Schools working in cooperation with business can reduce the number of youth at risk of long-term unemployment if teachers and school administrators are willing to learn from research developed outside the field of public education and if schools are substantially restructured to meet student needs. A review of the literature of labor economics and employment and training reveals data that define the problem of chronic youth unemployment as well as strategies to reduce that risk. The economy's requirements for education have risen faster than the educational levels of the young. Jobs now require the social, communication, and interpersonal skills that are acquired through informal and formal schooling. However, youth have no more trouble finding work than adults when they have met the following preconditions: (1) developed sound basic academic skills; (2) received a high school degree; and (3) had substantial work experience as teenagers. Educational programs that develop these skills include the following features: (1) competency-based remedial programs; (2) computer-assisted instruction; (3) small, supportive environments; (4) summer programs that combine education and employment; (5) social services integrated into the school program; (6) increased student control over the pace, content, and style of the program; and (7) a clear and concrete connection between school performance and employment. A grade-by-grade description of how the high school years might be restructured to incorporate these features is included. A list of five references and a brief description of Research for Better Schools (RBS), a non-profit, educational research and development firm, are appended. (FMW)
Education, Employment, and the At-Risk Youth

Richard H. de Lone
Research for Better Schools
444 North Third Street
Philadelphia, PA 19123
1989
Education, Employment, and the At-Risk Youth

Richard H. de Lone

Research for Better Schools
444 North Third Street
Philadelphia, PA 19123
1985
The work upon which this publication is based was funded in part by the Office of Educational Research and Improvement, U.S. Department of Education. The opinions expressed do not necessarily reflect the position or policy of the Department, and no official endorsement should be inferred.

© 1985 Research for Better Schools
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>A REVIEW OF DATA ON AT-RISK YOUTH</td>
<td>3</td>
</tr>
<tr>
<td>REDUCING THE FACTORS ASSOCIATED WITH &quot;AT-RISK&quot; YOUTH</td>
<td>9</td>
</tr>
<tr>
<td>RESTRUCTURING SECONDARY SCHOOLS TO BETTER SERVE AT-RISK YOUTH</td>
<td>17</td>
</tr>
<tr>
<td>Ninth Grade</td>
<td>17</td>
</tr>
<tr>
<td>Tenth Grade</td>
<td>18</td>
</tr>
<tr>
<td>Eleventh Grade</td>
<td>18</td>
</tr>
<tr>
<td>Twelfth Grade</td>
<td>19</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>21</td>
</tr>
</tbody>
</table>
The term "at risk" has become voguish and is applied in many different ways. The most important application, I submit, is the concept of youth who are "at risk" in the labor market -- that is, young people who face tough odds entering the labor market and securing a career. This paper does not address special problems of the handicapped, the mentally retarded, the mentally-ill or the youthful offender, important as the needs of such young people are. Rather, it is concerned with normal teenagers, some three to four million of them nationwide, who are at risk for serious and sustained unemployment.

Work is central in our society: not only does it mean economic security, but it really defines social membership. Increasingly, of course, this is true for women as it has long been for men. Only the young -- whose work is school -- and the retired, for many of whom retirement is an ambivalent experience, at best -- have honored roles in the society which do not involve work. As a result, one finds that unemployment in America is correlated with almost everything which isolates individuals from full community participation -- ranging from mental illness to voter apathy, from poverty to physical disease, from alcoholism to crime. Youth who are at risk of unemployment are hence at risk in all these ways.

Youth unemployment, defined broadly as unemployment between the ages of 16 and 21, is a seemingly intractable phenomenon that in some ways may represent the most vicious form of unemployment. The unemployment rate for this age group is typically about twice that of the adult unemployment.
rate. For minority youth, however, it is his; still -- about twice the rate for white youth. And in some cities, such as Philadelphia, black teenage unemployment rates sometimes exceed 50 percent. These rates -- and the racial differential -- have been gradually rising since the early 1960s, for a complex and not totally understood set of reasons.

These numbers are a warning flag. They suggest that something is wrong, terribly wrong, and it is. But the unemployment rate by itself is not particularly useful in understanding either the magnitude or the nature of the problem. The definition of unemployment, after all, is the number of people actively seeking work who have been unable to find it for a week or more.

To begin to understand what these unemployment statistics mean, in terms which policymakers, program planners, educators, and others can use, some additional information and analyses are necessary. We need to distinguish between short-term (so-called "frictional") unemployment and long-term ("structural") unemployment; we need to use a more informative statistic than the unemployment rate -- which is the labor force participation rate. We need to know something about historical trends in youth labor force participation and we need to understand what happens to unemployed young people over time. Most important of all, we need to know a lot about the young people for whom youth unemployment is not a transitory stage but a precursor of chronic adult unemployment, and all that goes with it. When the problem is thus defined, we can then address the ultimate question: what can be done?

This paper will suggest that the data exist to define this problem quite thoroughly, in both quantitative and qualitative terms. The data are
not, in fact, very surprising but they are, for social science, unusually precise and helpful in focusing planning. Further, a surprising amount is known about "what works" to reduce the factors which make young people "at risk" for chronic unemployment. It may be an exaggeration to say the problem can be solved, but it is crystal clear that a tremendous amount can be done to reduce it -- even in a time of diminished public resources.

Finally, this paper will argue that it is through the schools -- working in cooperation with business -- that the best chance of redressing this problem lies. Doing so, however, will require that teachers and school administrators learn from a technology of youth development that has, to a considerable degree, been developed outside the field of public education per se. Further, it will require that what I will call the environment of schools be substantially altered to serve youth at risk. It is this change, not surprisingly, that may be the hardest to achieve, for institutions as venerable, as layered and as massive as public education do not change with ease, despite the best intentions of the many talented and dedicated people who work in them.

A Review of Data on At-Risk Youth

Youth unemployment rates are inevitably higher than adult rates, and always will be, because the numbers of the unemployed reflect young people entering the work force for the first time, entering seasonally, and moving in and out of parttime or fulltime jobs as their interests and need for money wax and wane. However, a small portion of unemployed youth are long-term unemployed. If all the youths' days of employment are summed over a year, about 10 percent of unemployed youth account for almost
two-thirds of youth unemployment. This is not short-term frictional unemployment, and it is not simply a matter of foregoing a little pocket money or contribution to the household budget: almost 30 percent of these long-term unemployed youth are heads of households.

By and large, then, that subset of unemployed youth who are long-term unemployed represent the "youth unemployment problem." But they do not represent all of it. There are large numbers of young people who do not show up in the unemployment figures simply because they have given up looking for work. The precise figure for so-called "discouraged workers" is not clear, but the trends for labor force participation are clear and alarming. Over the past 20 years, labor force participation of white teenagers has been steadily rising, from 48 to 60 percent of the 16-to-19 year-olds. This is the percentage of that age group either working or actively looking for work. By contrast, the labor force participation rates for black youth have declined -- from 46 percent to 38 percent. For those who remember it, the Kerner Commission's famous admonition about "two societies" appears a dire prophecy come true when youth unemployment and labor force participation data are considered.

If one asks why this growing problem in the face of considerable public attention and spending in the past 25 years, in a span of time in which the number of jobs in the economy has grown at unprecedented rates, a period in which, despite some recent backsliding, the gap between black and white educational levels has diminished somewhat, and -- again with some recent backsliding -- overall levels of educational attainment have risen, the simple answer that emerges is that the economy's requirements for education have risen faster than the educational levels of the young. This
expansion in the educational requirements of the workforce has gone hand in hand with the dramatic transformation of our economy from a largely industrial, blue-collar workforce to an information and services, white-collar workforce. It should be noted that this is not necessarily a transformation to a better paid workforce. The service and information sector, which now accounts for over 70 percent of jobs, includes everything from financial analysts and cabinet officers, to insurance salesmen, teachers, and computer programmers, to file clerks, restaurant workers, beauticians, and custodial assistants. It includes some of the highest paying and many of the lowest paying jobs in America.

But the vast majority of those jobs do require the ability to communicate and interact effectively with people (co-workers, customers) and most require either the interpretation, the manipulation, or, at minimum, the accurate comprehension of written and/or numerical data. That is, they require the social skills, the communications skills, and the interpersonal skills that are acquired through the informal and formal curricula of the schools. This change in the economy and its educational requirements have been possible because of the tremendous reserves of educated women who have traded homemaking for the workplace. Small wonder that surveys and studies of and by employers consistently report that attitude, workplace behavior, and basic academic skills rather than specific occupational skills, are what they look for in hiring entry level workers (Sherman, 1983; North Carolina Commission on Education for Economic Growth, 1984).

Both non-labor force participation and youth unemployment can have long-term consequences. There is substantial evidence that teenage work
experience, when combined with high school graduation, helps assure adult employment. Unemployment in the early teen years is not itself strongly correlated with later unemployment, but if unemployment persists in the 19-to-21 year range, it correlates strongly with subsequent adult unemployment.

But it should be stressed that it is not youth unemployment or lack of work experience alone that are the causes of continuing adult unemployment. Rather, lack of work experience interacts with poor basic educational skills and the lack of a high school diploma. Extensive studies by the National Bureau of Economic Research (Freeman, 1980) have shown that young people, regardless of race, have no more trouble finding work than adults, when the following conditions are met:

- They develop sound basic academic skills.
- They receive a high school diploma.
- They have substantial work experience as teenagers.

"Sound" basic academic skills is a relative concept, and there is no clear point on the continuum where "unsound" turns "sound." However, reasonable rules of thumb are the ability to read at the eighth grade level and facility with basic computation skills. Below these levels, there are precious few jobs available in our society, and below these levels, most training programs report individuals lack the basics to profit from training. Indeed, one of the strong findings from the massive amounts of research on youth employment sponsored by the U.S. Department of Labor in the late 1970s and early 1980s is that reading ability is the best predictor of success in job training programs, and of subsequent employment gains.
The earnings and employment gap between recent high school graduates and high school drop-outs rose through the 1970s, which is not surprising since a recent national survey of employers shows that only 18 percent of jobs are open to people without high school degrees (Malizio 1984). Clearly, employers view attainment of the high school degree as an indication of persistence and motivation, as well as skills.

As with educational skills, the definition of "substantial" work experience is also a moving target, but the more experience the stronger the independent effect of this variable (when basic skills and a diploma are present). Something in the range of 1,200 to 1,500 hours appears a crude benchmark. The importance of work experience does not appear to have much to do with occupational skills development. Very few young people end up in careers that resemble their first jobs as teenagers. In fact, not until their early 20s do most people settle into anything that resembles a career path.

Rather, work experience enhances maturity, helps develop the social and interpersonal skills which are increasingly important in the model workplace, and helps young people acquire a knowledge of the "ropes" of the workplace — from interviewing skills to punctuality and dealing with a boss — a very important aspect of employability. There is considerable evidence, incidentally, that these skills can be taught in pre-employment training programs, both in and out of school.

The reader may note that occupational skills training and vocational education do not appear on the list of requisites here. For some jobs, secondary school skills training is important and effective. Employers, for instance, often hire secretarial workers right out of high school, and
they expect them to have skills. Furthermore, some vocational schools are very successful at developing relationships with employers which enable them to, in effect, provide customized training of students which results in high-paying jobs after graduation.

But in the most part, the American labor market is one where skills are acquired on the job. Many employers, in fact, prefer to train their own workers, through formal or informal means. And even when vocational skills are taught effectively in classroom settings, there is usually a requirement that basic academic skills be mastered. The literature consistently fails to find evidence that secondary school vocational training confers long-term benefits in the labor market to most of its recipients. Those vocational-technical schools which do make a difference -- and there are some excellent ones -- generally have selective admission policies which mean that students are relatively solid in their basic skills. The combination of the way the labor market works, the requirement that a student have a pretty good idea of career choice, and the requisite for mastering basic skills first together mean that the best time for vocational training is in the 13th and 14th years of schooling, a conclusion that is also consistent with the evaluation literature. Hence, while vocational education has a modest role to play at the secondary level and an important role at the post-secondary level, it offers little to most at-risk high school youth.

How many young people lack the basic skills, diploma, and work experience whose absence places them at risk? Most estimates suggest that approximately 20 percent of all youth, and as many as 40 percent of minority youth, nationally, are "at risk" by these criteria. In major metropolitan
areas, such as Philadelphia, where drop-out rates range over 40 percent, test scores are low, and youth unemployment rampant, a good case can be made that as many as 40 percent of the students entering ninth grade (some 6,000 youth) fall in the at-risk category. If this figure is extrapolated over the years of 16 to 21, we are talking about 35,000 to 40,000 young people in this city alone. In some high schools, we are no doubt talking about the majority of the students.

These are staggering numbers. There may well be a crisis of excellence in education. There is a need for tougher graduation standards, more advanced science and mathematics instruction, teaching of foreign languages, and all the other laudable goals of the recent round of educational reports. But the cold, bald, inescapable facts are that the deepest, most enduring crisis in American education concerns those youth who are "at risk."

Reducing the Factors Associated with "At-Risk" Youth

Can anything be done to resolve this long standing crisis, which changes little except in the amount of public attention it receives? Part of the answer depends upon matters of political will, about which papers such as this have little to say. Part of the answer depends upon whether a sufficient knowledge base exists to redress the problems, along with the resources to implement solutions.

I believe that the knowledge base does exist, firmly grounded in research. Further, I believe the primary issue is not one of more resources, although some would help, but a better use of existing resources. If these statements are true, the issue is one of regearing and redirecting the practices of institutions -- primarily the schools. This is, I realize, a
massive task, but it is unacceptable to conclude that it is an impossible task. It will take time, and it will meet resistance, but it can occur if the people who set policy, manage, and teach in our schools can get a clear fix on where they should be going.

Let me be clear that there is no magic bullet, no quick fix, no panacea. The problems we have been describing will be with us in some form for a long, long time. But a better job can be done than we are doing. Marginal improvements can be made, one after the other, and, over time, those improvements will make a big difference.

What is it that must be done? In part, the answer is that we must do more of what has already been shown to work. And in part, it is that we must keep focusing on the problem until we find better ways to solve it. This may sound trite, but my experience is that we haven't focused on it and I'll give you an illustration of why. Imagine, for a minute, an auto company turning out cars and unable to move huge portions of its inventory -- a reasonable description just a few years ago of most American manufacturers. The stockholders, the board, top management, engineers, and workers at almost all levels would be meeting, rethinking, changing the way they do business, developing new strategies, and spending a good portion of their professional time trying to discover what to change to do a better job. Consultants would be consulted; statisticians would scrutinize the effect of new designs, new models, and new production technologies. The company would find the solution -- or go out of business.

The analogy is obvious; the question is simple. Education for employment is one of the fundamental missions of schools, and as the data reviewed above indicate, far too often the product has no customer. The question
is, do principals, teachers, curriculum consultants, and others go through the kind of concerted process a failing business must go through to change their methods, approaches, and results? Occasionally, yes. When there is new money, often. But daily, persistently, as a centrally important concern of their jobs? I will leave the answer to the reader's experience.

What is it that must be done? Research tells us a number of factors that are important at all levels of schooling. Early childhood education pays off, modestly but significantly. Programs like Follow Through, which were designed to build on the gains of Head Start, pay off, modestly but significantly, almost regardless of the approach used, because the focus is on the learning needs of disadvantaged children throughout the school program. Time on task is important; parent involvement is important; effective school leadership -- defined primarily as involvement of teachers as professionals in setting and monitoring the achievement of shared educational objectives for the school -- is important. If all these lessons are taken seriously and made the central focus of elementary schools, far fewer students will come to the secondary level at-risk than is the case today.

But in the foreseeable future, many students are going to come to secondary school well behind in basic academic skills. Even with large improvements in elementary education, this is likely to be the case. And under any circumstances, students at the secondary level face a different set of developmental and educational challenges that must be addressed if they are to make a successful transition to the workplace. In the middle to junior high years, they must gain the ability to engage in abstract thinking and problem solving. In the same years, they must cement the
social and interpersonal skills which they carry through the rest of their lives. At approximately the same time, they must begin to develop the broad (not specific) career aspirations which, to a surprisingly high degree, correlate with subsequent experience. At the same time, their school curriculum begins to focus much more intensively on mastering the various disciplines and fields that characterize human knowledge: literature, mathematics, social studies, science, various vocational fields, and so on.

It should be remembered that in the late 19th century, when high schools were developed, less than five percent of the students attended them, and the high school program, following European models, was basically preparation for college. Junior highs were a somewhat later variation on the theme, designed to be just what the name said, as the number of children staying in school until adolescence swelled. Vocational education, which received its greatest impetus under the Smith-Hughes Act as part of the World War I build-up and as a plausible response to an increasingly industrialized economy, was added as larger numbers of students sought education after the eighth grade. Through the next several decades, the movement loosely known as progressive education attempted to make secondary schooling more relevant to larger numbers of students. Many curricular innovations, from such discrete subjects as industrial arts and home economics, were part of this movement, as well as grand concepts such as the comprehensive high school (Cremin, 1959) which its proponents believed would be an educational supermarket offering all things to all students.

But the reality was that there were really three programs offered by American secondary schools: a college preparatory program, a watered down version of the college preparatory program which, with a few variations and
considerably less rigor, served the general student, and the vocational technical program.

This array of offerings, the evidence makes pretty clear, has not served well that large groups of students -- disproportionately poor and from minority backgrounds -- who make up the "at risk" population. While arguments can be made that discrimination and low expectations, historically at least, kept minorities (and women) from their fair share of vocational and academic offerings, I do not believe the failure has been primarily from lack of trying. Most teachers knock themselves out trying to teach the subjects, academic and vocational, which they have been asked to teach. To be sure, there are some who don't try and don't care, but anyone who seriously believes that teachers as a group are lazy, or unintelligent, or unconcerned, has been reading too many reports and visiting too few schools. The problem is not in lack of trying, I suggest, but in trying the wrong thing: in teaching subjects instead of teaching students; in focusing on what the curriculum guide says students are supposed to learn instead of ways to alter the school program so that students master what they have to learn to make it in this society.

This is not to suggest that, ultimately, literature, science, mathematics, social studies, and vocational skills are not important for everyone, and possible for everyone to learn at some level. They are, and they are. But it strikes me as crazy -- there is no other word for it -- to teach junior high and senior high students a subject-matter based curriculum when they have not, in large numbers, managed the basic skills to succeed in those subjects. Extraordinary teachers occasionally manage to teach poor
readers Shakespeare, and they may even use Shakespeare to excite a motivation to learn basic skills. But most of us are not such wizards.

What generally happens is that students who lack the basic skills fail. For most, failure begets aversion, and aversion begets more failure. Poor attendance, disruptive behavior, and early exit from school are the responses. A lifelong disadvantage in the labor market is the result.

For all intents and purposes, we ignore this problem, continue teaching the traditional curriculum, and publish the statistics. Occasionally, we throw in a remedial reading program, but not often enough. Nationally, for example, only about five percent of Chapter I funds, perhaps the prime source of remedial monies, are spent at the secondary school level.

The case is overwhelming to me, that we need to try something else. I do not pretend to know exactly what else. We should try and evaluate, try again and reevaluate, until the best combination emerges.

But we do not start totally blind, either. We can define the problem properly; we can draw on a substantial body of research and experience that point to promising directions; and we can reallocate and redeploy resources we already have, both within and without school systems, to begin to remove the risk from at-risk youth.

The problem, for starters, is to educate at-risk youth for employment. This does not and should not foreclose preparation for higher education. It does mean attending to first things first. Concretely, it means identifying early in their secondary school careers those youth who are at-risk -- something quite easy to do with the aid of test scores, grades, and attendance data. It means building an educational program for those young people that makes sure they possess as a minimum the three fundamentals
that are necessary for a successful transition to the work force: basic academic skills, a high school diploma, and work experience.

Research suggests some of the building blocks that we should consider for creating this kind of program:

- Competency-based remedial programs work (although not if they are "pull-out" programs).
- Computer-assisted instruction helps competency-based programs work even better.
- Small settings, such as alternative schools and schools-within-a-school, work -- largely because they create a warmer, more supportive environment where students can form supportive relationships with adults and peers.
- Summer programs combining education and employment work. (Indeed, some students have found that most of the difference in achievement between advantaged and disadvantaged youth results from differences in retention or addition of knowledge and skills over the course of the summer. Not all agree, but there is no doubt that scores of disadvantaged youth deteriorate over vacation, leading to a two steps forward, one step backward syndrome.)
- Integrating social services into the school program works.
- Giving students increased ability to influence and manage the pace, content, and style of their own educational program works, especially as they approach adulthood.
- Mixing education and work -- earning and learning -- works, and it works best when there is a very clear and concrete structure of rewards: for example, when good school performance results in a job and money, the one reward which, filthy as it may be, seems to motivate everyone!

It is ironic that some of the best-documented and well-researched knowledge about "what works" in the education of vocationally at-risk youth comes not from the education literature but from the literature of labor economics and employment and training. The Job Corps, the military, and
other employment and training programs have pioneered competency-based remedial programs that typically achieve a year-and-a-half or more gain in reading scores after 90 hours of instruction -- at costs far below the cost of a year of schooling.

However, it is also clear that the best way to put all these elements together is in school. There is perhaps no better example than Philadelphia's own High School Academies Program. The Academies are each organized around an occupational theme. These are small "schools-within-a-school" run jointly by the school district and industry. The Academies serve a primarily at-risk population that enters in classes of 50 at the 10th grade. The program includes a careful blend of trial and paid work experiences, academic skill development (taught, where appropriate, in a fashion relevant to the student's work experience), career counseling, and vocational education. The programs are characterized by close personal attention and follow-up by teachers, who get to know all of the students well. Average daily attendance in the Academies is consistently over 90 percent, the drop-out rate below 10 percent, and about three-quarters of the graduates successfully find jobs, enter post-secondary education, or enlist in the military. By contrast, the schools in which the Academies are located average about 60 percent daily attendance, and a 40 percent drop-out rate.

The Academies programs are not perfect, and they are not the only good model. They do not solve all the problems of all the students, and not every graduate is a success. But the numbers suggest that their approach is vastly superior to the ordinary school program. The program embodies many -- not all -- of the features listed above which suggest "what works,"
and it represents a significant departure from the traditional school program which, for many young people, clearly does not work.

But it is one example that provides some clues. There are others I could cite, such as New York City's remedial STAR program which registers two-to-four year gains in reading and mathematics scores annually; Jobs for America's Graduates which has shown that teaching job search and related skills to high school students increases their employment dramatically; the Ford Foundation-sponsored STEP program, a year-round education and employment sequence for 14 and 15 year olds; the integrated program of social services and education which Cities in Schools has shown dramatically cuts drop-out rates in a number of cities; and cooperative education programs, including the small program in Philadelphia and larger programs in Pittsburgh, New York, and other cities.

Restructuring Secondary Schools to Better Serve At-Risk Youth

I believe secondary schools can and should be restructured to serve at-risk youth in something like the following manner, focusing simply on the high school years for illustration's sake.

Ninth Grade

Students with poor attendance and achievement are identified. They receive an academic program which includes a substantial amount of competency-based remedial instruction, with teachers assisted by computers for drill, quick student feedback, and scoring. Other subjects should take an interdisciplinary approach to problem solving, focusing on issues in the family, the economy, and politics for their content. Students also should
have access to the arts (i.e., not all learning should be reduced to remediation). Career exposure activities, including visits to industries and talks with working adults from many occupations, would be a part of the program. Students achieving required competency levels could be returned to the "regular" academic program. Social services -- especially health, family counseling, and recreation -- would be made available as appropriate through personnel from those agencies outstationed at the schools. A "house plan" or school-within-a-school organization would be employed for most academic offerings. In the summer, students with good attendance would be eligible for subsidized jobs reserved from the summer youth program. Jobs would be parttime and complemented by further educational remediation.

Tenth Grade

The basic program would not differ substantially for those requiring remediation. Career education would begin with internships -- opportunities for students to spend a sustained amount of time at private or public workplaces, not simply observing, but doing some work. They would receive academic credit for completing this experience successfully as well as an academic exercise (a paper or project) related to their internship. A summer job would again be a reward for successful school performance, with standards a bit tighter and the job paying more money than in the previous year. Summers would also be used for remedial work.

Eleventh Grade

By now, many students should have the academic skills to be participating in the usual academic offerings of the high school. Cooperative
education opportunities would be broadly available to our (increasingly less) at-risk young people, providing them jobs throughout the school year if they maintain standards in school and on the workplace. The house plan or school-within-a-school format would remain in effect. Private sector summer jobs would also be available.

Twelfth Grade

This would be similar to 11th grade, with some significant additional options: intensive vocational training available for those electing it in skills centers, job search skills taught to all students, and job development and placement services provided in cooperation with the city's employment and training program. Intensive vocational training, customized to employer needs, would also be available in the summer after 12th grade, constituting an intensive 13th year in a three to six-month time frame.

This is, of course, a very sketchy plan, meant to be suggestive and neither the sole nor the definitive approach. But the literature suggests that some such restructuring holds promise, and it clearly represents a challenge:

- A challenge to schools to rethink and restructure the educational program offered the students they can best identify: students vocationally at-risk.

- A challenge to the business community to provide the opportunity for work experience which is one key part of the solution.

- A challenge to city and community agencies to join with the schools in a coordinated approach to the needs of at-risk youth.
If we meet these challenges, we will not solve all the problems, but we will take a giant step forward. It is a feasible step, and if we lack the courage to take it, we may pay an awful price.
References


Research for Better Schools (RBS), a private, non-profit, educational research and development firm, was founded in 1966. Its sponsors include many clients from the public and private sector who support R&D projects that meet their needs. RBS is funded by the U.S. Department of Education to serve as the educational laboratory for the Mid-Atlantic region.

Using the expertise of some 50 staff members, RBS conducts research and policy studies on key education issues, develops improvement approaches and services for schools, provides consultant services to state leaders, develops products for special populations, and participates in national networking activities with other regional laboratories to enhance the use of R&D products and knowledge.

During the past 20 years, RBS has developed extensive capabilities which are available to all education professionals in the form of practical, research-based products and services. This publication is one of the products of RBS R&D work. Related training and technical assistance services also are available. Your interest in RBS is appreciated and your suggestions or requests for information always are welcome.