, they do not fare as well as their advantaged counterparts. In 1986, only 50 percent of 1972 high school graduates from low-income backgrounds had some post-high school education, compared with 91 percent of graduates from high socioeconomic backgrounds; and graduates from disadvantaged backgrounds were earning, on average, only \$6.48 an hour compared with \$8.02 an hour for graduates from more advantaged backgrounds (U.S. Department of Education, 1989:364). There are many competing explanations for these racial and socioeconomic differences in educational success.¹⁷

¹⁷ This is an extremely complex area that cannot be given full treatment here. However, this topic is more fully explored in a separate paper devoted to educational issues for this population. See Johnson and Gambone, this volume.

One prevalent theory is articulated by Ogbu (1985). He argues that, as a result of discrimination, minority youth do not invest much effort in schooling because it is clear to them, from observing their circumstances, that their opportunities are restricted whether or not they finish school. Ogbu argues that a rational response to the job ceiling that exists for minority youth is to stop working hard in school and settle for low-status jobs that do not require much education, because there is no evidence to show that they could otherwise do any better.

Others suggest that such factors as teachers' lower expectations for minority and disadvantaged youth affect their achievements. In a study of five junior high schools, Hall, et al., (1986) found that differences in minority and white students' achievements in reading and math were related to teachers' misperceptions of differences in the groups' abilities. Trained observers found no differences in behavior or attention in the classroom, and students reported the same attitudes toward success in school. Nevertheless, teachers believed that black males exerted the least effort in the classroom and rated the ability of white students higher than that of black students with similar achievement scores.

Regardless of the cause, in the current educational structure, disadvantaged youth are not benefitting from a key process used to promote cognitive growth. When they reach second-chance programs, these adolescents are burdened by the physical deprivations of poverty and may have developed in an environment handicapped by some of the forces mentioned above--parents burdened by poor mental health, risk of substance abuse, unsupportive psychological environments, isolated social environments with limited access to groups exhibiting mainstream norms and successes, and a school system ineffective in educating them. It is not surprising, therefore, that these youth often seem to be unaffected by the short-term strategies used in employment and training programs to enhance the school-to-work transition for this population.

V. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

1. The findings about youth employment programs derive from no systematic framework, seldom build coherently or effectively on one another, pertain as much to specific programs as they do to generic “strategies,” and thus have only limited value to policy-makers.
2. Our knowledge of the quality of program design and implementation, and of how variations in these factors might affect the impacts of programs, is likewise limited.
3. The available findings suggest that employment training programs have generally had small average impacts on youth. Excluding findings from the Job Corps, there is no evidence that any of the programs has more than a modest and short-term effect. In particular, few of the programs show strong (or any) effects for minorities, particularly minority males. Given the fact that youth unemployment problems are experienced disproportionately by minority youth, this is a particularly sobering finding.
4. Our knowledge regarding program effectiveness for youth in particular age groups is fragmentary at best. Since youth experience a series of different and significant changes over the 14 to 22 age period, the lack of age-specific findings is particularly limiting.
5. Although work experience has been relegated to the category of strategies that do not work, the available evidence is mixed. Particularly for in-school youth, there is evidence that work experience may pay off, and there seems to be a valid basis for arguing--as a number of analysts do--for further work and experimentation with this strategy.
6. There are particular gaps in knowledge that call for focused investigation:
 - . There is virtually no solid evidence about the effectiveness of on-the-job training for youth;
 - . The Summer Youth Employment and Training Program (SYETP)--incidentally, the largest work experience component in JTPA--remains a program of unknown effectiveness or potential; and
 - . Basic skills instruction, universally acknowledged to be a critical area in youth employability development, has been little investigated.

7. Finally, it should be noted that most appraisals of program effectiveness reduce the issue to generic youth problems and generic employment and training programs. Usually lacking are an appreciation of either the particular problems youth may have, or the distinguishing (potentially significant) features of programs designed to serve them. As Mangum and Walsh observe: "the problem has been that all employment and training programs have been prescribed for all disadvantaged youth regardless of the external or personal barriers that prevent them from either labor market success or success in others aspects of life" (1980:14).

A fair general conclusion is that knowledge regarding the effectiveness of employment training programs is sparse and often inconclusive; that it is based on results from a comparatively few studies; and that the measured impacts for the most part are small.

It is important to place these conclusions in perspective. Training and employment programs are positioned to serve important functions and needs. For many youth, they provide opportunities: connections to the workplace, training and education, career exposure, enrichment of school curriculum, income and work experience. For many, there have indeed been benefits, and in some cases these benefits have been substantial.

We must be cautious in assessing these programs, or their potential. Their scale has been modest for most of their history, and the research findings are both uneven and unimpressive, hardly points that support expansion. Yet the fitful nature of programming and its limited scale may explain much of the research. Offered at a resource level broadly commensurate with the problems they seek to address, and scrupulously assessed, employment and training efforts might produce a far more positive record of effectiveness.

Indeed, in concept, the programs serve an important gap in the lives of disadvantaged youth. Outside of custodial or emergency services, or the schools, employment training programs represent perhaps the only publicly funded youth assistance program available. Many youth would have few other avenues to obtain the needed services and workplace connections these programs provide, or the benefits, long- or short-term, that such services and connections can confer. The question then is how their value can be increased and extended. Two points should be stressed:

First, these programs have focused far too little on the developmental and social needs of their participants-the set of issues reviewed in Section IV of this paper. Adolescent years are critical in the growth and maturation of young people. Youth clearly need opportunities for psychosocial development if they are to succeed as workers and citizens. The disadvantaged youth targeted by JTPA are likely to arrive in programs with

few such opportunities in their home, peer or school environments. The programs that serve them must, therefore, seek to provide more of those opportunities.

Work experience--politically unpopular at present, and with a mixed record of results--appears to represent one such opportunity in terms of both employability and psychosocial development. Its correlation to later employment gains, its experiential and motivational potential and its capacity to serve employment preparation aims all argue for its wider adoption in public programs, with the aim of intensifying the developmental impact those programs can have.

Most second-chance programs make few provisions for development; it is thus probably not surprising that they have for the most part produced few significant impacts. The programs are usually short-term and limited--a poor medium for fostering growth and opportunities for maturation. Employment and training strategies, narrowly focused on just one aspect of youth's lives, cannot address broader needs. And, further, the core strategies, conceived purely in employment-based terms and concepts, may have only limited value even in terms of achieving their stated goals.

Second, the multiple needs of many youth outstrip resources currently available to address them. These needs are both extensive and intensive. They are displayed by many youth and by youth with many needs. JTPA now serves only about 5 percent of the eligible youth population. Were its strategies revamped to provide longer-term, more intensive services, it would serve even fewer youth. Only a substantial increase in the funds available for these programs can begin to extend the reach of programs while also reshaping them so that they address youth development needs in a broader context.

In seeking to frame recommendations in light of these conclusions, it is necessary also to consider these facts: current knowledge regarding employment and training programs remains meager; and knowledge concerning how broader youth development principles might effectively be translated into programmatic terms is limited even more. In only a few cases, therefore, can fairly specific recommendations be made. More often, the recommendation is for knowledge development or for general changes in practice. Over time, the development of knowledge will make possible further improvements and enhancements of the current strategies for addressing employability development and concomitant psychosocial development as well.

RECOMMENDATIONS

The recommendations presented here are of three kinds: for policy development, for practice in the field and for research.

Recommendations for Policy

1. The Department of Labor should consider liberalizing the kinds and extent of allowable support services in JTPA. The purpose would be to make such activities not a marginal aspect of employment programs, but their major and integral feature. The Department would certainly want to promulgate criteria and aims for such services, but--consistent with JTPA's structure and local emphasis--should keep these broad enough to encourage local variation and experimentation.
2. The Department should develop collaborative ties and projects with other federal agencies, aimed at making available a broader range of support and developmental services in employment training programs. Such collaborations are needed to develop knowledge about how to program and implement intervention strategies for participants with multiple needs.¹⁸ Models should be systematically tried on a demonstration basis (possibly tied into the research recommendations listed below) with the aim of adopting successful multiservice strategies permanently throughout the JTPA system.
3. The Department should seek to expand the use and variety of workplace connected strategies for youth--in particular, on-the-job training and work experience. As an immediate measure, the Department could encourage more widespread use of try-out employment, and explore the possibility of funding public sector work experience on a limited and judicious basis. Some additional programming options the Department might consider are described below in connection with research recommendations.
4. The Department's efforts to establish a separate youth title within the current JTPA should be vigorously pursued to provide a distinct emphasis on youth issues and services. However, the Department should recognize that pursuit of the recommendations proposed here will require additional funding. In particular, as it seeks to develop regulations for youth programs under a separate youth title, the Department should consider raising the current caps on administrative and support services for youth programs.

Recommendations for Practice

5. Practitioners should make wider use of try-out employment as a strategy for both in-school and out-of-school youth. In the case of in-school youth, combining such employment with labor market or career preparation appears to hold potential. For out-of-school youth, dropouts particularly, there may be value in combining work experience

¹⁸ A later paper is devoted to this topic. Specific recommendations for the types of services and research needed for a more holistic approach to serving youth are listed in that paper. See Nightingale, et al., this volume.

with OJT or skills training. In any case, it is essential to maintain high quality standards in the work experience provided.

6. Practitioners should seek ways to combine summer employment (SYETP) for out-of-school youth with additional services, particularly workplace-connected services (OJT and/or permanent job placement).

7. Practitioners should aim to build formal, multisummer work experience programs for youth in school, connected during the intervening school year by career exploration and/or labor market preparation programs.

8. Practitioners should seek collaborative funding or programming arrangements that provide a broader range of services, particularly those that address, in a systematic way, the developmental needs of youth. It seems particularly important to focus on younger participants, whose needs may be more readily addressed through judicious addition of such services. But it seems clear that most participants are likely to benefit from a more supportive program environment, one that recognizes and can respond to their needs for development and maturation. One specific approach that should be used is to incorporate relationships with adults (mentoring) into work-based interventions.

Recommendations for Research

The Department should view investments in soundly conceived, long-term research efforts as an essential part of its employment and training policy generally, and its youth employment policy and initiatives in particular. The current base of knowledge rests on a small number of unconnected studies conducted in the early 1980s that, in general, are inconclusive in regard to which program strategies are most effective for the at-risk youth population. This research supports policy formulation of only the most general kind and this base must be measurably enlarged if it is to better guide policy and program development in the future. Both an increase in the levels of effort and funding for such research, and a commitment to carry out careful long-term efforts, are essential.

9. The Department should develop a long-term, stable and coherent youth research program for at least the next five years that is not disrupted by legislative or political changes. A multiyear strategic program of research, whose projects emanate from a coherent framework and build toward answering well-specified questions, should be initiated. The program should be systematically developed, using background papers, carefully assessed pilot programs and well-designed demonstrations and research. Some general characteristics of such a program are:

- . Development and maintenance of a national longitudinal data set that compiles basic information about background and social characteristics (family, peers, schooling) of at-risk youth and about their social-psychological development;
- . Analyses and studies that develop usable knowledge about how these characteristics interact with youth decisions about participating in existing institutions and programs, and how they affect the outcomes and results of such participation;
- . Continuing work to identify strategies and services that will be effective in producing the employment-related outcomes sought for youth, building on the basic information described above; and
- . Refinement of knowledge regarding the most effective management and implementation strategies for delivering these services to the targeted population.

10. The Department of Labor should consider revising federal reporting requirements to enhance the flow of information that can inform major policy issues regarding youth. Most data currently collected cannot be used to address the major questions about the usefulness of particular employment strategies for youth. For example, we now have general information about the generic employment service(s) participants receive but no information about the characteristics of a program, such as sequencing or length of the program, or the support services included in a program. Without regularly collecting such information, we cannot sort out the important elements in programming for youth.

11. Based on the findings of this paper, the following issues seem most important for longer-term investigation:

- . How can work experience (both public and private) be most effectively used for the school-connected youth population to achieve stronger labor market results? Can it achieve results if offered alone? Should it be systematically offered, in tandem with career exploration and/or labor market preparation? How should it be combined with current summer employment programs? Are there threshold amounts of work experience that may prove optimal?
- . How can developmental or support services be added to existing employment and training strategies to enhance their usefulness?¹⁹ Which services seem to produce the best results? For which populations and ages? In combination with which services? Does their addition increase employment/training impacts?

¹⁹ This topic is treated in Nightingale, et al., this volume

Must program experiences be lengthened (or participants be moved through an extensive sequence of programs) in order to produce results? Does addition of such services produce other changes in youth that might later contribute to stronger labor market results?

- What combinations of employment and training strategies--particularly workplace-connected strategies, such as work experience and on-the-job training--can be used to produce positive employment outcomes for out-of-school youth?
- How can basic skills remediation programs be successfully incorporated into core strategies? Can their use significantly enhance the impacts these programs have on long-term employment and earnings? Can experience-based or career-specific curricula significantly enhance learning as well as long-term employment outcomes?

APPENDIX

**Table A-1
MAJOR SOURCES OF EVIDENCE REGARDING
YOUTH EMPLOYMENT PROGRAM EFFECTS**

Program	Services	Target Population	Extent of Findings	Effects
Job Corps	Occupational Training, Basic Skills, Support Services	Out-of-School	Long-Term	+
Youth Incentive Entitlement Pilot Projects	Work Experience	In-School Out-of-School	Short-Term	-
Supported Work	Work Experience	Out-of-School	Long-Term	-
Alternative Youth Employment Strategies	Labor Market Preparation	Out-of-School	Short-Term	+
70001	Job Placement	Out-of-School	Long-Term	-
JOBSTART	Occupational Training, Basic Skills, Support Services	Out-of-School	Short-Term	+
California Conservation Corps	Work Experience	Out-of-School	Short-Term	-
Summer Training and Education Program	Basic Skills, Work Experience	In-School	Short-Term	+

Sources: Betsey, et al., 1985; Auspos, et al., 1989; Wolf, et al., 1987; Sipe, et al., 1988.

Table A-2
SUBGROUP ANALYSES REPORTED
BY SELECTED YOUTH PROGRAM EVALUATIONS

Program	Subgroups Examined			
	sex	Race/Ethnicity	Age	Education
Job Corps	Yes	No	No	No
Youth Incentive Entitlement Pilot Projects	Yes	White/Black/Hispanic	Yes ^a	High School Graduate/ Non-High School Graduate
Supported Work	Yes	White/Black/Hispanic	Under 19/19+	Up to 8th Grade 19th Grade+
Alternative Youth Employment Strategies	Yes	No	No	No
70001	Yes	No	No	No
JOBSTART	Yes	Hispanic/Black/White/Other	19 or Under/ 20-21	No
California Conservation Corps	Yes	White/Black/Hispanic	No	High School Graduate/ Non-High School Graduate
Summer Training and Education Program	Yes	Asian/Black/Hispanic/White	No	No

Sources: Betsey, et al., 1985; Auspos, et al., 1989; Wolf, et al., 1987; Sipe, et al., 1988.

^a The analysis of outcomes is presented primarily for the 15- to 16-year-old black youth cohort.

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SUPPORTIVE SERVICES FOR YOUTH

**Demetra Smith Nightingale, Barbara Cohen and Pamela Holcomb
The Urban Institute**

1. INTRODUCTION

Many programs for disadvantaged youth include supportive services intended to help individuals overcome social and personal barriers that might prevent them from (a) participating in a program's core activities, (b) achieving desired outcomes and/or (c) maintaining the outcomes over time (e.g., remaining employed, drug-free and self-sufficient). This paper addresses the role of supportive services in the context of employment and training for disadvantaged youth, primarily those between the ages of 14 and 22 who would be eligible for programs funded under the Job Training Partnership Act (JTPA), especially Title II-A (youth and adult training) and Title II-B (summer youth programs). Other relevant federal employment and training programs targeting the economically disadvantaged include the Job Corps and the Job Opportunities and Basic Skills (JOBS) training program for recipients of Aid to Families with Dependent Children (AFDC). The paper also examines the use of supportive services in these programs and in related non-employment youth programs (such as juvenile justice and mental health programs).

The intent is to document (a) the types of supportive services provided; (b) the way they are most commonly delivered; and (c) evidence of their effect on youth outcomes. It must be emphasized that our ability to address these issues is greatly limited by the lack of empirical study of supportive services and how they contribute to overall program outcomes for disadvantaged youth. The existing literature on employment and training programs, including those that serve disadvantaged youth, typically treats supportive services as an ancillary program component and does not go much beyond describing

Demetra Smith Nightingale is Director of the Welfare and Training Research Program of the Human Resources Policy Center at The Urban Institute. Barbara Cohen is a Research Associate with the Human Resources Policy Center at The Urban Institute. Pamela Holcomb is a Research Associate with the Human Resources Policy Center at The Urban Institute. The authors would like to thank Kristin Seefeldt for her work in identifying and reviewing research and reports for this paper. The report also benefitted from useful comments by Michelle Gambone, Gary Walker and Thomas Smith of Public/Private Ventures.

their presence. As there has been no attempt to separate the effects of core employment and training services from the effects of supportive services, any conclusions about the possible impact of supportive services on youth program participation and overall program effectiveness must only be tentative.

Beyond categorizing supportive services as a secondary program component that seeks to reduce barriers to program participation and ultimately self-sufficiency, supportive services encompass a wide and sometimes overlapping range of activities and, thus, defy easy definition. Within the context of employment and training, assistance with transportation and child care are probably the most well-defined and well-known supportive services because these are so clearly connected to an individual's ability to participate in training, education and work activities. However, supportive services also address other problems--such as physical abuse, depression, lack of self-esteem, and alcohol or substance abuse--that may indirectly affect program participation and client outcomes. The definition, range and particular mix of supportive services offered by a program depend on the characteristics and assessed needs of the participating youth, the program's objectives and resources, and the organization providing the services.

II. CHARACTERISTICS OF THE POPULATION

The disadvantaged youth population generally shares characteristics that lead to a range of problems and indicate a role for different types of supportive services. The most important characteristics relate to family structure, education level, health status and involvement in criminal activities.

FAMILY STRUCTURE AND GEOGRAPHIC DISTRIBUTION

Growing up in poverty has a major impact on the social, psychological and economic well-being of children, and poverty is often associated with particular family and neighborhood patterns. In general, poor youth, especially minorities, are likely to live in female-headed families. In 1989, 12 million children, or 19 percent of all children, were poor. Of these children, more than half (57%) lived in female-headed families. The poverty rate for children was especially high for those in minority female-headed families--63 percent of black children, 64 percent of Hispanic children and 43 percent of white children in female-headed families were poor. The incidence of poverty is also pronounced for families headed by a teenager. In 1985, 3.1 million family households were headed by a person under 20 years of age and almost one-third (30%) of these families lived below the poverty line. The rate was 60 percent for families headed by a black teenager (Wetzel, 1987; U.S. Congress, Committee on Ways and Means, 1991).

High rates of teenage childbearing among poor families is one important reason childhood poverty is so prevalent in female-headed households. The extent of teenage sexual activity has increased over the past two decades, with the overall increase attributed to white, nonpoor young persons. However, the rate of sexual activity among poor youth has remained consistently higher than for all teenagers (U.S. Congress, Committee on Ways and Means, 1991). Regardless of race, disadvantaged young women are three to four times more likely to become unwed mothers than their more advantaged counterparts, perpetuating the cycle of poverty into the next generation (Wetzel, 1987).

Between 60 and 70 percent of poor minority children live in metropolitan areas, compared with about 30 percent of poor white children. Inner-city neighborhoods with concentrated poverty represent environments in which youth face numerous barriers as they grow to adulthood. Much research on so-called underclass areas of persistent poverty describes the problems of youth in various dysfunctional life situations (e.g., temptation of drugs and the underground economy, exposure to criminal activity, lack of middle-class role models, inferior schools, and poor housing) (Wilson, 1988; Sawhill and Ricketts, 1986).

Lerman¹ suggests that the combination of growing up without fathers, on welfare and in smaller families may contribute to employment difficulties for youth. For example, many black youth who have trouble obtaining jobs may find their situation worsened because they do not have an informal network of family and friends who could provide job information. In particular, the lack of stable adult black males to serve as role models for youth is of growing concern among policymakers and black citizens (Mincy and Wiener, 1990; and Ferguson, 1990).

EDUCATION

Educational attainment is highly associated with lifetime earnings and economic well-being. For example, high school dropouts (age 20 to 24) experience unemployment rates 10 to 14 percentage points higher than those of graduates, and minority youth have higher dropout rates than white youth (Wetzel, 1987; U.S. Department of Education, 1989). Low-income youth are often educationally as well as economically disadvantaged.

In the 1970s and 1980s, some progress was made in improving the educational attainment of minorities, but the aggregate statistics mask the continuing severity of the problem. Black dropout rates declined from about 38 percent to about 15 percent, but white and Hispanic dropout rates remained almost unchanged--13 percent for whites and a very high 41 percent for Hispanics. In addition, minority youth are more likely than whites to be behind in school.¹

However, simply remaining in school (or even graduating from high school) does not necessarily mean youth are adequately educated. Recent reports from the National Assessment of Education Progress have raised concerns about the low competency levels of today's youth and the fact that overall ability levels are not improving. Although the test scores of minority youth show some recent improvement, they still are considerably lower than the scores of white youth on reading, math and science tests.¹

Disadvantaged youth are also more likely than other youth to be labeled as having learning disabilities that constrain their success in regular educational and work environments. There is considerable controversy about what constitutes a learning disability and how children are identified, screened, diagnosed and treated. However, there is growing evidence that biogenetic and environmental conditions contribute to some learning disabilities, and that poor children are at a higher risk because of prenatal conditions (e.g., mother's poor nutrition or use of drugs, cigarettes or alcohol) and living conditions (e.g., exposure to lead or poor nutrition). Although only about 4 percent of the general

¹ See Lerman, second volume of this series.

population is thought to have learning disabilities, about 25 percent of JTPA participants, 40 percent of AFDC recipients and 60 percent of adult education students may be classified as learning disabled (Nightingale, et al., 1990b).

HEALTH

In general, teenagers (aside from those who become pregnant) have fewer health care needs than do older persons and younger children. Nevertheless, there is some evidence that even though very few youth have health problems that prohibit them from participating in employment and training programs, many have health care needs that program staff feel must be addressed.

The most serious health problems experienced by Job Corps participants, for example, relate to mental health (which is generally not immediately obvious), dental problems, substance abuse, obesity, venereal disease, pregnancy (as high as 10 to 12 percent of all female enrollees in some centers), diabetes, and poor vision or hearing (Richardson, et al., 1985). Although few Job Corps participants have problems with "hard drugs," there is a "significant problem of substance abuse among new enrollees typically involving alcohol or marijuana use and, at some centers, amphetamine use" (Richardson, et al., 1985:xi).

Criminal justice data also suggest that drug abuse is a serious problem among at-risk youth. In 1985, 350,000 youth were arrested and in jail, prison, or juvenile correction facilities for drug-related offenses (Wetzel, 1987).

Young adults are less likely to be covered by health insurance than are older adults. In 1985, 21 percent of 16- to 24-year-olds were not covered by health insurance or Medicaid compared with about 13 percent of the overall civilian population. Health care coverage ratios are also much lower for minority youth than for white youth (Wetzel, 1987). This may be one reason that many health care problems go unattended.

MULTIPROBLEM YOUTH

As this brief discussion indicates, disadvantaged youth may face several barriers to participating in employment and training programs and achieving self-sufficiency. Of particular importance are (a) dropping out of school, (b) health problems, (c) early sexual activity and pregnancy, (d) living in or growing up in poor female-headed families, (e) residing in urban areas of concentrated poverty and (f) involvement with the criminal justice system.

Of even greater importance, some youth have a combination of problems that negatively affect their prospects for future employment and stability. There are no studies that clearly define the population with overlapping problems. However, Lerman,² in discussing the problems of youth with multiple problems, cites Dryfoos (1990), who estimates that about 10 percent of all 10- to 17-year-olds may be "very high-risk"--"over 50 percent of this group have been arrested, 70 percent have engaged in unprotected sex, 75 percent have dropped out or are two years behind in school, and most smoke cigarettes, drink and/or use marijuana." Another 15 percent are in the "high-risk" category, and 25 percent are at "moderate risk." Only about half of all youth are estimated to be in the "low-risk" group. Although the majority of very high and high-risk youth (and all youth) are white, the high-risk categories include disproportionate numbers of black and Hispanic youth.

These risk factors are compounded by the continuing presence of sex and race discrimination in society. Early literature on youth employment documents the unique discrimination faced by minority male youth in particular (Stromsdorfer, 1980). Although it is probably true that discrimination in general has abated, it is still a problem. For example, recent reports by the U.S. General Accounting Office (GAO) suggest that JTPA programs provide higher-level skills training to adult males than they provide to females and youth (GAO, 1991).

The characteristics of participants in youth employment and training programs reflect some of the general patterns described above. According to a GAO report on youth participating in JTPA Title II-A programs, 64 percent of 15- to 21-year-olds were not enrolled in school and 27 percent of all youth participants were high school dropouts. About one-third of the youth were 15 to 17 years of age; the other two-thirds were between 18 and 21. Only about 20 percent had any recent work experience, about 25 percent were on welfare and 11 percent had a dependent child (GAO, 1985).

Thus, while it is still not possible to disaggregate the causes and effects of problems facing youth, there is fairly strong evidence that poor, minority youth are more likely to have difficulties and multiple problems that negatively affect their chances of making successful transitions into adulthood. JTPA and other employment-related programs targeting disadvantaged youth must recognize and address the multiple problems facing many of their clients. Supportive services--in addition to training, education and work experience--are one way local service deliverers attempt to do this. The following sections summarize the experiences of employment and training programs as well as related non-employment and training programs in providing supportive services to youth.

² See Lerman, second volume of this series

III. SUPPORTIVE SERVICES IN EMPLOYMENT AND TRAINING PROGRAMS

Much has been written about employment and training programs for economically disadvantaged youth and adults, and some have been rigorously evaluated. In addition to employment-related services to clients (e.g., vocational training, classroom remedial education, on-the-job training, job search assistance and work experience), many programs have also provided supportive services. Although there is considerable information about the nature and impact of these programs' employment, education and training services, there is much less detailed information, and virtually no evaluation findings, about supportive services. This section summarizes the little that is known about supportive services in employment and training programs.

THE ROLE OF SUPPORTIVE SERVICES

In their 1978 report on supportive services in the Comprehensive Employment and Training Act (CETA), which preceded JTPA, Turner and Conradus (1978) describe them as controversial. Such services could be relatively costly (in dollars and in time), there was no evidence about whether they were critical to success and they were generally considered supplemental.

Throughout the history of employment and training programs, the role and functioning of supportive or ancillary services have been continuously questioned. The general scaling down of such services which has occurred under CETA could be attributed to their costs in relation to results, or to the recession, which did not allow for the support of these services no matter how worthy their objectives, or to the feeling that the government cannot and should not do everything because individuals should take responsibility for their own lives (Turner and Conradus, 1978:5).

Turner and Conradus note that there was no source of information about the level of supportive services being provided in CETA programs, the extent of need among CETA clients or the effect of such services on employment-related outcomes (1978:23).

In many ways, current discussion has changed little since then. There is still very little statistical information about the number of clients receiving supportive services, the intensity of the services or the impact of the services. There is some evidence, though, of growing recognition in the employment and training field that effective programs should include comprehensive services to address multiple problems. As discussed in the following sections, the most recent "generation" of youth programs often includes a broad range of supportive services. However, there is also growing recognition that not all youth need the same services, and staff are increasingly called upon to determine who

needs which services (assessment) and how those services are provided (case management).

INVENTORY OF SUPPORTIVE SERVICES

The changing role of supportive services is evident from a review of reports about employment and training programs. Table 1 summarizes the services offered through selected programs on which reports or evaluations were readily available. With few exceptions, the reports on which the table is based note only that supportive services were available, not how many clients received them. The inventory is useful, though, in showing that supportive services have been included in many employment and training programs and that more recent programs appear to use more comprehensive program models.

In the 1960s, local programs under the Manpower Development and Training Act (MDTA) of 1962 allowed funds to be used for services that would support the core employment and training activities. Supportive services included transportation assistance, child care assistance and such educational activities as tutoring in basic skills. Local MDTA programs reportedly made "extensive use of supportive services," but there are no summary statistics on the number of persons they served or the types of services they received. Since MDTA funded thousands of local programs, there was variation in the types of services offered and how they were provided. The most typical manner of providing services involved informal interagency agreements, such as brokering or bartering; in many instances no funds were exchanged (Turner and Conradus, 1978).

Under CETA, which replaced MDTA in 1973, the informal role of supportive services continued, and the working definition of supportive services used by the U.S. Department of Labor was "services that do not have employment as their direct goal" (Turner and Conradus, 1978:1). A long-term implementation study of CETA (Mirengoff, et al., 1982) found that of the 22 CETA prime sponsor areas examined, about 80 percent had resources available to pay for supportive services. In that study, local officials reported child care and transportation were the services most needed and most used by participants: transportation especially in rural areas, child care and basic education in urban areas. Despite the recognized need, the provision of services was reportedly very "limited," presumably compared to MDTA (Mirengoff, et al., 1982).

Unlike MDTA and CETA, supportive services were more formalized under the Job Corps program and the Work Incentive (WIN) program for AFDC recipients, which both operated in the 1970s. WIN, enacted in 1967, allowed funds to be used to pay for child care, transportation and any other services that could be construed as "training-related expenses" or "work-related expenses." Both the Job Corps and WIN allowed the

Table 1
SUPPORTIVE SERVICES IN SELECTED
EMPLOYMENT AND TRAINING PROGRAMS

Program or Project	Supportive Services Provided	Percent (%) of Participants Receiving supportive Services	Information Source
Manpower Development and Training Act (MDTA) 1962-1973	Transportation, child care, education	Not available	Turner and Conradus, 1978
Comprehensive Employment and Training Act (CETA) 1973-1982	Health care, child care, counseling, transportation, educational services, family planning, legal services	Not available	Turner and Conradus, 1978; Mirengoff, et al., 1982
Job Training Partnership Act (JTPA) 1983-present	Cash payments, transportation, child care, handicapped services, health care, financial counseling, meals, temporary shelter	Not available	U.S. General Accounting Office, 1985
Youth Incentive Entitlement Pilot Projects (YIEPP) 1977-1980	None reported	Not available	Farkas, et al., 1982; Diaz, et al., 1982
Project Redirection 1980-1983	Parenting classes, recreation, birth control and other counseling, mentors	Parenting 49% Recreation 29% Birth control counseling 35% Other counseling 33% Mentors 100%	Polit, et al., 1985
Supported Work Experience Demonstration 1975-1980	Peer-group support, work orientation, job readiness and placement	Not available	Manpower Demonstration Research Corporation, 1980a, 1980b
Teen Parent Employability Demonstration (TPED) Projects 1987-1989	Child care, transportation, life skills training, mentors, housing assistance, parenting skills training, meals, counseling, follow-up services	Mentors 87% Parenting skills 97% Child care 67% Transportation 28% Counseling 98% Meals 70%	Cohen, 1991

Table 1 (continued)
SUPPORTIVE SERVICES IN SELECTED
EMPLOYMENT AND TRAINING PROGRAMS

Program or Project	Supportive Services Provided	Percent (%) of Participants Receiving Supportive Services	Information Source
Work Incentive Program (WIN) 1968-1988	Counseling, transportation, child care, health services, legal services, allowances, emergency cash, clothing	Not available	Turner and Conradus, 1978; Mitchell, et al., 1980
Job Opportunities and Basic Skills (JOBS) Training Program 1989-present	Child care, transportation; post-program Medicaid and child care	Not available	U.S. Congress, 1988
Job Corps 1965-present	Counseling, work orientation, residential living, allowances, health and dental care, education, recreation	All services 100%	Maller, et al., 1982; Turner and Conradus, 1978
JOBSTART Demonstration Program 1988-1989	Child care, transportation, counseling, life skills training, cash payments	Supportive services 43%	Auspos, et al., 1989
Summer Training and Education Program (STEP) Demonstration 1985-present	Life skills training: decision making, family planning, substance abuse, health, etc.	All services 100%	Sipe, et al., 1988
Youth Opportunities Unlimited (YOU) Demonstration Projects 1990-present	Counseling, mentoring, substance abuse treatment, recreational health services, housing, tutoring, child care, parenting skills training	Not available	U.S. Department of Labor ^a
Career Beginnings 1987-1989	Counseling, mentoring, family planning, workshops	Counseling 75% Mentoring 64% Workshops 24%	Cave and Quint, 1990

^a Information on YOU was obtained from various materials, including the "Youth Opportunities Unlimited Advisory Board Briefing Book" (undated), and from personal conversations with David Lah of the Employment and Training Administration.

following types of supportive services: (1) counseling; (2) program and employment orientation; (3) educational services, such as general equivalency diploma (GED) preparation; (4) transportation; (5) child care; (6) physical and mental health services; (7) legal and bonding services; and (8) use of petty cash funds for emergencies (Turner and Conradus, 1978).

JTPA, enacted in 1982 to replace CETA, recognized the need for supportive services but officially limited its support to about 15 percent of total funding for adult and youth training in each service delivery area (SDA).

By the late 1980s and early 1990s, the role of supportive services in employment and training programs had expanded. As noted in Table 1, many programs and demonstration projects incorporated a range of activities and services to address the multiple problems facing disadvantaged youth. Counseling and workshops, which in earlier employment and training programs focused on job search skills, career planning and vocational interests, now also address health and nutrition, parenting skills and responsible sexual behavior. Mentoring has also been included in programs that serve youth, recognizing that many youth do not have stable adult role models in their families or neighborhoods.

For example, the JOBSTART demonstration for high school dropouts included, by design, an emphasis on supportive services, drawing from the Job Corps experience (Auspos, et al., 1989). Similarly, Career Beginnings provides a coordinated package of supportive services, combined with summer jobs, to high school juniors and seniors (half of whom are from low-income families) to encourage postsecondary schooling. The Career Beginnings services, provided on college campuses, include mentoring, counseling and information about college (Cave and Quint, 1990). The Summer Training and Education Program (STEP) formalizes the provision of supportive activities in an 18-hour Life Skills and Opportunities component, in which all STEP students participate (Sipe, et al., 1988).

The Youth Opportunities Unlimited (YOU) projects represent potentially one of the more comprehensive efforts to serve poor youth and have incorporated extensive supportive services. The Department of Labor (DOL) initiated YOU in seven high-poverty communities in 1990. All the projects are encouraged to be innovative and to draw on the resources of many different programs. The array of services includes education and training as well as counseling, mentoring, drug prevention, recreational and cultural activities, health care, housing assistance, and special services to teen parents, such as child care and classes in parenting skills. There are no reports yet about

the operations or results of the YOU demonstrations, but all of the project plans include a broad range of supportive services to be used to the “maximum extent possible.”³

Finally, in the welfare policy area, the new Family Support Act (FSA) makes separate provision for supportive services (child care and health care) both while a welfare recipient is in training or education and for 12 months after leaving AFDC due to employment. In addition, the Job Opportunities and Basic Skills (JOBS) training program component under FSA (like WIN before it) continues to fund transportation and other training-related services.

Thus, employment and training programs have historically offered some supportive services, primarily transportation and child care assistance. The Job Corps and several of the more recent youth projects include a comprehensive range of services to meet the multiple needs of clients. Periodically, the role of supportive services has resurfaced in policy debates around employment and training, but they have not played a central role. There is clear recognition that supportive services should be included in employment and training programs, but no real understanding of how many youth (or adults) need which supportive services and how important such services are in terms of core program outcomes like employment.

OBJECTIVES OF SUPPORTIVE SERVICES

A useful way to discuss supportive services in current employment and training programs (e.g., JTPA, the Job Corps, JOBS and YOU) is to consider the reasons they are included and the objectives they are intended to meet. Supportive services have at least four purposes in youth programs. For descriptive ease in this section, services are categorized as follows:

- . incentive services,
- . enabling services,
- . compensatory services, and
- . intensive or therapeutic services.

³ Information on YOU was obtained from various DOL materials, including the “Youth Opportunities Unlimited Advisory Board Briefing Book” (undated), and from personal conversations with David Lah of the Employment and Training Administration.

Any service listed in Table 1 might fit into one or more of these categories, depending on the purposes and objectives of a particular program. Youth entering or participating in programs may receive one or more of the four types. In addition, services in employment and training programs are sometimes provided to participants both while they are active in core components and after they technically leave a program. The categorizations presented below represent one way to conceptualize the role of supportive services based on the reports reviewed.⁴

Incentive Services

Some youth programs have had difficulty attracting participants and keeping them in programs once enrolled (Betsey, et al., 1985). Supportive services, in the form of cash or in-kind services, are sometimes provided as incentives to attract youth to programs.

Cash stipends and allowances are one type of incentive helping to offset participation costs (e.g., transportation and meals) or providing income supplementation. Stipends have ranged from about \$3 a day to hourly compensation equal to the minimum wage. In a review of JTPA Title II-A programs, the GAO (1985) found that about 40 percent of SDAs offered participants needs-based cash payments to offset the costs of participation. In the SDAs that provided such payments, between 13 and 25 percent of enrollees received an average of \$34 to \$44 a week (in 1985 dollars). Similarly, the WIN program and some new JOBS programs provide a cash incentive of \$35 a week during participation in training, education or job search activities.

The effect of cash stipends has not been extensively analyzed. Taggart (1981:ix) cautions that cash incentives sometimes “attract and hold some participants . and [discourage] transition into unsubsidized employment.” Presumably he is referring to the larger cash payments (such as minimum wage), since it is unlikely that \$30 to \$40 a week would provide much incentive. In fact, there is some evidence that stipends and allowances alone are not sufficient to maintain participation if the reason youth drop out is related to pregnancy or other personal problems. For example, a primary reason Youth Employment and Demonstration Projects Act (YEDPA) programs in the 1970s had difficulty maintaining participation was the high incidence of teenage pregnancy and childbearing among women participants (Betsey, et al., 1985).

In-kind supportive services may also act as an incentive for some individuals to participate in employment and training programs. The availability of child care--an essential

⁴ An alternative way to discuss the various types of services would be to address each type of service separately (e.g., transportation, child care and counseling). But since not all youth need the same services, this section considers the role of supportive services within the overall context of program objectives and client needs.

service for mothers who work or attend school--can be a primary incentive that attracts young mothers to employment-oriented programs (Nightingale, et al., 1991). Some of the DOL-funded teen parent employability demonstration programs provided baby clothes, formula, toys and diapers to encourage teen mothers to continue in the programs (Cohen, 1991:17).

However, there is no clear evidence that supportive services per se motivate individuals to participate in employment and training. For example, one of the lessons gleaned from the recent JOBSTART demonstrations is that teen dropouts need "extensive supportive services such as assistance with child care and transportation, counseling, [and] life skills training." Despite the inclusion of such services in JOBSTART, about one-third of the participants still dropped out. The evaluators suggest that it is not enough to simply provide the services, but programs must also create a "supportive environment" that includes case management and client advocacy (Auspos, et al., 1989:17).

Enabling Services

Supportive services may enable clients to participate in a program. Some youth require certain services in order to be able to participate--for example, transportation, child care, meals, work clothes, or books and supplies. Although cash allowances, as noted above, might be used for these services, many programs provide this support in kind (e.g., bus tokens, child care vouchers, legal services or training supplies).

These enabling services appear to be among the most commonly provided supportive services in youth and adult employment and training programs, as noted in Table 1. The WIN and JOBS programs for AFDC recipients essentially have viewed supportive services in this way, and JOBS includes child care as an entitlement, not just an ancillary service.

There is very little information, though, on the number or proportion of participants in JTPA or other programs who need or receive such services. (This is discussed in the next section.) In part, the lack of statistical information is exacerbated by the fact that different programs and agencies follow different conventions for reporting provision of services and client outcomes.

Compensatory Services

Some youth employment and training programs include a range of supportive services intended to compensate for social disadvantages. The compensatory services include mentoring, recreation activities, and instruction in personal hygiene, financial management, and responsible work and sexual behavior. Berlin (1984) stresses the importance

of other supportive services offered to disadvantaged youth, especially child care for those who have children. The design of the Job Corps incorporates such compensatory services, as do several of the recent youth demonstration projects, such as JOBSTART, Career Beginnings and YOU.

Mentoring activities (i.e., sustained personal relationships between stable, caring adults and at-risk youth) also fit into this category, in that they are intended to provide positive and supportive role models for disadvantaged youth. Ferguson (1990) explains that mentors often assume “regular supplemental parenting roles.” In fact, Ferguson eloquently argues that disadvantaged youth often need someone outside the immediate family, school and social service organizations to help the youth learn to “manipulate his environment in a positive way.” Mincy and Wiener (1990) have designed a mentoring program model for young adolescent black males, based on Ferguson’s theories, that emphasizes sex education, family planning and parental responsibility through a combination of teaching, nurturing and motivating. The DOL Teen Parent Employability Development (TPED) programs and the YOU demonstrations, among others, include mentoring components for teenagers.

Therapeutic Services

Some youth need fairly intensive supportive services in order to overcome serious, potentially serious or multiple problems, including those related to physical or mental health, housing, substance abuse or physical abuse. Intervention services (which can be either short-term or long-term) are provided either sequentially or in conjunction with other program components. Therapeutic services include, for example, professional counseling, emergency dental or medical services, and emergency housing assistance. The extent to which youth employment and training programs provide these intensive services depends on whether severely disadvantaged clients are a target population. The Job Corps program, which is perhaps the most intensive (and serves the most disadvantaged), screens all entrants for problems that require intervention, then provides needed treatment and services.

Postprogram Services

In addition to supportive services that might be provided to youth during employment, education or training programs, postprogram services are becoming more common, as is evident in JOBS and TPED. These are sometimes referred to as follow-up, transitional or after-care services. Postprogram supportive services range from periodic peer-group support activities and counseling, to access to information and referral centers, to resources for child care, health care and transportation.

In the employment and training area, postprogram services appear to be more prevalent in those programs serving teenage parents. Until recently, JTPA programs formally limited postprogram activity to contacting individuals at a specified period after termination. Most JTPA-funded programs did not allow JTPA resources to be used for such postprogram services as counseling. However, there are some JTPA-funded programs that also have other funding sources (e.g., TPED) and maintain ongoing contact with youth for extended periods after they complete formal components (Cohen, 1991).

FSA and its JOBS program for AFDC recipients formalize postprogram services, drawing on the experiences of several state-initiated work-welfare programs in the 1980s. Under FSA, one year of extended child care and Medicaid coverage is provided to families that leave AFDC as a result of employment. These formal transitional services are important work-related supportive services for families seeking to become self-sufficient. As noted below, there is some evidence that these postprogram services help young families.

SUMMARY OF SUPPORTIVE SERVICES

Employment and training programs for youth have traditionally included supportive services, primarily transportation and life skills counseling. The life skills components of some programs have been expanded to address a range of issues intended to help youth make successful transitions to adulthood, including instruction on responsible work and sexual behavior, and mentoring. However, some youth need additional supportive services (e.g., child care and counseling) due to their circumstances. Employment and training programs that serve the most disadvantaged youth have incorporated a broader range of supportive services.

IV. PROVISION OF SUPPORTIVE SERVICES

The way supportive services are provided depends on (a) the type of program or agency, (b) the backgrounds and qualifications of staff, and (c) community resources. For example, many JTPA programs refer clients to other agencies for child care or counseling since JTPA money for supportive services is limited. Some SDAs and many work-welfare programs, though, contract with other agencies or institutions for specific services. And many programs, as noted, provide participants with cash or vouchers for services provided elsewhere.

As early as 1978, four supportive service models were being used in CETA programs (Turner and Conradus, 1978:19-21), though no information is available about how many programs fit into each model. The topology is still relevant for categorizing how services are delivered in employment and training programs today:

- Model 1: No provision for supportive services;
- Model 2: Provision of supportive services through interagency agreements;
- Model 3: Subcontracting for supportive services, separate from employment and training functions; and
- Model 4: Provision of supportive services by deliverers of employment and training (either under subcontract or through in-house service delivery operations).

The GAO (1985) reports that 95 percent of SDAs in 1985 were providing some supportive services, with transportation and child care being the most common (in 85 and 77 percent of all SDAs, respectively). Other reported common services include special services for handicapped persons (57%), health care (53%), financial counseling (43%), meals (41%) and temporary shelter (34%).

Corresponding to the program models listed above, the GAO (1985) reports that 60 percent of the SDAs had nonfinancial agreements with other agencies to provide supportive services to JTPA participants (Model 2). Fifty-seven percent (57%) contracted with outside vendors to provide supportive services (Model 3); and 30 percent provided supportive services directly (Model 4). In addition, 65 percent of SDAs in 1985 provided cash to participants to pay for needed services.

There are obvious benefits and risks associated with either providing services directly or contracting and referring clients out. For example, if programs have substantial resources (or few clients), it could be beneficial to the client to have all services available in-

house, delivered by regular program staff. However, if resources are limited or if a client has special problems, it is usually necessary to involve other agencies. This leads to difficulties of coordination, but to the extent that programs can easily use the services of other agencies, the clients will benefit.

Thus, most SDAs have provisions for supportive services through a variety of program models. The majority of SDAs have at least some arrangement with other agencies to provide supportive services. However, the GAO does not indicate the number or proportion of JTPA program participants who actually receive supportive services, whether funded by JTPA or by other programs.

There is increasing recognition in the employment and training field that many disadvantaged persons require multiple services, both direct and supportive (Porter, 1990; Public/Private Ventures, 1988). One way to assess client needs and to arrange and coordinate provision of services is case management. Although the concept of case management is not new--it dates back to the earliest years of social work practice--it is enjoying a resurgence of interest. In part, the increased attention to case management is related to the welfare reform programs that emerged in many states in the 1980s. It also has figured importantly in programs serving teenage parents and high-risk youth. As JTPA has moved to provide more services to the most disadvantaged, there is increasing interest in case management among JTPA administrators.

In the 1970s, state and local social service agencies administering Title XX Social Services programs and the WIN program described case management as "a set of interrelated activities performed by agency staff and clients to help sort out the complex array of bureaucratic regulations, policies and service providers" (Regional Institute of Social Welfare Research, 1977). By the mid-1980s, many state-initiated work-welfare programs (e.g., in Massachusetts, California and New York) used case management (Nightingale and Burbridge, 1987).

Despite the purported use of case management, there is no single set of activities and no one program model to describe it in employment and training programs. In some of the more bureaucratic programs (e.g., large work-welfare programs in welfare offices), case management essentially means agency staff carry a caseload and are responsible for tracking all activities and completing all required paperwork for their clients (National Governors' Association, 1991). In contrast, in many programs serving teen parents, case management means staff interact closely with clients, often over an extended period, and serve as advocates for their clients (Cohen, 1990).

Regardless of one's perspective on case management, it is generally recognized that an effective case management system begins with some form of assessment of the needs,

situation, goals and skills of individual clients. Because case management has its roots in traditional social work and in programs other than those directly involved with employment and training, it is discussed in Section V.

EFFECTIVENESS OF SUPPORTIVE SERVICES

As the previous sections indicate, supportive services are clearly a part of employment and training programs. But there is very little information about the extent to which supportive services are provided and even less empirical information about the need and the effectiveness of such services within the overall objectives of these programs. The policy and research controversy around supportive services described earlier continues: it is not clear whether supportive services are an essential activity or an enrichment activity; and if they are essential, it is not clear how many employment and training clients “need” services to successfully participate in programs and/or achieve self-sufficiency.

The ambiguity surrounding supportive services is evident in the experience of JTPA. The JTPA legislation recognized the need for some supportive services, but limits an SDA’s expenditure for them to 15 percent of its funds, without special federal waivers. The objective was to provide supportive services to persons who otherwise would not be able to participate in JTPA programs. To date, SDAs have not requested approval to exceed the 15 percent limit, suggesting that the limit on supportive services has not negatively affected program activity or client service. However, Levitan and Gallo (1988) caution that the lack of supportive services makes it difficult for SDAs to target services to the most needy. Since JTPA can serve only a small portion of the eligible population, the supportive services limitation may influence who gets served.

Child care provides an example of the controversy about supportive services. Polit and O’Hara (1989) note that very few low-income teen mothers report child care as a serious need. There is also other research that suggests child care may not be an essential service for all employment and training participants with children. In the Supported Work Experience demonstration, fewer persons in the control group than in the treatment group cited child care as a barrier to employment and training (Masters and Maynard, 1981). Similarly, in an implementation study of WIN, many local staff reported that motivated clients could find their own child care if a job was available (Mitchell, et al., 1980). And when child care is provided by employment and training programs, only a small proportion of welfare mothers use it. In Massachusetts, for example, only about 14 percent of AFDC mothers in the Employment and Training Choices program used the subsidized child care available (Nightingale, et al., 1990a).

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There is also mixed evidence about the effect of child care on the employment outcomes of mothers. In the evaluation of the Massachusetts program, child care was significantly related to whether or not mothers of young children under six remained employed, but there was no such positive effect for mothers of children over six years of age (Nightingale, et al., 1990a).

Despite the limited research evidence about the effect of child care and other supportive services on employment outcomes, it appears that some supportive services are important for at least some programs and some clients. Program operators have claimed since the 1960s that transportation and child care are among the most serious problems employment and training participants have (Mitchell, et al., 1980; Polit and O'Hara, 1989).

The importance of supportive services may help explain why evaluations of such demonstrations as the Youth Incentive Entitlement Pilot Projects (YIEPP) and Supported Work Experience have shown less positive impacts than designers expected. The YIEPP evaluation report suggests that one of the reasons the guaranteed job program was not more successful, especially with youth who had dropped out of school, was that those individuals needed supportive services that were not integrated into YIEPP (Diaz, et al., 1982). At least one local YIEPP administrator was quoted as saying that transportation problems were a serious impediment to participation.

It is also possible that supportive services have played an important role in the reported success of the Job Corps. Of the major youth employment and training programs reviewed for this paper, the Job Corps provides the most comprehensive set of supportive services, including allowances, physical and mental health treatment, and routine instruction in basic hygiene, health and pregnancy prevention. The residential character of most Job Corps sites may make it easier and more efficient to incorporate supportive services into the basic education and training activities.

The Job Corps has been carefully evaluated and has proven to be effective over a range of economic and noneconomic outcomes. At first, some observers attributed its success to the education components. However, Taggart (1981) implies that economic outcomes may be due to (a) the residential component and/or (b) supportive services, such as health care, counseling, recreation and motivation. That is, the program's effectiveness is probably due to more than just the education and training components.

Employment and training programs also have noneconomic objectives, for which supportive services may be particularly important. Burbridge (1983:55) notes that noneconomic outcomes for youth employment and training programs include (1) "improvements in job awareness, satisfaction, aspirations and work-related attitudes;" (2) "increases in self-esteem;" and (3) "improvements in health, education, family formation,

and responsible citizenship." The current DOL youth employment competencies also recognize the importance of non-employment outcomes by including such factors as work maturity in the JTPA performance standards system.

Achieving noneconomic outcomes may require supportive services beyond the traditional transportation allowances and child care, including counseling, mentoring, workshops, and postprogram support and advocacy. The Summer Training and Education Program (STEP), serving 14- and 15-year-olds at risk of dropping out of school, shows evidence of the importance of supportive services. In the original demonstration, youth participated for two summers of half-time work and half-time basic skills and life skills, plus one school year of supportive services. The life skills component was an important part of the program and included instruction on sexual decision-making, job equality, teenage pregnancy, AIDS prevention, substance abuse, family planning and general health issues. Early evaluation findings indicate that participants showed increased knowledge in these areas, though the effect on behavior was less obvious (Sipe, et al., 1988).

Thus, while there have been very few efforts to evaluate the independent effects of supportive services, their inclusion in employment and training programs suggests that they may contribute to program impacts.

SUMMARY

Since the 1960s, employment and training programs have included supportive services. Over time, the emphasis on such services has varied, at least in part because there is no consensus or evidence about whether they are essential to or simply enhance the core employment and training program. Neither is there much information about the extent to which participants have received them nor any indication that policymakers have been particularly interested in investigating this issue. Major evaluations have not included analysis of the effects of supportive services separate from those of core education or training activities or the program as a whole.⁵

Despite the lack of empirical evidence, experience among program operators suggests that supportive services are an important ingredient in employment and training programs. Some evaluations also suggest that supportive services contribute to program effectiveness. For example, the positive results of the Job Corps may be partly attributable to comprehensive supportive services and residential living, not just to the education

⁵ Evaluations of recent and ongoing demonstrations and programs (e.g., YOU, JTPA and JOBS) may provide new empirical findings on the effects of supportive services.

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and training components. Similarly, such demonstrations as YIEPP may have had more significant impacts if they had included more supportive services.

Several of the more recent and visible youth employment and training programs operate comprehensive service delivery systems, with strong assessment components, case management, and a number of supportive services, including mentoring and life skills instruction as well as child care and transportation. This suggests that some program operators are aware of the value of supportive services and are concerned with determining who needs which services and how they should be delivered. The next section discusses these issues by drawing on the experiences of programs outside the employment and training field, particularly those that have traditionally provided comprehensive services to youth.

V. SUPPORTIVE SERVICES IN OTHER PROGRAMS

The previous section describes supportive services in employment and training programs. This section considers supportive services in other programs that serve disadvantaged youth, including developmental disabilities programs, mental health programs, juvenile justice programs, substance abuse treatment programs, runaway and homeless programs, and programs for pregnant and parenting teens.

Like employment and training programs, many other youth programs provide services designed to supplement core services. Primary supplemental services are transportation assistance, meals, health care referrals, child care and housing assistance--services designed to help a youth deal with immediate barriers to program attendance or personal stability. In contrast to the previous section, this section does not include a comprehensive literature review. The discussion is focused particularly on how the services are delivered in programs where they appear to be most prevalent. The intent is to provide employment and training policymakers and practitioners with an understanding of supportive services in other programs.

The section begins with a brief overview of the role of supportive services in youth programs, followed by a discussion of the range of services provided in selected programs and models for delivering the services, particularly case management approaches.

ROLE OF SUPPORTIVE SERVICES

Before describing the services and service delivery approaches used in non-employment and training youth programs, it is important to note the nature of these programs. Three types are relevant to this report: (a) programs serving the general population that include substantial numbers of disadvantaged youth (such as adult basic education and vocational education programs); (b) programs serving youth who are in crisis for one or more reasons (e.g., programs for homeless youth or teenage parents); and (c) programs serving youth with particular ongoing problems (such as those for ex-offenders or the developmentally disabled). These distinctions are important for understanding the philosophical bases of the various programs.

First, like employment and training programs, it seems that staff in education programs (for the general population) perceive the need for supportive services to enable individuals to effectively participate, though this perception is not based on empirical evidence. For example, a survey of directors of adult basic education (ABE) programs found that transportation and child care were the most serious needs among their students, "even though there is no research evidence to support this position" (Kutner, et al., 1990:24). That study explains that ABE programs were hard pressed to use their limited resources

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for supportive services because their primary objective was education. The authors report that local teachers and administrators feel that if more supportive services were provided, their students would show better attendance and better outcomes.

In contrast to most employment and training and education programs are programs designed to serve youth in crisis. The objective of such programs is to help these youth meet their immediate needs by providing housing, food, clothing and short-term counseling. Once the crisis is dealt with, some programs offer services that meet other, perhaps related, needs. One of the major differences between employment and training programs and crisis-intervention programs is that employment and training programs are not intended to help youth deal with crises, but to help them become self-sufficient.

Finally, there are non-employment and training programs that focus on providing participants (e.g., disabled or ex-offenders) with the skills necessary for achieving economic and/or social independence. In these programs, supportive services are services that help clients participate in the program and achieve the general and specific program goals. Employment-focused activities (for example, job placement) may be included among other supportive services offered to help youth achieve self-sufficiency. However, self-sufficiency may or may not be defined by the employment status of a youth. The inclusion of “employment services” as a supportive service in non-employment and training programs parallels the inclusion of “education” as a supportive service in employment and training programs of the 1970s.

Thus, the term “supportive services” defines activities ancillary to a program’s basic mission. Many non-employment and training programs have as their core components those services that are considered supportive in employment and training programs, and vice versa.

Operationally, and of particular relevance for this paper, many non-employment and training programs use case management approaches. As discussed below, it seems that programs that deal with the most disadvantaged youth or with youth experiencing multiple problems (e.g., developmental disabilities programs, mental health programs, and programs serving pregnant and parenting teens) are most likely to use case management.

Regardless of whether a program uses a case management approach or a simpler model of service delivery, many youth programs are designed with the belief that youth require guidance, support and positive reinforcement in order to make successful transitions into adulthood. However, a few take an opposite approach sometimes called “tough love.” The nature of the interactions between staff and youth differs by program type (case management or direct service) and by program philosophy. In general, as discussed

below, programs serving pregnant and parenting teens or runaway youth appear to be more nurturing in nature, while some juvenile justice and substance abuse treatment programs use the “tough love” approach.

The range of supportive services in selected non-employment and training programs and some of the issues relevant to case management are discussed below.

TYPES OF SUPPORTIVE SERVICES

In its technical assistance guide for practitioners, Public/Private Ventures (P/PV) summarizes the numerous federally funded programs that serve disadvantaged youth (P/PV, 1988). The message to local program administrators is that employment and training resources alone may not be enough to adequately address the problems of disadvantaged youth and that other sources of funding must be considered. Among the other programs that are closest to employment and training programs, several noted by P/PV have the potential for funding supportive services, including the Perkins Vocational Education Act, the Adult Basic Education Act, Even Start (educational remediation for teen parents and their children), juvenile justice programs and the Independent Living Initiative (for youth who are about to “age out” of foster care).⁶ Although these programs can provide such services as transportation, life skills counseling, housing assistance and child care, no information was identified about the extent to which such services are used.

Of particular importance for employment and training policy are the experiences of juvenile justice programs, programs for homeless and runaway youth, and adolescent pregnancy programs. Many (if not all) of the youth they serve are probably eligible for federally funded employment and training programs. Two themes that emerge from the following review are (1) many (but not all) of these programs attempt to deal with youth in a caring and supportive manner, and (2) case management is the primary model of service delivery, particularly in the more comprehensive programs.

Juvenile Justice and Delinquency Programs

Over the years, various approaches have been used to serve youth in the juvenile justice system. Reamer (1990a, 1990b) discusses the ongoing tension that has existed in this field between the goals of “punishment” and “rehabilitation.” In the 19th and early 20th centuries, most juvenile justice professionals supported institutionalization and punish-

⁶ Other federal legislation that authorizes supportive services includes the Americans with Disabilities Act, the McKinney Act, the Social Services Block Grant program and the Community Development Block Grant program.

ment. By the 1960s, mainstream practitioners had shifted to more community-based approaches, demsttttutionalization and rehabilitation. The community-based or noninstitutional programs include, for example, family treatment, alternative residential programs and assignment of advocates to youth. These programs include a range of supportive services, such as counseling, group therapy, transportation and housing assistance. But, according to Reamer, the “pendulum has swung again.” Throughout the country, there have been recent attempts to replace the “velvet glove” with the “iron fist.” In some communities, there is less public support for rehabilitation programs that rely on counseling and other services, and more support for longer periods of incarceration.

These shifts occur, apparently, not because of research evidence of differential effects, but rather are based on “political and public determinants, such as increased incidence of juvenile justice” (Reamer, 1990a). Public opinion in the 1980s and 1990s has led to tougher policies for dealing with youth in the juvenile justice system (Reamer, 1990a). The result of these types of shifts and the effect of public opinion on policy, according to Reamer, “is a system that is without clear direction, in which professionals are unable to agree on basic goals much less on methods of intervention” (1990b:665).

Despite the lack of consensus about what the juvenile justice system is intended to achieve, some juvenile justice programs provide insight into the role of supportive services. The rehabilitative approach is evident in the following quote (Smith, 1991:60): “Judges and probation officers who fall prey to the popular wisdom that espouses a get-tough policy on troublesome but nondangerous teens are doing them a great disservice. These youth need services, not time in detention centers.” Rehabilitative programs are developed both to rehabilitate youth and to help them break the delinquency cycle, often in a caring and positively reinforcing environment. Some programs work with the youth through recreational programs, while others focus on education or vocational training. The goals are to build the self-esteem of youth and to teach them how to redirect their “negative” behavior patterns.

There are many programs serving juvenile offenders and delinquents that are based on this approach. The following are a few examples:

- The Associated Marine Institutes, Inc., is a nonprofit organization with programs for delinquent youth in Maryland, Florida, South Carolina, Delaware, Louisiana and Texas. The programs all provide GED instruction along with participation in maritime activities. Interaction is centered on the concept of staff-client bonding (Mardon, 1991).
- The Fort Smallwood program in Maryland tries to counterbalance negative self-images with positive attention. Youth are praised, congratulated and thanked for

each positive step they take, from showing up (youth live at home) to completing their chores. Staff are hired based on their positive attitudes toward people and their motivation, enthusiasm and values (Mardon, 1991).

- A Kansas program for young female offenders who have been sexually abused expects its staff to be willing to share their own experiences with them and to be comfortable with the specific problems they may need to discuss (Moore, 1991).
- A program for Puerto Rican youth offenders assigns each participant to a staff member. This advocate is expected to go beyond individual counseling and get to know the youth and his or her peers and family and look into the school, work and family situation and day-to-day behavior of the youth (Milton S. Eisenhower Foundation, 1990).

An extension of the rehabilitative approach involves using street-wise staff or community volunteers in programs attempting to divert young people from crime. Some diversion programs recruit as volunteers other young people, people from the same community or people who have overcome similar problems (Woodson, 1981). Programs developed to work specifically with gangs have used gang leaders to provide positive role models for other gang members. This often first requires program staff to earn the trust of these leaders, after which they can work together to develop positive programs for the youth (Woodson, 1981). Diversion programs are comparable to mentoring activities used in employment and training and other programs.

The belief in using staff or volunteers who can identify with the youth and their problems is shared by youth themselves. A recent Urban Institute study (Brounstein, et al., 1990) on substance abuse and delinquency among inner-city youth finds that 79 percent of the youth using peer-counseling services felt they were helpful. Of these youth, 82 percent were either using or selling drugs. When youth were asked how to improve school substance abuse programs, the most frequent answer was: increase credibility by bringing in people who had direct experience with the problems of substance abuse. Similarly, in a program aimed at preventing alcohol abuse among 12- to 17-year-olds in East Harlem, researchers found positive changes in attitude and behavior attributed to "workshops, outreach to parents, and role-modeling by staff" (Zambrana and Aguirre-Molina, 1987).

Thus, although there is some controversy about how society should deal with young offenders, nearly all of the juvenile justice and delinquency programs identified through this brief literature review include substantial supportive services.

Programs for Homeless and Runaway Youth

There are no definitive estimates of how many youth are homeless, but there is general agreement that many do not have families to which they can return and often have multiple problems. More than 65 percent of street youth come from homes in which they have been physically, sexually or emotionally abused. Staff working with these youth report that they must devote considerable effort and time to earning the confidence of the youth before they can begin to help them achieve stability (Price, 1990).

However, despite the fact that this population is likely to include many youth with multiple and serious problems that would normally require long-term services, most runaway and homeless youth centers, which are the primary programs serving this population, cannot provide such services. Federal regulations for the Runaway and Homeless Youth Program limit the length of stay in shelters to 15 days (the average length of stay is 12 nights). Given the relatively short length of stay, staff do not focus on long-term counseling, but provide short-term intervention and refer individuals to other programs for such services as health care, transitional housing or an independent living program (Cohen and van Houten, 1991; Mihaly, 1991). Supportive services that may be offered to the youth in these centers are services that enable them to maintain their “normal” life (e.g., transportation to school or recreation activities) or to return to their home or other suitable home environment (e.g., support groups or other counseling services).

Adolescent Pregnancy Programs

In 1980-1981, the Office of Adolescent Pregnancy Programs (OAPP) in the Department of Health and Human Services funded 38 local projects serving pregnant and parenting teens. The objective of the projects varied, but all were mandated to provide health and prenatal services and other supportive services needed by pregnant teenagers and their male partners. In an evaluation of these projects, Burt, et al., (1984) report that, in addition to the health and nutrition services all clients received, about 80 percent received at least one hour of counseling on contraception, sexual decision-making, parenting and family life, and/or vocational and career planning. Twenty percent (20%) received assistance with transportation (usually bus tokens or cash allowances). Other supportive services include child care, stipends and meals.

Burt, et al., emphasize the importance of “comprehensive or supportive services” and “monitoring clients” using a case management approach to “ensure that needed services are offered to all clients” (1984:136). They also stress the importance of postprogram follow-up services to “insure that the important gains made by the project are maintained and that clients meet long-term goals of independence and productivity” (1984:137).

There is other evidence from adolescent pregnancy programs that many staff feel their clients need comprehensive and supportive services and ongoing support to help them learn to properly care for themselves and their babies (Cohen, 1991).

DELIVERING SUPPORTIVE SERVICES: CASE MANAGEMENT

As is evident from the discussion above, there is no one set of supportive services that is or should be offered to all clients in all programs. Each program first needs to determine whether supportive services will be used to enable clients to participate in other services, or whether supportive services are the core services. Once a set of supportive services is decided on, the delivery approach must be developed. Some programs will choose to offer all services on-site, while others will refer clients to other programs offering specific services. It must next be determined whether all clients will receive the same supportive services or if the delivery of services depends on individual needs. For example, a juvenile justice program is likely to decide that all clients will participate in a mentoring or peer-counseling program, while a runaway and homeless youth program may only target certain youth for this type of service.

Case managers are often used by programs to help direct clients to outside services and to help determine which supportive (or other) services each client needs. At times, a case manager also serves as a counselor or an advocate with outside agencies. Case management is particularly developed in mental health programs, adolescent pregnancy programs and developmental disabilities programs.

Mental Health Programs

Case management has traditionally been an integral part of mental health programs, and research about those programs offers useful insight into case management. Fiorentine and Grusky (1990) explain that the several case management models all emphasize the "linchpin" or service brokering functions, but that many case managers routinely perform other activities that they classify as "integrative," "therapeutic" or "interventive." They also note that there is no research evidence to confirm that case management is effective for clients.

Fiorentine and Grusky find that the most common activities performed by mental health case managers are "interventive," such as keeping clients out of hospitals, helping with crises and serving as advocates. The second most common case management activities are "therapeutic," including helping clients understand their problems and strengths and improving their self-esteem. The linchpin activities are the third most common and involve assessment, gathering information, setting up a plan of action, monitoring progress and referring clients to other agencies. The least common activities are

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“integrative,” such as arranging or providing for transportation, helping clients with employment problems and teaching life skills--i.e., helping the client integrate into mainstream social and economic lifestyles.

These two researchers further suggest that case management is best understood within a contingency theory framework. The activities case managers perform depend on a number of factors (i.e., contingencies), including (a) the presence of needed services in the community, (b) their own backgrounds and training, and (c) the needs of their clients. At a minimum, case managers serve as linchpins between clients and other services; but if case managers feel that these other services or programs are not satisfactory, they will also provide needed service themselves.

It is not clear, though, whether mental health programs typically include such a broad model of case management. It seems that a case manager is often responsible for creating a package of needed services for a youth (such as health, recreation, education and family support services). The typical case manager also advocates on behalf of the youth in school, in court or within the treatment program. For example, in a North Carolina program, case managers are responsible for seeing that all facets of evaluation and treatment are carried out. They review and monitor treatment plans, locate and arrange for services outside the system and help parents obtain services that would help the youth (U.S. Congress, Office of Technology Assessment, 1986).

There are also reports that some mental health case managers primarily broker services (i.e., the linchpin function). The Youth Services division in Massachusetts and the New York City Family and Children's AIDS Case Management Program both offer examples of case managers whose primary responsibility is to assess client needs and help them access the necessary services. As clients enter various programs, case managers keep track of their activities.

Thus, in mental health programs, which involve providing a broad range of services depending on the needs of the client, the service delivery approach is routinely called case management but often includes a number of activities beyond brokering.

Adolescent Pregnancy Programs

Programs serving pregnant and parenting teens, which are primarily supportive service programs, also routinely use a case management approach to service delivery. Although there is no one standard description of case management in such programs, it generally involves assessing needs, linking clients with services from outside agencies, and tracking the progress of clients. That is, using the terminology from the discussion above, case managers in these programs generally perform linchpin functions.

In their evaluation of adolescent pregnancy programs, Burt, et al., (1984:137) describe what they consider the basic ingredients of effective case management, recognizing that there will be variation in how mechanisms are structured and staffed, depending on the agency, program, staff and community: (1) identification of all clients; (2) determining which services are to be delivered to these clients, both by the program and by referral agencies; (3) assignment of staff responsibility for particular services to individual clients; and (4) determination of whether clients are receiving services (e.g., showing up for appointments).

The above listing suggests that programs serving pregnant and parenting teens are primarily brokers of services (1, 2 and 4), but that staff provide services directly when necessary (3). In fact, much of the literature about these programs emphasizes the multiple problems facing this population and the need for access to a variety of services (e.g., health care, and training in parenting skills, financial planning and household management). In a survey of its member parenting programs, the Child Welfare League of America reports that 86 percent assigned a single case manager for each client (Vecchiolla and Maza, 1989). The role of these case managers is generally to help coordinate services and to monitor and assess the clients' progress and needs (Cohen, 1991).

Perhaps because of the recognized need for multiple services, many of these programs have adopted case management models that depend critically on staff assessments of client needs. For example, in the San Francisco Teenage Parent Program (TAPP), case managers conduct client assessments, provide short-term counseling and bus passes, and refer clients to other agencies for necessary services, e.g., longer-term mental health counseling, education, vocational training, child care, income maintenance or housing assistance (Loomis, 1987).

Developmental Disabilities Programs

Developmental disabilities (DD) programs also make routine use of case management. DD programs serve persons (regardless of income) who have a physical or mental disability (identified by the age of 23) that makes independent living difficult. The primary objective of DD programs is to help the individual, usually a young person, eventually live an independent life.

Ideally, DD programs place clients in jobs intended to prepare them for competitive employment. The supportive services provided during the gradual transition to regular employment include: transportation, allowances, family support (e.g., respite care to allow the individual to remain outside of an institution), readers (for visually impaired) and job coaching.

Case management, more typically called case advocacy, depends on intensive services both while preparing the individual for regular employment and during its initial period. A case advocate and job coach is assigned to each client. Gradually, supportive services are reduced as the client becomes prepared for independent living. Practitioners believe that postemployment advocacy, coaching and follow-up is essential to job retention, and these services continue for as long as the case manager feels it is necessary.⁷ Thus, on a continuum of case management approaches, DD programs fall somewhere between mental health programs (where case managers spend much of their time in intervention and counseling activities) and adolescent pregnancy programs (where case managers are primarily brokers of services, both within the sponsoring agency and with outside agencies).

SUMMARY

Programs reviewed in this section recognize the need for services that are called supportive in the employment and training field. However, one of the problems in assessing supportive service components in non-employment and training programs is that it is often difficult to delineate which services are "core" versus "supportive." For example, in mental health programs and adolescent pregnancy programs, supportive services are generally the core activities. Developmental disabilities programs include both supportive services (e.g., transportation) to enable clients to participate in core activities and service (e.g., coaching) to prepare clients for independent living, which is the primary intent of these programs.

Among the non-employment and training programs reviewed in this section, case management is used to deliver, coordinate and track supportive services, particularly for youth with multiple problems. Although the term has been used to describe service delivery in many programs, there is no one accepted definition of case management, nor one set of activities case managers perform. In many programs, case management involves a philosophical approach to service delivery.

The designs of programs and anecdotes from program operators suggest that supportive services are critical to youth programs. However, neither non-employment and training nor employment and training programs can provide information on the effectiveness of supportive services, or of case management. The lack of empirical evidence indicates a need for further study on the effectiveness of supportive services and their delivery in both types of youth programs. Given the different target populations, objectives and

⁷ Personal conversation with S.T. Tidwell, Louisiana State Planning Council on Developmental Disabilities, July 1991.

philosophies of these two types of programs, it is quite possible that different impacts exist as well.

VI. CONCLUSIONS AND RECOMMENDATIONS

This review of the role and provision of supportive services in programs for youth discloses that much more needs to be known about their effectiveness. Information available on supportive services generally is limited to a description of what is offered in various programs and the overall need to provide supportive services to youth. The following conclusions are presented within the context of these limitations.

CONCLUSIONS

Operational experience in employment and training programs indicates that certain activities or services are commonly provided in programs to help youth both participate in a program and make a successful transition to adulthood. To accomplish these goals, numerous services (see Table 1 in Section III) may (a) serve as incentives to enrollment, (b) help youth overcome material barriers to participation, (c) help youth overcome social disadvantages, or (d) help youth cope with serious physical or mental health problems.

Within employment and training programs, supportive services are not the main focus. In other youth programs, supportive services can often not be distinguished from the core activities. In fact, non-employment and training programs may be the very programs that provide services to youth participating in employment and training programs. This overlap among youth programs makes it difficult to assess the role and impacts of supportive services.

Despite the limitations of current knowledge, two main points can be drawn from this review. First, there is consensus that youth with multiple problems need supportive services. Second, there is evidence that many youth programs include case management and some degree of personal interaction between staff and clients. The intent of these strategies is to (a) develop self-esteem through ongoing positive relationships and (b) assure the provision of supportive services either directly or through other agencies. Program staff not only act as service providers and brokers but also serve as positive role models for the youth.

Thus, programs that serve youth have incorporated a range of supportive services designed to meet a number of different needs. The following recommendations encourage further assessment and development of the role and effectiveness of supportive services and their delivery.

POLICY RECOMMENDATIONS

1. DOL should initiate formal interagency dialogue about the multiple supportive service needs of disadvantaged youth.

DOL is already collaborating with the Departments of Health and Human Services and Education on several major initiatives to benefit youth, including the YOU demonstration, dropout prevention programs, and programs for teen parents and homeless persons. The review in the preceding sections suggests that (a) many direct providers receive funding from a number of sources, and (b) many youth are simultaneously eligible for a number of federally funded programs. Although little information exists about the number of disadvantaged youth with multiple service needs, it is clear that practitioners feel these youth are most in need of supportive services. There is also some anecdotal evidence of a need for more services (or more funding for services) among all youth programs.

It would be beneficial for federal agencies to sponsor forums and conferences to discuss (a) the extent of need for supportive services, (b) programmatic definitions of supportive services, (c) current problems or gaps in services and (d) regulatory inconsistencies that affect programs providing supportive services.

2. DOL should provide local programs with information about case management for youth.

Effective case management depends on staff who understand the range of services available for and needed by youth, especially those with multiple problems. It is important that local administrators, staff and Private Industry Council members receive information about the special needs of youth. The previous sections of this paper strongly suggest that youth may require counseling and longer-term services (including postprogram follow-up and support).

RESEARCH RECOMMENDATIONS

1. DOL should sponsor research to document (a) the types of supportive services provided to youth in JTPA programs, (b) the extent to which supportive services are provided, and (c) the relationship between supportive services and youth outcomes.

This paper suggests that supportive services are an important part of most programs for disadvantaged youth, both employment and training programs and other programs (e.g., mental health, juvenile justice and adolescent pregnancy programs). However, there is very little empirical data about how many youth receive supportive services or the impact

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of supportive services on the subsequent experiences of youth (especially labor market experiences).

Since many programs funded by JTPA provide supportive services, DOL might sponsor research that would (a) collect information from administrative records in a sample of these programs in a sample of SDAs, (b) use this information to assess the types of supportive services and the extent to which they are provided, and (c) analyze the relationship between supportive services and youth outcomes.

2. DOL should sponsor a demonstration project that would enable evaluation of the effectiveness of (a) supportive services offered to youth in employment and training programs and (b) case management approaches to delivering services to youth.

Although numerous case studies of the provision of supportive services to youth in employment and training programs have been conducted, there are no empirical data to support their findings (i.e., that supportive services are important). A demonstration project should be designed and conducted to test the hypothesis that supportive services have positive impacts and to evaluate approaches to service delivery.

The demonstration design would consist of random assignment of youth to different treatment conditions. These treatment conditions could include: employment and training services with no other intervention; employment and training services with a combination of supportive services; and employment and training services with a stipend. Supportive services could include child care, transportation assistance, mentoring and life skills training. Each control group would not receive the designated service. The demonstration would be enhanced by testing different case management models (e.g., performance of interventive or integrative activities).

A demonstration would provide empirical evidence on the impacts of supportive services and of various approaches to their delivery. This information, which has not been available to researchers or policymakers, could be used to inform the effective design and implementation of youth employment and training programs.

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STRUCTURE AND SEQUENCE:

**Motivational Aspects of Programmatic Structure
in Employment and Training Interventions for
Disadvantaged Youth**

Catherine Higgins
Public/Private Ventures

I. INTRODUCTION

Despite the social, economic and technological revolutions of the 20th century, the structure of the American high school has remained the same, while employment and training programs for young high school dropouts have varied along almost every dimension. This paper examines the variations implemented in the 1970s and 1980s.

Even as its constituency has expanded from a voluntary few to virtually universal participation, the American high school has retained the structure it started with. Students are still grouped into age cohorts for three to four years. The day begins and ends early, punctuated at 40- to 50-minute intervals when students change location within a building. The years are punctuated by intervals with specific transition points. The structure is sequential, with fixed requirements for transition between levels measured in calendar and chronological increments. Content is academic, with occasional opportunities to participate in such activities as sports, clubs and band. Although there is some variation--some students have access to vocational training for at least part of the day, some schools offer enrichment activities in the arts and athletics--this routine has varied little across the decades of the century and geographic regions of the United States.

Conversely, employment and training programs for youth in the past decade have varied in content, length and goals. In some cases, structure has conformed closely with that of the traditional school, though usually within a more condensed time frame. In other

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cases, an attempt has been made to avoid any resemblance to school by providing participants with an entirely different experience, usually work. Some structures accommodate comprehensive services, necessitating frequent schedule changes and occasional venue changes. Some programs have group or team substructures.

This variation has been propelled by a sense that interventions for the most disadvantaged young high school dropouts must provide multiple services. Three demonstrations from the late 1970s provided at least part of the rationale for this argument.

Controlled studies of two single-focus demonstrations indicated that jobs programs alone did not produce indirect educational outcomes. By the end of the second program year, participants in the National Supported Work Demonstration, which offered work experience but no education or support services, showed no gains in rate of employment or wages relative to controls (Maynard, 1980). Similarly, the Youth Incentive Entitlement Pilot Projects (YIEPP) demonstration, which offered a guaranteed job for youth enrolled in high school, yielded no effects on secondary school attendance, graduation or college entry for the cohort of black students age 15 or 16 at enrollment (Diaz, et al., 1982).

In contrast, long-term findings from the Job Corps demonstrated that a comprehensive program could achieve desired outcomes. Four-year follow-up of 5,000 very disadvantaged corpsmembers enrolled during April 1977 found positive economic impacts relative to a comparison sample (Mallar, et al., 1982).

Perhaps most significantly, youth who stayed longer showed the greatest impacts. Early dropouts (30 percent of the sample), who left within the first 90 days of enrollment, demonstrated small but statistically insignificant effects relative to comparison group youth. Partial completers (also 30 percent), who stayed at least 90 days and completed at least one program segment, benefitted an intermediate amount. Completers (40 percent), who completed an entire vocational and/or educational program, consistently benefitted the most in terms of employment and earnings (Mallar, et al., 1982:125-126).

However, even as these findings appeared to resolve any uncertainty about the desirability of multidimensional alternatives for high school dropouts, they raised additional questions: If several components are necessary, which are essential? In what sequence should they be combined? How long should the intervention last? How much time does it realistically take to achieve an outcome? What outcomes are most desirable?

These questions reflect a lack of consensus about the mission of a second-chance program for disadvantaged youth. Many believe, for example, that second-chance interventions must remediate the educational skills trainees failed to acquire in school.

Advocates of a pedagogical approach believe employment and training has a mandate to teach skills and inculcate attitudes for labor market entry.

Others argue alternatively for a structure that attracts youth who disliked school enough to leave it in the first place. Adherents of what is here called a "marketing" approach argue that a program that youth like has the potential to reengage them in a traditional system, and thus potentially to motivate them to pursue work and education independently and long term. For these advocates, a structure's attractiveness varies directly with its dissimilarity to school: they look for new approaches that may or may not include didactic training.

Those who espouse the pedagogical approach usually substantiate their argument by pointing to the large number of high school dropouts and their poor academic skills. Estimates of dropout rates from several sources provide partial support for this stand.

Because of political implications of dropout data and the problems implementing collection and recording in schools, most school system reporting is suspect (Morrow, 1986). However, several relatively reliable estimates exist. These estimates all show that although national rates are low, rates in large urban districts are very high. Prevalence data from the National Longitudinal Survey yield an estimate of "no higher" than 14 percent. Although prevalence rates peak at age 19 (i.e., the proportion of all 19-year-olds who are uncredentialed), the rates drop below 14 percent by age 23 because of later returns to school (Morgan, 1984:225).

Closer analysis, however, reveals a difference in magnitude and trend by race. At age 19, compared with whites, prevalence rates for blacks were 7 points higher and for Hispanics 20 points higher. By age 22, these differences had expanded three additional points. Although prevalence rates for whites dropped after age 19, they remained essentially flat for blacks and Hispanics, reflecting the smaller proportion of minority youth who achieved a general equivalency diploma (GED). "Becoming a dropout is thus not only more prevalent among minority youth," the report concludes, "it is also more likely to become a permanent condition of undereducation" (Morgan, 1984:230-233).

These findings are corroborated by the National Center for Education Statistics (NCES), which reports that 17.3 percent of the cohort of 1982 had dropped out by the time their class graduated. However, by 1986, almost half of the dropouts had obtained a high school diploma or GED, another 12 percent of the dropouts were pursuing a credential, and only 7 percent of the cohort had not completed any degree program. Approximately two-thirds of those who thus obtained credentials had earned a GED; the remainder had obtained a high school diploma (NCES, 1988).

Noncompletion rates also show large variation--by geographic location, academic ability and socioeconomic status. Almost 25 percent of the sample enrolled in metropolitan high schools failed to graduate, compared to 15 percent from suburban or rural high schools.

Reports from two large-city school districts confirm these findings. An independent advocacy group reports a cohort dropout rate of 42.8 percent for 30,000 Chicago students enrolled in ninth grade in 1981. Black males age 15 or older were 16.8 percent of the total class but 25 percent of the dropouts. The report also finds wide variation among schools, much explainable by socioeconomic status of students but enough left unexplained to suggest effects of management and implementation (Hammack, 1986).

The New York City Board of Education reports similar calculations. A four-year dropout rate was calculated for 83,000 students who first entered ninth grade in 1984. By 1988, 20.8 percent had dropped out; however, because an additional 25 percent were still in school, the rate was expected to rise. Follow-up studies of the two previous classes accounting for students who dropped out in their fifth or sixth year yielded a final rate of 33 percent (New York City Board of Education, 1989).

The data also consistently indicate that most dropouts have long histories of academic and, in some cases, social problems. According to NCES, dropping out was usually preceded by histories of poor attendance, poor grades and grade repetitions. Thirty-one percent (31%) of the 1982 cohort who had ever repeated a grade dropped out, compared with 14 percent of those at grade level. Of students who reported they had been in serious trouble with the law, had been suspended or on probation from school, or had in the last year had disciplinary problems in school, one-fourth to one-third later became dropouts (NCES, 1988:24-39). In Chicago, entering high school overage and reading below age level greatly increased the probability of dropping out (Hammack, 1986). More than 70 percent of the dropouts from the New York City class of 1988 were overage when they entered ninth grade (New York City Board of Education, 1989).

In summary, although national dropout rates are low, high rates cluster among youth who are already at risk in the labor market because of residence, race and probably (inferred from these data) income. High school dropouts are more likely than graduates to be minorities residing in inner cities, to be attending poorly managed schools, and to have histories of poor academic performance and difficulties with school authorities or the law prior to dropping out. Among this group, educational remediation may be not only necessary to produce entry-level skills, but may also be an efficient way to remove the least intractable employment barriers.

Within employment and training, the comparable argument invokes attrition data. Although most attrition reports are anecdotal, they are consistent in direction: youth persistently fail to enroll in or complete education and training programs, thereby dropping out again, this time from the high school alternative. Proponents of a marketing approach argue that youth drop out because the education and training intervention is too similar to school, or because it does not deliver what youth want.

The problem marketing advocates face is that there are no reliable data about what it is that youthful high school dropouts want from a high school alternative. When asked directly, trainees seldom respond unambiguously. Youth who leave a program before completion often praise it, and many completers are fiercely critical (Higgins, 1988). Questionnaire responses at termination usually yield vague results, with the most frequently cited reason for leaving being "other."

Many practitioners argue persuasively that education and the opportunity to earn a GED is an incentive for youth to join programs. However, focus groups with younger participants suggest that they most enjoyed and remembered their work experience, even when offered remedial educational and life skills designed to appeal to them.¹ Furthermore, in-program data, when reported, consistently show low attendance in educational compared with training components.

Marketing advocates also frequently cite the high number of GEDs awarded annually as evidence that academic instruction in education and training programs may be superfluous. The American Council on Education reports that 56 percent of the 760,000 GED test takers in 1990 were youth between the ages of 16 and 24. Although slightly over 24 percent of them studied at least 100 hours for the exam, the median study time was 30 hours, considerably less than average GED preparation time in education and training programs. However, because the data are not disaggregated by income, race or highest completed grade, the percentage of at-risk youth among the GED test takers is not evident (American Council on Education, 1990).

This paper takes an indirect route to addressing the questions raised by these different approaches and philosophies. The paper attempts to advance the discussion through a consideration of the following two questions:

- What are existing structural alternatives and what do their outcomes suggest about optimal design?

¹ Unpublished data from the Summer Training and Education Program (STEP) demonstration by Public/Private Ventures.

- What can the literature from academic psychology on motivation suggest about what youth might want?

Section II presents a survey of the structural variation in 15 sites from six employment and training programs for disadvantaged youth that have been evaluated in the previous decade. It discusses the variation in structure and outcomes across all 15 sites. Because of the wide variation among programs, and the number of variables that are not reported, no definitive association between structure and outcomes is possible. Therefore, this summative presentation is made in order to clarify concepts and identify the range of alternatives and outcomes of employment and training programs.

Section III attempts to augment the mostly anecdotal information about what youth want from a second-chance program, and which experiences they find motivating. The section selects and reviews recent literature from academic psychology on the subject of achievement motivation and incentives. Although this discussion does not yield a definitive alternative to the structure of high school, it suggests concepts that can guide the design of second-chance settings.

Section IV reviews findings from Section II in the context of motivational theories. The section applies concepts introduced in Section III to what appear to be motivational aspects of several of the programs discussed in Section II. The section concludes with policy recommendations and suggestions for future study.

II. STRUCTURE AND OUTCOMES

This section reviews structural and outcome variations among six employment and training programs. It identifies the range of models and components, and presents analyses of impact data from program evaluations in the 1980s. The wide variation among programs precludes definitive conclusions about the relationship between program characteristics and outcomes. Thus, this analysis provides only a summary and distillation of available knowledge.

The survey includes four demonstrations and two independent programs. Three of the demonstrations--Minority Female Single Parent (MFSP), Supported Work and JOBSTART--include a diverse array of programs that vary across all structural dimensions. Because of these differences, this analysis presents data only from specific sites.

All the MFSP sites have been included to advance the discussion of program structure and duration: the Center for Employment Training (CET), the Atlanta Urban League (AUL), the Opportunities Industrialization Center (OIC) and Wider Opportunities for Women (WOW). Three Supported Work and five JOBSTART sites have been selected to illustrate differences in structure, services and outcomes. Two of the five JOBSTART sites (Los Angeles and Phoenix) are Job Corps.

The fourth demonstration, the Summer Training and Education Program (STEP), provides a consistent structure and array of services across all sites and years of operation. Although the demonstration's curriculum was upgraded between the first and second cohorts, the basic structure remained the same. This analysis includes enrollment and impact data for the second demonstration cohort across all five sites.

The four demonstrations were evaluated using random assignment to treatment and control groups. Participant characteristics cited here reflect only applicants assigned to the treatment condition. Impact data reflect the analysis of participant/control group differences at designated intervals after enrollment.

Both the independent programs--the California Conservation Corps (CCC) and the City Volunteer Corps (CVC) of New York City--operate multiple sites that are consistent across sites. The CCC sites are primarily residential, with structure and program determined at the state level. Although teams of CVC corpsmembers serve in all of New York's five boroughs, the program is highly centralized and has varied little since its founding. CCC has been evaluated using a comparison group methodology; a formal evaluation of benefits has not been conducted for CVC.

The Job Corps evaluation is not discussed here because it does not describe structural differences among specific sites (Mallar, et al., 1982). The definitive report on the Job Corps aggregates outcomes across sites (15 in total), thus obviating any analysis of structure and associated outcomes. However, because of the importance of the Job Corps in employment and training evaluation, aggregate data are reported in the three tables included in this section. References to the Job Corps in the text refer only to the two Job Corps sites in the JOBSTART demonstration.

This analysis is complicated by differences in the reporting conventions used in the individual reports. For example, the authors of the JOBSTART report do not always clarify whether transitions from educational sequences into training were conditioned on elapsed time or academic achievement. Similarly, the length-of-stay groupings in the MFSP evaluation limit cross-program comparisons. Other examples are cited as they arise.

PARTICIPANTS AND STRUCTURE

Table 1 summarizes participant and structural characteristics of employment and training programs. Program and site descriptions are presented in the appendix. The programs vary in components, sequencing, admission and termination policies, training options, curriculum, methods of instruction, subgroupings of youth and financial support.

Participants

Observers have reported that youth entering employment and training programs "became considerably more 'at risk' in the 1980s" (Public/Private Ventures, 1990a:13). Although they ranged in age from adolescent to young adult, the participants in the six programs selected for this analysis demonstrated multiple characteristics of at-risk status.

Most of the programs target at-risk youth. All Supported Work participants were between the ages of 17 and 20 and had poor employment histories, and at least 50 percent had a delinquency record. Seventy percent (70%) of the minority single mothers recruited for the MFSP demonstration were receiving public assistance when they enrolled. JOBSTART participation was limited to high school dropouts between 17 and 21 years of age who read below the eighth-grade level and were Job Training Partnership Act (JTPA) eligible.

Although nontargeted, most youth corps recruit youth with one or more indicators of disadvantaged status: welfare status as a child, lack of a high school or equivalency degree, minority status, lack of vocational skills or poor work history. Approximately one-third of CCC participants reported family income levels below the poverty line; and

**Table 1
PARTICIPANTS AND STRUCTURE**

Program Name/ Site *	Participants	Program	Entry/ Exit	Training Options	Life Skills	Education	Sub- groupings	Financial Support
Supported Work								
Hartford	17-20 years old, unem- ployed dropouts	Work experience	Open entry	No	No	None	Crews	Minimum wage; performance bonuses
Jersey City	17-20 years old, unem- ployed dropouts	Work experience	Open entry	No	No	None	Crews	Minimum wage; performance bonuses
Philadelphia	17-20 years old, unem- ployed dropouts	Work experience	Open entry	No	No	None	Crews	Minimum wage; performance bonuses
Minority Female Single Parent								
Center for Employment Training	Minority single mothers	Concurrent skills training and education; in-house	Open entry and exit	Wide selection available	No	Group instruction	No	No
Atlanta Urban League	Minority single mothers	Concurrent skills training and education; brokered	Both fixed and open	Limited selection	Weekly seminars	Group instruction	No	No
Opportunities Industrialization Center	Minority single mothers	Sequential; skills training dependent on GED	Fixed entry every six weeks	4 options	No	Group instruction	No	No
Wider Opportunities for Women	Minority single mothers	Assignment to education or skills training	Fixed entry at 10- and 20-week intervals	1 course	Yes	Group instruction	Yes	Yes

Table 1 (continued)
PARTICIPANTS AND STRUCTURE

Program Name/ Site ^a	Participants	Program	Entry/ Exit	Training Options	Life Skills	Education	Sub- groupings	Financial Support
JOBSTART								
Los Angeles Job Corps	17-21 years old, dropouts reading ≤ 8th-grade level	Sequential education and skills training; in-house	Open entry and exit	Wide selection	3 hrs./day ^b	Group	Yes	\$40-80/month
Phoenix Job Corps	17-21 years old, dropouts reading ≤ 8th-grade level	Concurrent skills training and education; in-house	Open entry and exit	Wide selection	2 hrs./day	CAI (PLATO)	Yes	\$40-80/month
El Centro (Dallas)	17-21 years old, dropouts reading ≤ 8th-grade level	Sequential education and skills training; in-house	Open entry and exit	Limited selection	2-3 hrs./day	Group	Education only	\$5/day
Connelley (Pittsburgh)	17-21 years old, dropouts reading ≤ 8th-grade level	Concurrent skills training and education; in-house	Fixed cycles	Wide selection	Yes	CAI (CCC)	Varied	\$5/day
Allentown (Buffalo, NY)	17-21 years old, dropouts reading ≤ 8th-grade level	Sequential education and skills training; brokered	Varied	Limited selection	3 hrs./day	CAI (CCP)	Education only	\$1-2/hour
California Conservation Corps	18-23 years old (nontargeted)	Concurrent work and education; residential	Monthly intake	No	Irregular	Group	Crews	Minimum wage
City Volunteer Corps	17-22 years old (nontargeted)	Concurrent work and education	Fixed cycles	No	20 hrs./week	Group	Teams	Deferred minimum wage
Summer Training and Education Program	14-15 years old, JTPA eligible (nontargeted)	Concurrent summer work and education	Fixed entry	No	20 hrs./summer	Group and CAI ^c	Education and life skills	Minimum wage
Job Corps	14-21 years old (nontargeted)	Concurrent work and education; residential	Open entry and exit	Yes	Health education	Group	No	Pay allowance

Sources: Maynard, 1980; Gordon and Burghardt, 1990; Auspos, et al., 1989; Lah and Wolf, 1985; Public/Private Ventures, 1990b; Sipe, et al., 1988; Mallar, et al., 1982.

^aProgram and site descriptions are presented in the appendix.

^bDuring education phase in sequential sites, several weeks after enrollment only at concurrent sites.

^cCAI for 20 to 25 percent of total instructional hours.

almost 40 percent of the families of CVC youth received some form of public assistance. The STEP demonstration screened for JTPA-eligible youth between the ages of 14 and 15 at enrollment.

Program

Only one of the programs in Table 1 represents a single intervention: Supported Work provided work experience only, structured in small groups with close supervision. The CCC and CVC models offer several weekly hours of educational remediation concurrently with work experience. The CCC is a residential program.

This report adopts the nomenclature proposed by Auspos, et al., (1989) to categorize the programs that combine educational remediation and skills training. Concurrent programs allow participants to participate in both components within the same week. Access to one is not restricted by performance requirements in the other. For example, achievement of a GED or any other educational benchmark is not required for entry into skills training at the Center for Employment Training (CET), one of the MFSP sites. In contrast, sequential programs segment their components, with some performance attainment required for transition. Transition between segments usually depends on attainment of a GED, as at the Opportunities Industrialization Center (OIC) in the MFSP demonstration, or completion of educational modules, as at the Los Angeles Job Corps. Some sequential programs, such as the El Centro JOBSTART site, continue basic skills instruction concurrently with training.

Programs also differ in whether they broker or offer services in-house. The Atlanta Urban League (AUL), for example, served mainly to broker services and provide case management for MFSP participants. Both Job Corps in the JOBSTART demonstration offered all services in-house. CVC brokers its educational program at the City University of New York (CUNY).

The four categories--concurrent, sequential, brokered and in-house--have benefits and drawbacks. Concurrent programs facilitate immediate entry into vocational training but often stint on education and life skills instruction. Sequential programs provide the educational remediation many consider essential to advancement to skilled jobs, but are often discouraging for participants looking for a more immediate vocational connection (Auspos, et al., 1989:183-185).²

² For example, no more than 50 percent of enrollees at the Los Angeles Job Corps and El Centro, and 30 percent at Allentown--all sequential sites--participated in training. In contrast, all participants at both concurrent JOBSTART sites (Connelley and the Phoenix Job Corps) took part in some training activity (Auspos, et al., 1989:122).

Restriction to in-house services narrows the scope of training options but facilitates implementation of a unified program and maximizes contacts between staff and youth. Brokering enables small agencies to offer employment and training services, but requires smooth transitions between agencies and concerted efforts to achieve integration among program elements (Hershey, 1988:211-214).

Entry/Exit

Education and training programs also differ in how they structure intake and termination. Many programs facilitate intake with an open entry policy, enabling trainees to enroll at any time in the program year. Trainees could enroll at any time at the three Supported Work sites, two of the four MFSP sites and four of the five JOBSTART sites. Alternatively, sites structure fixed entry times at various intervals: monthly at CCC, at the beginning of the summer for STEP. Some programs use both policies: at AUL, for example, education courses were open entry, but skills training courses had fixed start dates and were of fixed length (Hershey, 1988:96).

Each intake structure has advantages and disadvantages. Open entry facilitates access to the program and eliminates attrition from waiting lists. However, open entry requires a curriculum that can allow trainees with different start dates to progress independently. Fixed entry offers the advantage of group cohesion for those who enter together. Many practitioners argue that group cohesion reduces attrition and facilitates learning (Hershey, 1988:218-219).

Technically, every employment and training program is open exit: trainees can leave at any time. In practice, however, terminations can be either open, occurring at any time after entry, or fixed to specified dates or durations.

Most of the open entry programs also provide open exit, enabling trainees to terminate whenever they have completed a training module or found a job. Fixed entry programs vary, with some, such as Connelley, providing open exit and others, such as STEP, linking termination to the calendar.

Although the two Job Corps sites allowed open exit, both structured incentive payments to encourage retention. The Job Corps made monthly contributions to an escrow account that could only be redeemed by participants who stayed six months or longer. Similarly, CVC has a deferred wage structure. Participants receive partial pay and can redeem the balance only at intervals of 6, 9 and 12 months after enrollment.

Training Options

Employment and training programs also differ in the extent to which they offer participants options for training. At one extreme are the programs that do not provide training--Supported Work, CCC and CVC assign participants to work settings. At the other extreme are programs with a wide selection of training options. The Los Angeles Job Corps, for example, offers training in health occupations, automotive repair, construction, electrical appliance repair, clerical work, child care, building maintenance, culinary arts and industrial production. Some programs offer a limited selection of options. For instance, AUL brokered some training--in retail sales, for example--but channelled most participants into an in-house clerical course.

Life Skills Instruction

Life skills instruction usually includes units on health and nutrition, sexuality and family planning, and consequences of drug abuse. Some curricula also include instruction on personal budgeting, values clarification, and government and civics.

Formal life skills instruction was included in about half of the programs surveyed here. Auspos, et al., (1989) report that the two Job Corps sites and El Centro incorporated two to three hours of life skills classes into the regular program day. Allentown provided three hours of life skills instruction every afternoon during its educational sequence. Connelley developed an "after school" component that included sessions on human relations, sexuality and family planning.

CVC's Corpmember Development curriculum, scheduled for two hours every week, emphasizes racial/ethnic diversity and tolerance. CVC also teaches "survival skills," such as budgeting and communication, at its one-week residential training program. STEP's Life Skills and Opportunities curriculum was written for the demonstration. Structured as a unit of 20 hours per summer, it emphasizes personal choice in the areas of sexuality, drug use and general health.

Education

Programs traditionally structure education in groups. Computer-assisted instruction (CAI) enables programs to teach individuals with widely varying abilities simultaneously and detach educational curricula from fixed enrollment dates.

Many employment and training programs have implemented one of the several available CAI packages. Sites participating in JOBSTART were required to offer CAI, though two sites, El Centro and the Los Angeles Job Corps, used group instruction. However,

Table 1 indicates that use of group instruction and/or CAI appears to be independent of entrance structure.

Subgroupings

Most programs with group education further divide students according to reading level. The usual demarcation is an eighth-grade reading level, with GED preparation offered to trainees reading at or above this level, and basic skills remediation offered to those reading below this level.

Demonstrations in sites that also enrolled adults occasionally provided subgroups for youth. To the extent that youth have different needs and interests than adults, this subgrouping enables sites to focus their interventions. Supported Work assigned trainees to work crews composed only of youth. MFSP participants at the OIC site, in contrast, trained and received instruction with all other OIC trainees. Three of the JOBSTART sites grouped youth separately only in education. (In CCC, CVC and STEP, all enrollees are youth.)

Financial Support

Financial support provided by programs in the form of a wage or allowance ranges from modest to nonexistent. Supported Work offered participants minimum wages with periodic bonuses for attendance or good performance. Bonuses ranged from \$5 a week to \$25 a month. Two sites, Hartford and Jersey City, also offered a bonus to participants who found and held a nonprogram job. The size of the bonus was calculated as a percentage of gross wages earned, increasing with length of program stay.

MFSP offered no financial stipends. However, most MFSP sites worked to broker in-kind supports, such as transportation and health benefits and, in the case of CET, emergency housing. Several of the sites offered child care on-site.

The two Job Corps sites in JOBSTART provided monthly allowances based on attendance, bus passes, a clothing allowance, and free meals at the centers. The monthly allowance increased with good behavior and performance, and the Job Corps made a monthly contribution to an escrow account redeemable after a six-month length of stay. Participants could use some of the escrow account for family expenses or child care while enrolled.

Other JOBSTART sites offered less extensive supports. For example, Allentown's only financial support was a one dollar per hour payment for Aid to Families with Dependent Children (AFDC) participants based on need, two dollars per hour for non-AFDC

participants. El Centro offered five dollars per week for perfect attendance, child care by referral and emergency rent funds for homeless participants.

CCC paid corpsmembers a minimum wage with opportunities for increases. CVC's deferred minimum wage contains a dual incentive for longer length of stay: corpsmembers who complete a 12-month rotation are eligible for a cash bonus that repays the deferred wage, or a college scholarship twice the value of the bonus. STEP paid participants minimum wages for time in school and at work.

Summary

In summary, no pattern emerges from a comparison of 15 employment and training sites across a range of structural dimensions. Although all except Supported Work offer educational remediation, programs differ according to whether education is offered as a precondition to training or concurrently with training. Variation along one component, such as group instruction, does not predict an associated characteristic, such as entry or exit policy. However, the trend over time from Supported Work to JOBSTART appears to be in the direction of program flexibility, integrating concurrent components, open entry and CAI.

With the exception of the programs that emphasize work, which pay participants a minimum wage, financial support is very modest. Participation rates are therefore remarkable, given the disadvantaged constituencies the programs have targeted and attracted.

LENGTH OF STAY, EDUCATIONAL ATTAINMENT AND EMPLOYMENT IMPACTS

Tables 2 and 3 display length of stay, educational attainment and employment impacts for the sample of employment and training programs.

Length of Stay

Most programs are on a 12-month schedule. However, open exit programs, such as CET, have flexible program lengths of stay, based on the needs of individual trainees and their facility in completing training modules. Auspos, et al., (1989) defined maximum length of stay for JOBSTART sites in hours: 200 for education, 500 for training. Other programs, such as STEP, are tied to the calendar. Table 2 indicates that whatever the optimal length of stay, most trainees in year-round programs stay on average six months. In the Supported Work demonstration, two 18-month sites, Hartford and Philadelphia, posted length-of-stay averages shorter than a 12-month site, Jersey City. Nor does there

**Table 2
LENGTH OF STAY AND
EDUCATIONAL ATTAINMENT**

Program ^a	Maximum Length of Stay	Average LOS (Mos)	% LOS <3 Mos	% Completing 12 Mos	% No GED or HS Diploma at Baseline	% Received GED Prep ^b	GED Attained	
							% in GED Prep	% Total Sample
Supported Work								
Hartford	18 months	5.9	29.5	16.3	100	0		
Jersey City	12 months	8.2	15.1	36.2	100	0		
Philadelphia	18 months	3.7	35.6	9.4	100	0		
Minority Female Single Parent^c								
Center for Employment Training	10 months	6.6		19.9	60.6	31.7	28.9	9.1
Atlanta Urban League	24 months	6.4		22.6	38.2	31.1	25.3	7.9
Opportunities Industrialization Center	3 months education 6 to 9 months skills training	7.2		29.3	44.7	37.7	29.9	11.0
Wider Opportunities for Women	2.5 months education 5 months skills training	5.6		11.0	50.9	28.9	17.4	5.0

Table 2 (continued)
LENGTH OF STAY AND
EDUCATIONAL ATTAINMENT

Program ^a	Maximum Length of Stay	Average LOS (Mos)	% LOS <3 Mos	% Completing 12 Mos	% No GED or HS Diploma at Baseline	% Received GED Prep ^b	GED Attained	
							% in GED Prep	% Total Sample
JOBSTART								
Los Angeles Job Corps	12 months	7.6	10.1	30.3	100	Not reported	Not reported	5.7
Phoenix Job Corps	12 months	6.9	10.6	19.7	100	Not reported	Not reported	19.2
El Centro (Dallas)	12 months	5.8	16.2	8.1	100	Not reported	Not reported	43.2
Connelley (Pittsburgh)	12 months	8.5	2.8	22.9	100	Not reported	Not reported	49.5
Allentown (Buffalo, NY)	12 months	8.7	0.7	22.9	100	Not reported	Not reported	37.0
California Conservation Corps	12 months	5.1	44.4	8.1	48.2	Not reported	Not reported	
City Volunteer Corps	12 months	5.8	40.3	25.2	87.3	24.6	33.1	8.1
Summer Training and Education Program	2 summers, 7-8 weeks each	75% reenrollment	Not applicable	Not applicable	Not applicable	Not applicable		
Job Corps		8.8	Not reported	Not reported	85.3	Not reported		

Sources: Maynard, 1980; Gordon and Burghardt, 1990; Auspos, et al., 1989; Voith and Leiderman, 1986; Public/Private Ventures, 1990b; Sipe, et al., 1988; Mallar, et al., 1982.

^aProgram and site descriptions are presented in the appendix.

^bReported as a percentage of program participants.

^cFigure given is upper limit of "expected duration" in programs. 11-13 month percentages are used for "percent completing 12 months" here.

**Table 3
POSTPROGRAM IMPACTS**

Program	Follow-Up (Months)	Employment	Education	Other
Job Corps ^a	24 months postenrollment (18 months average)	Positive impacts on earnings, employment rate and receipt of public assistance	Positive impacts on educational attainment	Reduced criminality rates that faded out after one year
Supported Work	18 months postenrollment	No impacts on employment, earnings or public assistance benefits	No effect on participation in employment and training	No effects on drug use or criminal activity
Minority Female Single Parent				
Center for Employment Training	12 months postenrollment	Positive impacts on employment rates, monthly earnings and hourly wages; women with young children and women on welfare showed especially large employment rate gains		
Atlanta Urban League	12 months postenrollment		Positive impacts on GED attainment	
Opportunities Industrialization Center	12 months postenrollment	Negative impact on earnings	Positive impacts on GED attainment	
Wider Opportunities for Women	12 months postenrollment	Negative impact on earnings and public assistance income		
JOBSTART ^a	12 months postenrollment	Negative impacts on weeks employed and earnings	Positive impacts on participation in education and training and on educational attainment	
California Conservation Corps	6 to 12 months posttermination	Positive impacts on hours worked per year for JTPA-eligible corpsmembers	Not reported	Positive attitudinal changes
Summer Training and Education Program	15 months postenrollment		Reduction in summer learning losses relative to controls	Positive gains in contraceptive knowledge; no impacts on sexual behaviors

Sources: Mathematica Policy Research, 1980; Maynard, 1980; Gordon and Burghardt, 1990; Auspos, et al., 1989; Wolf, et al., 1987; Sipe, et al., 1988.

^aReported results are for the entire demonstration, not disaggregated by site.

appear to be any association between program structure and length of stay. In the MFSP demonstration, a site that required GED attainment before skills training, OIC, posted the longest average length of stay. Another sequential site, Wider Opportunities for Women (WOW), had the shortest average in the demonstration. Among the JOBSTART sites, two programs--one concurrent, one sequential--posted length-of-stay averages exceeding eight months.

The timing of departures varies widely. Some sites reported low early attrition rates but low completion rates, indicating high midpoint attrition. For example, WOW lost less than 15 percent during the first and second months, but retained only 11 percent to the 12th month. Similarly, although both Job Corps sites reported losing only 10 percent of their participants in the first three months, less than a third completed a 12-month rotation. In contrast, CCC and CVC, with their rigorous preenrollment training, lost over 40 percent of their recruits by the end of the third month, and CVC retained about a quarter for the full program duration.

Several difficulties of comparing length-of-stay averages across programs surfaced during this analysis. First, Auspos, et al., report that the relatively long average length of stays posted by many JOBSTART sites mask the fact that a substantial portion of trainees were frequently absent from class (1989:96). The average duration of consecutive days absent varied by program structure, with 1.8 months inactive at concurrent programs, 1.7 months at sequential in-house sites and 2.5 months at sequential brokered sites. Almost 11 percent of all trainees were ever inactive at concurrent sites, 14 percent at sequential in-house sites and over 20 percent at sequential brokered sites (1989:98).

Auspos, et al., conclude that “a considerable amount of absenteeism may be inevitable in a program serving young dropouts, even at well-run sites that provide quality services and caring, supportive staff.” One reason for absenteeism may be concurrent employment. Twenty-six percent (26%) of JOBSTART participants held jobs while enrolled, working on average 31 hours a week. Yet participants who worked on average stayed longer (8.3 months) than participants as a whole (6.7 months) (Auspos, et al., 1989:97).³

Absentee data from CVC confirm these findings. Public/Private Ventures (P/PV) calculated days suspended or “on hold” (an approved absence that exceeds four days) for all corpsmembers in the sample. Corpsmembers who stayed at least six months averaged 40 days suspended or on hold within the first six months of enrollment. Even early

³ These data are reported for the entire demonstration and are not disaggregated by site.

leavers compiled a substantial amount of absentee time. Corpsmembers who stayed less than three months averaged 16 days absent before their final departure.⁴

Many programs adjust length-of-stay calculations to reflect absenteeism. Supported Work sites allowed trainees up to three months “inactive time” in addition to their maximum 12 or 18 months of active participation (Maynard, 1980:33). Auspos, et al., (1989) report both length of stay in elapsed months and hours of participation. CVC calculates length of stay for bonuses by calendar time and program hours, and both indicators are reflected in P/PV’s report (1990b).⁵ The MFSP and Supported Work reports present only monthly attainments, without indications of absentee rates.

A second difficulty in comparing programs arises from program structure. Programs with open entry may admit trainees at both the beginning and the end of a month, and both groups may be reported with the same length of stay. Some programs, such as OIC and WOW, structure their sequences by weeks. Reporting conventions do not always indicate whether transitions between program sequences, or between brokered services, are excluded from calculations. Programs that have preenrollment training, such as CCC and CVC, can calculate length of stay from entry into training or entry into the standard program.⁶

A third difficulty arises from differing conventions for reporting attrition frequencies. Maynard (1980) reports percentages of Supported Work participants still in the program at the end of periods of three months. For the MFSP demonstration, Gordon and Burghardt (1990) report the number of months in two-month blocks: 1 or 2 months, 3 or 4 months, etc. For the JOBSTART sample, Auspos, et al., (1989) report the percentage still participating in months 3, 6, 9 and 12 without indicating the part of the month ending each period. P/PV reports attrition by completed month for CCC (Voith and Leiderman, 1986) and CVC (P/PV, 1990b).

Finally, length of stay may be independent of program structure but highly reactive to the quality of program implementation, which is not usually reported. Length of stay for the Supported Work sample varies by enrollment date because of “the more relaxed

4 Unpublished data from P/PV’s assessment of CVC in 1990.

5 Bonuses can be redeemed after compilation of 830 hours and 6 months, or 1,245 hours and 12 months. CVC allows corpsmembers up to 18 months to accrue 1,660 hours.

6 P/PV uses both conventions. For CCC, the 5.1-month average includes all corpsmembers who started training; length of stay for all corpsmembers who completed training averages 6.2 months (Voith and Leiderman, 1986). For CVC, P/PV (1990b) computes length of stay from posttraining induction.

termination policies of programs during the early period of their operation" (Maynard, 1980:57). Maynard (1980) concludes that sites "that set clear rules, carefully monitored daily attendance, quickly contacted absentee students, and worked closely with absentees to resolve underlying problems" were able to control absenteeism, but does not name those sites. CVC calculates but does not release length of stay by team as an indicator of a team leader's capability.

Reasons for Leaving

Analysis of reasons for leaving is also complicated by differences in reporting conventions. Supported Work sites reported terminations for "poor performance" ranging from 31 percent of participants at Jersey City to 54 percent at Philadelphia. Hartford and Jersey City lost approximately 30 percent of their participants for reasons that included low pay and problems with health, child care or transportation; Philadelphia reported losing only 7 percent for these reasons, probably an indication of different recording conventions (Maynard, 1980:60). Gordon and Burghardt (1990) do not indicate reasons for leaving in the MFSP demonstration, but report that approximately 50 percent of participants were "very satisfied with program services" at follow-up, with no differences among sites.

Auspos, et al., (1989) do not break down reasons for leaving JOBSTART by site or program structure. Overall, 20 percent of participants reported that they left for "program-related reasons," such as "problems with staff" (3%), "asked to leave" (3%) or "disliked education" (3%). Thirty-six percent (36%) left for "personal reasons," such as "needed a job" (10%), "transportation difficulties" (3%) or "pregnancy" (7%). Ten percent (10%) of participants in sequential in-house sites, 7 percent in sequential brokered sites and 4 percent in concurrent sites said they "disliked type of education or training." Twenty-one percent (21%) in sequential brokered sites said they "disliked program rules or staff attitudes," compared with 9 percent in concurrent and 6 percent in sequential in-house sites.

Fifty-seven percent (57%) of CCC departures were voluntary, for reasons that included "tired of program," medical reasons and employment. Voluntary departures peaked in the first month, thereafter remaining stable; involuntary departures, in contrast, peaked in the third month, then declined slowly. Forty-eight percent (48%) of the men but only 25 percent of the women left involuntarily. Fifty-three percent (53%) of corpsmembers without high school diplomas left involuntarily, compared with 27 percent with high school diplomas.

P/PV's unpublished case studies (1990b) of 39 CVC corpsmembers illustrate the difficulty of categorizing terminations. Eight out of 39 corpsmembers terminated within

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the first month for single reasons that included “the program isn’t for me,” full-time employment and conflict with another corpsmember. Later terminations usually resulted from multiple causes. One corpsmember, for example, was forced to go on hold when an old police charge surfaced. By the time he returned, his friends on the team had left. After his grandmother became ill, he terminated to pursue part-time employment to pay for housing. Another corpsmember stopped attending after she and her sisters were abandoned by their mother. Soon thereafter she became pregnant and officially terminated.

Education and GED Attainment

Two of the demonstrations, Supported Work and JOBSTART, targeted high school dropouts. Even without targeting, all the programs surveyed here attracted large numbers of participants who lacked a high school diploma or GED. Almost 50 percent of all MFSP and CCC participants, and almost 90 percent of CVC corpsmembers enrolled without either credential.

All programs except Supported Work offered educational remediation and the opportunity for GED attainment. STEP’s remedial curriculum for in-school youth is intended to promote high school graduation.

Most programs restrict access to GED preparation according to reading level, usually assessed by the Test of Adult Basic Education. Approximately one-third of MFSP participants who lacked a high school diploma or GED received GED preparation. CVC placed approximately 25 percent in GED preparation classes. Auspos, et al., (1989) do not give percentages for the JOBSTART demonstration.

GED attainment rates are usually reported as percentages of those enrolled in GED classes. The rates range from 17 percent at WOW to 33 percent at CVC. Because Auspos, et al., report GED attainment rates as percentages of the total sample, the JOBSTART rates are (except for the Los Angeles Job Corps) noteworthy (see Table 2).

The JOBSTART analysis signals three difficulties in comparing GED attainment rates across sites. According to Auspos, et al., some of the differences reflect state differences in GED examinations. State-level scoring conventions make it easier to pass in Texas, and more difficult in New York and California. States also control the minimum age of recipients. In most states, recipients must be 18, but in Arizona and New York, the locations of the Phoenix Job Corps and Allentown, the age is 19. Other differences among sites, according to Auspos, et al., reflect different average reading levels, which are not reported.

Auspos, et al., also credit program differences for differences in GED attainment rates. El Centro emphasized GED attainment, partly in response to contractual obligations to JTPA, and incorporated a substantial amount of practice test-taking into the weekly program. El Centro also placed heavy emphasis on group instruction. Connelley awarded a financial bonus for passing the GED (Auspos, et al., 1989:112-115).

Only P/PV (1990b) reports educational attainments for youth assigned to adult basic education classes, 62 percent of corpsmembers in CVC. P/PV finds that youth who stayed long enough to complete 100 educational hours (at six hours a week) showed significant reading gains.

Impacts

Except for CVC, all the programs surveyed in this paper have been evaluated by impact studies using either random assignment or comparison group methodologies. Control or comparison groups provide benchmark assessments for measuring the impacts of a demonstration, by providing information on what the behavior of experimentals might have been in the absence of the program.

Table 3 summarizes reported findings in employment, education and other areas, and the timing of the follow-up assessment relative to program enrollment or termination. Because of its importance for the field of employment and training, findings from the Job Corps evaluation are included in the table.

The Job Corps remains the only intervention to demonstrate positive impacts in more than one area (Mathematica Policy Research, 1980). Compared to peers (the evaluation used a comparison group methodology), Job Corps trainees were more likely to have found either civilian or military employment, and to show a five-week increase in annual employment. Former Job Corps members also reduced their participation in all six public transfer programs measured by evaluators, and showed large and statistically significant probabilities (a difference of 19 percentage points) of having a high school diploma or GED. However, early reductions in arrest rates faded out during the second postprogram year.

None of the subsequent evaluations has yielded positive impacts in more than two areas. Maynard (1980) found no positive impacts for Supported Work participants in any area: employment, education, drug use or criminal activity. In the MFSP demonstration, CET participants showed positive impacts only in the area of employment: compared with controls, treatment group members were more likely to be working (a difference of 10 percentage points) and earned \$133 dollars more a month. Positive impacts at AUL and

OIC were limited to educational attainment, where significantly more treatment group members than controls reported GED attainment at follow-up.

Similarly, 12 months postenrollment, JOBSTART trainees showed negative impacts on earnings, the cost of foregone employment and wages as a result of enrollment in the training intervention. However, 28 percent of experimentals received a high school degree or GED compared with only 10 percent of controls, an impact on educational attainment that matches the Job Corps rates.

CCC's short-term economic impacts were limited to the subgroup of JTPA-eligible corpsmembers, who showed a statistically significant positive benefit of \$678, in part because of positive effects on hours worked. In addition, CCC corpsmembers showed positive attitudinal changes in areas related to corps activities, such as awareness of environmental problems and the importance of community service work. STEP's short-term gains included a decrease in summer learning losses (1.1 grade levels in reading and 0.6 grade levels in math for controls versus no losses for treatment youth) and gains in contraceptive knowledge. However, STEP students did not show changes in associated sexual behaviors.

Summary

In summary, employment and training programs appear to average a six-month length of stay and a GED attainment rate of 30 percent of participants assigned to GED classes. No clear association between average length of stay and any outcome measure emerges. In the JOBSTART demonstration, for example, a longer than average length of stay is associated with both a high and a low GED attainment rate.

Differences in implementation appear to account for much of the deviation in GED rates above (El Centro) or below (WOW) average. Although sites that require educational attainment prior to skills training produce higher rates, their structure often deprives many participants of vocational training. Short-term impacts from CET and JOBSTART suggest that impacts in one domain--education or employment--are usually at the expense of the other, and that trade-offs may therefore be inevitable.

CONCLUSION AND IMPLICATIONS

This survey illustrates the array of structures and outcomes of employment and training programs for disadvantaged youth. The different structures have different advantages. Concurrent structures facilitate entry into training but often compromise educational outcomes. Brokered services expand the range of training and educational options but

require careful coordination. Corps and work experience programs provide no skills training but enable trainees to earn a minimum wage while enrolled.

The survey demonstrates that in the design of second-chance interventions for youth, no clear alternative to the high school model has emerged. Despite wide structural variation among programs, outcomes fall along a narrow range. Length of stay rarely exceeds six months. Only approximately 30 percent of those enrolled in GED preparation courses pass the exam. Since the Job Corps evaluation, only two sites, CET and CCC, have posted economic impacts, and only over the short term.

These findings have several implications for employment and training in both the practice and research areas.

Practice

First, structure should reflect program goals. No one structure among those surveyed is optimal, but some are clearly better adapted to specific goals. For example, a concurrent structure with self-paced modules appears adapted to training interventions. Sequential structures with either individualized or group learning settings appear to maximize educational gains. Some structural variables may determine or complement others in program strategy. Fixed entry suggests group learning; CA1 allows open entry.

Second, the circumstances of participants and the consistent length-of-stay averages argue for the value of efficiency in program design. Few high school dropouts apparently are either willing or able to make 12-month commitments to training and education. Programs that offer flexible entry and exit and self-paced learning modules appear to address the learning needs and styles of these youth.

Research

This review indicates a need for research in three areas. First, the narrow range of outcomes argues that employment and training has a mandate--indeed, perhaps an opportunity--to evaluate structure from a psychological perspective. In the past decade, program design has usually been based on a sense of "what works," with justification argued from a social policy perspective (Maynard, 1980:2-12). Psychological arguments, based on theories that might predict how to motivate low achievers, have, to date, been an underutilized resource that might inform the central question of this paper: Is there a way to integrate what youth want from a high school alternative with what planners think they need?

Second, employment and training programs lack measures of successful implementation. Without indicators of how well a program was implemented--how consistently services reflected planners' goals--evaluators cannot assess whether outcomes reflect structural or implementation successes or failures. Employment and training research would also benefit from standardized reporting conventions that include non-GED educational attainment measures, baseline reading scores, and the time of onset and duration of absenteeism.

Finally, the attrition and absentee data argue for developing more understanding of their causes. The report that 26 percent of all participants worked while enrolled in JOBSTART indicates some of the pressures faced by significant numbers of youth who seek training. Careful study of attrition patterns and of reasons for absences or termination might guide the design of models to maximize training and education opportunities and participation.

In the next section, we identify several findings from academic psychology that might assist with program design. In the concluding section, we return to the discussion of program structure, integrating findings from the previous two sections.

III. ACHIEVEMENT MOTIVATION: PROCESS AND STRUCTURE

The concept of motivation has been problematic for those concerned with the welfare of the poor. All too often invoked to, in effect, blame those trapped in poverty for failing to escape from it, the concept has been understandably avoided by the research and policy communities. Yet no other theory has emerged to explain low enrollment levels or attrition in employment and training interventions, or to guide alternative designs. This section presents recent concepts of motivation that may address this problem.

BACKGROUND

In the last century, motivation has been redefined several times. For many decades, psychologists conceptualized motivation as the goals, desires and ideas of individuals. Research psychologists explained how people differed according to their goals and attempted to measure differences in the intensity with which they pursued them. However, following the development of behaviorism, genetics and Freudianism, motivation became a discredited concept. Because people were thought to be controlled by innate drives (genetics or Freudianism) or environmental stimuli (behaviorism), they supposedly lacked the capacity for independent action; research on motivation was therefore considered superfluous and theory-building waned.

The renewal of interest in motivation grew out of observations not explainable by classical behaviorism. Why, for example, would rewards cause children to lose interest in activities they had previously enjoyed? Why didn't simplification of a task enable children to grow in confidence and subsequent motivation? The resulting inquiries led to a model of motivation in which people act in part independently of cues from the environment or genes. The last two decades have seen a profusion of research defining how and when people are motivated to act.

The central insight driving this research has been that ideas about achievement experiences--not the experiences themselves--determine the intensity and direction of future action. "The search for understanding is the (or a) basic 'spring of action,'" one of the founding fathers of contemporary motivational research explains (Weiner, 1979). "Motivation is believed to be determined by what one can get (incentive) as well as by the likelihood of getting it (expectancy)," he writes in another place (Weiner, 1985). Causal ascriptions--how people explain what happened--determine reactions and expectations and motivate behavior.

Many of the findings about motivation have already been applied to educational interventions for youth. STEP's Practical Academics curriculum and the CAI programs now in wide use translate many of the key concepts into both format and content.

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However, applications to the structure of employment and training programs remain untested.

For several reasons, much of the new work is relevant to employment and training. First, many psychologists have found the new concept of motivation applicable to learning settings for low achievers, especially children with histories of learning failures. Their reports of success suggest that their methods and insights might be useful to alternative programs for high school dropouts.

Second, by shifting the focus from outcomes to process, the theories can potentially advance discussions about how youth perceive and benefit from employment and training opportunities. Psychology may be able to inform efforts to design second-chance programs that provide what planners think youth need, in settings youth like.

Unfortunately, however, immediate applications to employment and training settings may be limited. First, the literature is complicated and often very technical. The several unifying theories of motivation implicate concepts from many domains within psychology--including cognition, affects, learning theory and behavior--any one of which is difficult for lay persons. "What it means" for the employment and training field can often require translation.

Second, almost all findings are based on experiments using elementary school students as subjects and conducted under laboratory conditions. Psychological research typically demands very controlled settings--very different from the applied settings in which employment and training research is conducted. Few studies of motivation have involved high school dropouts and none--at least none uncovered by this survey--employment and training programs.

Finally, most of the findings are based on short-term outcome measures, such as performance on arithmetic tasks, or self-reports on ideas or feelings following task completion. Few studies have probed the contingencies of "continuation motivation," defined as "a return to a task in a subsequent time, in similar or varying circumstances, without visible external pressure to do so, and when other behavior alternatives are available" (Maehr, 1976:448). Yet continuation motivation is the yardstick for employment and training programs whose impacts are measured months or years after participation.

THEORY AND EXPERIMENTAL FINDINGS

This presentation necessarily simplifies what is a complex area of inquiry and an extensive academic literature. The goal has been to select concepts that are immediately

relevant to existing programs and to explain them in nontechnical language. For convenience, the concepts are presented under three headings: expectations of personal effectiveness; the structure of goals; and intrinsic motivation and incentives.

To illustrate the relevance of many of the concepts, theoretical discussions are followed by practical examples. All examples are drawn from the Practical Academics curriculum, developed by P/PV for the STEP demonstration, which has integrated many of the key concepts into its design.⁷

Expectations of Personal Effectiveness

The core of current psychological theory is that the ideas people hold about their effectiveness determine the amount of effort they will exert, their choice of activities, and their persistence in the face of failure and accomplishments. Expectations people have about their effectiveness vary in magnitude, generality and strength. The stronger the ideas about personal effectiveness, the theory's chief proponent explains, "the more active the efforts" (Bandura, 1977).

People derive their ideas about their own effectiveness from various sources. In general, experiences of success increase and experiences of failure decrease a sense of personal effectiveness, though a failure after a string of successes may have little effect. Observations of peers improving their skills can convey a vicarious sense of effectiveness. Praise and encouragement can raise expectations, but only if the source is credible. Self-awareness can inform ideas about personal effectiveness. Sweating and trembling may signal ineffectiveness relative to a task; relaxation may indicate competence (Schunk, 1989).

An important source of ideas about personal effectiveness are the causes people ascribe to their success or failure: what psychologists call attributions. The most common attributions concern their own ability, the amount of effort they must exert to accomplish a task, the difficulty of a task and its outcomes. For example, people think differently about themselves depending on whether they think they succeeded or failed at a task and

⁷ Practical Academics provides reading and math instruction for 14- and 15-year-old disadvantaged youth performing below grade level in school. Created specifically for the 90 hours of basic skills instruction built into each summer of STEP, the curriculum includes 15 one- or two-week modules on the subjects of work, literature, drama, current issues or life skills. All focus on topics that are highly relevant to youth and emphasize specific basic higher-order skills, such as summarizing, predicting, drawing conclusions and problem-solving. The other ingredients of Practical Academics are CAI, journal writing, sustained silent reading and individual support activities (P/PV, 1991).

whether they attribute an outcome to their own ability, their own effort or the difficulty of the task.

Psychologists believe that ideas about ability and effort have a direct effect on performance.⁸ Because effort, as opposed to ability, is controllable, children who make effort attributions are more likely to do their best when confronting difficulty. Conversely, children who attribute failure to insufficient ability are likely to be debilitated by failure (Licht and Dweck, 1984).⁹ In fact, low achievers are more likely than high achievers to attribute failure to low ability and success to low task difficulty--in other words, to attribute outcomes to uncontrollable causes.

Psychologists have demonstrated that interventions that change attributions affect both ideas about personal effectiveness and achievement. Attributional retraining combined with learning task strategies has altered achievement levels in low-achieving children.¹⁰ However, interventions that provide low achievers only with success experiences do not affect subsequent performance.¹¹

⁸ Ideas about the relationship between ability and effort change as children age. Younger children believe high effort implies or is equivalent to high ability. Older children believe higher effort implies lower ability, and ability is seen as more critical for performance than effort. Adults employ more or less differentiated conceptions, depending on audience, task and setting (Nicholls, 1984).

⁹ For example, fifth-graders classified as high or low in self-concept were instructed to work in pairs. High self-concept children attributed success outcomes to their ability more than did low self-concept children (Ames, 1978). In a study of fifth-graders classified as "helpless oriented" or "mastery oriented," helpless children attributed failure to lack of ability. Mastery children, in contrast, made few attributions but engaged in remedies for failure. Despite failure, mastery-oriented children maintained a positive view about the eventual outcome (Diener and Dweck, 1978). After completing tasks with designed failures and successes, helpless children underestimated the number of their successes, did not view them as indicative of ability, and did not expect them to continue. Subsequent failure led them to devalue their performance (Diener and Dweck, 1980).

¹⁰ Children reading below grade level who were given direct attribution retraining showed significant increases in reading persistence and attribution to effort on a standardized posttest compared to controls (Fowler and Peterson, 1981). Students with deficient arithmetic skills who were given attributional retraining that combined task strategies and achievement beliefs showed statistically significant gains on a self-efficacy posttest (Schunk, 1981).

¹¹ Children defined as "helpless" were assigned to one of two procedures that provided either attributional retraining or success experiences. Subjects of the latter procedure demonstrated deterioration in performance after failure; subjects given attributional retraining maintained or improved their performance and showed an increase in the degree to which they emphasized effort versus ability (Dweck, 1975).

In summary, psychologists have demonstrated that ideas children hold about their effectiveness affect their achievement. The most influential of these ideas are the attributions: ideas about causes of success and failure. Because effort, unlike ability, is a cause that people can control, people who ascribe success experiences to their own effort are more likely to achieve in the future. Conversely, low achievers are more likely to make maladaptive attributions, such as low ability as a cause of their failures and low task difficulty as a cause of their successes. This attributional pattern inhibits their motivation for future challenges.

Practical Academics provides students multiple opportunities to change their ideas about their personal effectiveness. The many activities that encourage class participation enable students to see peers improving their skills. The activity of journal writing refocuses a writing task away from skills (and ability attributions) onto content and personal effort. The modules integrate challenging exercises--that require real effort--with material that is interesting and accessible to students. For example, a module on "Your Summer Job" teaches reading and spelling skills in the context of resume preparation, and math skills in the context of time cards and pay stubs.

The Structure of Goals

Not surprisingly, ideas about ability and effort do not arise in a vacuum. Psychologists can now describe how ideas about achievement are shaped by the structure of learning settings, and vice versa.

Recent research indicates that students instinctively structure learning situations differently. Some students construct performance goals in any learning setting; these students instinctively look for indicators of their own ability in relationship to how others are performing. Students who construct mastery goals in contrast, focus on mastering a skill, value the process of learning and attaining mastery, and are usually more predisposed to pursue challenging tasks (Ames and Archer, 1988).¹²

Experiments with children have illustrated how structures imposed by adults affect ideas about personal effectiveness and achievement. When experimenters emphasize ability, high outcomes and comparison with other students, or performance goals, children make ability attributions and become despondent after failure. In mastery goals settings, when experimenters stress improvement, progress and the process of learning, children ignore

¹² Implicit ideas about goal orientation predict ability attributions. Eighth-graders were assessed for goal preference and their interpretation of effort. Subjects with performance goals used effort as an index of ability, with high effort implying low ability, and vice versa. In contrast, subjects with learning goals viewed effort as a means to achieve mastery, with greater effort indicating more ability (Dweck and Leggett, 1988).

cues about their ability and respond to failure with problem-solving strategies (Elliott and Dweck, 1988). When shown attainable short-term learning goals, even low achievers make rapid progress in self-directed activities (Bandura and Schunk, 1981).

Similarly, learning settings structured as competitive, individualistic or cooperative situations elicit different ideas about achievement in children. These differences result from the different relationships these structures impose on people. For example, competitive structures impose a condition of negative interdependence, so that the possibility or opportunity for one student to attain a goal is reduced when others are successful. In individualistic structures, in contrast, students are independent of each other and the opportunity to attain goals is equal for all students. In cooperative structures, students perform in groups and usually are dependent on each other for goal attainment (Ames, 1984:178-181).

Children think about their performance differently depending on these goal structures. In competitive structures, children tend to make ability attributions and to reward themselves exclusively on the basis of their present performance. In individualistic structures, in contrast, children are more likely to make effort attributions and to consider past and present performance when evaluating themselves.¹³ “Not only do [these] children attribute their performance to effort,” one psychologist points out, “they also think about how to do the task” (Ames, 1984:203).

When learning in cooperative structures, children evaluate their own performance based on the group outcome. Successful group outcomes promote positive self-evaluations even in children who perform poorly on a group task. For this reason, “cooperative structures that ensure group success can be a real boon to low achievers,” according to one psychologist (Ames, 1984:186).

Practical Academics provides a flexible structure that enables students to move between individualistic and cooperative learning situations. Students may work cooperatively on a task, such as creating a poster to illustrate a concept from a module. Individualized activities enable students to practice and reinforce skills while working independently. Because the curriculum focuses on mastery of higher-order thinking skills, it avoids the need for normative performance measures, such as grades. In fact, grades and other competitive measures of achievement are excluded from the curriculum.

¹³ Children placed in either competitive or individualistic settings were told to work on a task. In the individualistic setting, children’s assessments of past and present performance counted almost equally toward their feelings of satisfaction. In the competitive setting, children focused almost exclusively on present performance (Ames and Ames, 1981).

Intrinsic Motivation and Incentives

The classical stimulus-response model of motivation posits a direct link between environmental stimuli or rewards and behavior. According to the classical paradigm, the bell rings and the dog salivates; the reward of food induces the rat to continue to press a bar.

The contemporary model is considerably more complex. It is based on research that found that when people receive rewards for activities in which they were initially interested--or "intrinsically motivated"--they lose interest in those activities.¹⁴ Rewards may have detrimental effects, especially when initial interest in an activity is high and the reward is viewed as a bribe. "The mere creation of an instrumental, contingent means-end relationship, even between two activities of high and initially equivalent interest to the child," psychologists explain, "may be sufficient to create a decrease in the child's later intrinsic interest in the activity undertaken as a means to some ulterior end" (Lepper and Hodell, 1989:77).

Psychologists point out, however, that not all rewards are detrimental. Rewards given to reinforce specific behaviors, such as attendance or adherence to a dress code, promote those behaviors. Rewards for competence in an activity, or achievement awards, can increase or decrease motivation, depending on success or failure in the activity. Rewards that lead to perceptions that an activity is being controlled--as in a bribe--always decrease subsequent interest in the activity (Lepper and Hodell, 1989:84-87).¹⁵

Furthermore, rewards linked to cooperative structures can have a positive and even powerful effect. Research on cooperative structures has demonstrated that rewards for team achievements increase individual achievement even if individuals in the group have

¹⁴ For example, children who showed intrinsic interest in drawing and were given expected rewards demonstrated less subsequent interest in the activity than children given unexpected or no rewards (Lepper, et al., 1973). Furthermore, adult surveillance of children engaged in activities in which they were intrinsically interested decreased subsequent interest, even when there was no explicit expectation of reward (Lepper and Greene, 1975).

¹⁵ Research suggests that application of these concepts, though complicated, is not impossible. For example, children who performed well in an intrinsically motivated task showed decreased interest in the activity when rewards were not related to performance. However, subjects who received rewards based on performance showed decreased interest only if they had performed poorly (Kamiol and Ross, 1977). A summary of research on rewards and intrinsic motivation confirms that if rewards are contingent on performance, delivered systematically and repeatedly, and related to the task for which they are delivered, then negative effects on motivation can be minimized (Malouf, 1983).

worked independently. Group study itself had no effect on individual achievement; only when a group received a reward did individual achievement rise (Slavin, 1983).¹⁶

Psychologists point out that no reward given by others can replace the reward of enjoyment from the mere performance of an activity. However, some individuals may lack the skills necessary “to get into the flow, stay in it, and make the process evolve.” These skills probably include a capacity to focus attention on an activity, to define goals and the means of attaining them, to seek feedback, and to balance challenges and skills. For some individuals, an ability to tolerate the anxiety of learning new skills--with the likelihood of failure accompanying the learning process--may also be necessary. In other words, to enjoy an intrinsically motivated experience may, for some people, pose both a challenge and a reward (Csikszentmihalyi and Nakamura, 1989:66-67).

STEP staff recommend that “Self-Identify” be one of the first Practical Academics modules taught in students’ first summer of STEP. The module builds off activities in which pairs of students take turns discussing photographs of their families, which they have been asked to bring to class. These motivating activities, built around topics in which students are intrinsically interested, lead into exercises that teach higher-order skills, such as writing a description of the photograph, or drawing inferences from another writer’s biography or photograph. The module concludes with independent tasks, selected by the student, that reinforce these interests or skills, such as a journal entry on a family story, or the construction of a family tree using a form in a workbook.

SUMMARY

Contemporary psychology defines motivation according to the thought processes that integrate internal and external information. Whereas past concepts of motivation identified what a person wanted, the new model describes how people think about past and future achievement experiences. These thought processes directly affect behaviors.

This revised model of motivation signals several facts relevant to interventions for disadvantaged youth. As dropouts from inner-city high schools, many recruits will probably use maladaptive attribution patterns that constrict their motivation. Learning structures that emphasize individual accomplishments and mastery goals--the process of

¹⁶ These findings are based on categorization of 46 studies of cooperative learning and achievement according to task structure and incentive structure. Tasks could be accomplished either by all group members working together or by individual specialization. Rewards could be distributed to groups based on either individual achievements or a group product, or to individuals based on individual achievement within the group effort. Slavin concludes that group rewards for individual or group learning are critical to the effectiveness of cooperative learning methods.

learning as opposed to grades--may encourage more productive orientations. Cooperative structures, especially those that confer rewards for group successes, may prove motivational even for low achievers. Exercises that emphasize the importance of effort in achievement may have long-term motivational benefits.

The new model reverses a familiar causal relationship. "Where there's a way there's a will," psychologists now argue, pointing to the potential for learning settings to elicit the thinking that precedes achievement (Corno and Mandinach, 1983). This revisionist formulation has far-reaching implications for interventions that seek "to make the connection" with youth at risk of school failure (Higgins, 1988).

Implementation of the new vision is, however, unavoidably complex. Motivation "works" on multiple levels, reinforced or extinguished by cues embedded in all aspects of educational interaction. The task for planners is to integrate the internal motivation of the individual with the structure of a learning environment--no small feat in multidimensional programs for youth with many needs.

IV. CONCLUSIONS AND RECOMMENDATIONS

This paper began with two questions related to the structure of education and training programs for youth. The first question probes the array of options available to design second-chance programs different from the high school model. The second question asks about the motivations of candidates for those programs. What would they want from an alternative structure, we asked? How could this structure be different enough from school to attract them but still prepare them for the world of work?

Our analysis of the structures of 15 sites in six employment and training programs implemented in the 1980s has illustrated the range of design options. Programs can be concurrently or sequentially structured; services can be in-house or brokered; core components can include work experience, training, education and life skills; and stipends may or may not be offered. Other options include open or fixed entry and exit, and groupings by age and by teams or crews.

Similarly, our review of contemporary theories about motivation has yielded insights about the types of experiences that students--at least those in laboratory settings --find motivating. Here we find additional diversity: different motivating cognitions and different structural settings where they can emerge.

In this section, we review findings from Sections II and III. We then apply concepts from Section III to explore what might be motivational components of existing education and training programs. We conclude with recommendations that emerge from these discussions.

REVIEW OF FINDINGS

The diversity of programs surveyed in Section II yields no clear alternative to the high school structure for second-chance interventions. Two factors contribute to this conclusion. First, despite the diversity, outcomes fall along a narrow range: length of stay averages about six months, GED attainment averages 30 percent of those who receive preparation, and impacts are limited to a single outcome--education or training--or subgroup of a research sample.

Second, different structures have different advantages. Concurrent structures reduce waiting lists but may also have reduced educational outcomes. Sequential structures promote education but may result in attrition because of delays between program segments. Offering all components in-house facilitates integration and reduces attrition but limits the training options programs can offer.

For these reasons, we conclude that any structural alternative involves trade-offs. Planners therefore need to identify goals prior to designing a program structure. Selection of goals--occupational training, educational remediation--should inform selection of structural alternatives.

However, absentee and attrition data suggest that, no matter what the structure, many candidates for employment and training programs will not or cannot participate beyond six months. The consistency of the attrition data argues for efficiency in program design: planners need to ensure that even short-term participants are able to derive some benefit.

The review of the psychological literature on motivation has yielded findings of a very different sort. In the last two decades, psychology has produced a profusion of research on motivational patterns. Much of the research has focused on the special needs of low achievers, and on the often subtle relationships between individual motivation and educational approach.

The survey reveals that patterns of thinking characteristic of low achievers can compromise their motivation for new and challenging tasks. Interventions that focus on the contribution of effort as opposed to ability in the attainment of goals can help revise maladaptive patterns and raise achievement levels. Individualistic (as opposed to competitive) structures that emphasize mastery (as opposed to performance) and attainable short-term goals can motivate all learners. Cooperative programs, especially when combined with group rewards, can provide experiences that are particularly constructive for low achievers.

Although these insights are compelling, the major findings from the review are more subtle. The framework of contemporary theories of motivation--the concepts that undergird the research--have far-reaching implications for educational interventions.

First, current understanding of how motivation works indicates the possibility for change. Interventions can be designed to address apparent motivational deficits in low achievers. Individuals can change the process whereby they define and seek out goals.

Second, motivation results from interaction between an individual and his or her setting (Higgins, 1988). Both sides of the connection are essential: the individual reaching for his or her goal; and the setting that makes the goal, and the path to its attainment, apparent. It follows that intervention will be admittedly challenging when the individual has had many experiences that discourage adaptive and productive motivational thinking and behavior.

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Finally, intrinsic motivation--what an individual wants and strives to attain--may be the goal, as opposed to the starting place, of interventions for high school dropouts. The demographic literature suggests, and anecdotal reports confirm, that many recruits to second-chance interventions enroll with many deficits and many needs. Support services and constructive interactions may be necessary to enable them to experience the reward of intrinsic motivation.

MOTIVATIONAL ASPECTS OF EXISTING PROGRAMS

Below, we identify what may be motivational aspects of employment and training programs. From our review in Section II, the CCC, CVC and CET programs appear to have motivational components.

Youth Corps

Our survey included two youth corps programs, CCC and CVC. Although neither has demonstrated postprogram impacts (only the CCC has been formally evaluated), both remain popular with youth. Our review of the psychology of motivation suggests several reasons for this popularity.

Youth corps traditionally promote a strong social ethic, usually centered on the values of service and racial/ethnic tolerance. Corps reinforce these values on several levels: corpsmembers work in teams, wear uniforms, and perform community service for low wages. We have noted both the need for program structure to reflect program goals and the effect of setting on motivation. Our review suggests that to the extent that corps blend their values with their structure, they may elicit motivations associated with helping, service and interdependence.

In addition, because they are often challenging but require no prior skills, corps work projects may be motivational. CCC teams occasionally take on emergency assignments, such as fire fighting and flood control. CVC usually requires corpsmembers to work outside their own neighborhoods under difficult physical conditions or with difficult clienteles, such as the mentally retarded or terminally ill.

Our analysis yields several insights into why many youth like these assignments. To the extent that a project is a group success, it motivates even those who contribute little toward the eventual outcome. A project's novelty may motivate some youth; others may be motivated by a difficult task.

Many corps, including CVC, require recruits to attend a preenrollment training session, or "hard corps challenge." These sessions often provide physical and psychological

challenges, such as rock climbing or predawn physical training. Perhaps paradoxically, they are often popular with corpsmembers--many describe it as "the best part of CVC." Although never researched, the training appears to contain motivational elements: difficult (but not impossible) tasks that require (and respond to) effort; coaching by sympathetic leaders; and discussion to focus attention on effort and feelings.

However, our review suggests that corps have yet to maximize the potential of groups to reinforce such social codes as attendance, or to elicit motivation on academic tasks. Many corps, including CVC, use a cooperative team structure for work but reward individuals for attendance and academic attainments. Yet research suggests that individual attainments are greater when the group receives the reward; the high GED attainment rates at the El Centro site in the JOBSTART demonstration may be an example.

CET

A site in the MFSP demonstration, CET offers a very different structure from the corps, but one that has demonstrated postprogram employment impacts. Contemporary psychology provides insights into its success.

In the CET model, participants begin training in an occupation of their choice immediately after enrollment. They then proceed at their own pace through a series of training modules. Participants have access to academic remediation concurrently with training. Because CET offers training only for demand occupations, participants who complete the modules can expect employment.

CET's success is usually attributed to its practical orientation. Participants are motivated to learn a skill, the argument goes, because training leads to a definite outcome: a better job than they could otherwise procure. Placement specialists guarantee that jobs are identified for those who attain training benchmarks.

Contemporary psychology suggests several different explanations. The goals embedded in the training modules may reinforce intrinsic interest in the selected occupation. The emphasis on mastery may elicit effort attributions and thus develop adaptive thinking about effectiveness. Focusing on the process by which participants master a skill may change thinking that may have compromised motivation and performance in the past. In addition, CET's supportive setting may enable participants to tolerate anxiety in learning new skills. Finally, mastery of a skill may provide its own reward.

CET's success is especially remarkable in that participants receive no stipend and no monetary incentives to attain designated benchmarks. Because the academic component

is subordinate, educational attainments, though comparatively low, are also remarkable and suggest that motivational experiences may be transferable.

Without further research, explanations of success based on the cognitive (as opposed to occupational) changes CET achieves must remain speculative. Although occupational impacts will always be the measure of employment and training programs, psychological research into skills mastery may help other settings emulate CET's success.

RECOMMENDATIONS

Integration of psychology with structural planning for employment and training interventions cannot be an immediate goal. Several steps in the short term, however, could facilitate this integration. We outline these steps below:

1. Investigate reasons for absenteeism and attrition. Section II has revealed widespread absenteeism from education and training programs and high rates of early terminations. Yet little credible information exists on the reasons youth are absent or leave before completion.

The few published reports of reasons for absenteeism or termination indicate the complexity of investigating these behaviors. Many youth who enroll in employment and training programs confront multiple, simultaneous problems that restrict their participation. Homelessness, pregnancy and family problems are in the backgrounds of many of these youth. Many find they must seek employment to provide for present needs, even while enrolled full time in a program that aims to improve their future.

Careful study is needed to identify reasons for absences. Identification of causes and patterns of attrition might enable planners to minimize interruptions. Even if absences and attrition are unavoidable, understanding causes might facilitate design of structures to maximize learning during intermittent or brief enrollments.

2. Standardize conventions for reporting attendance and length-of-stay outcomes. Section II has illustrated the difficulty of comparing attendance and length-of-stay outcomes across sites as part of the search for optimal program structures. Many youth compile absences of long duration while enrolled. In segmented programs, lapsed time between segments may or may not contribute to length-of-stay calculations. Evaluators compound the confusion by failing to indicate whether length of stay includes all or part of a month and by using different length periods.

Our review indicates that any convention should reflect both hourly and chronologically lapsed time. P/PV likes the CVC formula;¹⁷ formulas not identified in this survey may have other benefits. P/PV also recommends that "months" be reported as "months completed," with monthly or quarterly periods, and that evaluators follow Auspos, et al., (1989) and report hours by component.

3. Develop and promulgate indicators of good management. Any structure may appear promising in design. Yet without indicators of the quality of implementation, evaluators cannot explain whether a disappointing outcome reflects a design or implementation failure. Furthermore, to argue effects, evaluators need to demonstrate that trainees received the intervention.

Several indicators can probably be included in evaluations without significant increases in cost. Reports of average daily attendance based on time sheets are often good indicators of management quality. Attendance measures disaggregated by component can reflect how well components have been integrated and implemented. Conversely, absentee rates and average duration of absences indicate the constraints on an intervention if youth are consistently not present, especially if reasons for absences are reported.

Other indicators may have to be developed, or adapted from related fields. Evaluators, managers and participants usually have opinions about how well programs are managed--opinions that could form the basis for quantitative assessment. Some assessments may be purely qualitative--reporting the atmosphere of a site or team, the excitement generated by a group or a learning experience--but these often have value and can occasionally be quantified.

4. Broaden the range of professional disciplines involved in program planning, and provide opportunities for psychological research in employment and training settings. The review of literature on motivation from academic psychology has indicated the potential relevance of many central concepts to the design and implementation of second-chance interventions. Review of findings from other academic and practice areas might yield other key concepts with potential relevance to employment and training interventions for youth. Persistent attrition and disappointing outcomes demonstrate the need for input from a broad range of disciplines in a program's design and operational phases.

¹⁷ CVC computes length of stay by hours and chronological time. Absences longer than ten days are subtracted from the total. Corpsmembers have up to 18 months to accrue 12 months of enrollment time. Full-term enrollment to qualify for the maximum termination bonus requires 12 months and 1,660 hours.

Opportunities for psychologists to conduct research in employment and training settings could establish the validity of several core concepts for late adolescent clients. Although employment and training research is usually across sites, many sites provide subgroupings or distinct program segments that could support the small-scale studies typical of psychological research. These settings, for example, could provide opportunities to investigate motivational effects of group versus individualized education for youth.

CONCLUDING REMARKS

Thirty years ago, White (1959) postulated a drive he called competence motivation. “It is directed, selective, and persistent,” according to White, “and it is continued not because it serves primary drives, which indeed it cannot serve until it is almost perfected, but because it satisfies an intrinsic need to deal with the environment” (1959:318). Fifteen years later, Harter (1974) published experimental data demonstrating that children find the attainment of competence pleasurable. “Children derive pleasure from cognitive mastery on problem-solving tasks,” she concluded, and “the greatest gratification is derived from the solution of the most challenging problems” (1974:668).

These insights bring us back to the questions: What is it that high school dropouts want from a high school alternative? Is there any way to provide for them an attractive and effective intervention?

Youthful clients of second-chance interventions have often repeatedly failed to master the skills that enable competent interactions with social and employment settings. For them, the attainment of the mastery experience described by Harter may not be straightforward. Years of discouragement may have inhibited the competence motivation postulated by White. Nevertheless, these concepts remain a valid reminder of the human need “to interact effectively with [the] environment” (White, 1959:297)--a need that will motivate individuals at all achievement levels.

To the extent that employment and training programs can integrate mastery experience into second-chance settings, the pedagogical and marketing approaches to interventions for youth--what they should have versus what they want--will be congruent. For those youth no longer served by the high school model, the pleasurable aspects of learning and mastering skills might yet yield positive outcomes.

APPENDIX: PROGRAM AND SITE DESCRIPTIONS

SUPPORTED WORK

Between April 1975 and July 1977, the National Supported Work Demonstration targeted young high school dropouts. Participants received 12 to 18 months of paid work experience to enable them to transition to stable employment. Selected to be between the ages of 17 and 20, all participants had to have poor employment histories, and at least 50 percent had to have a delinquency record. Eighty-eight percent of those who enrolled were male.

The model provided for work under conditions thought to promote employability in individuals unable to meet performance standards of the labor market. The model emphasized close supervision, peer support through work assignments in crews, and "graduated stress" through gradually increased standards of attendance and performance. Work assignments included service industry jobs, auto repair, construction and, at one site, parks maintenance, building rehabilitation, and furniture manufacturing and repair.

The demonstration was implemented in five sites, all of which concurrently served other target groups, such as Aid to Families with Dependent Children recipients and ex-offenders. The three sites selected for this analysis reflect variation in maximum length of stay; the Hartford site is included because of its varied work program and the high percentage of youth in its overall program.

THE MINORITY FEMALE SINGLE PARENT (MFSP) DEMONSTRATION

The Rockefeller Foundation established only broad guidelines for the community-based organizations selected into the MFSP Demonstration, which operated from 1982 through August 1988. The Rockefeller Foundation provided matching funds for programs that combined assessment, counseling, education, training, job placement and child care assistance. Programs differed in structure and emphasis. All four community-based organizations selected into the demonstration are included in this analysis, which is based on all the minority single mothers who sought service between November 1984 and December 1987.

The Atlanta Urban League (AUL)

AUL offered participants basic education, skills training and direct job placement. AUL brokered educational, skills training and support services from other agencies. AUL focused on initial assessment, guidance and short-term preparation for outside courses.

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The brokering arrangement allowed some participants to attend several classes simultaneously.

The Center for Employment Training (CET)

In the CET model, participants receive practical skills training in an occupation of their choice. CET teaches training in self-paced learning modules and structures basic educational remediation as a supplement rather than a precursor to skills training, with classes scheduled for one to two hours daily.

The Opportunities Industrialization Center (OIC)

OIC required MFSP participants without high school diplomas to attend general equivalency diploma (GED) preparation or adult basic education classes. Class schedules included sessions on job readiness and parenting. Skills training, only for those with high school diplomas or GEDs, was offered in-house and through brokers.

Wider Opportunities for Women (WOW)

WOW enrolled MFSP participants in one of two parallel courses based on Test of Adult Basic Education scores at entry. Participants reading above the eighth-grade level qualified for an electromagnetics course. Participants with lower literacy levels were assigned to an academic skills course, with no possibility for transfer to the occupational track. Participants reading below the fifth-grade level were referred to adult literacy programs. Both tracks included life skills training. The occupational course did not aim to impart a technical skill but a general knowledge of technical subjects and preparation for written exams used by many local employers.

JOBSTART

The Manpower Demonstration Research Corporation (MDRC) initiated JOBSTART in 1985 to test whether the Job Corps model, the only employment and training intervention to produce long-term impacts for high school dropouts, could be adapted and implemented within the Job Training Partnership Act (JTPA) system. Programs were implemented in existing sites and had to conform to JTPA as well as to demonstration guidelines. The major demonstration requirement was for a curriculum that included 200 hours of education and 500 hours of skills training.

The demonstration was structured to be more intensive and lengthy than most JTPA interventions, but with a less extensive array of support services than in most Job Corps. Participation targeted high school dropouts between 17 and 21 years of age who read

below the eighth-grade level and were JTPA eligible; MDRC allowed 20 percent of participants to read at or above the eighth-grade level.

Sites had latitude in selecting educational curricula--though computer-assisted instruction (CAI) was encouraged--and occupational skills training. Sites were also free to structure their program sequentially--requiring education before skills training--or concurrently, and to contract out either segment. Support services had to include child care, transportation and some combination of life skills training, personal and vocational counseling, and incentive payments.

Thirteen sites were selected for the demonstration. This analysis focuses on five of the sites, selected to illustrate variation in structure (concurrent and sequential), governance (Job Corps and community-based), and success in achieving length-of-stay and GED-attainment benchmarks. The analysis is based on participants who enrolled from August 1985 through November 1987.

The Connelley Skill Learning Center. Pittsburgh. Pennsylvania

Connelley operated as a division of the Pittsburgh Public School System. JOBSTART participants could select occupational training from more than 20 skills areas. Education was offered two hours a day in-house, using the Computer Curriculum Corporation (CCC) curriculum. Life skills sessions were offered as an "after school" component.

El Centro Community College Job Training Center. Dallas. Texas

El Centro provided a sequential program for JOBSTART. Education, organized as small group instruction, and two to three hours daily of life skills training preceded skills training. Students continued to spend about two hours a week on basic skills when in the training component. Training was offered in a variety of areas, including clerical work and autobody repair.

The Los Angeles Job Corps Center. Atlanta. Georgia

The Los Angeles Job Corps, operated by the Young Women's Christian Association, is one of the largest and oldest Job Corps in the nation. All JOBSTART participants were enrolled in its nonresidential component. Participants could select training in a wide array of areas after completing the educational component.

The Phoenix Job Corps Center, Phoenix, Arizona

The Phoenix Job Corps is a center operated by a for-profit organization enrolling Hispanic, Native American, Asian, black and white American youth. JOBSTART participants enrolled in its nonresidential component and attended concurrent educational and skills classes. Training options included preapprenticeship training by local unions in construction skills.

Allentown Youth Services Consortium, Buffalo, New York

Allentown is a major provider within the JTPA system. Allentown uses a sequential structure and contracts out vocational training. In the initial educational component, JOBSTART participants divided their time equally between a computer-assisted basic skills curriculum and life skills activities.

URBAN AND CONSERVATION CORPS

Youth corps usually enroll youth between the ages of 17 and 23. Although nontargeted, most recruit youth with one or more indicators of disadvantaged status: welfare status as a child, lack of a high school or equivalency degree, minority status, lack of vocational skills or poor work history.

Corps emphasize high standards of work, usually in conservation (public parks in rural areas, abandoned lots in cities) or human service settings (institutions for the aged, retarded or terminally ill). Most corps also offer opportunities for educational remediation, either in the evening after work, or in periods during the workday.

Corps indirectly offer what is sometimes called "employability development" through enforcement of rules about attendance, punctuality and teamwork, and an emphasis on high-quality supervision. Although few offer life skills classes, most emphasize a social ethic that values community service, environmental awareness and racial tolerance.

The California Conservation Corps (CCC)

The oldest and largest of existing corps, CCC annually enrolls almost 2,000 youth age 18 to 23 in both residential and nonresidential settings. Corpsmembers spend up to one year on conservation projects, many with high visibility. Educational classes, some subcontracted, are offered evenings and some weekdays. Corpsmembers with exemplary records can reenroll for one additional year to receive training in such areas as energy conservation, emergency helicopter fire rescue, carpentry and clerical skills.

The analysis includes corpsmembers who enrolled between November 1983 and October 1984.

The City Volunteer Corps of New York City (CVC)

The largest of the urban corps, CVC enrolls approximately 300 youth annually in its nonresidential program. CVC pioneered the addition of human service assignments to conservation and short-term projects. Teams of corpsmembers rotate through work projects at least every three months, thereby gaining experience in a variety of work settings. Corpsmembers attend classes at their neighborhood City University of New York branch one evening and one morning a week, and receive two hours a week of life skills instruction.

The CVC sample includes youth who enrolled from December 1988 through September 1989.

THE SUMMER TRAINING AND EDUCATION PROGRAM (STEP)

Beginning in 1985, the five-site STEP demonstration enrolled JTPA-eligible youth in a summer work and education program. The program offered seven to eight weeks of educational remediation, life skills instruction and work experience for in-school youth age 14 or 15 at enrollment, for two consecutive summers. Participants had access to a STEP counselor during the school year. Funded by a consortium of foundations as well as the U.S. Departments of Labor and Health and Human Services, STEP involved, at the local level, collaboration between public schools and the federal Summer Youth Employment and Training Program. However, the structure and curriculum were designed by Public/Private Ventures and implemented on a consistent basis across all sites.

The analysis is based on STEP's second cohort of youth, who enrolled in the summer of 1986 for two summers of participation.

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CRITICAL SKILLS FOR LABOR MARKET SUCCESS: What Are They and How Can At-Risk Youth Acquire Them?

Amy W. Johnson and Michelle Alberti Gambone

I. THE PROBLEM

[T]he greatest issue facing American education today is how to do a better job of educating low achievers and other students at risk of school failure (Guthrie, 1989:1).

Many minority and disadvantaged youth enter employment and training programs severely lacking the requisite skills for future work--the basic academic, higher-order and coping skills traditionally obtained through the formal education process. This has been a persistent difficulty for second-chance programs designed to ready this population for long-term employment. Increasingly, students are not leaving high school (with or without degrees) with the level of skills demanded by a labor market that many believe will continue to grow more technical.

This problem is particularly acute for minority and disadvantaged youth. In a national study of young adults' achievement of the complex literacy required by today's work world, African Americans and Hispanic Americans demonstrated significantly lower levels of facility than did whites in "using printed and written information to function in society . . . and to develop one's knowledge . . ." (Kirsch and Jungeblut, 1986:3). A majority of these young adults were unable to interpret instructions from an appliance warranty (60%) or balance a checkbook (60%) (Kirsch and Jungeblut, 1986:16-17,36-37). While high school graduates exhibited higher levels of ability than did nongraduates in all of the skills measured in this study, minority and disadvantaged students are more likely to drop out of school than are their nonminority peers. The high school dropout rate has remained at 25 percent for the general population, with rates around 50 percent in some areas for African-American and Hispanic-American youth (Winters, et al., 1988).

Amy Johnson is a Research Associate at the Institute for Research on Higher Education. Michelle Alberti Gambone is a Sociologist and Senior Research Officer at Public/Private Ventures. The authors would like to acknowledge Thomas J. Smith for his thoughtful contributions and advice in framing the issues and recommendations of this paper. We would also like to thank Adam Sherer for his invaluable assistance in finding and reviewing the research on which this paper is based.

Low skill levels are increasingly noted by employers and have been identified as a significant labor force problem. For example, in a survey of Pennsylvania businesses, nearly half the employers reported dissatisfaction with newly hired employees' writing, communication and ability to follow oral instructions. Approximately two-thirds were dissatisfied with abilities in reading, reasoning and problem-solving (Koppel, 1990).

The repercussions of low skill levels are felt far and wide: among the employed, low skill levels affect business productivity and accident rates (Koppel, 1990); among the unemployed, the effects are even more severe. Research from the National Longitudinal Surveys of Youth Labor Market Experience shows a direct relationship between deficiencies in basic skills and joblessness, dropping out, unwed parenting, welfare dependency and various antisocial behaviors (Berlin and Sum, 1988).

The Job Training Partnership Act (JTPA) system's major response to skill shortages among youth was the institution of youth competencies, with an emphasis on basic skills training. Amendments to JTPA in 1986 further directed the Department of Labor to provide basic skills remediation to unemployed youth through summer programs. Early on, remedial education components were incorporated into employment and training programs only on an ad hoc basis, in part because there were no workplace-based literacy tools or strategies available to the JTPA system (Strumpf, et al., 1989).

In most cases, the addition of basic skills to job training programs has been an ancillary concern. These additions have not been well integrated into a clear set of strategies aimed at reaching the goals of the programs.

Current attempts to combat the problem of basic skills deficiencies range from cursory offerings of one or two hours per week in summer programs, to programs that require several hundred hours of individualized, self-paced instruction with the goal of a general equivalency diploma (GED). However, most of the teaching approaches in use are based on techniques used in the mainstream education system--techniques that have consistently proven inadequate for educating at-risk youth (Strumpf, et al., 1989). Practitioners' attempts to plan and implement educational components in employment and training programs have, in part, been hindered by the nature of research in the field of education, where findings are difficult to interpret and often provide contradictory information. A further limitation in current educational research is that it is predominantly focused on elementary school-aged mainstream students and, as such, is often not relevant to the circumstances of the at-risk teen population served by these programs.

As the list of failed attempts in preparing at-risk youth for productive employment grows, so too does the price of failure. The American Society for Training and Development has reported that corporations are spending hundreds of millions of dollars on remedial

education (Barton and Kirsch, 1990). Calculations from data on students in the class of 1981 have estimated the loss from dropouts for this class alone at \$221 billion in income and \$68 billion in government revenues (Gage, 1990).

THE ISSUES

How might employment and training programs better prepare at-risk youth for employment? Is there research available from the traditional education system that points toward particular instructional strategies or programs as more effective in skills acquisition than others? Likewise, is there research in this area indicating what employment and training programs ought not to do? Based on a review of pertinent research, analyses and literature on this subject, this paper addresses the following questions:

- What are the critical abilities that young adults should have when they leave school or employment and training programs and enter the labor force? Are traditional "basic skills" enough, or does participation in the work force require "higher-order skills"? Is there general agreement on this matter, and if not, what does this imply?
- What is currently known about how the traditional education system transmits these skills? Does the system's limited success with at-risk youth provide us with valuable lessons or research indicating which pedagogical practices ought not to be duplicated in second-chance programs?
- What evidence of success is there in special programs designed to teach educational skills to disadvantaged youth? Are the findings sufficiently grounded to justify replication of these programs?
- What long-term strategies ought employment and training programs to pursue, in light of these issues?
- What research questions warrant further investigation?

In Section II, we address the issue of a lack of consensus regarding the meaning of critical educational skills, then briefly review, in Section III, some of the ways in which the traditional education system hinders at-risk youth. This examination provides insight into some deficiencies in the traditional structure and helps formulate lessons to the employment and training industry, which has the flexibility to modify program design according to relevant evidence.

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Section IV contains a critical review of the evidence from evaluations of current approaches--both single-component strategies and comprehensive programs--and their indications of success in skills acquisition among at-risk students; Section V reviews the literature identifying those components of comprehensive programs that researchers have concluded to be important. Section VI presents our conclusions and recommendations for future practice and research.

Several points should be noted before moving on. First, the target population on which we focus throughout this paper is youth defined as "at risk." There are a number of different labels used to identify this population, such as disadvantaged, marginal and high risk, but these converge on several basic circumstances: all refer to students who demonstrate poor achievement in school; who come from low socioeconomic status homes, frequently from single-parent families; and who are frequently African-American or Hispanic-American. Second, issues concerning the process of identification of these youngsters are not addressed here. There is a substantial literature available on this subject, but because this paper is concerned with imparting skills to those who are clearly at risk, this question is not addressed. And finally, we acknowledge the abundance of individual programs and efforts across the country aimed at dealing with the basic skills crisis among at-risk youth, both in schools and in employment and training programs. Some may claim to be remarkably effective but have no formal evaluation data from which to make an objective judgement; others may have evaluation data but were not uncovered in the course of our review.¹

¹ Our review process included searches of computerized bibliographic data bases (ERIC documents and the Social Science Citation Index), an examination of printed collections of existing programs for youth skills acquisition (the National Diffusion Network catalogue of exemplary educational programs and the National Dropout Prevention Center, Clemson, South Carolina) and telephone calls to selected programs to request evaluation results. We restricted our review to programs and publications that focused specifically on skills acquisition, and those targeting the at-risk teenage population. Programs directed toward the needs of language-minority youth were not included.

II. IDENTIFYING CRITICAL SKILLS

There is virtually unanimous agreement that, as a nation, we must improve the labor force preparation of many of today's youth through either schools or other programs designed to serve youth. The first step toward better serving at-risk youth--in fact, youth in general--is to define clearly the capabilities or "skills" they must acquire in order to be self-sufficient as adults. This requires answering a series of questions:

- What are the "critical skills" that youth need as a basis for successful labor force participation?
- Do educators and employers agree on what skills youth should have when they leave formal preparation programs?
- Do skills form a hierarchy, in which some are fundamental while others are advantageous but less essential?
- How can attainment of these skills be measured?

A good start to answering these questions can be found in the numerous analyses and commissioned reports by government agencies and other organizations published in the last five to seven years. As a set, these reports represent what are widely considered some of the important skills with which students should depart any preparation program; as a set, however, they also represent somewhat disparate views. Table 1 displays the critical skills referred to in 11 recent documents concerned with this issue.²

We have clustered these skills along two dimensions, as follows: (1) the source of their definition--those located primarily in the traditional education system (the left-hand side of the table) and those chiefly concerned with the rapidly changing needs of the work force (the right-hand side)--and (2) the skill type--academic skills, which include the traditional basics plus science and history; higher-order skills, a reference frequently

² The set of documents included in this table is not exhaustive but rather constitutes a sampling of the positions receiving national attention. The original purpose of these documents varies, but they all represent attempts to direct policy in the areas of education and employment training. In the interest of legibility, some truncation of detail, as well as minor interpretation where wording was similar but not identical, was necessary.

Table 1
SPECIFYING "CRITICAL" SKILLS: SOME ALTERNATIVE APPROACHES

	School-Based Definitions					Work-Based Definitions					
	Applebee, et al., 1989	Johnson, 1986	Alabama State Commission on Higher Education, 1989	South Carolina State Department of Education, 1989	Florida State Department of Education, 1982	National Academy of Sciences, 1984, in Barton and Kirsch, 1990	National Alliance of Business, in Barton and Kirsch, 1990	U.S. Department of Education and U.S. Department of Labor, 1988	Carnevale, et al., 1988	Johnston and Packer, 1987	U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1991.
Academic Skills											
Reading	*	*	*	*	*	*		*	*	*	*
Writing	*	*	*	*	*	*		*	*	*	*
Math	*	*	*	*	*	*	*	*	*	*	*
Science	*		*			*					
History/Social Studies						*					
Higher-Order Skills											
Problem-Solving			*			*	*	*	*		*
Thinking/Learning to Learn			*				*		*		*
Reasoning			*			*	*				*
Creative Thinking							*		*		*
Decision-Making											*
Coping Skills											
Oral Communication			*			*		*	*	*	*
Listening			*						*		*
Responsibility						*	*	*			*
Self-Esteem									*		*
Ability to Work with Others						*		*	*		*
Reliability							*	*			*
Self-Discipline								*			*

invoked but without precise definition; and coping skills, which include responsibility, an ability to work with others and oral communication.³

The discussion that follows focuses on three issues that result from an analysis of Table 1: the lack of agreement in defining critical skills, the question of a skill hierarchy and the difficulties in developing consistent standards for assessing skill levels.

LACK OF AGREEMENT

A review of the literature shows that there is no real agreement on what the requisite skills are for youth. The left- and right-hand sides of Table 1 (labelled as school-based and work-based definitions) reflect disparate views. The left-hand side of the table shows a fairly tight grouping of core academic skills that educators believe students should acquire before leaving school, while the employers' perspective, represented on the right-hand side of Table 1, encompasses a broader range of competencies regarded as critical to labor market success.

Math, reading and writing--the basics--are all considered critical. However, no other skill in any category extends across the table to indicate consensus. Further, even where there is apparent agreement on a skill's importance, a closer look reveals a range of definitions as to what competency entails. Math competency, for example, is defined in one document as the ability to perform basic computations; use basic numerical concepts; use tables, graphs, diagrams and charts; choose techniques; construct logical explanations for real world situations; express mathematical ideas orally and in writing; and understand the role of chance in the occurrence and prediction of events (U.S. Department of Labor, 1991). Another document defines math competency as possessing knowledge of geometry and trigonometry (Carnevale, et al., 1988); and yet a third specifies that math competency requires the ability to solve multistep problems and use basic algebra (Applebee, et al., 1989). Given that math is considered one of the three R's, and as such has a longer history in the limelight than many of the other critical skills included in the table, it is disconcerting that even so fundamental an area lacks clearer agreement once we move beyond its name.

A definition of higher-order skills proves even more elusive. Over half of the cited works identify one or more "higher-order" thinking skills as critical to success in adulthood. However, as Nickerson points out, there is little agreement as to what "thinking" really means:

³ Credit for the term "coping skills" goes to Walther (1976); he, however, defined coping skills as both "self-management skills" and the cognitive skills we categorize as higher-order skills.

Critical thinking, creative thinking, reasoning, problem-solving, and decision-making are among the topics around which substantial research literatures have developed. These literatures, while interrelated, are remarkably distinct and self-contained. Even within the articles and books that are focused on the teaching of thinking, one can find numerous definitions and characterizations of thinking, or, more commonly, of specific types of thinking If there is one point on which most investigators agree, it is that thinking is complex and many faceted and, in spite of considerable productive research, not yet very well understood (1988:9).

Lack of agreement in defining critical skills is a fundamental problem, strikingly illustrated by two facts: (1) the president and the nation's governors have declared a goal of national preeminence in science by the year 2000; and (2) science proficiency is not mentioned in 8 of the 11 documents listed in Table 1. This lack of agreement occurs, in part, because the various orientations toward defining necessary skills are driven by different goals: the president's concern is maintaining the nation's competitive status; the labor market perspective is driven by a fluid need for employees who can fill changing occupational demands; and the school system focuses on measurable traditional academic skills. The answer to the question of what skills are necessary is, therefore, largely framed by--and differs according to--the sector that is responding.

Even those who share the concern regarding labor market needs are hard pressed to agree on the skills necessary for employment. This difficulty is magnified by our uncertainty as to what impact our rapidly advancing technology will have on work force needs.

Many recent national statements (e.g., U.S. Department of Labor, 1991; U.S. Department of Education and U.S. Department of Labor, 1988) have predicted that the level of skills needed in various occupations will significantly change by the year 2000, thus calling for new emphases on what youth are taught. Based on careful analysis of job requirements and the development of a continuum of skills needed, the Hudson Institute predicts that, while currently 40 percent of jobs fall into the lowest skill categories on the continuum, only 27 percent will be at that level by the year 2000. Likewise, 24 percent of current jobs are in the highest three skill categories, but this figure is predicted to rise to 41 percent (Johnston and Packer, 1987:xxii).

However, Rumberger and Levin (1989) have concluded that "the average educational requirements of future jobs will not be significantly different than current jobs, as both high-skilled and low-skilled jobs will continue to exist in the future economy" (quoted in Barton and Kirsch, 1990:25). Support for this perspective is offered by Mishel and Teixeira (1991) in their recent report for the Economic Policy Institute. They conclude from their analysis of labor market trends that "increases in job-skill requirements due to

upgrading of the occupational structure will be modest and less than in the past" (1991:40). Based on a survey of employers in the Los Angeles area, Wilms (1984) reports that the impact of changing technology is unclear: 69 percent of employers reported that there had been no change in skills required in entry-level jobs, 22 percent reported an increase in skills required, and 9 percent reported a decrease.⁴ Wilms's conclusions may be quite relevant: the "lower the job level, the smaller the impact of technological changes" (1984:348); advancing technology may only serve to widen the existing gap between skilled and unskilled workers.

There is little doubt that changing technology will have an impact on human capital formation in some way, but our uncertainty as to what that impact will be may potentially cause future problems: being too slow to react could result in another woefully under-skilled generation, or charging forward to a more technology-based curriculum could be at the expense of vital groundwork in such areas as the coping skills.

HIERARCHY

Do the skills listed in the table reflect an implicit hierarchy of importance or acquisition? Are academic skills valued more highly than are coping skills? Does acquisition of academic skills need to precede higher-order skills in instruction?

While there is less than complete agreement on the answers to these questions, research indicates that some new perspectives are beginning to emerge. Basic academic skills, such as pronunciation, grammar and spelling, have long been considered essential prerequisites for learning more advanced, or higher-order, skills. At-risk youth, who may have dragged themselves through years of drill and practice, find that they must endure yet more rote learning before they will be permitted to move on to more interesting and relevant educational challenges. We have resolutely--until most recently--stuck to the belief that this established order should not be violated.

Now, however, there is some evidence that the more effective order in terms of acquisition may be the other way around:

[R]esearch . . . demonstrates quite clearly that students can acquire . . . comprehension skills--which we have traditionally called advanced--well before they are good decoders of the printed word . . . [F]irst-graders can solve a wide variety of math problems, using modeling and counting, before

⁴ It is important to keep in mind, however, the date of Wilms's survey and that he was not asking what employers predicted, but rather what their current experiences were.

they have perfected the computational algorithms that are traditionally regarded as prerequisites. Likewise, children can perform sophisticated composition tasks before they have acquired the mechanics of writing (Means and Knapp, 1991:4; research includes that of Palincsar and Klenk, Peterson, et al., and Calfee).

These new insights are encouraging, particularly in light of the fact that continuous instruction in the very basic skills may be one of the greatest deterrents to the participation of at-risk youth in programs offered outside of schools.⁵

Where do “coping skills” fit into educational instruction? Educators have long believed that such skills as decision-making and self-discipline are learned through regular cognitive development (Beyth-Marom, et al., 1989) and therefore need not be taught. It is, however, becoming increasingly clear that many students lack these coping skills, and that they do indeed need to be taught. Those who support the developmental-interaction approach have long recognized this need: “It is a basic tenet of the developmental-interaction approach that the growth of cognitive functions--acquiring and ordering information, judging, reasoning, problem-solving, using systems of symbols--cannot be separated from the growth of personal and interpersonal processes--the development of self-esteem and a sense of identity, internalization of impulse control, capacity for autonomous response, relatedness to other people” (Shapiro and Biber, 1972:61).

As to the position of coping skills relative to more academic skills, clearly the traditional hierarchy is being called into question: increasingly, researchers are concluding that coping skills are as important as other skills, if not more so. Even as early as 1976, Walther, in a review of employment and training programs sponsored by the Department of Labor, concluded that ‘what youth need are not immediately saleable job skills but self-management skills control of aggression ability to reconcile conflicting demands and adaptation to authority’ (Wehlage, et al., 1982:5). Wehlage, et al., (1982:4), as well, argue for what they term “adolescent social development”--qualities fundamental to long-term employability and life success.

NATIONAL STANDARDS FOR SKILLS ATTAINMENT

The lack of agreement in defining what constitute the critical skills youth should acquire is reflected in the absence of national standards for the formal training systems (e.g., the education system and the second-chance system) and lack of agreement about how to measure the skill levels of the youth served by these systems. As concerns about interna-

⁵ See Smith and Gambone, this volume.

tional competitiveness, a skilled work force and youth unemployment have risen, so has the demand for national standards for achievement in critical skill areas.

In the past, high school diplomas and GEDs were regarded as indicators of attainment of a fairly standard set of abilities. But, in part because schools and employment and training programs operate under highly decentralized systems, there has been great variation in the skill levels attained by participants in these systems, and certification is no longer regarded as evidence that certain skills have been acquired. This has led to the current proposals to establish national standards for achievement in critical skill areas.

The establishment of national standards is an important goal because they can be used to identify the educational needs of students; to determine whether stated educational goals are being reached; to evaluate the effectiveness of the teaching process; and to ascertain national skill levels in order to gauge future international competitiveness and social and economic progress.

National standards can be used to define levels of competency, while means of attainment can be left to local discretion. In employment and training programs, concerns about the ad hoc nature of remedial education programs and the persistence of poor outcomes might be addressed through more uniformly defined levels of competency as well as close monitoring of participant progress. But progress toward defining standards is impeded by two factors.

First, as much of this section has shown, the lack of consensus regarding the essential skills for today's youth poses a serious obstacle. What the documents in Table 1 suggest, despite the variation in their original purposes, is that the process of standardizing definitions of requisite skills will be a difficult one. Unfortunately, policymakers and practitioners are moving forward to set standards without consensus, and are continuing to put forth a variety of definitions of what the necessary skills are. This may jeopardize the ability to generate any truly national standards.

Second, national standards can only be useful if there is consensus on how to measure attainment of skills. But the assessment question has been mired in debates about what constitutes an accurate measure of skills attainment. Traditional standardized measures are often adequate for making summative evaluations, but they are not always useful in assessing the educational needs of a particular student or group of students. Nor are they necessarily the best indicators of the proficiencies demanded by any particular occupation. In addition, the work-based perspective on skills indicates a demand for many skills (higher-order thinking and coping) that have few, if any, assessment instruments to measure their acquisition.

Current research is beginning to disclose that past approaches to measurement may not be serving either the education system or the labor market very well. Part of the difficulty is that the standardized measures favored by many to evaluate the education system are most easily designed to measure basic academic skills. There is some evidence that this results in a focus by teachers on discrete skills, at the expense of higher-order skills so often cited as important. Means and Knapp, in their review of research in this area for the Department of Education, sum up this tension well:

Equally important is the compatibility of assessment instruments with program goals. If teachers continue to be held accountable mainly for the teaching of basic and isolated skills . . . it is foolhardy to think that real change will occur in the instructional opportunities offered to children at risk. . . We have been struck repeatedly by the importance of an alignment between assessment and instructional goals (1991:32).

Without assessment, it is not possible to work toward instructional improvement or to measure national progress. There is reason to hope that improvements are forthcoming, since many who have an interest in assessment are moving in a direction that may address some of the difficulties in accurately measuring both individual skills attainment and institutional progress. Applebee, et al., (1989) discuss the consideration of alternative forms of assessment; as they point out:

Since tests and grades send a message to students about what is valued in their course work, the focus of tests also will need to shift. Instead of simply displaying their knowledge of facts and rules, students will need to show that they can think about and use their knowledge. A number of alternative assessment procedures have been suggested. For example, in course work, portfolios of selected work, simulations, problems, or cases can be used as the bases for assessing students' knowledge and abilities (1989:41).

The National Governors' Association also has noted, alongside its call for more rigorously defined educational benchmarks, the shortcoming of much of our current standardized assessment: "Achievement tests must not simply measure minimum competencies, but also higher levels of reading, writing, speaking, reasoning, and problem-solving skills" (1990:39). Yet another sign that the methods of assessment may face some change comes from the draft regulations for curriculum and student assessment recently proposed by the State Board of Education in Pennsylvania. The proposed regulations include detailed proficiency standards in academic and higher-order skills, as well as attention to many coping skills: "All students must demonstrate life skills (e.g., decision-making, refusal skills, social skills, coping skills and critical evaluation) to enhance men-

tal, emotional and social health” (Pennsylvania State Board of Education, 1991:2). The goals inherent in these suggested outcomes--from a state board of education--reflect a potentially greater convergence than is evidenced in Table 1 between what educators intend to supply and what the labor market demands.

The issues of national standards and assessment are critical for the employment and training system. If a consensus can be reached that accurately reflects labor market needs, then the utility of devoting employment training resources to educate youth in critical skills through second-chance programs can be measured. If national standards are adopted and assessment techniques are validated, then the need to measure performance outcomes in this highly decentralized system can be met in a more effective way, and the link between skills training and labor market success should be forged more strongly.

CONCLUSIONS

This section has illustrated the current lack of agreement in defining the skills “critical” for labor market success. The broad range of skills being called for by educators, employers and policymakers can only serve to exacerbate the difficulties in designing effective skills training and the evaluation of skills acquisition. This section has also highlighted forces that influence the various laundry lists of skills, as well as pointed out issues for consideration as we continue to define what today’s youth should know and be able to do. From this analysis, we draw the following conclusions:

- . There is remarkable lack of agreement on what we mean when we refer to critical skills. Politicians, educators, panels and commissions have all been anxious to decry existing skill levels, but what we have been left with is a list of needs that does not cohere. In addition, apparent agreement on the labels used for skills often masks underlying differences in definition.
- . There is also disagreement about the hierarchy of skills acquisition. While the education system seems to stay focused, in large part, on basic academic abilities, work-based agendas often include far more elaborate versions of skills that appear to stray from necessary to desirable characteristics. We clearly need to separate desirable skills from those that are necessary.
- . The current range of desired competencies is so broad that it precludes coordinated direction of policy and programming toward improving skill levels.

- If coping and higher-order skills, in addition to traditional academic competence, are necessary, current assessment instruments are inadequate and constrain pedagogical content and delivery.
- National standards are necessary for meaningful measurement of progress or effectiveness. Standards, and the tests to measure them, should not be defined or developed, however, without first defining what the necessary skills are. Current practice has reversed this order, and policymakers are moving forward to develop standards without first settling the question of what skills are critical to reaching stated goals. This may result in little or no improvement in preparing youth for the transition into the labor market.

III. SHORTCOMINGS OF THE TRADITIONAL SCHOOL SYSTEM

Once critical skills are defined, the next step is to determine the most effective way to impart them to youth. The current ad hoc incorporation of remedial education components in employment and training programs has precluded implementing a well-informed, well-planned set of strategies for teaching critical skills. But the problem of inadequate preparation in critical skills has very real labor market consequences--for employers who find themselves without an adequate work force and for individuals who are unable to achieve labor market success.

What is the most effective way to teach these critical skills? Since skills training has been an ancillary rather than primary concern in employment and training programs, few systematic efforts have been made to evaluate or improve the success of educational efforts in second-chance programs. Consequently, there is little pragmatic knowledge from the employment and training field regarding the education of at-risk youth. However, experience in schools can be a fairly rich source of information, from several perspectives: it provides information on what does not work and where the major sources of trouble are; limited information on the success of some alternative approaches; and information on what remains to be learned--particularly in the area of program evaluation. This section addresses practices and problems of the traditional school system that should inform program design in the employment and training industry.

A full discussion of the shortcomings of mainstream education is well beyond the scope of this paper. A brief review, however, of some of the major systemic problems can inform approaches used in second-chance programs. If, for example, enough research indicates that student tracking or drill and practice techniques have detrimental impacts on learning outcomes, then youth employment and training programs that mirror these strategies are misdirected and most probably headed for failure.

There is no question that circumstances outside of schools have much to do with academic failure. Educators and policymakers have known for at least three decades that young people who grow up in poverty do not fare well in the education system. "But it is also true that most schools simply do not provide environments congenial to students who fail to adapt to the conventional expectations and regularities of schooling" (Goodlad and Keating, 1990:9). What does current research tell us about where the trouble lies in the traditional school system's delivery of educational skills?

Some of the best evidence available has clearly identified the practice of tracking students--and its domino effects--as severely detrimental to student achievement. Disadvantaged students are commonly tracked into lower-ability groups which, in turn, places them in classrooms that do not receive a fair allocation of teaching resources and where

expectations for achievement are greatly diminished. This succession of events commonly follows initial tracking that is often discriminatory and coalesces to place at-risk students at a serious disadvantage in acquiring critical competencies.

The general consensus in the research is that placement into a given track is largely based on socioeconomic status rather than ability (for a current review of research on this topic, see Bempechat and Wells, 1989). In one large study based on the High School and Beyond data, researchers found that socioeconomic status (SES) had an effect on track placement even when ability levels were held constant. High-status students (in the top SES quartile) had a 53 percent chance of being placed in an academic rather than a vocational track, compared with a 19 percent chance for those of low socioeconomic status (bottom SES quartile) (Bempechat and Wells, 1989).

A recent study by the General Accounting Office also found “a disproportionate number of minority students in some classes in more than half of the nation’s school districts” and some evidence that about 10 percent (about 1,700) of the nation’s middle schools sort students into ability groups in a “possibly discriminatory manner” (U.S. General Accounting Office, 1991:7). What makes these findings even more alarming is that once a student (usually poor or minority) is placed in a low-ability group, he or she has little chance of moving to a higher-ability group (Oakes, 1985), and the disparity between the attainments of the highest and lowest groups simply grows greater over time.

Contributing to this disparity is the frequently inequitable allocation of teaching resources. Students in nonacademic (lower-ability) tracks are at a disadvantage in developing skills in the areas that are uniformly agreed to be important--reading and mathematics. Research on the effects of tracking has shown that the “students in greatest need of the best teaching are the least likely to get it” (Darling-Hammond and Green, 1990:239). Largely due to training and incentives, research indicates that the most competent and experienced teachers are assigned to the high-ability tracks; that these teachers are better able to instruct students; and that their students learn better (for a summary, see Darling-Hammond and Green, 1990). This unequal distribution of skilled teachers greatly affects classroom climate in terms of expectations and implicit messages communicated to students.

Lower expectations, the message in the sequence that begins with tracking, have been identified as a critical element in educational failure. Table 2 shows that the expectations low-track teachers hold for their students are profoundly different from those of teachers instructing high-track students. High-track teachers, for example, expect their students to learn to reason logically, learn values and morals, think critically, think for themselves, analyze and collect information, and master problem-solving. This is in contrast to low-track teachers who, for example, expect their students to learn to develop

more self-discipline, cope with frustration, improve study habits, fill out a job application and learn how to work with a checking account (Oakes, 1985).

These divergent teacher expectations are reflected in what students say they learn. High-track students report that they learn, for example, to form their own opinions on situations, to speak in front of groups, to be creative and free in doing things, to be organized, to listen and to think quickly, to understand concepts and ideas and experiment with them, to work independently and to think in a logical way using a process of elimination (Oakes, 1985:87-88). Low-track students are more likely to say that they learn, for example, to behave in class, to have self-control, to have manners, to be quiet when the teacher is talking, to respect the teacher and to be a better listener in class (Oakes, 1985:89). Clearly, the skills needed for successful employment, as listed in Table 2, are more likely to be incorporated into high-track classes than into low-track classes.

While researchers and educators have found it more difficult to document the impacts from other structural arrangements and school conditions, there is increasing consensus on some other important barriers to achievement. These include a disjuncture between student aspirations and opportunities available to pursue them (Ogbu, 1985), a lack of engaging learning experiences (Goodlad and Keating, 1990), a lack of adequate counseling, abrasive relationships between teachers and low-achieving students, a conflict between the home and school cultures, and an inflexibility in responding to great diversity in student needs.

The employment and training system can design interventions that do not duplicate the mistakes in traditional school settings. Specifically, this entails not segregating the lowest achievers from better achievers, ensuring that well-trained instructors and adequate resources are devoted to teaching at-risk students, and setting and maintaining consistent high expectations for students.

There are efforts underway to supply remedial education to students who have not been adequately served by mainstream schools. Some efforts are “pull-out” programs within schools and some are comprehensive alternative programs. The next sections examine current efforts to evaluate these programs and the elements for effectively teaching critical skills to at-risk students.

Table 2
TEACHER EXPECTATIONS FOR STUDENT ATTAINMENT, BY TRACK LEVEL

High Track	Low Track
<p>"Ability to reason logically in all subject areas."</p> <p style="padding-left: 40px;">"Deal with thinking activities."</p> <p style="padding-left: 40px;">"Self-reliance, taking on responsibilities."</p> <p>"To learn values and morals--to make own personal decisions."</p> <p style="padding-left: 40px;">"To think critically--to analyze, ask questions."</p> <p style="padding-left: 40px;">"How to think critically--analyze data, convert word problems into numerical order."</p> <p style="padding-left: 40px;">"To be creative--to express oneself."</p> <p style="padding-left: 40px;">"Ability to think for themselves."</p> <p style="padding-left: 40px;">"Ability to collect and organize information. Able to think critically."</p> <p>"Determine best approach to problem-solving. Recognize different approaches."</p>	<p>"Develop more self-discipline--better use of time."</p> <p>"Independence--start and complete a task on their own."</p> <p>"To try to get the students to at least be aware of how to keep themselves clean."</p> <p style="padding-left: 40px;">"How to cope with frustration."</p> <p>"Business-oriented skills--how to fill out a job application."</p> <p>"More mature behavior (less outspoken)."</p> <p>"Content--minimal. Realistic about goals. Develop ones they can achieve."</p> <p style="padding-left: 40px;">"Work with checking account."</p> <p style="padding-left: 40px;">"Good work habits."</p> <p>"To learn how to follow one set of directions at a time."</p>

Source: Oakes, 1985:80-83.

IV. EVIDENCE FROM IN-SCHOOL EFFORTS

Across the country, efforts in both second-chance programs and school districts are underway to impart to at-risk youth many of the critical skills discussed in Section II. In some cases, there is collaboration between second-chance programs and schools; in other cases, each is struggling independently. It is both vital and cost-effective--in terms of dollars spent and futures saved--for these two groups to share their best knowledge of success and failure, given that they share the same ultimate goal. While the evidence available from in-school efforts may not look tremendously different from the evidence--or lack thereof--from second-chance programs, attempts to learn from one another could provide some confirmation or insight regarding appropriate and inappropriate directions.

Two points are important to emphasize at the outset. First, the corpus of evidence based on rigorous evaluation is meager. For this reason, conclusions must be qualified until better evidence is collected. Second, this section explores what the employment and training industry can learn from less-traditional in-school efforts to teach critical skills to the at-risk population. Evaluations or reviews of evidence, for the most part, focus on the "basic" academic skills listed in Table 1--i.e., the traditional skills of reading, writing and mathematics. Where other skills are addressed or assessed, these are noted.

CURRENT APPROACHES

As with the literature defining critical skills, the literature covering in-school approaches to teaching skills to disadvantaged youth is diffuse. A framework within which to cluster various efforts is therefore helpful in sorting through the evidence. For our purposes, we first distinguish between single-component strategies and comprehensive programs.

Single-component strategies are particular methods, tools, approaches or curricular materials that teachers can use inside the classroom, targeted toward a primarily academic goal. As distinct from single-component strategies, comprehensive programs are those efforts that aim to address a broader spectrum of needs--particularly developmental--through the provision of a wide range of services, opportunities and approaches.

Considerable research has been conducted on various instructional strategies and their effectiveness with at-risk students, in particular by researchers Slavin and Madden. While their analyses have contributed greatly to a better understanding of the impacts of various efforts, their research has been primarily confined to the kindergarten to sixth-grade population, due to the dearth of available evidence for older students. The utility of this research for the employment and training field is, therefore, limited and perhaps more relevant for efforts undertaken with the system's youngest clients.

We begin with a discussion of the evidence of effectiveness for various single-component strategies.⁶

SINGLE-COMPONENT STRATEGIES

Single-component strategies can be further distinguished as those that encompass a particular delivery mode, defined by how the teacher interacts with or presents material to the students, and those that involve a particular instructional content, such as a focus on discrete skills, a multicultural curriculum or experience-based education. For those students identified as at risk, it has become particularly important to ask how much of a difference the mode of delivery and the particular content make in skills acquisition. Are some strategies more effective than others?

Delivery

Table 3 displays the most widely discussed single-component strategies fundamentally concerned with how particular material is delivered to students--in small groups, one-on-one, through use of technology, in the classroom or in a separate location (referred to as “pull-out” programs), etc. As can be seen from the table, many of the instructional delivery modes share an individualized approach and a belief in frequent assessment. Tutoring, computer-assisted instruction, videodisc instruction (depending on use), continuous progress and mastery learning all emphasize attention to the unique needs of each student. Cooperative learning and direct instruction, while not placing such heavy emphasis on the individual approach, share an emphasis on frequent assessment.

Despite these similarities, the effectiveness of single-component strategies that focus on the mode of instructional delivery is not consistent: the results are mixed, and some results are conflicting. Other findings are based on so little evidence that a definitive statement would be inappropriate. We briefly review each of the delivery approaches noted in Table 3 according to a summary of the available evidence of effectiveness: inconclusive evidence, marginal evidence, or consistent and positive evidence.

Inconclusive Evidence

The evidence regarding effectiveness for both mastery learning and computer-assisted instruction is inconclusive.

⁶ The research included in this review is limited to literature reviews and meta-analyses that used clearly identified selection criteria for inclusion of evaluations and that focused on strategies and programs designed to serve the “at-risk” population later eligible for employment and training programs.

Table 3
SINGLE-COMPONENT STRATEGIES: FOCUS ON MODE OF DELIVERY

strategy	Definition	Effectiveness with At-Risk Youth
Mastery Learning	similar in format to continuous progress; students learn through a succession of lessons and tests, until mastery is acquired.	Inconclusive evidence
Computer-Assisted Instruction	Students work on computers for part or all of their remedial instruction.	Inconclusive evidence
Diagnostic-Prescriptive	Students are assessed and provided instruction appropriate to their needs, in a separate location, in small groups.	Marginal effects; not sustained
Videodisc Instruction	Similar to computer-based instruction in technology; students respond to and manipulate instructional materials through videodisc presentations.	Some positive effects; little research
Direct Instruction	Students are told explicitly how to accomplish tasks and are guided through the process; feedback and assessment are frequent.	Positive effects, with discrete Skills
Tutoring Programs	Tutors (teachers, volunteers or paraprofessionals) work one-on-one with students.	Consistent, positive effects
Continuous Progress	Students proceed through a hierarchy of skills, and proceed to each new level based on their individual readiness. Instruction is delivered to students at the same skill level.	Consistent, positive effects
Cooperative Learning	Students are given instruction in small groups, based on ability level, then work in mixed-ability teams. Students are frequently assessed.	Consistent, positive effects

Sources: Madden and Slavin, 1987; J.D. Fletcher, 1990; Slavin and Madden, 1987; Knapp and Shields, 1990; Wehlage, et al., 1982.

Mastery learning is grounded in the theory that students learn best if enabled to master a concept or lesson prior to tackling additional material. After a series of lessons, students who achieve an established level of mastery move on to new material, while others receive instruction designed to bring them up to the mastery level (Slavin and Madden, 1987).

It is unclear how effective this strategy is for improving the achievement of at-risk students. Slavin and Madden (1987) conclude that there are no significant gains from this approach for the at-risk population. Knapp and Shields (1990) also conclude that it is unclear how much positive impact this method has, that evaluations assess effects based on very short time periods (a week or less) and that mastery learning is a difficult strategy to implement in large inner-city schools because of the required teacher-to-student ratios.

Computer-assisted instruction varies a great deal, depending in part on what software is used and how students interact with the computers (e.g., whether they are supervised, and whether they share a computer or work alone).

A number of studies and meta-analyses have been done on the effectiveness of computer-assisted instruction, but, overall, there is lack of agreement as to whether or not this strategy is effective with disadvantaged youth. Some studies have shown no effectiveness at all (Caldwell and Heidl, 1984) or effectiveness in certain areas but not others (Harris and Harrison, 1987); other studies show positive effects favoring the at-risk group in certain areas and the control group in other areas (Educational Testing Service, 1983, cited in Madden and Slavin, 1987).

One key area of disagreement is whether this technique is more effective for teaching basic skills or higher-order skills. For example, Madden and Slavin conclude that, overall, the effects of computer-assisted instruction are "well-established and positive, though in the best-controlled studies they are usually modest in magnitude and appear more frequently on basic skills [emphasis added] than on higher-order skills" (1987:17). On the other hand, Samson, et al., based on a meta-analysis of 43 studies of computer-assisted instruction in secondary schools, indicate that there are individual findings that give "conflicting and sometimes inconclusive results" (1986:312-313). But, in contrast to Madden and Slavin's, these findings indicate that lessons requiring higher-order outcomes were more effective than those requiring only factual outcomes or a combination of the two.

Samson, et al., report that programs emphasizing drill and practice are, on average, less effective than tutoring programs that introduce new concepts. These researchers assert that computer-assisted instruction seems to be more effective than reducing class size or

mainstreaming but concede that other strategies--tutoring, mastery learning and cooperative learning--produce considerably larger positive effects (Samson, et al., 1986).

Moderate Evidence

Diagnostic-prescriptive approaches, videodisc instruction and direct instruction all demonstrate some evidence of effectiveness, but none that is compelling. This is due, respectively, to evidence that effectiveness is not sustained; little available research; and evidence of effectiveness in certain areas but not in others.

A diagnostic-prescriptive approach is usually a "pull-out" approach in which students are assessed and provided instruction appropriate to their needs in small groups. From this type of strategy, there are frequently fall-to-spring gains in skill levels, which then decline over the summer. While there is some evidence of effectiveness, the gains here are generally not very large or sustained (Madden and Slavin, 1987).

Videodisc instruction, like computer-assisted instruction, has received somewhat mixed reviews. Some of the early research conducted to examine its applicability to at-risk youth indicates that this is an instructional strategy with potential that should be explored. Risko, et al., (1990) conducted an evaluation of videodisc instruction that was used with at-risk fifth-graders for two years. The evaluation involved random assignment to a control and an experimental group, and findings were based on a pretest and posttests after each year. The researchers report that videodisc instruction resulted in significant gains in writing after the first year and significant gains in writing, reading comprehension and critical thinking after the second year.

Also like computer-assisted instruction, videodisc instruction is a strategy that will continue to evolve as new presentations, new applications and more advanced technology are developed. Videodisc and computer-assisted instruction may be strategies that are the most influenced by the variables of delivery and content: as technology changes and instructors become more familiar, adept and creative in capitalizing on its potential, increased efficiency could produce greater positive effects.

Direct instruction, which emphasizes drill and practice, has shown some effectiveness with fundamental skills but has been sharply criticized for its narrow focus. Students are told explicitly how to accomplish tasks, are guided through each step, and get frequent feedback and assessment. Questions remain as to whether what is learned through this strategy can be applied to more independent tasks (for a review of research, see Knapp and Shields, 1990). These questions, in turn, call into question the viability or reasonableness of using this approach if the aim is to impart many of the higher-order and coping skills sought particularly by employers.

Consistent Positive Evidence

Tutoring, continuous progress and cooperative learning all have consistent and positive evidence of effectiveness with at-risk youth. Assessment and corrective instruction are essential features of all three strategies.

Tutoring involves using teachers, volunteers or paraprofessionals to work one-on-one with students who need remedial help. Unlike diagnostic-prescriptive strategies, tutoring programs have demonstrated fairly consistent and impressive evidence of effectiveness with at-risk students, particularly in improving math and reading (word recognition and oral reading) skills, where gains are "large and important" (Madden and Slavin, 1987). Reading comprehension, however, is often not tested in tutoring programs.

Tutoring has also been shown to prevent students from falling behind, at least in the short term. A finding of particular interest for employment and training programs is that, in a program using older students to tutor younger students, both groups showed significant increases in reading and math skills. The tutors were required to be able to read and compute only at the fifth-grade level and received intensive training in tutoring skills. Given that students with relatively low basic skills levels can be tutors, this type of technique could be useful in employment and training programs; both the "teachers" and the "students" in the program could improve basic skills while at the same time developing the interpersonal skills that employers often seek.

In continuous progress, students proceed through a specified hierarchy of skills and move on to each new level based on their individual readiness, as in mastery learning. Some continuous progress programs are even identified as mastery learning models, but there are important differences between the two. With continuous progress, students move at their own rates and are constantly grouped and regrouped, often across grade lines. Using this approach, students are instructed by teachers (rather than using programmed or individualized materials) and careful records are kept of each student's progress through the curriculum.

On examining 11 evaluations of continuous progress programs for elementary school students (such as Distar and USAIL), Slavin and Madden (1987) found that five demonstrated positive effects for at-risk youth in language, reading and math skills--but not higher-order skills, such as reading comprehension and math problem-solving. (The other six programs, while they showed positive effects, did not assess applicability specifically for the at-risk population.) The finding of consistent and positive evidence must be somewhat tempered, therefore, regarding the range of skills (particularly higher-order) that employers seek.

In cooperative learning situations, students are given instruction in small groups of similar ability levels, but they then move on to work on tasks in mixed-ability groups, with the expectation that students will learn from each other. Of the two cooperative learning studies reviewed, both used a control group design and showed positive effects for at-risk youth. In a brief synthesis of best evidence, Slavin (1989) reviewed achievement outcomes and other areas affected by cooperative learning. His review concludes that cooperative learning positively affects student achievement only if group goals and individual accountability are incorporated. In other areas, cooperative learning was found to produce positive effects on intergroup and race relations, acceptance of academically handicapped students and self-esteem. These are important outcomes in light of the demand for workers who can work well with others and have a healthy sense of self-esteem (see Table 1).

Summary of Evidence

Slavin and Madden have concluded from their extensive research that the two methods that appear to show the most encouraging results are continuous progress and cooperative learning. These strategies share the elements of small groups, instruction by a classroom teacher, frequent assessment, adequate time for any necessary remediation, and a hierarchy of skills that students must master.

The major shortcoming of their research, for the purposes herein, is that evaluations were confined to the kindergarten to sixth-grade group. Although research is being conducted at the Johns Hopkins University Center for Research on Effective Schooling of Disadvantaged Students on cooperative learning for middle school students, there are no definitive findings for this group (McPartland and Slavin, 1990:16). Cooperative learning and continuous progress might be appropriate for the younger students (age 13 to 16) in both school and second-chance programs, while individual approaches, such as tutoring, may prove more effective with older at-risk youth (age 16 to 21). The need for programs that contain a rigorous evaluation component is still great, so that appropriateness of method is better determined.

Instructional Content

Single-component strategies that focus on curricular content--as opposed to mode of delivery--are grounded in the belief that the nature of the material contributes most significantly to student success in learning. While every teacher in every classroom, to some degree, presents a unique instructional content, there are a number of identified approaches that have been labeled and received attention in the literature.

Paper No. 4

The research and debate surrounding instructional content to a large extent centers around whether content ought to focus on discrete skills, such as punctuation and grammar (often referred to as a component skills approach); on higher-order skills, such as problem-solving (e.g., a process approach); or on integrated or contextualized skills (e.g., a whole-language approach, which emphasizes the integration of writing with reading and oral expression, or vocational education, which teaches skills in the context of a particular trade).

While content can certainly be closely bound to how it is delivered, it is important to consider the question: How important is content alone to skills acquisition?

Knapp and Shields (1990) have summarized some of the principal content elements that seem to be important with at-risk youth. They have concluded that writing instruction should deemphasize discrete skills (research has consistently shown a discrete skills approach to be ineffective in facilitating writing); that, instead, skills ought to be integrated with a purposeful use of language, in a context that enables students to communicate ideas of value to them; and that, in terms of delivery, teachers ought to demonstrate awareness of and respect for different cultural and linguistic backgrounds.

In math, the principles Knapp and Shields discuss echo the principles in writing: that greater emphasis on developing a conceptual understanding has proven more effective; that, in terms of delivery, students should be exposed to concepts much earlier than they are at present; and that math skills ought to be integrated into contexts that allow students to apply them to actual situations and problems.

Research in support of this view comes from Sticht, et al., (1984), who summarize content approaches that they found effective in their Project 100,000 for low-aptitude youth previously excluded from the military. "One of the major findings of this study was that remedial programs directly related to the life experiences of participants i.e., instruction developed from the functional needs of military life, as opposed to general literacy instruction, had the most significant results" (Strumpf, et al., 1989:5). They conclude that the most effective instructional content for older youth who are well behind their peers is that which is related to existing knowledge or experience and integrates technical training.

Two of the most frequently used content approaches with at-risk youth have been vocational education and experience-based education, both of which base instructional content on applications outside of the traditional classroom.

Vocational education, however, is defined and taught in many different ways and settings. It is an approach, similar to cooperative learning and continuous progress, whose effec-

tiveness may be significantly affected by the age of the youth who participate. The work of Sticht, et al., pertains to an older cohort of youth--those of an age to enter the military. Findings from other research on vocational education with at-risk youth in school, and presumably of a younger age for the most part, are less encouraging.

Natriello, et al., (1989) report that students in a vocational education track gained less in skill levels than did students in either academic or general tracks. Research on vocational education has shown that the only real wage and employment gains derived from this approach come from career-specific courses of training.⁷ In addition, the usefulness of traditional vocational education is increasingly questioned by employers, who are less inclined to seek workers well skilled in a narrowly focused area. "Most of their skilled work, employers say, is too specific to their firms to be taught anywhere else" (Hamilton, 1986:423).

The Experience-Based Career Exploration (EBCE) program is a large-scale effort to teach a variety of skills through nontraditional content. EBCE focuses on broad career, personal and intellectual skills "that facilitate gathering information used to make knowledgeable decisions about future training and careers" (Bucknam and Brand, 1983:68). Instructional content comes from work experience at multiple community sites, goal-setting and planning a personalized education. A meta-analysis of 80 evaluations of EBCE programs showed participating students to have made large gains, relative to a comparison group, not only in career and life attitudes, but also in academic skills (Bucknam and Brand, 1983).

Conclusions

- The problem of isolating effective teaching strategies is compounded by the lack of agreement as to what skills to address. For example, computer-assisted instruction is better for teaching basic skills than for teaching higher-order skills. But many programs rely almost solely on this technique for the component that addresses skills acquisition. If there is disagreement about what is most important to teach, it is difficult to decide what teaching strategy to use.
- None of the strategies is overwhelmingly effective in preparing youth for the labor market. Skill gains are, for the most part, only in basic skills--reading and math.
- For younger at-risk students, the best evidence suggests that tutoring, continuous progress and cooperative learning strategies offer the most hope of improving

⁷ See Smith and Gambone, this volume.

basic skills. Tutoring seems particularly well suited to be incorporated into employment and training programs, since young people experience increased proficiency in reading and math both as students and as tutors. Tutoring can also be a relatively inexpensive strategy to use when program participants or volunteers are used as tutors.

- For older students, approaches that incorporate meaningful content based on current knowledge and experience seem to offer the most hope of improving skill proficiencies.
- Most research on single-component strategies has neglected the population between the ages of 13 and 16. Instead, research has focused on kindergarten to sixth-grade students or on older youth in job or military training programs. This has left a real gap in knowledge with which to build remediation programs for this population.

COMPREHENSIVE PROGRAMS

Implementation variables are extremely difficult to isolate but may play a large role in how well students fare. For example, expectations and support communicated by individual teachers are increasingly viewed as important. Due to greater awareness of these factors, and because of the absence of definitive direction from single-component strategies, many recent efforts have undertaken a more comprehensive approach with at-risk youth. Because these programs often contain a developmental as well as an academic component, they appear the most likely to address the range of skills called for by employers

We conducted a review of comprehensive programs in order to help formulate conclusions as to what features or elements contribute to critical skills acquisition among at-risk youth. We confined our search to programs that specifically noted a basic skills component and targeted at-risk students from seventh grade on, and to evaluations that used respectable research methods (a control group with random assignment or a comparison group, and pretest and posttest results).

From the best available evidence, is it possible to draw some conclusions as to program elements most likely to produce positive effects? Or must we accept the conclusion of researchers McPartland and Slavin that, with regard to middle and high school-age youth, “no proven approaches exist for successfully reaching these students” (1990:15)?

Program Evidence

Table 4 gives information on ten of the comprehensive programs we reviewed and focuses specifically on the area of outcome evidence. We have included the source, the program name, a brief listing of the easily identifiable program elements, the evaluation method used and the findings on specific outcomes. Here, we include any information that was given in the areas of academic skills, school retention or attendance, and personal development. Under the outcomes categories, a “yes” entry indicates significant gains for the at-risk population; a “no” entry indicates no positive gains from efforts in that area; and a “not assessed” entry indicates that this was not an area the program evaluation measured.

In focusing on the outcomes in Table 4, the first point to make is that improvements in academic outcomes and school retention/attendance do not necessarily move in tandem. In a program for which findings regarding academic skills are positive (e.g., Alternative High School), there is not always a similarly positive result regarding school retention rates. Likewise, in two programs where school retention or attendance rates are significantly affected (Fresh Start Mini School and the Career Intern Program), basic skills are not. Only two of the ten programs (Academy for Career Education and Higher Horizons) show positive outcomes in both areas.

This lack of parallelism in these two very important areas makes the task of determining how to shape programs even more difficult. Is there any benefit to be gained from programs that significantly improve academic skills (at least for the short term) but have no impact on student persistence rates? Given the high degree to which future employment is related to the attainment of a high school diploma, how beneficial would this be? Likewise, any program that significantly improves the graduation rates of its students but can demonstrate no impact on basic skills is somewhat suspect. Given the tremendous emphasis that employers and others are placing on the acquisition of academic skills, how great would the benefit to youth be if they leave school with nothing more than a piece of paper?

There are, however, several interesting parallelisms. Three of the five programs that indicate positive gains in basic skills contain a work experience component. Of the other two, one uses vocational education. While hardly conclusive, this provides some support to the contention that linking content to work applications may be, for many youth, the most successful way to ensure academic skills acquisition (Sticht and Mikulecky, 1984).

The table highlights the degree to which developmental goals, while noted in program designs, are difficult to measure. This can be seen from the majority of programs for which a “not assessed” notation is made under this outcome category. As discussed

Table 4
COMPREHENSIVE PROGRAM EVALUATION OUTCOMES

Program	Elements	Evaluation	Significant Outcomes		
			Basic Skills	School Retention/ Attendance	Developmental Goals
Academy for Career Education	Experience-based career education: basic skills, career guidance, career education. Development: self-exploration, values clarification, life skills, motivation.	Experimental design - random assignment	Yes (after 2 years)	Yes	Yes
Fresh Start Mini School	School-within-school: self-paced instruction, continuous assessment. Development: rap sessions.	Experimental design - random assignment - controls never tested	No	Yes	Not assessed
Higher Horizons 100	School-within-school: remedial training. Development: cultural activities, intensive counseling.	Pre/posttest design - no control group - spring-to-spring measures	Yes (after 3 years)	Yes	Not assessed
Career Intern Program	Alternative school: school-work unit, work experience, basic skills, English, science. Development: counseling.	Experimental design - random assignment	No	Yes	Not assessed
Career Education for 9th-Graders in a Community College Setting	Alternative school setting: 1/2 day of classes at college in reading, math, English. Development: daily guidance sessions with counselor.	Pre/posttest design - no control group	No	Not assessed	Not assessed

Table 4 (continued)
COMPREHENSIVE PROGRAM EVALUATION OUTCOMES

Program	Elements	Evaluation	Significant Outcomes		
			Basic Skills	School Retention/ Attendance	Developmental Goals
Alternative High School	Individualized program: 1/2 day basic skills; 1/2 day work experience, job search assistance, job referrals. Development: support services (child care, transportation, health care).	Pre/posttest design - no control group	Yes	No	Not assessed
Institute for Career Exploration	Summer program: integration of writing and career exploration, writing remediation, occupation course, work experience, peer tutors, computers. Development: student mentors, counseling, cultural activities.	Pre/posttest design - no control group	No	No	Not assessed
Basic Skills Academy/ Comprehensive Competency Program	Summer program: individualized instruction in reading and math, individually tailored sequence and goals, computer-assisted instruction, self-paced.	Pre/posttest design - no control group	No	Not assessed	Not assessed
Summer Training and Education Program	Summer program: basic skills remediation, work experience. Development: life skills.	Experimental design - random assignment	Yes	No	Yes
Louisiana State Youth Opportunities Unlimited	Residential program (8 weeks): work experience, academic training, health care, computer-assisted instruction. Development: support services, parental involvement, life skills.	Experimental design - random assignment	Yes	Not assessed ^a	Yes

Sources: Biester, 1976; Washington, D.C., Public Schools, 1981; Hartford Public Schools, 1984; Gibboney and Langsdorf, 1979; Lieberman, 1979; Malmberg, 1983; New York City Board of Education, 1989; Mei, 1990; Sipe, et al., 1988; Shapiro, et al., 1986.

^aThis outcome was measured as a participant's "intention to complete the current year and graduate." Statistically significant differences were found over time within the treatment group, but no comparison was made to the control group. Since this measure does not directly assess school retention, we classify this outcome as "not assessed."

earlier, current assessment instruments do not allow for measurement of many developmental or "coping" skills.

Of the three programs that provide evaluation data in this category, all show positive outcomes. In addition, two of the three also show improved school retention or attendance (see the table footnote; the third program did not directly assess school retention). Finally, all of the programs with positive developmental outcomes also indicate positive results in basic skills. These parallel outcomes, while again hardly conclusive, support the argument that developmental goals may play an important role in skills acquisition and improved school or program retention rates.

Clearly, there are many and varied efforts to deal with the educational difficulties faced by at-risk youth. What is equally clear is that it is still impossible to determine precisely which program components are responsible for the respective successes and failures of these efforts. Mann reports that his attempts to conduct a useful program content analysis of 12 school district programs for at-risk youth resulted in 360 different entries "scattered almost randomly over the major and minor headings" (1986:69). D'Amico has concluded that, while effective programs do exist, "each one's effectiveness . . . seems to represent an intricate, perhaps even idiosyncratic, phenomenon that, in turn, is probably the result of intricate, perhaps idiosyncratic, processes" (1982:62).

Shortcomings in evaluations certainly compound the problem of developing programs for at-risk students. Many programs have no evaluation component. Even those evaluated often do not use comparison or control groups, or random assignment, making it difficult to attribute gains to program participation; and they frequently measure only fall-to-spring changes and avoid the issue of possible summer losses. One high school program, reviewed by Taylor and Pinard (1988), reports extremely positive outcomes: a greater than 98 percent graduation rate, with 92 to 97 percent of its students accepted to four-year colleges. This is a high school located in the West Harlem section of Manhattan, in which 44 percent of the students receive some form of public assistance, 76 percent are African-American and 23 percent are Hispanic-American. However, no formal evaluation was conducted, thereby minimizing the value of this information.

Other Information

A few final points to make regarding Table 4 have to do not with what is presented, but rather with what has been omitted. Three areas of importance have received comparatively and disturbingly little attention in program evaluations. These areas are: program length, program cost and staff training.

Program Length

There are two angles from which to consider program length: the length of time an individual student is enrolled and the length of time a program has been in operation.

The length of time necessary for a student to be enrolled in any comprehensive program is really unknown. Programs vary greatly, though most--particularly those using instructional strategies--have been relatively short-term (one year or less). There is some indication that, most recently, comprehensive programs are being designed for longer terms (from two to five years). While longer interventions seem logical, this is a program feature that has not been much explored and may be critical. For example, the gains in skill proficiencies in two of the programs in Table 4 occurred only after two or three years. How much of a role does length of involvement play in program success? Are many of the short-term interventions (one year or less) futile, given that without sufficient time, no intervention can hope to work? Are two years sufficient, or are four or five years needed? Or longer? These are important questions to research, particularly in light of Hahn's (1987) warning that short-term interventions will lead only to short-term results.

In terms of duration of program operation, here, too, there is compelling logic to the assumption that the longer a program is in operation, the longer it has to develop, be revised, learn from past success and failure, and ultimately improve. Hahn points out the degree to which this has been true for the Job Corps, which, he asserts, has benefitted from the ability to experiment with learning methods: "This process of experimentation and standardization could only bear fruit in a program that is allowed to operate for several years" (1987:263). Of the multitude of efforts funded across the country to serve the at-risk population, many appear to be abandoned after only a very short period. In following up on programs eligible for funding and dissemination through the National Diffusion Network for their effectiveness with at-risk youth, we were told in some cases that programs were no longer in operation or had no evaluation data to share.⁸ While this aspect has been neglected in the research, the Summer Training and Education Program (STEP),⁹ the programs of James Comer at the Yale University Child Study Center, and Henry Levin's Accelerated Schools program may have benefitted from sustained efforts.

⁸ After contacting by phone five program officers and getting confirmation on evaluation data available from only one, we abandoned this effort as fruitless.

⁹ After the first year, STEP revised its curriculum to reflect new insights from its first-year experiences.

Cost

Few programs provide information on actual cost of operation. In a time of particularly limited funding, this is a distressing omission. Certain interventions or strategies, such as paid tutors and computer-assisted instruction, clearly have higher start-up costs than others, such as cooperative learning and volunteer tutoring. Do they, then, reduce costs of later remediation more effectively than less-expensive methods? Given the large and growing number of youth at risk and the limited--and perhaps shrinking--funds available for this population, we need to be able to allocate money in the most cost-effective way. This is possible only with more complete information on program costs.

Staff Training

Information on staff training for program operation indicates that it can range from absolutely no training (as is the case for the majority of programs we reviewed) to ongoing and intensive training. This, too, is an area in which we know very little that is conclusive. How important is training for personnel involved in management and teaching? What should that training consist of? Do programs that devote more attention to staff training produce better results? Is a certain amount sufficient, or should training be ongoing?

While it is not yet possible to prescribe what is needed or sufficient in the area of training, a lack of training matches the poor results of some programs and thus raises questions. Given both the complexity of needs and the continual evolution of best practices related to meeting them, it is difficult to understand the assumption that no training would be necessary, particularly in a field where staff turnover can be high. This may be an area of great importance to program success but generally receives only secondary consideration. Personnel and implementation factors may play a significant role in ultimate success; adequate training could play a large role in these factors.

Conclusions

- . Existing evaluations of comprehensive programs are not adequately designed or implemented to allow for consideration of all of the variables that might be linked to positive effects.
- . As in single-component strategies, linking instructional content to work applications in comprehensive programs seems to produce better outcomes in skills acquisition.

- . Limited evidence suggests that developmental gains are linked with gains in academic skills.
- . The developmental needs of youth could play a vital role in student persistence and attitudes. Both assessment instruments and evaluations designed to consider developmental outcomes are needed.

V. COMPREHENSIVE NEEDS CALL FOR COMPREHENSIVE PROGRAMS

Many researchers have come to the conclusion that “[e]ffective programs are comprehensive” (Slavin and Madden, 1989:11); “[t]he most vital lesson educators and trainers can derive from this review. is the importance of integrating and relating the critical components of a comprehensive effort” (Hahn, 1987:263);¹⁰ “[n]o single factor makes schools effective in sustaining student interests and commitment . Rather, a constellation of both structural and normative features appears to be involved’ (Bryk and Thum, 1989:375).

The most compelling reason to conclude that program designs for at-risk youth should encompass more than single-component strategies is that comprehensive needs call for comprehensive programs. The multitude of problems faced by at-risk youth today, and their reasons for leaving school (Rumberger, 1987), are, perhaps, sufficiently compelling reasons to believe that approaches in confronting their educational needs must be comprehensive, rather than solely instructional. Such reasons as dislike of school, pregnancy, financial concerns, drugs and home difficulties all point toward the need for a collaborative effort expressly designed to assist these youth with those issues first and foremost in their minds--issues against which basic skills pale in terms of immediate importance or relevance.

The very factors that have placed these youth at risk are what need to be addressed. Wehlage, et al., (1982) have reviewed the various approaches taken with at-risk youth--remediation in basic skills, vocational training and work experience--and argue that these approaches have been too simple and misdirected. They state that “[t]he assumption that some variation of skill remediation or training will eventually alter the life circumstances of marginal students underlies most of our recent national youth policy’ (Wehlage, et al., 1982:4). Their report argues that attention to “adolescent social development” is far more important to the long-term success of these youth and that acquisition of skills “can be most beneficial only in the context of broad development” (1982:9).

Those programs that attempt to impart educational skills alone, without attention to developmental needs, indeed have not had great success. They have succeeded more with elementary school-aged children, precisely because the issues discussed above, such as pregnancy, drugs and financial responsibilities, are not so prevalent. In addition, it is now quite clear how detrimental a role tracking and low expectations have played in increasing the alienation many at-risk youth experience in schools. Only a comprehensive approach that is systemwide can adequately address these issues.

¹⁰ Hahn’s review was of second-chance programs.

Finally, it is becoming increasingly clear from the demands of employers, as seen in Table 1, that what these youth need for future success are not just academic and higher-order skills, but coping skills as well. Coping skills, such as responsibility, self-esteem and self-discipline, will be learned only through programs that are expressly designed to teach them. Researchers have concluded that these skills are not automatically or necessarily learned along with simple cognitive development; they must instead be a basic aim of programs (Beyth-Marom, et al., 1989).

How best to design the comprehensive program? From carefully researched reviews that constitute some of the best analyses, we pull out and summarize those program elements researchers have identified as important in comprehensive programs that aim to serve at-risk youth. This information has been organized in Table 5.¹¹

We categorize the elements of these programs into four areas: instruction, which refers to single-component strategies used in the classroom (discussed in the previous section); development, which refers to efforts that target the developmental needs of at-risk youth, including an extended day, early intervention or a summer component; leadership, which refers to elements chiefly concerned with overall program management or teacher behavior; and school ethos, which refers to those elements, such as high standards, that attempt to create a general atmosphere conducive to learning.¹² Efforts in the last three areas--development, leadership and school ethos--are what largely distinguish comprehensive programs from single-component strategies; they are also three areas that few employment and training programs address.

Table 5 exemplifies the current state of understanding and effort in serving at-risk youth: it reflects both the continuing debate and uncertainty, and the increasing complexity of programs. Across the 12 reviews included here, 37 elements pertain to issues of instruction, while 47 elements pertain to issues of development. Considerable attention also goes to school ethos, with 27 elements listed. The category with the fewest number of elements (19) is leadership. That comparatively minimal emphasis could be a result of

¹¹ In constructing this table, we eliminated those few instances where components were not clearly defined. We also combined elements that appeared virtually identical but had been given different names. Finally, many details have been truncated, and the authors' words have been translated into a more uniform taxonomy.

¹² Clearly, there are many ways to categorize the various elements of comprehensive programs; e.g., the William T. Grant Foundation Commission on Work, Family and Citizenship (1988) uses the categories of program context, instructional context and community context; McPartland and Slavin (1990) use instructional practice and content in remedial reading, tracking and curriculum, and dropout prevention.

Table 5
IMPORTANT ELEMENTS OF COMPREHENSIVE PROGRAMS

Source	Instruction	Development	Leadership	School Ethos
Berlin and Sum, 1988	Emphasis on both academic and employment needs	Developmental needs; support services	Accountability; flexibility; creativity; centralized management; decentralized component	High standards; uniform standards
Bryk and Thum, 1989	Emphasis on academics			Faculty interest in students; orderly environment; supportive environment
William T. Grant Foundation, 1988	Flexible pacing; multiple teaching modes; computer-assisted instruction; mastery learning; emphasis on academic-work link; relevant, cultural curriculum; assessment	Support services; collaboration with community; assurance of work; employability skills; longer-term intervention	Instructional leadership; stable funding	Orderly environment; competent, caring teachers; supportive environment
Guthrie, 1989	Coordinated instruction	Early intervention; time after school, during summer	Staff development	Philosophy 'all can learn;' comprehensive approach targeted toward all students; high expectations
Hahn, 1987	Individualized instruction; competency-based curriculum	Counseling; support services; school/business collaboration; parent involvement; mentoring; year-round programs	School incentives	
Hamilton, 1986	Strong vocational component; small classes; individualized instruction	Out-of-classroom learning; counseling		Separate potential dropouts
Levin, 1988	Deadline for catching up; fast-paced curriculum; interesting applications; higher-order skills; peer tutoring; cooperative learning	Parent involvement; community involvement; nutrition and health; parent training; extended day	Autonomy; accountability; school-based governance; periodic evaluations	High expectations; high status; unity of purpose; clear goals

Table 5 (continued)
IMPORTANT ELEMENTS OF COMPREHENSIVE PROGRAMS

Source	Instruction	Development	Leadership	School Ethos
Mann, 1986	Emphasis on academic-work link	Coalitions; early identification		Care
Rumberger, 1987	Emphasis on both academic and employment needs; individualized instruction	Counseling; early identification		Sensitive staff
Wehlage, 1982	Small size; variable expectations; individualized curriculum in group setting; cooperative learning; relevant applications; experiential education	Extended role for teachers	Autonomy; accountability	Optimism about student success; high expectations; positive peer culture; cooperative effort; family atmosphere; support for program goals; admission of need for help
Wells, 1990	Small classes; experience-based education; emphasis on both academic and employment needs; challenging curriculum; peer tutoring	Self-concept development; counseling; student empowerment; interpersonal and life skills; transition programs; voc/adult education; work/study programs; parent involvement; substance abuse programs; pregnancy programs; after-school care; community involvement; business involvement; community-based youth activities; community service; preschool intervention; mentor programs	Flexibility; clear rules and procedures; staff development; school choice	High expectations; minority role models
Winters, et al., 1988	Emphasis on academic-work link; team approach; collaboration	Summer component		

the very heavy emphasis this area is receiving in the current reform of mainstream education.

INSTRUCTION

Careful scrutiny of the elements included in the instruction category reveals the degree to which debate continues in two areas delineated earlier: delivery mode and instructional content. Of those reviews that recommend specific instructional delivery strategies, the dispersment of recommendations (according to the number of reviews) is as follows: individual instruction (4), cooperative learning (2), mastery learning (2) and peer tutoring (2). In terms of instructional content, the range of advocated approaches is similar: an emphasis on both academic and employment needs (4); an emphasis on the link between academics and work (3);¹³ relevant and cultural applications (3);¹⁴ experiential education (2); and challenging content (2).¹⁵

While contradictions appear widespread, the mass of research generally points to instructional delivery that focuses on the unique needs of each student--either in small groups or individually--and content that has substantial relevance to the students' life experience. This summary appears to closely coincide with the evidence presented earlier on single-component strategies.

DEVELOPMENT

Under the category of development, the amount of detail provided varies considerably, from a simple declaration that "developmental needs must be met" (Berlin and Sum, 1988) to a listing of specific programs, such as those designed to address teen pregnancy and substance abuse (Wells, 1990). Despite these differences in detail, there appears to be greater convergence in the area of developmental needs than in the instructional strategies category. The most consistently noted elements are: provision of increased time through an extended day, a summer component or a longer-term intervention (6);

¹³ The former emphasis on both academic and employment needs pertains to recommendations for a curriculum that contains both components but does not necessarily teach academics through their connection and relevance to work.

¹⁴ Relevant applications may or may not be the same as the academic-work link. Details supplied did not make this clear.

¹⁵ Challenging content could also be considered a mode of delivery, in that the degree to which material is challenging can also be a function of the pace at which it is presented.

involvement of other constituencies, such as business, community and/or parents (5); counseling (4); social services (4); and early intervention (4).

The relative consistency and repetition of several themes here suggests, at a minimum, a general recognition that it is critical to address the developmental needs of at-risk youth--perhaps, given the volume of elements noted (47), even more critical with this population than are the instructional needs.

LEADERSHIP

Although given the least attention when considering the needs of at-risk youth, the leadership elements noted, on the whole, reflect the current recommendations being made in the mainstream education reform movement. For the most part, these pertain to governance and the delicate balance between centralization and decentralization. Such elements noted include: accountability (3) staff development (2) increased autonomy (2), school incentives and school choice.

From a review of evaluations of these types of efforts with mainstream populations, their impacts on student achievement appear weak, if present (Summers and Johnson, 1991). Some evidence indicates a positive impact on student absenteeism and dropout rates, though what is available is hardly conclusive (Collins and Hann, 1991).

SCHOOL ETHOS

School ethos is an area that has gained increasing attention over the last five years and probably will continue to be a particular focus of programs targeting at-risk youth. As discussed in Section III, there is general agreement that such elements as uniform and high expectations are critical to a productive and positive atmosphere in schools. Of the 12 reviews included here, high expectations are noted by five, while four others note care or sensitivity on the part of school personnel. Implicit in the recommendations for these elements is the certainty that many subtle messages from teachers and others in schools have, both in the past and today, negatively affected many students. The extent of agreement as to the importance of high expectations, as well as how closely the advocacy represents a response to findings from research (see Section III), is encouraging.

NOTES OF CAUTION

There are three notes of caution to raise from what has been presented in Table 5. The first relates to the degree to which we believe that many of the elements listed, once stipulated or mandated or even requested, will become reality. How do we ensure, for example, that high expectations are communicated? This is a problem that can be

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addressed through staff training, but, as discussed previously, staff training has received very limited attention.

The second caution pertains to program design. Powell, Farrar and Cohen (1985) have criticized the current state of education by using the analogy of the shopping mall to characterize the huge and seemingly random gamut of offerings or selections available to high school students. There may be another, equally disturbing, way to apply their analogy: Table 5 might lead one to conclude that approaches and programs for at-risk students could also become “shopping malls.” Schools and employment and training programs must guard against combining a little bit of this with a little bit of that, adding a few more things to the basket if there is money left over, then hoping that the end result is satisfactory. The array of elements discussed in this paper should not be treated as a shopping list.

The array of elements and evaluations discussed, however, provides us with the only information available as to how to successfully teach educational skills to at-risk youth. The employment and training sector is forced to draw on this “best evidence” from schools, given the dearth of coherent strategies and evaluations from current second-chance programs.

The third note of caution is that we can place only limited trust in the effectiveness of current strategies. Essentially, all of the conclusions regarding how to teach educational skills must be qualified. What would constitute an informed approach in both practice and research draws on this review and is discussed in the recommendations that follow.

VI. CONCLUSIONS AND RECOMMENDATIONS

This review has focused on two major tasks: (1) outlining the problem of, and issues associated with, identifying the skills needed for labor market success; and (2) identifying for the employment and training system effective strategies, techniques or programs that have been used in the mainstream education system and are designed to serve at-risk youth. As second-chance programs face the need to serve youth who lack the skills employers seem to want--because school practices result in inadequate skill outcomes for these youth--it is important to try to answer the questions with which we started.

Unfortunately, the foregoing review indicates substantial limitations in the development of well-documented, successful approaches to increasing the proficiency levels of disadvantaged youth. For this reason, answers to our original questions cannot be considered definitive, but informed. In addition, the answers highlight several serious impediments to progress in efforts directed at preparing at-risk youth for labor market success.

- What are the critical abilities that young adults should have when they leave school or employment and training programs and enter the labor force? Are traditional "basic skills" enough, or does participation in the work force require "higher-order skills"? Is there general agreement on this matter, and if not, what does this imply?

There is little agreement on the important educational skills required to enter productive employment. Many and differing voices, described in Section II, hold an equal number of opinions. We concur with the conclusion of the SCANS report, that "[p]art of the difficulty is that employers and school personnel are passing each other like ships in the night: one speaks in Morse code, the other signals with flags" (U.S. Department of Labor, 1991:4). Educators and the business community are not in accord over requisite capabilities; progress toward better serving the youth population through planned programs is severely impeded by lack of agreement on fundamental goals. In addition, the establishment of competency standards--vital to evaluating programs and participant progress--is necessary but should not precede agreement on skill definitions and program goals.

- What is currently known about how the traditional education system transmits these skills? Does the system's limited success with at-risk youth provide us with valuable lessons or research indicating which pedagogical practices ought not to be mirrored in second-chance programs?

The majority of at-risk students are ill served by an education system whose essential structure and practices compound these students' problems. It is reasonable to suggest

that the need for second-chance programs could be greatly reduced if mainstream education, which interacts with these youth first, were more successful in meeting their various needs. In the meantime, employment and training programs can learn much from research findings on traditional pedagogical techniques, which are too frequently imitated in other programs. The clearest research indicates that programs need to avoid ability tracking; that programs should communicate high and uniform expectations; that programs should use well-trained staff; and finally, that learning must be structured so that it truly engages students.

- What evidence of success is there in special programs designed to teach educational skills to disadvantaged youth? Are the findings sufficiently grounded to justify replication of these programs?

The volume of effort, while commendable, has impeded our ability to discern effective approaches. An improved understanding of effective practices is hindered by current interventions that include a seemingly random combination of elements--in shopping-mall style--and exclude, for the most part, attention to rigorous evaluation. As Mann (1986) has pointed out, we are learning less than we are doing and continue to be forced to design programs based on limited information. This, however, serves little purpose if what we are doing is not effective. Without agreement about the contribution to research that program evaluations are expected to make, we will continue in a haphazard fashion, and 15 years will pass again without much better understanding of how effectively to reach the at-risk population.¹⁶ As Kirst stated in response to President Bush's America 2000 plan: "We need . . . overarching priorities to guide both research and practice; what we don't need is more random innovation" (1991:38).

- What long-term strategies ought employment and training programs to pursue, in light of these issues?

Current strategies that focus on teaching basic skills alone will probably not result in any large-scale success. The types of strategies currently employed by second-chance programs to increase the skill levels of disadvantaged youth are generally aimed at only basic skills. Research indicates that acquisition of higher-order and coping skills is not necessarily a by-product of a purely cognitive approach. In addition, employers deem these other skills critical for long-term labor market success.

¹⁶ This 15-year gap refers to the time passed since Walther (1976) came to many of the same conclusions regarding the developmental needs of youth that we have come to in this review.

Employment and training programs must define the critical skills--academic, higher-order and coping--to be taught; design programs incorporating recommended elements from the best evidence currently available (see recommendations 6 and 7, which follow); establish national standards for competency levels in these areas and determine the appropriate assessment instruments to use; and conduct rigorous evaluations to both monitor progress and adjust program design as necessary.

- . What research questions warrant further investigation?

Specific research questions that can be addressed by the Department of Labor are listed below (recommendations 8 through 10).

RECOMMENDATIONS

The recommendations for the employment and training system presented here are of three kinds: for policy development, for practice in the field and for research.

Recommendations for Policy

1. The Department of Labor (Secretary's Commission on Achieving Necessary Skills) has already directed some effort toward defining educational skills critical for labor market success, but more is necessary to refine skill definitions and distinguish necessary skills from merely desirable ones. To serve the youth population effectively, strategies need to be developed to address skill needs; this can only be accomplished with a clear understanding of what these needs are.
2. The Department should support efforts to explore new and varied methods of "skill" assessment, once skills have been better defined. Given the evidence that a wide range of skills is demanded by today's employers, we must develop better methods to both guide and measure the effectiveness of teaching them. The employment and training system is an opportune testing ground for exploring alternative measures of academic skills acquisition (such as the new Educational Testing Service measures of literacy) and for formulating measures of the higher-order and coping skills not incorporated in traditional national tests.
3. The Department of Labor, in conjunction with the Department of Education, should support projects that aim to coordinate the various efforts of schools, social service agencies, employment and training programs and others involved in delivering services to at-risk youth. Because we are increasingly looking toward comprehensive programs as the only sensible way to address the broad range of needs faced by these youth, this type

of coordination would help to reduce costs, avoid repetition of failure and unnecessary duplication of effort, and facilitate the dissemination of effective strategies.

4. The Department should explore ways to foster greater school retention, which should include efforts targeting youth at a much younger age. Evidence of remediation and second-chance program success is so modest that it argues for a more preventive approach focused on school retention rather than on later remediation. The earlier an intervention occurs in the lives and education of these youth, the more likely it is that later need for remediation will be reduced. Current efforts must address those immediately in need, but a gradual shift of resources toward prevention, rather than remediation, is vital in terms of cost-effectiveness and optimal results.

5. The Department should undertake a program of technical assistance and knowledge dissemination aimed at providing better information to practitioners about effective educational strategies and how they should be incorporated into employment training programs. An important part of this program should be an effort to steer practitioners away from educational practices--such as context-free skills-drilling--that have been identified as unsuccessful. As much as possible, the Department should encourage adoption of alternative techniques that show some--though still marginal--promise for success, and discourage use of practices that clearly have failed.

Recommendations for Practice

6. Practitioners should seek to incorporate comprehensive educational components that target the unique instructional and developmental needs of each individual, without the stigma or lowered expectations commonly associated with tracking; that present a hierarchy of skills; that provide a context that is relevant and engaging; that frequently assess progress; and that communicate uniform and high expectations.

7. Two approaches that have demonstrated some success and appear particularly appropriate for the age and circumstances of youth in employment and training programs are tutoring and work experience. Practitioners should design programs with these in mind.

Recommendations for Research

8. The Department of Labor should sponsor a research project to identify those programs believed to be the most successful or that have some evaluation data pointing toward success. Complete evaluations of these programs (see recommendation 10) should then be sponsored by the Department.

9. Information should be collected on the levels of training that program staff currently have, whether programs with better-trained staff achieve better outcomes and whether ongoing staff training is needed for comprehensive programs.

10. The Department of Labor should standardize design requirements for evaluations of programs directed to increasing the educational skill levels of at-risk youth. The design requirements should include: minimum time periods for program operation; control group designs with random assignment; uniform assessment measures, with a pretest and posttest component for both control and experimental groups; measures of program effects on dropout prevention; follow-up data collection of postprogram labor market outcomes; and information for a complete program cost assessment.

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SCHOOL-TO-WORK TRANSITION: Failings, Dilemmas and Policy Options

Richard H. de Lone

I. INTRODUCTION

School-to-work transition refers both to individual journeys and to institutional processes. For individuals, it describes the gradual development of the maturity and the academic and occupational skills required to move from the status of student to that of solidly employed worker. It also describes the programs, services and avenues available through education, training, the workplace and the labor market itself, which together provide the preparation, training, experiences and opportunities available to youth as they attempt the transition.

As a developmental process, the school-to-work transition occurs over a number of years. There is no common definition of the boundaries of this span, but most discussions assume it to be the period from the beginning of high school (roughly age 14) to age 24 or 25, by which time most--but not all--youth appear to have stopped "floundering" and settle into careers (Osterman, 1980; Hamilton, 1986). Some discussions imply a longer span.

The U.S. General Accounting Office (GAO, 1990) cites the fact that early school failure usually creates a problem for the school-to-work transition. It is certainly true that if youth enter high school with serious basic skills deficiencies, the likelihood of an effective school-to-work transition is slight. Also, it is clear that the search for a career--or, more modestly, stable employment--lasts beyond the mid-20s for many. For instance, a majority of community college students across the country are over 25, and many of them are pursuing occupation-related education.

The primary criticism of the school-to-work transition system in America is that, except for those who move fairly smoothly through colleges and graduate schools to work, there is no system worthy of the name. Critics argue that this is especially true in contrast to other industrialized nations, which have systematic, well-articulated systems for moving non-college youth through training to jobs in their mid-teens to early 20s (e.g., Nothdurft, 1989; GAO, 1990; Hamilton, 1990).

Richard de Lone is the principal of de Lone Associates.

Much criticism has focused on the lack of effective education for employment during high school for non-college-bound youth in America, "The Forgotten Half," as the William T. Grant Foundation Commission on Work, Family and Citizenship (1988) has called them. More recently, criticism has also focused on the lack of a training system to carry youth from late secondary through postsecondary years, and the lack of employer involvement in youth training or connection of employers to schools (Barton, 1990; Hamilton, 1990; Hoyt, 1990; GAO, 1990; Commission on the Skills of the American Workforce, 1990; Lerman and Pouncy, 1990). These systemic shortcomings are presumed to result in many youth failing to make an effective school-to-work transition.

While the definition of "successful" can be problematic, much of the literature on the school-to-work transition focuses on the problems of youth who do not form a solid connection to the labor force--primarily disadvantaged and minority youth whose education does not go beyond high school. The data leave little doubt, as we shall see, that by normative standards (earnings, stability of employment), the school-to-work transition is especially rocky for those with no more than a high school education, for youth from poverty families, for minorities and for women.

Some, however, go further and argue that even those youth who make it by normative standards are not well served by standards of international competitiveness. Here, the argument is both that youth enter the labor force with weak skills and that they take a longer time making the transition than is true in other countries.

So broadly defined, as an object of public policy concern, it is not surprising that the topic becomes quite diffuse and complex. If there is one word that captures the overall nature of the subject--the literature that surrounds it, the institutions that deal with it and the efforts to reform it--it is "disjointed." What seems to be a fairly simple concept to define turns out to be a study in disjuncture for several reasons:

- Differing and, to some extent, competing definitions and analyses of the nature and/or causes of the problem;
- A varied set of institutions whose involvement is presumably needed to solve the problem (however defined) but which have limited history of or incentives for collaboration;
- A wide range of differing and, to some extent, competing policy and program recommendations--some quite discrete, others amounting to nothing less than fundamental critiques of the economic and social structure--backed by very little definitive evaluation research to help one choose the most effective course of action; and

- The setting against which the transition occurs--the labor market, which is a moving target; "what works" at one time and place at one stage in the economic cycle for some segment of youth in a particular sector of the economy may not hold when any of these variables changes, as they constantly do.

This paper reviews the literature and history of school-to-work transition as a policy issue and, while recommending issues for further research, also attempts to present some unified recommendations for action--recommendations for policymakers and practitioners alike.

II. THE PROBLEM

In a spate of recent criticism, the school-to-work transition in this country has been called "haphazard," a "system for preparing youth, particularly non-college youth, for employment (that) has evolved without a coherent overall strategy" (GAO, 1990) and perhaps "the worst school-to-work transition system of any advanced industrial nation" (Commission on the Skills of the American Workforce, 1990).

In effect, most critics argue, it is a fragmented "non-system," based on laissez-faire principles. Basic education is made available to all, but that system is implicitly biased toward college preparation and does little to prepare for the workplace those not headed for college (William T. Grant Foundation, 1988). With the exception of vocational education, which serves only some of these youth (with disputed effectiveness), there is little by way of career counseling, employability skills development, job search assistance or other career-oriented programs and services in most high schools.

With regard to services and programs with an explicit emphasis on preparation for careers, the most widespread school activity is vocational education. Nearly 20 percent of all high school credits taken are in vocational education. Some 97 percent of high school students take at least one "voc ed" course, but a substantial percentage are in fields, such as home economics, industrial arts ("shop") or typing, with little or no claim to serious occupational preparation. Nearly 47 percent take more than four vocational courses in high school, while 16.5 percent take more than eight courses (Wirt, 1991).

Despite these large numbers, it is not clear how many students are enrolled in coherent programs (as opposed to hopping through a range of electives). Some estimate it is as few as 13 percent (Hamilton, 1990), and quality is uncertain. Bottoms (1989) concludes that many comprehensive high schools have no coherent vocational programs, that less than half of vocational students receive guidance help in planning a sequence of courses consistent with their career aims, and that low expectations, particularly evident in assignment of students to low-level academic courses (e.g., general math in lieu of algebra), damage them academically, making the image of vocational education as a dumping ground a self-fulfilling prophecy. Further, disadvantaged students appear least likely to have access to quality vocational programs, in part because they are concentrated in less-wealthy school districts (GAO, 1990; Wirt, et al., 1989).

Other than vocational courses, career-related activities and services are limited. While most youth have some employment during high school--which most studies find to be a predictor of subsequent labor market success (Meyer and Wise, 1982; D'Amico and Baker, 1984)--less than 10 percent of vocational students and 3 percent of all students participate in cooperative education and other structured work/study programs (William

T. Grant Foundation, 1988) and minority students are less likely than whites to get any work experience as teenagers. Few schools offer job placement assistance (William T. Grant Foundation, 1988), and career counseling is a low priority for school guidance counselors (Hoyt, 1990).

THE LIMITS OF POSTSECONDARY OPTIONS

The education and training options of non-college-bound youth are limited. As a nation, we send more students to college than any other industrialized country, and we spend much less than most on postsecondary training of non-college youth, according to the GAO (1990). The GAO concluded that, exclusive of high school expenditures, the average public investment for a college youth is seven times that for a non-college youth.

Dropouts have the fewest options. Other than Job Training Partnership Act (JTPA) programs, which have the capacity to serve about 5 percent of those eligible, the 21 percent of students who drop out have few options for further education and training unless they first obtain a general equivalency diploma (GED) or are fortunate enough to obtain a job with substantial on-the-job training. Morgan (1984), analyzing National Longitudinal Survey (NLS) data, has found that close to a quarter of dropouts receive a high school diploma or are reenrolled in education by age 22. He concludes that about 16 percent of all youth remain dropouts at age 22, though minority rates are higher, especially for Hispanics.

High school graduates, of course, have an array of options available to them, if they take the initiative to pursue them. These include training offered in the military, enrollment in proprietary schools, apprentice programs, in-house employer programs, attendance at community colleges and other two-year institutions, or enrollment in four-year colleges. However, apprenticeship is a small program, and, except for informal on-the-job training, employers conduct little training for entry-level workers in most occupations (Tan, 1989).

Grubb (1989b) has found that 61.7 percent of the graduates of the class of 1980 (roughly 50 percent of the whole cohort, including dropouts) enrolled in some form of postsecondary education within four years of graduation. Of these, 35.5 percent enrolled in four-year colleges, with the remainder in two-year colleges, technical institutes and proprietary schools. Blacks, Hispanics and Native Americans are underrepresented in four-year colleges. Most non-college postsecondary enrollments are in vocational programs, which also graduate the majority of two-year degree candidates.

Within four years of graduation, over 40 percent of those enrolled in all forms of postsecondary education other than four-year college had dropped out, and about 20 percent had received degrees or certificates, with the rest still in school or having transferred.

Dropout rates for four-year colleges were lower (19.3%) and completion rates higher (27.2%). Enrollment rates stayed about the same, but dropout rates increased from the class of 1970 to the class of 1980 (Grubb, 1989b).

According to Hamilton (1990), there is little evidence about the economic benefits of postsecondary vocational programs, as opposed to academic programs, and Grubb (1989b) concludes that most dropouts from these institutions receive too little education and training to gain much benefit. This is consistent with findings of the GAO (1990) that enrollment in proprietary schools leads to some improvements in stability of employment, but not in wages.

For those who do not go to four-year colleges, then, the existing postsecondary system is characterized by relatively high dropout rates and marginal benefits for noncompleters. While many options are available, a large percentage of high school graduates--those who do not enter postsecondary education and some who do but drop out early--receive little education or training to help them make their transition to work. Rather, as Barton (1990) sees it, education and work remain separate worlds.

If current trends continue and the school-to-work transition system remains, in effect, a non-system, the argument can be made that the only school-to-work transition strategy that will lead to a decent income is college completion. That is equivalent to saying that 70 to 75 percent of youth face the prospect of an unsatisfactory transition, with the results most devastating for disadvantaged youth who receive the least education.

WHAT THE DATA SHOW

To get an overview of who does (and does not) make a successful school-to-work transition, we analyzed the NLS youth sample. Baseline data on this large sample was collected in 1979. To get numbers large enough to extrapolate to the population at large, we included all youth 15, 16 and 17 years old in that sample. Taking 18 as the typical age at high school graduation, we followed up these individuals two and five years after their assumed year of graduation (at ages 20 and 23, respectively). This means we were taking two-year follow-up measures in the period of 1981-83 and five-year measures in the period of 1984-86. The latter yield a picture that is relatively current and that was taken during a strong national economy.

If one uses earnings five years after leaving school as a proxy for making the transition successfully, the data reveal the importance of race, gender, educational attainment and family background to a successful transition (which, for illustrative purposes, we define as earning \$10,000 or more a year five years out of high school).

Race/Ethnicity and Sex

As Table 1 shows, only 18 percent of black females were earning over \$10,000 five years after the high school period. They were the least likely group to be earning at least \$10,000, followed by Hispanic females (24.3%) and black males (25.8%). In contrast, white females (32.6%), other males (35.8%) and white males (44.9%) were much more likely to be earning at least \$10,000. The "other" categories are dominated by Asian Americans. Table 1 also shows that women are much less likely than men to be among the highest earners in every race/ethnicity group, with the differences most pronounced for minorities.

Hispanics and blacks are least likely to have completed college (at least 16 years of school), with black males lagging behind black females. (See Table 2.) Hispanic males are the most likely to have completed less than 12 years of schooling, followed by black males and Hispanic females. These differences at the low and high ends account for most of the variation by race/ethnicity and sex. The percentages whose educational attainment falls in the middle ranges (12 years and 13 to 15 years completed) are fairly close. Complex interactions among race/ethnicity, sex and earnings are suggested by the fact that at age 23, Hispanic males, with considerably less overall education, are much more likely than females or black males to be earning over \$10,000, while black females, with more education, are less likely than black males to earn over \$10,000. (See Table 1.)

Table 3 shows two indicators of failure to make an effective transition: the percentage of each group with no earnings and the percentage of each group living in a household receiving welfare. Generally, as one would expect, the results here are the inverse of those regarding high earnings and high educational attainment. It is notable that women are more likely to be on welfare than men in the minority groups, but not among whites. Sex makes little difference in probability of no earnings, except among Hispanics.

Table 4 shows changes in the percentage of those with no earnings between two and five years out of school (ages 20 and 23). Note that there are only modest changes for whites and others, but there are decreases in the proportion with no earnings for black men and women and for Hispanic men, but there is an increase in this proportion for Hispanic women. Again interactions of race/ethnicity and sex are strong.

Education Effects

For those who do not go directly from high school to full-time labor force participation, postsecondary education is an alternative route to careers. In the long run, the payoffs to increased education are substantial. In the short run, however, as Table 5 indicates,

Table 1
PERCENTAGE AT AGE 23 EARNING ABOVE \$10,000,
BY RACE/ETHNICITY AND SEX

	% Above \$10,000	% Above \$15,000
Black Male	25.8	12.7
Black Female	18.3	4.9
Hispanic Male	35.9	19.3
Hispanic Female	24.3	8.3
White Male	44.9	26.1
White Female	32.6	12.9
Other Male	35.8	21.5
Other Female	27.7	6.7

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents five years post-high school in 1984-86.

Table 2
YEARS OF EDUCATION COMPLETED AT AGE 23,
BY RACE/ETHNICITY AND SEX

	<12 Years	12 Years	13-15 Years	16+ Years
Black Male	33.0	38.7	20.9	7.4
Black Female	20.0	40.7	29.3	10.0
Hispanic Male	46.5	26.6	21.4	5.5
Hispanic Female	32.5	36.7	24.0	6.7
White Male	20.9	36.3	21.8	20.9
White Female	17.3	41.5	21.2	20.0
Other Male	25.9	38.2	19.6	16.3
Other Female	15.9	42.6	22.8	18.6
All	21.6	38.7	22.0	17.7

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents five years post-high school in 1984-86.

Table 3
PERCENTAGE AT AGE 23 RECEIVING WELFARE AND
HAVING NO EARNINGS FIVE YEARS POST-HIGH SCHOOL

	% Receiving Welfare		% With No Earnings	
	Male	Female	Male	Female
Black	5.6	10.0	24.1	28.6
Hispanic	3.7	8.2	15.1	28.4
White	2.7	2.7	12.4	13.8
Other	1.1	5.4	15.0	13.1

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents five years post-high school in 1984-86.

Table 4
PERCENTAGE WITH ZERO EARNINGS AT AGES 20 AND 23,
BY RACE/ETHNICITY AND SEX

	No Earnings Age 20 (%)	No Earnings Age 23 (%)	Change	% Rate of Change
Black Male	28.2	24.1	-4.1	-14.5
Black Female	35.7	28.6	-7.1	-19.9
Hispanic Male	21.7	15.1	-6.6	-30.4
Hispanic Female	22.0	28.4	6.4	28.6
White Male	11.3	12.4	1.1	9.7
White Female	12.7	13.8	1.1	8.7
Other Male	17.8	15.0	-2.8	-15.7
Other Female	14.1	13.1	-1.0	-7.1

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data for respondents two years post-high school in 1981-83 and five years post-high school in 1984-86.

Table 5
 PERCENTAGE AT AGE 23 EARNING ABOVE \$10,000,
 BY EDUCATION LEVEL AND SEX

	Male	Female
Less than 12 years	27.8	12.2
12 years	42.2	31.3
13 to 15 years	35.5	40.5
16 or more years	37.8	31.9

Source: Public/Private Ventures' unpublished analysis of National Longitudinal Survey data

there is a trade-off between education and earnings, since those pursuing postsecondary education are, in many cases, either not available for full-time work or are working to support their education in jobs unrelated to eventual careers. Thus, at five years out, the earnings differential between dropouts and high school graduates has emerged clearly, but the payoff for continuing education has not yet emerged, except for women with 13 to 15 years of schooling.

Economists view the decision to continue education as an investment decision: immediate earnings are foregone in the prospect of larger earnings downstream. The NLS data are consistent with this perspective: five years out of high school, only 26 percent of those still enrolled in education had earnings over \$10,000, compared with 40 percent of those no longer in school.

In the past 20 years, with accelerating speed in the 1980s, the importance of higher education to a successful school-to-work transition has grown. In this period, real earnings of the average worker (that is, earnings in constant dollars adjusted for inflation) have declined--an unprecedented phenomenon in our economy. But the decline in the average disguises large variations. In fact, real earnings for all workers with some college education have increased modestly and real earnings for college graduates have increased the most (Blackburn, et al., 1990).

For younger male workers, real earnings have declined, with the rate of decline inversely related to years of education (Berlin and Sum, 1985; William T. Grant Foundation, 1988). These trends, illustrated in Table 6, have led some to worry that we are creating a two-tiered economy, with some--largely the disadvantaged--stuck in low-paying, high-turnover jobs in the secondary labor market while others find their way, through higher education, to more stable, rewarding and better-paid professional, technical and managerial jobs in the primary labor market.

While there is considerable debate on causes, future directions, and best policy responses to these signs of growing earnings inequality, it seems reasonable to conclude that, at minimum, making the transition to work with good pay and reasonable prospects for stable employment takes more than a high school education. While this seems obvious, it is a fact more often ignored than not in the school-to-work literature, most of which, as we shall see, tends to focus heavily on changes in the high school program. Such changes are important, but the bigger challenge may be in extending the effectiveness and quantity of postsecondary training opportunities, to fight sagging earnings with higher productivity and greater equality of educational attainment.

Table 6
ANNUAL MEAN EARNINGS (IN 1986 DOLLARS) OF 20- TO 24-YEAR-OLD
MALE WORKERS, BY EDUCATION LEVEL

	1973	1986	% Decrease
Less than 12 years	\$11,815	\$6,853	42.0
12 years	15,221	10,924	24.4
13 to 15 years	13,108	10,960	16.4
16 years	14,630	13,759	6.0

Source: William T. Grant Foundation, 1988.

Effects of Background Variables

In addition to race/ethnicity, sex and education, background variables that influence earnings include poverty status as a teenager and education level of parents, with poverty a particularly strong factor. Our analysis of the NLS sample shows that only 21 percent of those from families below the poverty line in 1979 were earning more than \$10,000 five years after high school, compared with 39 percent of all others. Similarly, only 27 percent of youth whose parents had less than a 12th-grade education were earning over \$10,000, compared with 39 percent of youth whose parents had a college education.

Results of Floundering

The point-in-time data give a snapshot of differing labor market outcomes, but they do not describe the process by which youth arrive there. While some young people exit high school and enter careers directly, this is not the norm. Rather, most go through a considerable period of "floundering." They alternate between fits of employment--in low-pay, low-skill, high-turnover secondary labor market jobs--and either unemployment or labor force withdrawal. For many, this pattern lasts into the early or mid 20s--about the time others are moving from college or graduate school into careers--when some settle into careers, while others continue muddling or drop out of the work force, settling into the welfare system, the underground economy or the corrections system (Osterman, 1980; William T. Grant Foundation, 1988; Hamilton, 1986, 1990).

Race/ethnicity and sex continue to be associated with different results in this period. In particular, as Table 7 shows, Hispanic and black males tend to experience longer periods of unemployment. Their unemployment spells are much more likely to end in withdrawal from the labor force than are similar spells of white males. For females, differences in duration of unemployment are less marked by race/ethnicity and women generally experience shorter unemployment spells than men. Indeed, 20- to 24-year-old Hispanic females have the shortest average unemployment spells. However, a period of unemployment for women is much more likely to end in withdrawal from the labor force, and black and Hispanic women are much more likely than white women to withdraw at age 20 to 24. The brevity of the average spell of unemployment for Hispanic women in this age group appears to be largely a factor of not finding a job, becoming discouraged and withdrawing.

When combined with limited education, the duration of unemployment and periods of withdrawal from the labor force result in less time spent developing human capital--in school or on the job. Some have argued against this human capital perspective, claiming that job switching among teens is a strategy for increasing wages (Becker and Hills, 1983), though they have found that the effects on wages are modest, at best, and only

Table 7
MEAN DURATION OF UNEMPLOYMENT SPELLS AND
PERCENTAGE ENDING IN WITHDRAWAL (BEGINNING IN 1984)

	16 to 19 Years Old		20 to 24 Years Old	
	Weeks	% W'draw	Weeks	% W'draw
Black Male	5.12	55.1	4.52	41.8
Black Female	2.95	42.8	3.90	57.3
Hispanic Male	3.77	35.2	4.19	15.3
Hispanic Female	NA	NA	2.47	64.0
White Male	3.38	29.2	3.21	13.3
White Female	2.98	37.1	3.03	33.8

Source: Household Economic Studies, 1989.

pertain when spells between jobs are brief. Perhaps job switching is a strategy for advancement for some, but, as Table 7 indicates, this is not the case for minority youth in general and minority women in particular.

Kim (1984) has analyzed NLS data and concluded that longer spells of unemployment produced wage gains--consistent with the hypothesis of search time as an investment of effort. But Lynch (1989), also analyzing NLS data, has found that longer spells significantly decreased the reemployment probabilities for minority youth of both sexes, arguing that her data (and most studies) support the view of earlier researchers that teenage unemployment has a permanent "scarring effect" on subsequent earnings and employment.

IMPLICATIONS OF THE DATA

The data are useful in determining the populations that experience the greatest difficulty making a successful transition. In this respect, they contain few surprises. They support a focus on disadvantaged youth and those with limited educational attainment. But they also raise questions.

Controls for family background (income, education level of parents) explain some of the racial/ethnic differences in outcomes, but not all of them. Little is known about the contributions of traditional sex roles, ethnic cultural traditions, and sex or race discrimination to differential labor market outcomes. Still less is known about how to intervene effectively in such mechanisms. These are intrinsically difficult issues for large-scale quantitative and econometric studies to resolve. Rather, qualitative studies--which have not been a major feature in a research landscape dominated by economists--seem more likely to produce useful information. The answers to these questions, in turn, could help program planners and researchers address such practical questions as whether different approaches are needed for different race/ethnicity and sex groups.

III. RECENT HISTORY OF THE SCHOOL-TO-WORK TRANSITION AS A POLICY ISSUE: INITIATIVES AND RESEARCH FINDINGS

Philosophically, concern for the school-to-work transition has roots in debates about the purposes of education and its relationship to work that go back over a century (Wirth, 1986; Lazerson and Grubb, 1974). In essence, this is a debate between those who view work largely as instrumental labor and judge schools in terms of their contribution to economic efficiency, and those who view work as a source of individual meaning and fulfillment. The latter, epitomized by John Dewey and his followers, take a broad view of the purposes of education and, while agreeing that work can have value as a means of education, distinguish the broad educative uses of work from the end of training for specific jobs. Thus, the latter tend to criticize the former for espousing narrow vocationalism. These debates, particularly among educators, still hover over the topic.

Operationally, school-to-work transition programs have antecedents in such turn-of-the-century developments as the educational guidance and industrial education movements, and the federal government's entry into vocational education funding with the Smith-Hughes Act of 1917, which in essence gave birth to public school vocational education nationwide. This was a movement in which the instrumentalists tended to dominate, seeing vocational education primarily as a means to train for specific jobs.

Despite this long tradition, there was relatively little research or policy attention paid to the school-to-work transition prior to the 1950s. Presumably, this is because it was not until then that high school graduation became the norm; because a broad range of blue-collar jobs were available for those with no more than 12 years of schooling; and because the transitional problems of minority youth in a segregated society were widely ignored.

From the 1960s on, however, issues of youth unemployment and concerns about preparing youth for the rapidly changing nature of work have made the school-to-work transition a frequent, if somewhat inconsistently pursued, theme of policymakers at federal, state and local levels, both in the realm of public education and in the realm of employment and training programs.

While emphases have shifted with each decade, there has been considerable continuity of policy themes and concerns surrounding the school-to-work transition throughout the past 30 years. In this period, policy and programming has traveled along three different tracks which, despite occasional efforts at coordination, have remained largely separate worlds in both analysis and implementation: reform of basic education, reform of vocational education, and development, primarily through the U.S. Department of Labor, of employment and training programs for (predominantly out-of-school) youth.

This growing concern since the 1950s was coincident with a number of broader developments that focused attention on the school-to-work transition. These included:

- . The gradual disappearance of unskilled jobs offering decent wages or security, especially in urban manufacturing centers;
- . Increases in educational attainment and the importance of a high school diploma (and subsequent degrees) to employment and solid careers;
- . Increased awareness, stimulated by the civil rights movement, of the growing difficulty many disadvantaged and, especially, minority youth have forming a strong connection to the labor force; and
- . Demographic changes--first the baby boom and later the baby bust.

THE SIXTIES

In the 1960s, concern was fueled by the swelling youth cohort as the baby boom came of age. Coleman (1965), for example, argued that schools would make little progress in reducing the (then) 31 percent dropout rate and that society was unlikely to create enough low-skilled jobs to absorb the numbers of young people who would be entering the labor market. In fact, he was one of many who believed automation would shrink the number, of jobs. Coleman suggested that a combination of public works programs and a new set of alternative education and training institutions--including some run by private entrepreneurs--would be needed to cope with the problem of excess supply of labor, particularly among disadvantaged youth. Then, as now, policy responses proceeded along distinct paths.

Vocational Education

The Vocational Education Act of 1963, the predecessor of today's Perkins Act, helped fuel the growth of area vocational and technical schools, which emerged and spread rapidly through the 1960s and 1970s. As significantly, it helped partially reorient vocational education from an effort to train for specific jobs to a developmental program for individuals, through its emphasis on assistance to the disadvantaged (Mangum, 1968).

Basic Education

More money and public attention, however, were focused on reform or enhancement of basic education, including such programs as Head Start (initially in the Office of Economic Opportunity) and Title I of the Elementary and Secondary Education Act of 1965

(remedial and other services to disadvantaged youth). These programs are, of course, with us today.

There is solid evidence that preschool programs can make long-term, if modest, differences in educational attainment and achievement (Berrueta-Clement, et al., 1984), though a major meta-analysis of Head Start research casts doubt on whether Head Start as a whole has been that effective (McKey, et al., 1985). The evidence on the effectiveness of Title I is mixed, at best.

Employment and Training

The 1960s also saw the entry of the federal government into youth employment and training on a large scale, with the creation of the Job Corps and the Neighborhood Youth Corps (NYC) and the inclusion of youth as a target population in the Manpower Development and Training Act (MDTA) of 1962. MDTA was initially passed to serve adult workers in the face of widespread concern that automation would displace many from their jobs and create the need for massive retraining (Ginzberg, 1980). However, it was rapidly amended to include youth, and its purposes were caught up in the "war on poverty."

Along with the Job Corps and the short-lived NYC, the MDTA youth programs were shaped largely as antipoverty programs, partly in response to political concerns over urban unrest. They were only in the broadest sense concerned with the school-to-work transition, though, as Smith and Gambone¹ point out, they created the mix of strategies that have characterized youth employment and training efforts since: occupational training, work experience, basic skills education, employability skills development and career counseling, with a modest amount of on-job-training and ancillary services thrown in. By any name, all are components of most proposals for improving the school-to-work transition.

Little rigorous evaluation of these efforts (or their counterparts in the schools) was performed, but subsequent studies of the Job Corps provide the best--some argue the only methodologically sound--evidence that occupational skills training can be an effective strategy for out-of-school youth (Betsey, et al., 1985).

¹ See Smith and Gambone, this volume.

THE SEVENTIES

The 1970s saw a tremendous increase in the literature, funding and policy attention paid to the school-to-work transition. Arguably, this decade was the high-water mark of concern with this issue in the schools, when it became one of the leading policy concerns of educational planners. Again, developments occurred on three tracks.

Vocational Education

Vocational and technical schools continued to grow, and in many parts of the country, vocational enrollments appear to have increased throughout most of the 1970s. Federal support to vocational education further increased attention to disadvantaged students. But there also began to appear, toward the end of the decade, a considerable body of research that questioned the benefits of vocational education.

In particular, with the exception of vocational training for women in office occupations (which almost all studies then and since have found to have economic payoffs), these studies found little or no evidence that vocational education in secondary school produced benefits for students in terms of improved wages, employment and earnings (Grasso and Shea, 1979; National Institute of Education, 1981). Such studies have since been criticized on methodological grounds--primarily, that they failed to separate vocational "concentrators" from those who simply elected a course or two. They have also been disputed by other studies (Bishop, 1989). However, they helped cast a pall on vocational education from which it has yet to recover.

Career Education

Perhaps the most significant educational development of the decade was the birth and rapid rise of the career education movement. While other researchers paved the way, this movement's birth is generally attributed to a 1971 speech by U.S. Commissioner of Education Sidney P. Marland, and (spurred on by federal funding) it rapidly generated a substantial literature, compendiously reviewed by Youthwork, Inc. (1980).

At its narrowest, career education was an effort to expand career guidance functions and infuse career-related topics into the curriculum. But most of its partisans viewed it much more broadly, as nothing less than an effort to revitalize and unify the entire educational system, embracing all experiences through which one learns about and prepares to engage in work, helping students develop self-esteem and teaching the most effective uses of leisure time. The Career Education Incentive Act of 1977 aimed to make education as preparation for work and as a means of relating work values to other life roles and choices (such as family life), a major goal of all who teach and learn.

As opposed to vocational education, which was always seen as a curricular choice for some students, proponents of career education viewed it as having something for all students or, more radically, as offering a broad-based alternative to traditional classroom-based, academic instruction for large numbers of students. Further distinguishing themselves from traditional vocational education, proponents of career education also argued that the labor force was rapidly changing and that lifelong learning and the ability to adapt to change would be critical to success in the work force of the future--positions that cast doubt on the viability of specific occupational training. Where occupational training was to occur, career education partisans (and some vocational educators) argued that a broad "cluster of skills" approach would better prepare youth for entry into any number of career slots in a shifting occupational structure.

One far-reaching approach to career education was the Experience-Based Career Education (EBCE) movement, launched as an experiment by the National Institute for Education in 1971. Funded by the Office of Education and run by four of the federally funded regional education labs, EBCE spread to over 500 sites. While the program varied quite widely in implementation (Farrar, et al., 1979), it had several key principals common to most sites. These included (de Lone, 1990):

- . Use of community people and facilities as learning resources;
- . A method for identifying and analyzing community learning experiences (including work-based learning);
- . Developing individualized student programs;
- . Combining the roles of teacher and counselor;
- . Career exploration activities; and
- . Activities and guidance to develop broad competencies needed for adult life.

EBCE was extensively evaluated, using random assignment methodologies in the major studies, and findings were generally positive, with EBCE students developing more positive life attitudes, more career knowledge and slightly better academic skills than comparison students (Owens, 1982; Bucknam and Brand, 1983). However, the differences were not vast, and did not occur in all programs. Bucknam and Brand (1983) found effects were strongest in programs with greatest fidelity to the models developed by the regional labs.

Hoyt and High (1982) conducted a "meta-analysis" of career education studies performed in the 1970s and found modest but generally positive results of career education programs. However, again the results are modest. Positive benefits were found in only about a third of the cases (negative results were almost never found); methodology was usually nonexperimental (neither matched comparisons nor pre- and posttests); and, as the authors pointed out, most had short time frames and focused on small parts of the overall career education program (e.g., career guidance at one grade level). There was a dearth of longitudinal studies and no evidence on the question of whether or not career education improved labor market success.

With strong federal leadership and dollars, career education became one of the most discussed education reforms of the 1970s, but it is not clear how extensively the movement penetrated the schools. Hoyt and High cite evidence that by 1980, most school systems reported having career education programs, and the majority of a national sample of teachers reported using occupational themes in their classrooms. But McLaughlin (1976, cited in Hoyt and High, 1982) found that thorough implementation of career education had occurred in only 3 percent of the sites she visited. Nonetheless, as we shall see, by 1980, the career education movement and such expressions of it as EBCE had peaked and reform movements of the 1980s shunted them aside.

In fact, the very breadth of definitions given to the career education movement made it conceptually difficult to know what it was or to measure whether it was happening or not. While much of the writing about career education clearly derived from Deweyian views of the role of schooling in preparation for work, in practice it was criticized as being a new form of the old social efficiency school, with the risk that it would result in tracking low-income students into low-status jobs (Lazerson and Grubb, 1975). In fact, however, the greater risk was that, because it was so broadly defined, career education threatened to mean all things to all people and nothing in the end.

This is illustrated by a series of essays commissioned by the National Institute for Education (McClure and Buan, 1973) in which career education is variously defined as synonymous with liberal education (McMurrin, in McClure and Buan, 1973); as a series of occupation-oriented courses for all but with concentration on vocational training for potential dropouts (Shapiro, in McClure and Buan, 1973); as not being vocational education but including vocational education (Parnell, in McClure and Buan, 1973); as a way to teach young people who do not require a college education that there are no second-rate jobs for second-rate people (Zigler, in McClure and Buan, 1973); as a way to help young people learn to deal with dead-end jobs and meaningless repetitive labor (Green, in McClure and Buan, 1973); as preparation for use of leisure time (Gordon, in McClure and Buan, 1973); as a vehicle for introducing competency-based education to the schools (Bailey, in McClure and Buan, 1973); and as an effort by public education and the com-

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munity to familiarize all individuals with the values of a work-oriented society (Mangum, in McClure and Buan, 1973).

In short, career education, while properly recognizing the range of issues involved in addressing a topic as complex as the school-to-work transition--and also sounding many themes current today--became a mirror on the wall that reflected back anything the observer wanted to see.

Research and Demonstrations

In the 1970s, the Comprehensive Employment and Training Act (CETA) decade, youth became a stronger emphasis of federal training programs, in the face of data showing consistently high youth unemployment rates, especially for minorities, and declining labor force participation rates for black teenagers. Youth were overrepresented in Title I, CETA's main training title (Grubb, 1989a), and were the subject of a separate title passed in 1977 as the Youth Employment and Demonstration Projects Act (YEDPA). Concerned that too little was known about "what works" for youth, Congress mandated an ambitious "knowledge development" program for YEDPA, and the Labor Department mounted a wide range of research and demonstration activities whose findings are summarized by Taggart (1981) and critically reviewed by the National Research Council (Betsey, et al., 1985).

YEDPA demonstrations tested a broad range of youth employment strategies, including subsidized private and public sector employment and other forms of work experience, on-the-job training (OJT), preemployment (job readiness) training, classroom training, and combinations of these with each other and basic skills remediation. While YEDPA produced some useful research and a great deal of discussion about "what works," many of its efforts suffered from rushed timetables and weak research designs (Betsey, et al., 1985). Further, much of it focused on out-of-school youth (as did CETA in general), so lessons for the school-to-work transition are limited.

While not a test of transitional strategies *per se*, the most important findings regarding in-school youth came from the Youth Incentives Entitlement Pilot Projects (YIEPP), a massive demonstration to test the effectiveness of publicly subsidized part-time work as an incentive for staying in school. This 76,000-student demonstration concluded that YIEPP increased the labor force participation rates of eligible youth, bringing blacks to parity with whites, and increased their earnings by between \$10 and \$11 a week, both during the program and a year after program participation. However, there was no significant effect on school enrollment, and longer-term impacts are not known (Farkas, et al., 1984).

Among other useful YEDPA findings² were that preemployment training and placement assistance, while beneficial in the short range, did not produce long-term wage and employment benefits for out-of-school participants; and that work experience alone (for out-of-school youth, again) yielded no benefits. Some studies found evidence of gains from OJT, public service employment and classroom training, but--with the exception of research on the Job Corps, which provides classroom training in conjunction with other services in a residential setting--none of these findings are clear-cut or undisputed.

While the YEDPA findings concerning single treatments are, like the preponderance of research on CETA youth programs, generally discouraging, some analysts find support for the proposition that combinations of program treatment--e.g., work experience, training and remedial education--are more effective (Hahn and Lerman, 1985). This intuitively pleasing proposition can be inferred from the fact that most of the programs for which methodologically sound and positive results have been obtained combine treatments.

Another broad overall inference drawn from the YEDPA experience and related research has been that basic skills achievement is the most important factor in predicting both success in training programs and subsequent employment and earnings (Taggart, Sum and Berlin, 1987; Berlin and Sum, 1985). This finding is consistent with the fact that academic achievement is the best predictor of school completion and, almost by definition, entrance into college. Again, this is an intuitively pleasing inference that accords well with common sense, but neither the employment and training literature (Barnow, 1989) nor the education literature yield much definitive guidance on how to improve basic skills--especially for the 14- to 24-year-old group at issue in the school-to-work transition.

THE EIGHTIES

While the 1980s saw a continuation of many of the concerns and policy strands of the previous decades, some--notably career education and extensive demonstration research on youth employment strategies--waned, to be replaced by distinctive new notes. These include renewed emphasis on basic education reform, triggered by A Nation at Risk (National Commission on Excellence in Education, 1983); concern that poor schooling (including weak school-to-work transition strategies) is undermining U.S. competitiveness in the global economy; greatly increased attention to the role of the private sector, in the education system as well as in the employment and training system; and, toward the end of the decade, suggestions that new institutions are needed to span the years from rough-

² See summary in Smith and Gambone, this volume

ly age 16 (11th grade) through the early 20s to create a better school-to-work transition. Finally, the new demographic realities of the baby bust added a sense of urgency to improving the education and training of minorities, disadvantaged youth and women, who will far outnumber middle-class white males among labor force entrants in coming years (Johnston and Packer, 1987).

The emphases on tougher academic standards and school restructuring in the 1980s were accompanied by fading interest in career education. The number of articles and studies on the topic declined (Halasz, 1988). As federal priorities changed, EBCE, after reaching a high-water mark in 1978 with programs in over 200 school districts, began to wither away (de Lone, 1990). At the same time, however, the eighties saw new interest in integrating vocational and academic education, with special attention aroused by apprenticeship models from abroad.

Education Reform

The new demographic issues of the 1980s were accompanied by increasing concern about the competitiveness of the US. work force, with many critics arguing that poor schooling was the root of the problem and some that inadequate attention to human resource development in industry was compounding it. Further, others argued that higher skill levels are now needed in the work force, as a result of global competition and new markets, new quality standards, greater emphasis on flexible production techniques, and the use of new technologies. Johnston and Packer (1987), for example, conclude that by the year 2000 skill levels now characteristic of the middle of the job hierarchy will characterize the lowest level.

Some (e.g., Levin and Rumberger, 1987) have disputed this view, arguing that the greatest number of jobs are low-level service jobs and that it is credentialism, not actual skill requirements, that are producing higher educational requirements for other jobs, resulting in "overeducation" of the work force (Rumberger, 1981). Bureau of Labor Statistics occupational forecasts also have projected that there will be an oversupply of college graduates, though they conclude that through the year 2000, demand for workers with at least one year of college will grow and demand for workers with a high school diploma or less will shrink--most rapidly for the latter group (Kutscher, 1987).

Barton and Kirsch (1990) are among those who argue that we simply do not know what will happen to skill requirements. They point out that labor market forecasting, like other forms of forecasting, is far from a precise science. Certainly only time will tell what will happen to skill levels in the work force as a whole. But an a priori case can be made that skills should increase if productivity and international competitiveness are to improve, especially in labor-intensive service industries.

Further, careful analyses of changes in banking, insurance and textile industries by Bailey (1989) and Noyelle (1989) leave no doubt that, in these industries, the combined effects of new technology and international competition have raised skill requirements, so that some jobs once held by high school graduates have been restructured and now employ college graduates. Additionally, the fact that real earnings increased for college graduates while they fell for those with a high school degree or less casts doubt on the "over-education" hypothesis. If anything, it underscores the importance of improving the school-to-work transition opportunities available after high school.

Academics

In the realm of basic education, the middle years of the decade saw a tremendous amount of attention given to upgrading the academic content and increasing the academic requirements of public schools. A Nation at Risk was followed by a flood of reports that criticized American schools for poor results in various subjects, especially science and math (National Science Board, 1983); found widespread evidence of low levels of literacy (Applebee, et al., 1989); and chastised schools for a lack of focus and curriculum coherence (Boyer, 1983;Sizer, 1984), to cite just a few.

While some reports made at least passing reference to school-to-work transition issues, the overwhelming effect of this first wave of reform reports was to place the focus on academic issues. To the extent that these reports were concerned with the school-to-work transition at all, they implicitly assumed that if academic skills were improved, the transition would take care of itself. This viewpoint was reinforced by reports by private sector groups (e.g., Research and Policy Committee of the Committee for Economic Development, 1991; Lund and McGuire, 1984), which argued that employers could do the training if schools turned out students with good basic skills. As Hamilton (1990:12) put it, "chief executive officers of large corporations have become leading proponents of improved academic education . . . arguing that they must invest heavily in remedial education before beginning to train new workers for specific jobs."

While some of these reports stressed the need for major changes in pedagogy and curriculum, the main result of this first wave of education reform was the imposition of increased academic requirements on local systems by state legislatures. Some criticized this emphasis on tougher standards, arguing that it would increase failure rates of the disadvantaged while offering little or nothing to enhance their instruction (Levin, 1985). Evidence available at the end of the decade (Clune, et al., 1989) found little to support this criticism, but also concluded that the reforms themselves had produced few benefits, largely because there was no consensus about, and frequently little attention to, how to translate tougher standards and new course requirements into improved instruction in individual schools and classrooms.

Restructuring

Toward the latter part of the decade, a second wave of school reform, generally called "restructuring," began to supersede the excellence reforms, stimulated by a report of the Carnegie Forum on Education and the Economy (1986) and high-profile early publicity and teachers union support given to efforts in such school systems as Dade County, San Diego and Rochester. While "restructuring" means different things in different places, dominant themes include moving to school-based management, with site accountability for results; empowering teachers not only to share in decisions but to redesign curricula, educational programs and staffing structures in the school; and involving parents and the community in governance or programming (see, for example, McDonnell, 1989; David, 1989).

While observers have found that restructuring to date has often succeeded in enlisting the creative energies of many teachers, yielding an aura of excitement and potential for change, there is no evidence that it has accomplished what its proponents argue it will: radically change school systems and improve student learning. Indeed, as McDonnell (1989) warns, restructuring proposals tend to be short in elaborating even casual logical hypotheses about their relation to improved learning. Furthermore, most restructuring has occurred under the purview of superintendents and existing school bureaucracies, which, the proponents of restructuring often argue, are part of the problem. In fact, some proponents argue that those bureaucracies must be dismantled and stripped of their political control before serious restructuring can occur--an argument made most forcefully by choice advocates (Chubb and Moe, 1990).

The effectiveness of restructuring in any of its variants, in short, remains to be seen. The further question of whether any improvement wrought by restructuring helps students--in particular disadvantaged students--achieve better school-to-work transitions also remains. It seems safe to say that it probably will not, unless specific attention is paid both to more effective basic education of the disadvantaged and to creating new avenues to and/or linkages with postsecondary training and the labor market. Nevertheless, one basic axiom of the restructuring movement--that change and improvement must occur school by school with the enthusiastic participation of teachers--seems highly plausible and needs to be considered in any effort to improve the transition.

Career Guidance

It is widely believed that career guidance is especially important to disadvantaged youth, who frequently lack informal exposure to the range of careers and knowledge about their educational and other requirements, though career guidance is often the lowest priority for school counselors (Hoyt, 1990).

Campbell, et al., (1983) have reviewed findings of over 100 empirical studies of career guidance conducted between 1970 and 1980. They conclude that most studies have found evidence that career guidance activities can be effective in a number of dimensions (improved school attendance and graduation rates, career knowledge and planning skills, personal and interpersonal work skills) if such activities are provided in a systematic developmental sequence. However, the authors caution that few of the studies they reviewed used random assignment control groups, almost all were short-term and none followed students long enough to see if there were any impacts on labor force participation. Further, most studies do not distinguish between results for disadvantaged and other groups.

Stronger evidence on the impact of career guidance strategies comes from the random assignment evaluation of Career Beginnings, a 24-site demonstration program that provided summer work experience and an array of guidance activities (college and job fairs, mentoring, financial aid counseling, preparation for taking the college boards, job readiness training, etc.) in the summer and the senior year. This demonstration, targeting disadvantaged youth, had the twin goals of increasing college attendance and improving the jobs obtained by students not going to college. The results varied widely by site but, overall, a significantly higher proportion of experimental students (53.2%) went to college than controls (48.5%). Initially, experimental students had lower employment rates and earnings than controls, reflecting a trade-off between education and work, but differences washed out in a year (Cave and Quint, 1990).

There is certainly plausibility to the argument for systematic career guidance, and the Career Beginnings demonstration shows that a multimodal approach can affect college attendance rates. Evidence on effects of career guidance on career attainment for the non-college-bound, however, is nonexistent.

Vocational Education

Vocational education was a nonstarter in the major reform efforts of the decade. With studies undercutting its traditional claim of providing an economic advantage to youth through training for specific jobs, and corporate reports claiming business would take care of skills training if schools laid a good foundation, vocational education was either scarcely mentioned or dismissed by most reform reports. Further, there is evidence that in at least some states, after two or more decades of rising enrollments, vocational enrollments dropped sharply as the added course requirements of the academic excellence reforms squeezed vocational options (Bailey, 1991).

Ironically, the 1980s saw a second generation of studies of the economic payoffs to vocational education that were somewhat more favorable than the studies of the late

1970s. Unlike the earlier studies--which classified students as vocational, general or academic based on their own characterizations of their program--these studies classified students according to transcript data that showed whether they took a heavy concentration of vocational courses or simply a smattering of elective vocational courses. In fact, almost all students in what Powell, Farrar and Cohen (1985) have called the "shopping mall" high schools of America elect at least one vocational class, but only about 13 percent can be considered "concentrators" (Hamilton, 1990).

Studies that accounted for the quantity of vocational education courses taken continued to find, as had most earlier studies, payoffs for women taking vocational education in office trades, and found stronger evidence of at least short-term payoffs for men and women in other fields (Meyer, 1981; Rumberger and Daymont, 1989; Bishop, 1989). Meyer (1981), however, whose studies provide the best longitudinal data available, found that these benefits had eroded and in some cases become negative six years after graduation. Finally, the studies using different data bases were not uniform in their findings of benefits for men and women in fields outside office trades.

Integrating Academic and Vocational Education

But if vocational education suffered, the 1980s were also a period in which adversity stimulated significant rethinking of its nature and role. The core of this rethinking, much of it embodied in the 1990 reauthorization of the Perkins Act (Wirt, 1991), is an effort to move secondary school vocational education away from its historical emphasis on training for specific jobs (though that goal is not totally eliminated) toward a new emphasis on vocational education as an alternative to academic education for teaching both basic and "higher-order" academic skills (e.g., problem-solving skills).

As a corollary reform, emphasis is placed on deferring skills training for specific occupations to the 11th grade or later, with support in particular for "tech prep" and other "two plus two" programs initially advocated by Parnell (1985). These are programs that link the last two years of high school with two years of community or technical college, in a sequence of activities emphasizing the academic skills needed to succeed in an occupation and blending academic with vocational training.

These trends, which to some extent bridge the distinction between vocational education and career education, are responsive both to longstanding criticisms of vocational education as a "dumping ground" for students who do poorly in academics, and to arguments that academic skill requirements are increasing in the labor force.

The ability of occupation-oriented programs to serve as vehicles for teaching academic skills on a mass scale remains to be seen. There is no definitive evidence on how best to

integrate the teaching of basic skills into occupational content and contexts. However, the potential of this approach gains credence from several sources. While vocational educators, adult educators and others have long argued that many learn best when academic skills are taught in an applied context, it is **only** recently that shreds of evidence and a strong theoretical basis for this approach have begun to take shape.

Some educators believe vocational students suffer in terms of academic basic skills, but if so, this may reflect the use of vocational education in lieu of academics in many schools. Bishop (1989), for instance, has found that when vocational students also took more rigorous academic courses, their basic skills gains were comparable to nonacademic students. Bottoms (1989) reviews evidence of solid gains in mathematics skills taught as an integral part of vocational programs. And, while not including measures of academic gains per se, quasi-experimental studies of programs in Philadelphia and California using the High School Academies model--a school-within-a-school with emphasis on work experience--show improvements in school attainment, graduation rates and post-high school employment (Stone, et al., 1989; McMullan and Snyder, 1987b).

The intellectual energy behind integrating vocational and academic skills, however, comes from the field of cognitive science--the study of how people learn to think and solve problems. This complex body of research, and its implications for vocational education, has been extensively reviewed and skillfully synthesized by Raizen (1989). The central point, however, is that virtually all cognitive skills--analyzing, synthesizing, problem-solving, etc.--are learned by most people, most of the time, in particular contexts that present a problem to be solved. These contexts or settings rarely resemble traditional classrooms and have little to do with instruction from teacher lectures--the dominant form of classroom education (Goodlad, 1984).

Resnick (1987), a leader in the field, has argued further that there is a disjuncture between the kinds of problems presented in the workplace and those presented in school. She notes, for instance, that in school, material is read so students can answer questions about it, while in the workplace, the expectation is that reading will lead to new behaviors. In school math, the emphasis is on solving problems with all data provided; in the workplace, it is on applying "expert" problem-solving techniques to a range of situations in which the relevant data must be discerned.

Scribner and Stephens (1989), in some of the basic research underlying this finding, further have found little correlation between ability to solve typical classroom problems and ability to solve the kinds of problems encountered in the workplace. They suggest that this disjuncture lies behind frequent complaints of employers that youth lack problem-solving skills and, further, that use of the workplace (actual or simulated) as a learning setting may be the best strategy for increasing those skills.

The road from cognitive science theory to vocational education practice has not been built, though many believe it can be. If so, vocational education--albeit in much revised form--could become an important part of the reform agenda of the 1990s as well as a key part of an improved school-to-work transition, whether in the form of a new training system, such as that proposed by the Commission on the Skills of the American Workforce (1990), or as a much revamped version of "voc ed" in high schools and community colleges.

Work Experience

The relevance of work experience to the school-to-work transition is a topic that, while not a major emphasis of school reform or JTPA (with the significant exception of summer jobs), has nevertheless come under considerable scrutiny in the past 15 years and merits discussion. The literature is characterized by some controversy and conflicting findings.

A number of large surveys have found that up to a point, working as a teenager is predictive of success at finding employment as an adult (D'Amico and Baker, 1984; Meyer and Wise, 1982; Kang and Bishop, 1986). Analyzing NLS data, for example, D'Amico and Baker (1984) have found that work experience is associated with a higher likelihood of school completion, no decline in grades of high school students, and modest wage and employment benefits after graduation. These effects seemed to pertain regardless of the nature of the job. A number of studies, however, have arrived at a consensus that the benefits stop at about 20 hours per week, after which work experience may interfere with schooling and begin to produce negative effects (Hamilton, 1990).

However, there are a number of questions important to policymakers and program planners that these large surveys and research studies cannot answer alone. One is whether these effects simply reflect higher levels of motivation among those who work, or whether they indicate that the experience itself helps develop human capital. Another is whether work experience as a planned program intervention produces the same benefits as "naturally occurring" work, and a third is whether the quality of the work experience affects the nature or degree of its benefits. To answer these questions, one must turn to studies of programs that have attempted to use work experience as a program intervention, as well as to ethnographic studies and studies of characteristics of work experience that address qualitative issues. Here, the picture becomes more complex.

Studies of summer jobs programs, CETA work experience and other programs in which work experience is the primary intervention have generally been inconclusive or found little or no economic benefit (Taggart, 1981; Hahn and Lerman, 1985; Wolf, et al., 1987;

Bassi, et al., 1984; Betsey, et al., 1985). However, as Smith and Gambone argue,³ some studies, such as the Entitlement findings (Farkas, et al., 1984) noted earlier, found short-term gains in earnings, and other researchers suggest that work experience combined with other services (e.g., basic skills education and job training) may have benefits and should be further researched.

Most of the studies just cited focus on out-of-school youth, however. They cannot, accordingly, be generalized to in-school youth--the population whose apparent work experience benefits are captured by large surveys--especially since in-school youth who work are by definition receiving a combination of work experience and other services (albeit, not necessarily in a coherently planned, well-integrated program).

Cooperative education is the most widespread form of work/study education in secondary schools. Typically, co-op serves vocational education students with good school records who, in their senior year, receive school credit while working in part-time paid jobs in their field of study. Studies of co-op education's effectiveness show that large percentages of co-op graduates get jobs with their co-op employers, and co-op students, like EBCE students, tend to be more satisfied with school than comparison youth. But the studies have generally failed to find economic impacts (Stern, et al., 1989). Stern (1991) notes, however, that these studies are inconclusive because they fail to control for student work experience outside of school.

Other than studies of co-op education, evidence on the benefit of work experience as a school program is confined primarily to studies of programs that include work experience as a component of the program, such as the studies of EBCE and the High School Academies programs cited above. These studies, which vary in methodological rigor, tend to find modest educational benefits, and one (McMullan and Snyder, 1987b) showed modest economic benefits using a quasi-experimental method.

Taken as a whole, the research on in-school work experience suggests that it may contribute to dropout prevention and student satisfaction with school (presumably inter-related findings), but its long-term economic benefits are somewhere between modest and uncertain. As with out-of-school youth, it is the combination of work experience with other activities that appears most likely to yield benefits.

The question that remains is whether the quality of the work experience is important. Some (e.g., Hamilton, 1990) have argued that the secondary labor market jobs most commonly held by youth are likely to be miseducative. Greenberger and Steinberg

³ See Smith and Gambone, this volume.

(1986), in an influential study, found that many teenagers developed cynical attitudes about the meaningfulness of work from their experience in low-skill service and retail jobs, though, oddly, they found evidence as well of a strengthened work ethic.

However, others have found the contrary. For instance, Charner and Fraser (1984) found that youth employed in fast food jobs were generally positive about their experience and believed they learned important generic lessons about working and some useful skills from them. More recently, Stone, et al., (1989) have explored whether such qualitative features as the complexity of the job and range of opportunities to learn make a difference, with evidence that, at least in the perception of students, they do.

Pending more definitive research, one is left with the overall conclusion that work experience may be part--albeit a modest part--of the answer to the school-to-work transition, but its effectiveness may depend on both the nature of the program in which it is embedded and the nature of the job.

Employment and Training

While basic education was undergoing various waves of reform and vocational education was undergoing rethinking, disadvantaged youth continued as a major target population of JTPA, which replaced CETA in 1984. With a prime focus on out-of-school youth and a prevalence of short-term programs aimed at job placement or teaching work readiness competencies (GAO, 1990), JTPA does not cast much light on the school-to-work transition. Nor did research on youth employment and training programs in the 1980s produce much new knowledge.⁴

Although the JTPA youth experience as a whole is but marginally related to the issue of the school-to-work transition, two significant school-to-work initiatives that came of age in the eighties were Jobs for America's Graduates (JAG) and the Boston Compact and its replications.

JAG, an outgrowth of the YEDPA-funded Jobs for Delaware Graduates, provides job readiness training, job development and placement assistance, and other supportive services for high school seniors seeking employment. A quasi-experimental evaluation conducted for JAG by Sum (1987) found that JAG participants experienced at least short-term earnings and employment gains.

⁴ See Smith and Gambone, this volume.

The Compact's main features were the development of a school-based career service, run by the Boston Private Industry Council, and pledges by Boston employers to hire qualified graduates. The Compact appears to have helped improve access by public school graduates to jobs with major employers (McMullan and Snyder, 1987a). Spring (1988) argues it also played a role in Boston's achievement of equal employment-to-population ratios for black and white youth in the mid-1980s, though this may have been the result of a super hot economy.

Taken together, the experiences of JAG and the Compact suggest that programs that provide coaching and assistance in job placement for graduating seniors can help with the transition to work. However, such intervention is but a small part of the picture: it does not serve dropouts or improve preparation. Nor did the incentive of a "guaranteed" job in Boston seem to have any effect on dropout rates. Neither effort has good long-term data, and while JAG has been a successful replication, the pledge feature of the Compact was not adopted by employers in half the sites of a National Alliance of Business replication (National Alliance of Business, 1989).

Apprenticeship

Enthusiasm for apprenticeship-type programs that integrate academic and vocational education burgeoned in the late eighties, though the belief that we have something to learn about the school-to-work transition from other industrialized nations--especially Germany--is not new. The National Association of Manufacturers was the first major business group to argue that U.S. industry is disadvantaged in competing with German industry because we lack what the Germans have--a separate, well-developed system of vocational education. This was in 1911 (Wirth, 1986).

Eighty years later, many of the leading critics of our school-to-work transition system are also looking at Germany and, to a lesser extent, other industrialized nations, for much the same reason. A GAO report (1990), for example, notes that youth unemployment rates in Germany, Sweden and Japan are considerably below those in the United States, as are the differentials between youth and adult unemployment. All three are countries in which a much smaller percentage of students go on to college than in the United States.

In Germany, about 70 percent of youth enter the employer-based dual system at age 15 or 16, where a combination of government-financed classroom education (usually one day a week) and employer-financed apprenticeships, conducted in the work place, continues their education. About one-quarter of German firms sponsor apprenticeships, which are offered in a wide range of manufacturing, office and service jobs, and which are subject to national training standards developed by industry, labor and government

jointly. According to Nothdurft (1989), about half of apprentices receive jobs with the firms providing their employment and--when the economy is strong--most of the rest end up in training-related jobs.

In Sweden, about 90 percent of youth who complete compulsory schooling at age 16 enter "upper secondary" schools for programs that vary in length from two to four years. Most of those not planning to attend college are in vocational programs in five broad occupational categories. These are programs run by local school authorities, in which "the line between education and job training is intentionally blurred" (Nothdurft, 1991:13). For these youth, upper secondary schooling consists of a core curriculum of Swedish, English and math; course work in their chosen field; and work experience, which increases from between 10 and 20 percent to 60 percent of their time over three years. Business and labor provide work experience, curriculum advice and, in some cases, training. In addition, the Swedes have a Youth Guarantee that provides a wide range of stipended training and work experience for the 10 percent of youth who do not enter upper secondary schools.

In Japan, the basic structure of the system is not dissimilar to that in the United States, with students taking 12 years of basic education. According to the GAO (1990), about 30 percent then go to two- or four-year colleges, and nearly the same percentage go to proprietary vocational schools. About 35 percent go directly to employment. In addition to the high percentage of proprietary school enrollees, there are some critical differences between the United States and Japan that seem to ease the transition for Japanese students. One is higher school completion rates, which the GAO argues reflect a cultural belief that virtually all students have the ability to succeed in school if they apply themselves. The second is that many Japanese industries have well-established relationships with schools for recruiting employees, whom they then train.

What are the lessons from these nations? Bearing in mind that the evidence of their superiority to the U.S. system is largely anecdotal and descriptive, strengths appear to be fairly clearly demarcated paths from school to work, upper secondary and postsecondary training systems that do an effective job of blending work experience, occupational training and academics, and strong employer involvement. Nothdurft (1989) suggests that the existence of a widely recognized credentialing system helps in Germany, and argues further that in contrast to the English and French systems, which are less well-developed and appear less effective, the German and Swedish systems are able to work because youth enter them with a strong basic academic education.

Most commentators agree that none of these systems can be copied exactly in the United States because of different cultural traditions. One is resistance to the kind of tracking of youth that the German system, in particular, embodies (Stern, 1991; Hamilton, 1990).

Another is that U.S. employers have little tradition of investing in training of entry-level workers and, in a highly mobile society where workers frequently switch jobs, lack an incentive to make such investments (Stern, 1991).

Whether these systems can be adapted to the United States in ways that account for cultural differences is an open question. A further question, however, is whether these systems, duly adapted, would be more effective in serving the disadvantaged. Presumably they would not unless the basic educational performance of these youth is improved. The current literature offers no definitive information on this topic, though there are hints that these systems have problems dealing with the equivalent of our “at-risk” youth.

The Swedish second-chance system exists for what they call “difficult youth” who do not enter the upper secondary levels, but its effectiveness is not clear. The German dual system attempts to enroll children of foreign workers, but they are underrepresented; their presence in the system is resented by some Germans, especially when unemployment is high; language differences apparently create problems; and those who are enrolled may be overrepresented in training for lower-level jobs (Nothdurft, 1989). But all this is fragmentary, and the benefits of the Swedish and German systems for disadvantaged youth of those societies warrant further investigation.

THE IMPORTANCE OF IMPLEMENTATION: A CROSS-CUTTING ISSUE

Many practitioners believe in their bones that how well a program is designed, managed and staffed makes a big difference in results. Absent a coherent overall system spanning the terrain from school to work, good single programs are not the answer. Yet one cannot imagine a good system without good programs, and the question of implementation, while not totally ignored, is rarely given much attention in the literature. The focus is on types of programs and services, not the quality of their implementation. The program itself remains the proverbial “black box.”

There are, of course, reasons for this. Policymakers have more control over the type of service or program that is funded than they do over the quality of implementation. Further, it is hard to develop simple measures of program quality that can be adequately incorporated into large-scale studies. The qualitative measures that can be incorporated in more intense, observational studies often rely on observer judgment, making them hard to validate, and it is difficult to generalize from such studies.

Nevertheless, probing beyond the generally modest or discouraging results of so many of the studies we have reviewed, the possibility emerges that quality of implementation makes as much difference--and perhaps more--than choice of model. There are several strands to this argument.

In basic education reform, some of the rationale for restructuring lies in the so-called “effective schools” research, which, taken as a whole, argues that school performance improves when schools have a strong leader and staff who share a clear and common vision of goals, a strong emphasis on instruction and an expectation that students will learn. These are characteristics of well-run schools, heavily dependent on the staff at those schools, and less dependent on the program model or systemwide policies. Hence, the emphasis on site-based management.

While restructuring has yet to prove itself, it at least has a strategy for implementation, as opposed to the academic excellence reforms, whose minimal impacts have been attributed in part to their reliance on legislating excellence with minimal attention to **imple-**mentational concerns.

The studies of vocational education that found some signs of effectiveness have concluded not only that the number of vocational courses was important, but, in the only study to examine the issue, that whether or not the student took a coherent program was associated with economic benefits (Rumberger and Daymont, 1989). Likewise, studies of the effects of vocational education on academic **skills** development have found that a major factor in determining whether vocational students gained those skills was whether they took courses with a high degree of academic content (Bishop, 1989; Wirt, et al., 1989).

Studies of replication efforts of the High School Academies (Stern, et al., 1989) and EBCE (Bucknam and Brand, 1983) both found that results were strongest when the basic program model was most faithfully replicated. Further, it is commonplace in demonstration research to find that some sites do much better than others. While this may simply be a result of chance, as most statistical models assume, it may also be saying something about the importance of implementation.

Similarly, studies of career guidance reviewed by Campbell, et al., (1983) stress the importance to effectiveness of structured sequences of activities. The Career Beginnings evaluation, noting a very wide range of impacts among sites (from strongly positive to slightly negative), stresses the importance of attention to implementation.

None of these arguments are strictly conclusive, yet they join with common sense in suggesting that any effort to improve the school-to-work transition that fails to give careful attention and strong support to quality implementation will not succeed.

SUMMARY

From this review, three broad conclusions emerge, which are important to summarize not because they help to provide a clear road map for the future (indeed, they do not), but rather because they define the complex, elusive and disjointed nature of the school-to-work topic.

1. The thinking and policy initiatives that have emerged in the past 30 years drew on a range of intellectual sources and disciplines, seldom if ever meshed in useful ways, and have not yet converged in the kinds of consensus that might undergird coherent policy formulation in the future.

2. The diffuse and polycentric nature of these shifting emphases and ideas reflects a significant underlying point: a multiplicity of institutions (and their underlying viewpoints) are spanned in the school-to-work transition, and must be accommodated in any large-scale national policy.

3. Nevertheless, two significant points of agreement emerge and should find a place in any policy:

- . Education beyond high school probably looms as essential for the young worker--and thus opportunities for such attainment must be found; and
- . The role of work experience in the school-to-work transition, while probably limited, is significant and needs more focused exploration and development.

IV. DEVELOPING AN AGENDA FOR THE FUTURE

The literature and experience of the past 30 years tell us a good deal about who has trouble making the school-to-work transition, and they help identify shortcomings that at least on the face of it appear to exacerbate problems. Unfortunately, however, evaluation research, while providing clues, yields little definitive information on what should be done, how best to do it, what the payoffs of an improved school-to-work transition system would be, or, indeed, why disadvantaged youth have such difficulty.

Further, criticisms of the school-to-work transition are varied in their specifics and therefore lead to different solutions. Each emphasizes failings in different areas: basic education (particularly education of the disadvantaged); America's economic position in international competition; and the social and economic structures and forces endemic to the country.

RESEARCH SHORTCOMINGS

Part of the problem lies in the nature of the research findings themselves. On questions about the effectiveness of programs, such as career education and vocational education, and specific program interventions, such as work experience and career guidance, the research often leaves one wondering whether the glass is half empty or half full. Positive findings of some studies are contradicted by others; what positive and significant findings exist are frequently either quite modest in degree or short-term in nature; and much of the literature is subject to criticism on methodological grounds--particularly the lack of well-designed, random assignment impact studies. The conclusion that combinations and well-articulated sequences of services are necessary seems a reasonable inference to draw from the research, but there is little guidance as to precisely what combinations or sequences.

The problem is compounded by the disjointed nature of much of the research (and much programming as well). Given the long-term, multifaceted and complex nature of the school-to-work transition, and the range of institutions involved in it, a degree of disjointedness is not surprising; but it remains a serious handicap in efforts to craft comprehensive policy initiatives and programs based on credible evidence about probable success.

The disjointedness appears in many ways. Most generally, quite different research traditions constitute the overall literature, making it difficult to splice findings into a unifying theory. Department of Labor studies have often been econometric, concerned with economic benefits, and employing random assignment models to determine impacts. While some education studies also fit this description, most are nonexperimental and are more likely to focus on soft outcome measures (e.g., changes in knowledge or attitudes).

A strength of the education research is a stronger tradition of qualitative studies, which have produced some provocative findings: for instance, Ogbu's (1978, 1986) argument that inner-city blacks do not seek to achieve in school because they believe a "job ceiling" limits the payoffs to education; Fine and Sandstrom's (1988) argument that dropouts are sometimes smarter and frequently more questioning of existing school practices than graduates; and studies reviewed in Gamoran and Berends (1987) of the negative effects of subtle tracking practices on student achievement.

Qualitative studies might help cast further light on causes of different race/ethnicity and gender experiences in the transition, though ultimately an effort is needed to reconcile qualitative and other research traditions. Existing ethnographic studies are sometimes in tension--if not outright conflict--with survey and quantitative studies that find that blacks and whites receive similar returns to education, that poor academic performance is the best predictor of dropping out, or that tracking produces uncertain effects.

Few efforts have been made to illuminate or reconcile either the conflicting findings about the effectiveness of program modalities or the apparent conflict between qualitative and quantitative findings, or to illuminate the importance of implementation to the effectiveness of program models. Similarly, most of the literature and almost all studies have been confined to examining a piece of the school-to-work transition system (e.g., school programs or transitional services) with little attention paid to the importance of precedent or antecedent services and experiences.

Finally, it is obvious that there is an interaction between characteristics of the labor market and program outcomes. It is common for econometric studies to include measures of gross demand (e.g., local unemployment rates) in their models, but a more detailed model of interactions is called for. For example, it seems highly probable that the consistent finding that vocational training in office occupations pays off for women (but not men) reflects not only benefits of the training itself, but also that most employers rely on the external labor market to provide trained secretarial and clerical staff; that high school remains a sufficient level of education to provide the entry-level skills needed in many of these jobs; and that the influence of gender--perhaps on both worker and employer decisions--remains strong in this labor market. But this is speculation, and further investigation of the interactions between the labor market and training could provide useful insights into the appropriate modes of training as well as levels at which training should occur for various occupations.

DEFINING THE ISSUES

The issues vary considerably, depending on the critical stance of the observer. As noted, there are three main schools of thought about shortcomings of the school-to-work transi-

tion system: criticisms of basic education, criticisms of both industry and education derived from concerns about international economic competitiveness, and criticisms rooted in broad societal analysis.

Reformine Public Education

The most venerable and voluminous criticism of the school-to-work transition focuses on the flaws in the education and training system. Commonly cited flaws are poor schools; low expectations for students; failure to teach basic skills; failure to provide sufficient emphasis on education for employment for the non-college-bound (e.g., lack of career counseling, work experience, employability development, job placement assistance, etc.); lack of programmatic linkages between schools and postsecondary training programs; lack of linkages between schools and employers; ill-defined or nonexistent pathways to employment and employer-based training after leaving school; and lack of incentive systems clearly relating school performance to employment opportunities. Finally, critics note that there is too little funding of “second-chance” programs (largely JTPA) to meet the needs of those whose schooling does not prepare them for employment (e.g., GAO, 1990; Hoyt, 1990; Barton, 1990; Reisner and Balasubramanian, 1989; Feichtner, 1989; Mangum, 1989).

Much of this criticism leads to recommendations to put more resources behind career-related educational programs in schools and to better coordinate existing services. Bishop (1988) concurs in the need for such services, but makes the provocative suggestion that to be effective they must be embedded in a system of incentives that make a connection between school performance and post-high school success for the non-college student. The connection is real and understood by the college-bound, for whom test scores and grades determine college admissions options. But the connection is accurately perceived as nonexistent by students heading for the work force, Bishop argues, reviewing five major studies that show little correlation between high school grades and wages received after high school. He suggests that a combination of new assessment measures that capture the competencies employers seek, and policies encouraging employers to use these records in making hiring decisions, are steps that would improve incentives.

Others argue that the problem is a more basic one of fundamental school reform. Recommendations range from improving basic skills, increased emphasis on problem-solving and higher-order thinking, and higher academic standards--all major themes of education reform in the last decade--to fully funding early childhood programs and restructuring schools and their governance systems. Still others argue the need to create fundamentally different educational options--such as apprentice-like programs inspired to some degree by the German dual system, which involves employers and educators in providing work-based learning (Hamilton, 1990; Lerman and Pouncy, 1990).

While much of the literature addresses schooling in general, some also focuses on vocational education in particular, citing lack of quality vocational programs and/or poor access to them for the disadvantaged (Bishop, 1988; Wirt, et al., 1989), and lack of career counseling, supportive services and transitional assistance to disadvantaged students participating in vocational education (Reisner and Balasubramanian, 1989).

As Grubb (1989a) points out, such criticisms--and the recommendations they tend to generate for the elaboration and/or extension of training programs, either in school or out--have a history dating back to the turn of the century. The underlying syllogism is:

- Youth aren't developing the right skills (knowledge, attitudes, etc.) to succeed in the workplace.
- They aren't because the education and training institutions aren't doing the job.
- Therefore, fix the institutions and youth development will be fixed.

Critics of the school-to-work transition who fall in this camp frequently allude to the economic consequences of poorly prepared youth, but their major concerns tend to be social. Throughout the 1960s, 1970s and part of the 1980s, for example, concern for minority youth unemployment was a hallmark of federal employment and training policy as well as much local, state and federal education policy--but few were arguing that the future of the economy was bound up in improving the school-to-work transition.

Improving U.S. Economic Competitiveness

A farther reaching critique has recently emerged, rooted in concern that inadequate strategies for human resource development--in the work force as well as in the schools--are a major threat (some argue the major threat) to the competitiveness of the United States in the global economy (e.g., Commission on Workforce Quality and Labor Market Efficiency, 1989; Dertouzos, et al., 1989; Commission on the Skills of the American Workforce, 1990; Carnevale, 1991). While most of the earlier literature focused on high school inadequacies, these criticisms have placed new stress on inadequacies of postsecondary training systems. These criticisms, while not necessarily incompatible with those focused on the needs of disadvantaged youth, have a different genesis of concern--more economic than social--and tend toward a somewhat different set of recommendations.

A prime example is the influential report, America's Choice (Commission on the Skills of the American Workforce, 1990), which recommends greatly increased business investment in training and education of the work force and creation of an elaborate national system of training entry-level workers, loosely patterned after European practices but

operated on a decentralized basis. America's Choice speaks directly to the problem of dropouts and other low achievers, urging creation of youth centers and second-chance programs to help all students achieve a new credential, the "Certificate of Initial Mastery," which would open the door to skills training programs run by employers and others.

These recommendations are broadly compatible with proposals for apprentice-like systems, but they are not so sharply focused on the disadvantaged and others with low educational attainments. Rather, America's Choice claims that up to 70 percent of new American workers face low-wage futures unless dramatic changes in the existing school-to-work transition are effected. This argument is grounded not in traditional supply/demand concerns--indeed, the Commission departs from some studies in finding that most employers are relatively satisfied with current education and skill levels--but rather in a belief, grounded in human capital theory, that the United States must develop a more skilled work force to increase productivity if we are to compete in the global marketplace. (Some evidence that global competition in fact requires higher skills of workers is reviewed subsequently in this paper).

These two strands differ, then, in the degree to which they treat the issue of the school-to-work transition as social or economic, in their relative emphasis on post-high school training, and in the extent to which they view the issue as limited to a problem of the disadvantaged or as a broader problem of which the disadvantaged are a part. They share, however, the assumption that extensions, elaborations or new institutional arrangements of the education and training system can solve the problem.

Pursuing Basic Social Reforms

A third definition of the issues goes even further. It argues that the problems of low-income and minority youth are caused by forces outside the control of schools and training institutions, such as the effects of poverty and social inequality. Grubb (1989a) summarizes this viewpoint:

These forces include socialization within families, which tend to vary with class, race and gender; the cultural influences on youth from diverse sources, including the media; and the labor market itself. Squeezed among other powerful institutions, schools and other youth institutions have been relatively powerless to make the changes asked of them. The result is a set of programs that often seem ineffective and a sense that there has been no real progress against the enduring problems of youth.

Variations of this critique include analyses suggesting that minority youth, as a result of their position in the social structure, perceive no payoffs to education and may develop an antiachievement ethic (Ogbu, 1986; Berryman, 1987); that tracking students into vocational programs at both secondary and community college levels serves to socialize them to low expectations or "cool out" their aspirations (Lazerson and Grubb, 1974; Rosenbaum, 1976); and that the so-called secondary labor market constitutes, in effect, a kind of occupational quicksand into which large numbers of the disadvantaged fall (or are pushed) (studies reviewed in Rumberger, 1981; Hamilton, 1990; William T. Grant Foundation, 1988).

This critique, while not necessarily opposed to innovations and elaborations of the education and training system, leads to policy recommendations that focus on interventions in the labor force and other social institutions as prerequisite to the effectiveness of education and training strategies.

DEVELOPING AN EFFECTIVE SYSTEM

If one concludes there is a need to improve the school-to-work transition, which seems a reasonable conclusion, and if one further believes that improvements and elaborations of the education and training system are sufficient to the task (a somewhat problematic conclusion), the operational requirements of an effective school-to-work transition system seem fairly clear. They include:

- More effective basic education to increase the proportion of students who graduate from school with the academic and personal skills needed to participate in subsequent education, training and/or employment.
- Transitional assistance to help young people--especially the disadvantaged, who have the fewest familial and informal resources to draw on--to gain information about and access to the most appropriate post-high school options.
- Increased employer involvement in the school-to-work transition system, to improve access to opportunities and improve the relevance of education and training to emerging labor force needs.
- An expanded system of post-high school training opportunities for non-college youth, (including second-chance programs) to provide the kind and quality of cognitive and occupational skills development required for high-skill, high-wage jobs in industries faced with international competition.

Basic Education

How best to reform basic education is the most fundamental question, for it is difficult to imagine any set of school-to-work transition services that will make a major difference for large numbers of disadvantaged youth, absent a solid grounding in the old basic skills (three Rs) and the new higher-order skills (e.g., problem-solving and teamwork).

There are plenty of theories but little consensus and less evidence on how to effect such reforms. Dougherty, et al., (1989) make a case that fundamental restructuring and related changes in uses of time, staffing, curriculum, pedagogy, assessment, school-parent relationships and social organization of the school may all be necessary to benefit disadvantaged and “at-risk” youth. In any event, a strong argument can be made that, for reforms to be effective for disadvantaged and non-college-bound students, the content, the context and the incentives for achievement built into educational programs should be related to the theme of work.

This can be inferred from a number of different research perspectives, including that currently the only incentives for school performance exist for the college-bound (Bishop, 1988); that black youth perceive they are subject to a “job ceiling” that limits the payoff from education (Ogbu, 1978, 1986); and that the reason many youth who drop out return to high school or get a GED is that they have learned the hard way that opportunities are limited without more education (Morgan, 1984).

This argument gains added force from cognitive scientists’ conclusion that the kinds of skills actually needed in the workplace are best taught in actual work contexts. While lacking experimental evidence, a small number of careful studies of such programs as the High School Academies in Philadelphia and California provide further support for the proposition that well-run programs that blend academics, skills training and work experience strengthen the holding power of schools and succeed in placing disadvantaged students in jobs or postsecondary education (Stone, et al., 1989; McMullan and Snyder, 1987b; Barton, 1990).

There are a number of ways one can attempt to use the connection to work as a vehicle for school reform. One approach, derived in part from the career education movement, is to attempt to infuse the school program with a continuum of career-related services at each grade level, arrayed in a developmental sequence from as early as seventh grade on. Typically, proposals for this approach suggest an early emphasis on career awareness and exposure activities; combinations of career development, career guidance and work-like experiences in ninth and tenth grades (including internships, community service, etc.); and, in the last two years of high school, a continuation of these activities combined with options for occupational education, work/study programs, such as cooperative

education or employer-based training, job readiness and job search training, and placement assistance. Both Hamilton (1990) and Lerman and Pouncy (1990), for example, suggest sequences of this sort leading into apprentice-like programs beginning in the 11th grade, as does Feichtner (1989), who adds social services to the mix and argues that individualized plans should hold the whole together.

While some such mix of services seems desirable, efforts to infuse them into the basic school program are complex. As Feichtner points out, most educators agree that employment preparation is one of the goals of schooling, but in most high schools--outside of the vocational arena--it is no one's specific responsibility to plan and coordinate this array of services. Further, even if staff are added to the school to coordinate these functions, there are barriers to infusion in the basic school structure of time, turf and content (e.g., see Orr, et al., 1990, for the evaluation of a recent New York City effort along these lines).

Virtually all high school teachers are subject specialists. They lack training or inclination and may resist efforts to incorporate occupational concerns into their classrooms. In fact, the subject orientation of the high school program can be a more general problem for at-risk students, since teachers of subject content do not feel attention to the basic skills or the personal needs of these students is their responsibility (Frymier and Gansneder, 1989).

The alternative to infusion is to restructure schools in a way that reorganizes the entire program around career or vocational themes, creating a more hospitable environment for education for employment than the typical comprehensive high school can provide.

The Pittsburgh Model

One model for this approach is provided by the Pittsburgh public schools, where over half of graduates are vocational students and which, in 1988, eliminated the "general track," renamed vocational education "applied technology" and began requiring all students to qualify for either an academic (college prep) or applied technology (vocational) certificate to graduate. (Students declare their choice at the end of tenth grade.) This policy, consistent with research showing that the coherence of the vocational program influences its payoff, was triggered by data collected by the school system showing that, over ten years, the average annual dropout rate for vocational students in Pittsburgh was 2.6 percent, compared with 13 percent for general education students (author's interview).

Pittsburgh's move to a two-track system was aided by a number of factors: the school system has been the recipient of most youth employment funds since the days of CETA;

it has an uncommonly strong tradition of vocational education, including strong linkages with employers and a range of innovative vocational programs; and these vocational programs have been complemented by strong career development and work experience programs, dating back to the days when Marland, the “father” of career education, was Pittsburgh’s superintendent (Reisner and Balasubramanian, 1989; de Lone and Watson, 1988).

There is as yet no data on the effectiveness of Pittsburgh’s reorganization. Should it prove effective, the uncommonly strong tradition of career and vocational education in that school district may be a prerequisite for such systemwide strategies to succeed. In other school systems, a more feasible approach may be to create magnet schools organized around industrial themes, such as New York’s High School of Aviation and other “exemplary” programs studied by Mitchell, Russell and Benson (1988), or schools within schools, such as High School Academies.

The High School Academies Model

The Academies model, as initiated in Philadelphia and since replicated in California and other sites, is particularly attractive conceptually for several reasons. In most settings, Academies are school/business partnerships, run by a joint board. The business connection provides financial support (approximately \$500 per pupil in Philadelphia) and a ready means of employer involvement in program design, career awareness activities, provision of mentors, summer and school-year work experience, and jobs for graduates.

The school-within-a-school setting (150 to 200 students) means that a core group of teachers can be in continuous contact with a discrete group of students, creating much closer student/teacher relationships than are possible in a large comprehensive high school. Because academic and vocational teachers are working with the same students, they are well positioned to function as a team, not only integrating vocational and academic curricula but also individualizing their efforts for students they share in common. As such, the model provides a vehicle for implementing the reforms of vocational education embodied in the 1990 amendments to the Perkins Act as well as the curricular and pedagogic changes suggested by research in cognitive science.

The model is flexible: it has been adapted to a wide range of industries and occupations (e.g., health, office, hospitality and electrical trades) and its students go on not only to jobs but to college and other postsecondary options. As a school-within-a-school, it does not require wholesale change of the high school or the entire system. It has operated effectively in very different settings--e.g., Philadelphia and the Silicon Valley--and in Philadelphia, it has been replicated widely in recent years, so that all but a few comprehensive high schools now have one or more Academies, serving over 2,000 students in an

expansion targeted to serve 5,000 students (10 percent of the high school population) by 1994 (author's interviews).

In short, this model has shown itself to be capable of providing, with reasonable evidence of effectiveness, virtually every element that the school-to-work literature suggests is important, and many of its features--the strong connection to industry, the integration of vocational and academic education, and close personal attention--are particularly suited to the disadvantaged population which, indeed, it serves.

Transitional Assistance

Models for provision of transitional services also exist. They are built into guidance and placement functions performed in programs like the Academies and occupational theme high schools. Jobs for America's Graduates and school-based career services, such as those established by the Boston Compact, serve the broader population of high school seniors.

Priority attention and resources, not know-how, appear to be the main obstacles to expanding these services. Such services, however, are simply linchpins between school and work or further education. They are not substitutes for good preparation during school or good training and employment opportunities afterward.

Private Sector Involvement

It has become axiomatic that the private sector should be involved in employment and training programs, vocational education and school reform generally. There is no research, however, to clarify whether (or under what conditions) that involvement is most effective if it consists of advice, of policy control and evaluation, or of direct operational involvement. While some observers see hopeful signs of continuing and increasingly sophisticated business involvement in public education (Timpane and McNeill, 1991), others suggest that substantive involvement of business in educational programs for the disadvantaged is the exception, not the rule (McMullan and Snyder, 1987a).

Here, the key operational questions turn around the extent to which the employer role needs to be primarily one of providing opportunities (work experience, jobs for school or training program graduates); providing policy guidance, training advice and ancillary services (e.g., career day speakers) to schools and programs; or taking a more direct hand in training, whether through work-based learning, expanded apprenticeships, operation of classroom training programs or expanded in-house training of entry-level employees.

There are many examples of employers playing the first two roles, though there is much room for expansion. If employers are to become more directly involved in training of entry-level employees, the critical question is: What incentives can be created to persuade employers to do something, besides informal OJT, that relatively few do now?

Postsecondary Training Opportunities

The development of improved and expanded postsecondary training systems (and the involvement of employers in them) may be the biggest challenge facing an improved school-to-work transition, in part because it faces the toughest questions:

- Is a new system necessary, such as the expansion of apprentice-like training or the establishment of a new national system of standards, credentials and administrative bodies? Or can such innovations as “two plus two” programs, involving community colleges and occupational education programs, such as the Academies, suffice? Or will a large second-chance system, offering much more intensive education, work experience, training and social supports, such as the Swedish Youth Centers or the British Youth Employment scheme, be needed?
- Where will the resources come from to pay for such a system, which will be much more expensive than the existing short-term programs offered by underfunded second-chance systems? Is it realistic to expect substantial investments in training of new workers from employers who have traditionally been averse to investing in such training--expecting the schools or the external labor market to provide them the skilled workers they need? Is it even efficient in a society where worker mobility is a way of life?
- Will Americans resist a system that many may see as “tracking”? Would existing education and training organizations resist the new system?

These are not questions to which existing research provides any ready answers. In part, this is because the questions are ultimately political in nature. In part, it is because the questions are relatively new, forced on us by global competition, the declining value of a high school education, the increased skill requirements at lower levels in many industries, and the growing necessity of post-high school education for a stable, decent-paying career.

Faced with such basic questions, uncertainty about answers, scarcity of resources and the relative newness of the issue, a period of intense experimentation and research seems a prudent course to follow. Experimentation should test out the full range of possibilities

for expanding postsecondary training, including programs that begin in the high school years and move beyond.

Bearing in mind the very diverse education and labor market experiences of different races, ethnic groups and genders, experimentation should include efforts to determine the characteristics of approaches most effective with different groups, not simply through post hoc analysis, but through affirmative efforts to craft approaches that speak to the socioeconomic and cultural diversity of these groups. Further, rather than evaluating modalities of service (e.g., work experience, career guidance), as much research has done with ambiguous results, experiments and research should focus on multimodal, multiyear efforts with special attention to the transition points (e.g., from high school to postsecondary training to early employment experience) that seem especially problematic in our “haphazard” system.

Evaluation research should address experiments in the postsecondary years as well as provide better (i.e., experimental and longitudinal) evidence of the impacts of models, such as the Academies, occupational theme schools, and various attempts to integrate academic and vocational content in a range of contexts. Research should address not only impacts (educational and economic benefits to individuals) but issues of implementation, including not only program structure and management, but staff qualities, staff training, curriculum and pedagogy. The relative importance of models versus effective implementation in producing results should be a guiding question.

Attention should also be given to the interaction of labor market conditions with training program effectiveness. This should include not simply gross indicators of demand, such as unemployment rates in the locality or industry, but closer examinations of the structure of markets within firms: the skills required; the speed, nature and effect of technological change on occupational skills and occupational mix; antidiscrimination efforts; the relative reliance on training, recruiting or job exporting, and similar factors that are likely to influence the outcomes of training programs, the age or grade levels at which training should be offered, the content of effective training programs, and the extent to which employers are likely to become involved in entry-level training--in the workplace or in schools and training organizations.

Further, quantitative studies of impacts and qualitative studies of implementation should be augmented by ethnographic and other studies of the experiences of youth undergoing the transition, to develop a much richer understanding of the ways in which their aspirations, perceptions, cultural or sex-related belief systems, interactions with adults, reactions to institutional settings and responses to intended (or unintended) incentives influence results. Such information, while not necessarily usable by policymakers because it is so fine-grained, can nevertheless be of great value to program planners and staff.

Finally, in synthesizing findings from research, attention should be paid to the third major criticism of school-to-work transition efforts mentioned above--the argument that education and training may be necessary but are not sufficient to improve the school-to-work transition, because the real problems are so deeply embedded in larger issues of poverty, race, gender and the functioning of society. Successful efforts will disprove this hypothesis; unsuccessful efforts will not prove it, but they require that it be taken seriously.

SUMMARY OF FINDINGS

1. There is no adequate system for the school-to-work transition, other than for those who successfully complete college.

While elements of a system exist, the pieces are not well connected, pathways are unclear, "floundering" remains the norm, and the individual must build his or her own bridge to a career--a process that leaves many, especially the disadvantaged, on the wrong side of the river.

2. Policy attention has been erratic and disjointed.

The school-to-work transition has received considerable policy attention in the last 30 years, but attention has waxed, waned and shifted in approach and emphasis. In the lives of individuals, the transition takes place over many years--but efforts to improve it are generally short-lived and address only a small segment of the transition. Such partial and transitory efforts are doomed to limited effectiveness.

3. Improvements in the transition are entangled with broader issues of education reform and institutional change.

School-to-work transition issues are embedded in broader issues, such as basic school reform; creating a new culture of learning in the workplace (treating the employee as an asset to be developed, not a cost to be reduced); and creating a larger, more varied and more effective set of postsecondary training options. For example, the German and Swedish systems both build on a foundation of solid basic education and thrive in a culture of institutionalized business responsibility for occupational training. While inevitable, the entanglement of issues also poses a dilemma: how to focus on school-to-work issues in general (and school-to-work for the disadvantaged in particular) in the midst of broader education reforms, such as academic excellence reforms or the school restructuring movement.

4. Postsecondary education is increasingly important, but underdeveloped.

Changes in labor force requirements--particularly increased cognitive and interpersonal skills--have yielded increased requirements for postsecondary training and education. Thus, while high school remains important as the launchpad for the transition to work, postsecondary opportunities with employers and education or training institutions have become the rocket ship. Policy is just catching up with this new reality--for example, through efforts to create new versions of apprenticeship and "two plus two" programs linking high schools and community colleges. However, the postsecondary institutional linkages, programs and approaches needed for the new economy are underdeveloped.

5. The elements of effective high school programs are generally known, if rarely implemented.

There is knowledge approaching consensus about the service and programming elements that are needed at the high school level to begin an effective school-to-work transition process. The importance of these elements is supported by research, though in many instances the research is less than definitive because it is (a) nonexperimental, (b) short-term or (c) limited in scope. The necessary elements include:

- A strong academic base, whether achieved through traditional academic courses with challenging content or programs that, drawing on the findings of cognitive science, integrate vocational and academic studies. There is strong research support for this conclusion.
- A well-articulated, multiyear sequence of career guidance activities, including exposure to the range of occupations, general "world of work" demands, the educational and skill requirements of various careers, and counseling on course selection and postsecondary options. The quality of research support for this conclusion is at best fair.
- Work experience to develop the skills and maturity needed to succeed in the work force--offered as an integral part of a program, combined with other services (e.g., basic education, counseling, skills training). Here, research strongly supports the basic importance of work experience, but less conclusively indicates the best ways to provide it as a program intervention.
- Transitional services, such as job readiness, job placement and job development programs, which are effective in providing at least temporary advantages in employment and earnings to students who graduate from high school. Here, the

research evidence is limited but consistent with related findings on the effectiveness of job readiness and placement programs for out-of-school youth.

Except in fields where there is a clear employer demand for high school graduates with specific skills training--most notably, office occupations--secondary school training for specific jobs has little payoff and should, increasingly, be deferred to the postsecondary level. While some analysts would dispute this finding, a preponderance of research supports it. However, secondary school programs built around occupational themes can be an effective mode of delivering basic education, as the High School Academies and exemplary theme-oriented magnet schools show. Research for this proposition is primarily descriptive and quasi-experimental.

6. The broad principles of an effective system are understood, but the system itself--and some of its component parts--remains to be built.

A system must be long-term; must link employers, secondary schools and postsecondary schools interactively; must be sensitive to the diverse needs of different race/ethnicity and gender groups, as well as to the requirements of local labor markets; must provide a well-integrated sequence and array of services, in numbers consistent with labor market demands and population; and must provide both clear pathways to and clear rewards for success. This general conclusion emerges strongly from the literature as a whole--but it is equally clear that this system does not exist, and that there is little experience in putting the pieces together.

7. Implementation is as important as policy.

Issues of effective implementation rival issues of well-crafted policy and program design in determining results. There is typically as much variation in results among examples of one program model as there is between examples of different program models. This presumably reflects variations among programs in the quality of management and staff skills.

RECOMMENDATIONS TO THE DEPARTMENT OF LABOR

Based on the above findings and their fuller explication in this text, we make the following major recommendations:

1. If the Department of Labor is to make the school-to-work transition a major emphasis, it is self-evident that joint initiatives with the Department of Education will need to become a standard modus operandi.

2. If JTPA is to make major contributions to improving the school-to-work transition, it will either have to have much more funding, or consciously pursue a "niche" strategy.

With much greater funding, and supporting legislative changes, JTPA could potentially become a major force in the development of work-based training and other postsecondary options. Alternately, it could become the backbone of a full-blown "second-chance" system providing extensive, intensive and integrated services to its current target population. Absent such changes, it should be clear that JTPA may contribute to parts of the school-to-work transition system, but cannot drive or serve as the whole system. For example, funding transitional services for seniors--as JTPA dollars do in many Jobs For America's Graduates sites and the Boston Compact--is one example of a niche.

In general, JTPA as it now operates should stress use of federal dollars to support components of well-integrated, comprehensive school-to-work transition strategies, and encourage service delivery areas and Private Industry Councils interested in the school-to-work transition to pursue collaborative strategies in which they fill a niche based on local needs.

3. Identify viable strategies for the school-to-work transition.

An extensive, interrelated set of longitudinal studies should be undertaken to determine the effectiveness of alternative approaches to improving the transition from school to work, particularly for disadvantaged youth. The importance of this topic has been long recognized, and has now emerged as a pivotal issue for the coming decade.

Drawing on both efforts already underway and new demonstration programs, the project would identify and carefully describe diverse approaches that work with different target populations, and possibly for different occupational sectors. The project would seek to compile evidence about the value of such strategies as add-on services within schools; high school academies; basic school restructuring; employer hiring guarantees; linkages among high schools, employers, community colleges and other training entities; neo-German apprenticeship models; and new postsecondary training options, including the Swedish-like use of postsecondary education in cooperation with employers. This would need to be a multiyear project. Its aim would be to develop a solid basis of evaluative evidence about the impacts of alternative approaches on disadvantaged youth, to support the development of long-term policy in this area.

4. Invest more in improving program management and implementation.

Providing ample funding for adequate planning time, training and technical assistance, in the context of a strong emphasis on performance outcomes, is the best way to improve implementation and achieve a fast return on policy investments.

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