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ABSTRACT

Project "FAIR" identified and evaluated alternative funding mechanisms for allocating state resources to support programs and services for at-risk youth. Information was gathered through the following activities: (1) two national surveys; (2) the development of a classification system for programs and the identification of prototype programs; (3) a cost study; (4) the simulation of funding alternatives; (5) identification of procedures for integrating funding alternatives into existing state school finance programs; and (6) an evaluation of state funding options. State policymakers should consider the following choices: (1) the target group; (2) service delivery systems; (3) expenditure per student; (4) participation standards; and (5) outcome measures. The following conclusions are presented: (1) programs are in an evolutionary stage; (2) social and economic costs demand immediate action to provide funding; (3) using a fiscally equalized approach may not assure that all eligible students receive adequate services; and (4) an "index of need" approach appears to be the best alternative for targeting resources on those districts with the greatest need; and (5) local creativity should be encouraged. Recommendations for further research are made. Statistical data are presented in 40 tables. The following materials are appended: (1) a list of 136 references; (2) two glossaries; (3) the survey questionnaire; (4) an explanation of the classification system; (5) one table of statistical data; (6) a description of the simulations; and (7) the evaluation criteria. (FMW)

ALTERNATIVE STATE FUNDING ALLOCATION METHODS FOR LOCAL SCHOOL DISTRICT PROGRAMS TO SERVE "AT-RISK" STUDENTS

"Project FAIR"

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FOREWORD

This study of alternative allocation methods for providing state funds for programs to serve at-risk youth is the result of a two-year research effort. First year funding was provided by a small grant from the Graduate College at Arizona State University; second year funding was from the U.S. Department of Education.

The researchers became interested in this area for several reasons. First, programs for at-risk youth were difficult to classify and study because of the plethora of programs in the schools and the absence of an historical data base. Thus, some consistent approach for classifying programs is needed to guide decisions about identifying generic program types for the purpose of assigning program weights. Second, to promote systematic state funding, additional information about program costs is needed to guide the public policy process. Third, to make informed decisions, policymakers need criteria to guide the selection of funding alternatives.

This research effort supports the concept of systematic state funding methods to improve the educational opportunities for at-risk youth. The findings and conclusions will add to the informational and conceptual knowledge base and contain analysis that should be valuable to public policy decision makers.

Special recognition is given to Dr. Charlotte Roberts of the Ladue (Missouri) Public Schools who was involved in the preliminary stages of this research effort, and to Dr. Fred DePrez for assistance in the analysis of the national survey data. Appreciation is extended to the Morrison Institute for Public Policy and Dr. Louann Bierlein for assistance with the cost study in this research project. Recognition is also given to Cathy Freericks for assistance with the final report and to Rivka Dushoff-Goldberg for editorial assistance and manuscript preparation.

November 30, 1990

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EXECUTIVE SUMMARY

Educational economists have argued in favor of funding at-risk programs because of the cost to society if the present situation is allowed to continue. Levin (1989) asserted that the social benefits of investing in at-risk programming are likely to be well in excess of the costs of providing such programs. He projected that a serious effort would require an additional annual expenditure nationally in excess of $25 billion. However, the annual cost of the current dropout problem on the national level reflects $71 billion in lost tax revenues, $3 billion in increased welfare and unemployment, and $3 billion in crime-related costs (Grossnickle, 1986; Hodgkinson, 1985; Kunisawa, 1988; Natriello, Pallas, & McDill, 1987). Such high social and economic costs suggest that it would be cost effective to invest in programs for students at risk of dropping out of the educational system.

The state, as the level of government with the primary responsibility for ensuring that children have access to an adequate education, has a special interest in identifying program costs for providing services to the at-risk population as well as identifying methods for allocating funds to support such programs. This research effort, Project FAIR, focused on identifying and evaluating alternative funding mechanisms for allocating resources to support programs and services for at-risk youth.

This project consisted of seven interrelated research activities--(1) a survey of the 50 states to identify their current definitions of at-risk youth and their current funding practices for at-risk programs, (2) a national survey to secure the opinions and attitudes of state drop-out coordinators, state school finance officers, legislative liaisons for large city schools, and national experts about the focus, funding, and delivery of at-risk programs; (3) the development of a classification system for at-risk programs and the identification of prototype programs, (4) a cost study of a sample of at-risk programs; (5) the simulation of funding alternatives on a prototype state, (6) the procedures for integrating funding alternatives into existing state school finance programs, and (7) an evaluation of state funding options. Each of these activities is abstracted in the following sections of this executive summary. A more comprehensive discussion of each activity is contained in the respective parts of this report.

State-By-State Survey of Current Practices

The first research activity of Project FAIR was a state-by-state survey of current state practices relative to definitions of at-risk youth and state funding of local programs. Data were received from each of the 50 states.

Responses indicated that 29 states had no official definition for at-risk youth. Limited definitions of at-risk youth that focused on factors and characteristics of youth relative to their academic performance were found in 13 states. Comprehensive definitions that focused on both academic and socio-economic factors were found in 8 states.

Regarding current state funding, 33 states did not specifically fund at-risk programs; however, 21 of those 33 states did fund programs aimed at specific segments of the at-risk population through either competitive discretionary or categorical grants. Of the 17 states which provided at-risk program funds, 8 states funded programs through competitive grants, 6 states funded programs through a formula based mechanism, and 3 states funded at-risk programs through a combination of formula funding and competitive grants.

Survey of State and National Experts

The second research activity of Project FAIR was a national survey of state at-risk program administrators, state school finance officers, legislative liaisons for members of the Council of Great City Schools, and selected national experts on school finance and/or at-risk programs. The purpose of the survey was to determine the attitudes and opinions of these persons about the focus, delivery, and funding of at-risk programs.

The opinion items on the survey indicated that pre-school and K-3 children were the most favored target populations; socio-emotional and parent/family support programs were the preferred at-risk program focuses. Respondents also indicated that the majority of at-risk students would be served best by mainstreaming in the regular classroom.

Regarding the funding of at-risk programs, in responding to one question, respondents indicated that funds should be available to all students as needed and that funds should be allocated through the state funding formula and equalized. However, in responding to another question, respondents supported funding at-risk programs outside of the

general state aid program because of the different needs of at-risk youth. Respondents also favored targeting funds to districts with high concentrations of at-risk youth.

The majority of respondents supported state at-risk funding procedures that require school districts to: (1) develop cooperative programs with other public social service agencies, (2) demonstrate that state at-risk funds were used to support district programs for at-risk youth, and (3) demonstrate that state at-risk funds were used to supplement existing programs.

The last part of the survey asked respondents to rank order several methods for funding at-risk programs. The mean rank ordered responses indicated that respondents' first preference was for allocations through a pupil weight in the general state aid program. This preference was followed by allocations based on the predicted number of at-risk youth (index of need) and categorical grants.

Little diversity was found among the respondents when the questionnaire results were analyzed. Only a few states were providing extensive funding for programs to serve at-risk youth, but the general opinions were supportive of state funds. The findings and conclusions from the national survey were used in the design of the subsequent research activities that simulated and evaluated alternative state funding options.

Classification System for At-Risk Programs

During the design stages of this research project, the decision was made that a classification taxonomy would be needed to categorize the diverse pattern of programs and services for at-risk youth that might be funded through a state school finance formula to facilitate the assignment of program funding weights. Because at-risk programs are in the development stage, there are no recognized "standard types" of programs for delivering services to at-risk youth as there are in other student-need-based programming. This observation provided the impetus for the development of a classification system.

Following a review of the literature on classification of at-risk programs, data were gathered on 200 at-risk programs. These data were used in the development of a three dimensional matrix for classifying programs. This initial three dimensional classification model, which was

a refinement of Clifford's (1987) at-risk taxonomy, proved to be too complex to be used in the identification of pupil funding weights for the cost-study activity; it was too discrete and yielded too many program types resulting in an excessive number of program funding weights.

Alternative classification systems based on strategy and delivery respectively were not discrete enough and masked important program distinctions and their relative costs. Therefore, the initial three dimensional model was modified, resulting in development of the Project FAIR system (PFS). The PFS provided a manageable number of program types, yet permitted the isolation of cost variables in distinctive programs. For example, the high cost of providing programs in an alternative school could be identified as well as the modest expense of providing programs for at-risk youth during an extended school year or summer school.

The PFS classification system categorized the at-risk programs into nine clusters yielding the following prototype programs:

1. Programs provided in an alternative school separate from the regular school facility (AS).
2. Classroom programs that had an academic and/or vocational focus (AC).
3. Programs delivered in small groups with an academic and/or vocational focus (AG).
4. One-on-one programs with an academic and/or vocational focus (AT).
5. Summer school programs (SS).
6. School-wide/classroom programs with a focus on preventive socio-emotional issues such as drug abuse and child abuse (SC).
7. Group counseling/support groups (GC).
8. Individual counseling (IC).
9. Programs focused on parent/family involvement (PF).

The PFS prototype programs reflected the types of programs reported in the descriptive literature on model programs. In this classification system, programs are organized around their primary program focus and primary delivery system.

Cost Study of At-Risk Programs

Accepting the premise that the public policy goal is to provide funds to all districts with at-risk youth, a major research activity in this project was to develop program cost estimates that could be used in a state allocation system to provide districts with funds for programs to serve at-risk youth. Since historical data were not sufficient to provide guidance in the identification of cost estimates that could be used for allocating funds, the cost study of at-risk programs was conducted.

Data for the cost study were based on actual practices and cost estimates for 88 at-risk programs in 26 school districts. The resource cost inputs methodology was used to calculate the cost index for each program. The refined classification system was used to cluster the programs into the PFS prototype programs. One reservation about the results of the cost study was that the range in per-pupil program expenditures among at-risk programs was large for some clusters. However, the research literature indicated that this was common in cost studies for other types of need-based programs. Recommendations and conclusions from previous research were used as the justification for selecting the median index in each cluster as the program funding index (PFI) for that cluster.

The PFIs for the prototype programs were as follows:

AS	1.26	SC	.01
AC	.38	GC	.10
AG	.28	IC	.15
AT	.41	PF	.14
SS	.15		

In their application in a state school finance program, the PFIs would be add-on weights or indices for each participating student. In each district, the sum of the number of students in a recognized at-risk program times the PFI for the program would be multiplied times the base support level per pupil to determine the amount of funds allocated for programs to serve at-risk youth.

Face validity and acceptance by the educational community are critical considerations in assessing the credibility of allocation systems.

Face validity and acceptance by the educational community are critical considerations in assessing the credibility of allocation systems. The range among the prototype program PFIs appears to be reasonable given the cost experience with other programs; however, subsequent experience with at-risk programs may suggest the need for further refinement of the classification system for prototype programs.

Simulation of Funding Alternatives

Building upon the cost study research, the next Project FAIR activity was to simulate selected state options for funding programs and services for at-risk youth. The results of the cost study were used in designing and simulating alternative methods for allocating state funds through a state funding formula to local school districts to support programs and activities for "at-risk" students. The alternatives used in the simulation were: (1) equalized per-pupil allocations, (2) unadjusted index of need, (3) adjusted index of need, (4) categorical (flat) grants to all districts with eligible students, (5) excess cost reimbursement, and (6) competitive discretionary grants.

The impact analysis from the results of the simulation focused on the distributive effect of the funding alternatives using the allocation of a constant amount of state funds to a set of school districts with different characteristics. District characteristics used in the analysis were property wealth per student, personal income per student, total enrollment, district type, and geographic classification.

In terms of the distributive effect of alternative methods, the index of need option tended to benefit poor districts; urban, rural, and independent area districts; and districts with small populations. The categorical (flat) grants alternative tended to benefit wealthy, suburban, and unified school districts. Equalized per-pupil allocations and excess cost reimbursements options tended to benefit large, moderately wealthy, suburban, and unified districts. The discretionary grants option tended to benefit small, poor, independent area, and elementary districts, but this was primarily an artifact of the criteria used in Arizona for the distribution of discretionary grants.

Integration of Funding Alternatives

From a public policy perspective, concerns about alternative mechanisms for funding programs to serve at-risk youth include the extent to which an alternative can be integrated into the general state school support program and the extent to which it will contribute to greater equity in funding. Integration issues associated with each alternative are discussed in the following paragraphs.

Of all alternatives, equalized per-pupil grants could be most easily integrated into a pupil-based state school support program. The grants would be included in the calculations of the district's basic entitlement and also would be fiscally equalized.

The index of need could be incorporated into the state school finance program as an adjustment index on the district's total entitlement or could be calculated and disbursed separately. The challenge with this alternative is to identify an acceptable set of educational and socio-economic factors associated with at-risk students that could be used in calculating the index.

Special purpose categorical (flat) grants could be integrated into typical state school finance programs as an add-on to the general state program; allocations would be the product of the per pupil or per unit value of the program times the number of eligible students or program units. By definition, flat grant funds are not fiscally equalized.

The basic premise of excess cost reimbursements is that they will not be integrated into the state's school finance program, but will remain separate from both an administrative and funding perspective. An additional premise of this alternative is that districts would receive different amounts of state funds for similar services. Further, the alternative likely would contribute to less fiscal equity because larger and more wealthy districts more likely would spend more for units of service, and therefore would have greater excess costs.

Personnel (classroom) unit allocations would provide a fixed amount of funds for each approved personnel or classroom unit; this alternative could be easily integrated into most state school equalization programs. As with per-pupil grants, funding would be fiscally equalized through general state school finance program.

For competitive discretionary grants, the basic premise is that they would not be integrated into the state's school finance program, but would

remain separate from both an administrative and funding perspective. Additional premises are that all districts would not receive funds and that greater equity in funding would not be a dominant value.

Evaluation of State Funding Options

The efficacy of each alternative was evaluated using Jordan's (1989) seven evaluation criteria. The criteria for evaluating state school finance programs were stability and predictability, adequacy, efficiency, accountability, equity, responsiveness, and non-manipulability. In addition, Hartman's (1980) incentives and disincentives of alternative need-based funding options were incorporated where applicable. The Hartman components included incentives and disincentives for classification and assignment of students, flexibility in program delivery systems, program and fiscal planning, and cost reporting and containment.

Among the alternatives, discretionary grants scored lowest. This option met three of the seven criteria: efficiency, accountability, and non-manipulability. The three top-rated alternatives were an index of need, the equalized per-pupil allocation, and the per-pupil categorical grant. The equalized per-pupil and the categorical grant each scored positively on four criteria: stability and predictability, adequacy, accountability, and responsiveness. These alternatives offered great flexibility and the capacity for multiple options through state incentives and mandates. The major drawbacks are that they necessitate the labeling of children to receive services, and that they may put a greater fiscal burden on those districts that have the greatest number of at-risk youth to serve.

The highest rated alternative was the index of need. It scored positively on five of the criteria: stability and predictability, efficiency, equity, responsiveness, and non-manipulability. The advantages of the index of need are that students do not have to be labeled to receive services, it allows for maximum flexibility in programming, and it has the potential for maximizing educational equity. Its primary disadvantage is the lack of accountability inherent in the funding mechanism. If an index of need were selected as the funding alternative, policymakers would want to build accountability measures into the rules and regulations.

One of the conceptual challenges in the use of the index of need is selection of the variables to be used in developing the index. There is

probably no single best indicator or set of indicators for all states. Each state would need to determine what set of indicators best reflects the need in its unique set of circumstances.

Policy Issues

An analysis of the general condition of programs and services for at-risk youth and the findings of this study suggest that state policymakers should consider the following public policy choices as they consider authorizing and funding programs for at-risk youth:

Composition of the target group. Defining the target group for at-risk programs is difficult because of the lack of agreement on a definition of at-risk youth. One of the contributing factors is the variations in conditions among schools and school districts that result in a child being considered to be at-risk. One critical decision about identification of the target group for at-risk programs is whether to serve all students who are potentially at-risk or to limit the programs to students at certain age/grade levels.

A policy consideration is the extent to which local school districts should be permitted to develop criteria for identifying students as being at-risk. One policy consideration is that criteria for the identification of students and the allocation of funds based on target group/program criteria should not offer an incentive for the district to classify students into programs so that the district's benefits from state funding may be maximized.

Target group decisions can be made at different levels. National criteria can be adapted to local conditions, and identification criteria such as those discussed previously might be considered. At least two options can be used to identify the target group. First, the state legislature or state board of education can adopt a top-down stance and impose target group criteria upon local school districts. Second, given the diversity of conditions associated with a student being at-risk, responsibility for identifying students to be served can be delegated to the local school district.

Types of program delivery systems. The most prevalent programs had an academic focus and were delivered either in a class or small group. Research about "what works" in programs for at-risk youth is limited; therefore, state program restrictions and prescriptions may not be advisable because of the lack of an information/research base about effective

and ineffective programs for at-risk youth. (No effort was made in this project to evaluate program effectiveness.)

Funds expended on the target student. Under all funding alternatives except the at-risk index, funding could follow the student if the rules and regulations indicate that funds are to be expended on the student who generated the funds. One of the dilemmas with strict adherence to the principle of the funds following the child is that funding levels for programs may be insufficient in some instances and more than sufficient in others; consequently, there would appear to be some merit in providing school districts with a degree of flexibility in the use of funds.

Participation standards. In any program with multiple delivery components, the question may be raised about the number of programs in which a student may be participating. In some programs, pupil counting problems are of less concern, but multiple focus programs provide local school officials with double or multiple student counting opportunities. An additional concern is related to the possibility that a student identified as "at-risk" could become a source of special income for the school district. When this occurs, the school district may be reluctant to indicate that the student no longer is "at-risk."

Outcome measures. Various outcome measures may be used; they range from reductions in the dropout rate and discipline referrals to increased attendance and improved performance on standardized tests. However, given the current status of programs for these youth, the best outcome measures may be observable changes in the student/school factors that were used in designing programs and identifying program participants. Pre- and post-program data will provide information concerning changes that have taken place during the course of the program.

Conclusions

The merits of different policy choices should be weighed as decisions are made about program design and implementation. One policy choice is whether or not the best way to address the at-risk dilemma is to encourage local creativity, diversity, and flexibility in designing and delivering programs. Other choices are related to the target group and the focus of programs. This study and the related research point to several possible

policy directions leading to the selection of a funding alternative that would maximize local innovation and decision-making.

First, programs for at-risk youth are in an evolutionary stage. In view of the dearth of program evaluation data and cost effectiveness studies and the variations in target groups and programs, selection of one of the traditional school finance formulas to fund at-risk programs may be premature.

Second, immediate action to provide funding for at-risk programs is imperative because the social and economic cost of delay is too great.

Third, if the goal is to ensure that all eligible students receive adequate services, using a fiscally-equalized funding approach may be counter-productive. Equalized options may penalize property-wealthy inner-city districts that often have the highest incidence of at-risk youth.

Fourth, if the public policy goal is to target resources on those districts with the greatest need and to encourage local creativity in addressing the problem, the index of need appears to be the preferred funding alternative based on the findings of the simulation study.

Recommendations for Further Research

The following recommendations for further research are based upon the findings of this study and the review of related research:

1. Programmatic evaluations of at-risk programs should focus on the cost-effectiveness of programs and the impact of different delivery arrangements on student outcomes.
2. As programs become better defined, further cost studies need to be conducted to determine the necessary resources to provide such programs.
3. Additional research needs to be undertaken to refine the concept of an index of need. Issues for research include: (a) identifying the optimal set of indicators that most closely mirror the distribution and magnitude of the at-risk population and (b) identifying the most appropriate statistical technique for calculating the index.
4. Further studies need to be conducted on the different effects of distributing at-risk funds to schools or school districts to determine which method of distribution increases the probability

of an optimal match of fiscal resources with the magnitude of educational need.

PART I

OVERVIEW

Introduction

A few years ago, the concept of at-risk youth was not a topic of high interest in public policy discussions. The prevailing attitude often was that a significant number of youth could be expected to become disaffected with school and could fill a set of menial jobs in the labor market. The willingness to accept an attitude of benign neglect about these youth became less tolerable because of changes in the patterns of the American family structure, structural employment shifts in the job market, and social problems related to drugs and chemical dependency.

In the 1980s, national concerns about the declining performance of American students and the need for the nation to become more competitive in the world economy resulted in greater public attention being given to the performance of all students, not just those who "want to learn." The developing consensus was that many of these youth had special educational needs, that they needed special programs, and that funding for programs to serve these youth should, at least in part, be provided by state governments.

Support for funding special programs to serve at-risk youth has come from a variety of sources. Educational economists such as Levin (1989) have contended that the social benefits of investing in at-risk programming are likely to be well in excess of the costs of providing such programs. Other analysts have contended that the cost of continued neglect will be reflected in lost tax revenues, increased welfare and unemployment, and crime-related costs (Grossnickle, 1986; Hodgkinson, 1985; Kunisawa, 1988; Natriello, Pallas, & McDill, 1987). The magnitude of these social and economic costs indicate the relative cost effectiveness of allocating additional dollars for programs for students at risk of dropping out of or not succeeding in the existing educational system.

Purpose of the Project

The primary purposes of Project FAIR were to identify the costs of programs for at-risk youth and to evaluate alternative funding methods for allocating state funds to those programs. This project addressed the following major questions:

1. What criteria did the states use to identify at-risk youth?
2. How were the states currently funding programs for at-risk youth?
3. What were the attitudes and opinions of state and national experts toward the focus, delivery, and funding of programs for at-risk youth?
4. What prototype programs could be identified by a classification system for at-risk programs?
5. What were the cost estimates of these prototype programs?
6. What alternative methods could be identified for allocating state funds through the state funding formula to local school districts to support programs and activities for at-risk youth?
7. Based on the simulation of funding alternatives for at-risk programs in prototype school districts within a prototype state, how would funds be distributed among school districts with different characteristics?
8. How could these funding alternatives be integrated into existing state funding formulas?
9. How do these alternatives compare using the following set of criteria for evaluating state funding formulas: stability and predictability, adequacy, efficiency, accountability, equity, responsiveness, and nonmanipulability?

Activities of the Project

This research project consisted of seven activities which are divided into individual sections within this document: (1) a survey of the 50 states to identify their current definitions of at-risk youth and their funding practices for at-risk programs (Part III); (2) a national survey to secure the opinions and attitudes of state drop-out coordinators, state school finance

officers, legislative liaisons for large city schools, and national experts about the focus, funding, and delivery of at-risk programs (Part IV); (3) the development of a classification system for at-risk programs and the identification of prototype programs (Part V); (4) a cost study of a sample of at-risk programs (Part VI); (5) simulation of funding alternatives on a prototype state (Part VII); (6) procedures for integrating funding alternatives into existing state school finance programs (Part VIII); and (7) an evaluation of state funding options (Part IX). Part II is the background or rationale for the project, and Part X contains policy issues. For a more comprehensive discussion and analysis of the various parts of this report, consult Lyons (1990) and McDonough (1990).

Evolution and Future of Funding Programs for At-Risk Youth

Conceptual discussions related to "desirable approaches" to be used in providing state funds for programs to serve at-risk youth have evolved in a manner different from the ways in which need-based funding approaches were developed for special education programs. Rather than relying on a research base of program effectiveness, funding approaches for special education often were conceptualized in the abstract by members of the intellectual community and then placed in state regulations. Court decisions, the passage of P.L. 94-142, and the resulting federal regulations contributed to the continued use of traditional delivery systems to provide special education services. Under this scenario, little opportunity was provided for local flexibility, ingenuity, or initiative.

A different history is evolving relative to programs to serve at-risk youth. Persons seeking to initiate programs to serve at-risk youth have access to an intellectual base similar to that which existed relative to special education; however, in the absence of court decisions and detailed regulations about programs, schools also have explored a variety of approaches in an effort to accelerate the pace of program development. The pattern of program evolution is that local schools identify priorities and organize program delivery systems in response to their locally perceived needs and available funds. Different approaches have been initiated and are evolving as a result of success and failure experiences, local management constraints, staff and community interests, and available

funds. The result has been a plethora of programs that are often unique and innovative and that have, in some cases, resulted in the restructuring of the educational setting to better meet student needs.

As will be noted in the following parts, programming for at-risk youth is still in an evolutionary stage, and there appears to be strong support for encouraging local school district creativity, diversity, and flexibility in designing and delivering programs. This is particularly true in the absence of extensive program evaluation data and studies on cost effectiveness. However, there is consensus that immediate action is justified because the social and economic cost of delay is too great.

PART II

REVIEW OF RELATED LITERATURE

Introduction

To provide background information about the identification of program costs and methods for allocating state funds to support programs and activities for at-risk youth, this review of related literature addresses five topics. The first section, "At-Risk Youth and Programs," describes the characteristics of at-risk youth, current services and programs, characteristics of program interventions, and research on program effectiveness. The second section, "Current Policy," addresses what states were doing to provide fiscal resources for programs and activities for at-risk youth. The third section, "Funding Strategies," provides an analysis of types of current funding allocation patterns for targeted specialized populations (specifically those who qualify for special education services). The fourth section, "Cost Methodologies for Categorical Programs," reviews current methodologies used in determining educational program costs for need-based funding. The final section of this chapter, "Evaluating Funding Alternatives," reviews possible methods for evaluating alternative strategies for financing programs for at-risk youth.

At-Risk Youth and Programs

The current educational reform movement has spawned well over two dozen national reform reports since the publication of *A Nation At Risk* in 1983. The reform movement has focused on three broad concerns (Committee for Economic Development [CED], 1987):

- Raising standards and expectations for students
- Improving the quality of the teaching profession
- Focusing on the problem of meeting the needs of at-risk youth.

The intensity of concern for at-risk youth has been, in part, an outgrowth of the policy reform of raising standards and expectations for students. As CED argued in its policy statement, *Investing in Our Children: Business and the Public Schools* (1987), raising standards for all students without offering additional assistance to students who may not

meet those standards will go only part way toward realizing the nation's educational goals. An additional cause of concern has been the perceived social and economic impact of having large numbers of minimally educated youth entering a work force that continues to require increasingly skilled workers. These concerns have resulted in a proliferation of research on at-risk youth and dropouts.

The first wave of research focused on two areas: the demographics of the dropout problem, and descriptive characteristics of dropouts and at-risk youth. There are different estimates of the number of dropouts. They come from two sources: national survey information and local school district administrative records. Because of the lack of a uniform definition of what constitutes a dropout, school district data must be viewed with caution. In the General Accounting Office (GAO) report, *School Dropouts: The Extent and Nature of the Problem* (1986), survey data were presented from three primary sources: the *Current Population Survey*, the *High School and Beyond* report, and the *National Longitudinal Surveys of Labor Market Experience*. They presented the following major findings:

1. Although data on the number of school dropouts varied depending on such factors as data collection methods, estimates based on nationally representative samples showed that about 13% to 14% of youths between the ages of 16 and 24 had not completed 12 years of school.
2. Research findings generally have shown much higher dropout rates for Hispanics, blacks, and economically and educationally disadvantaged young people (estimates were as high as 30% to 50%).
3. During the first several years after youth dropped out, sizeable proportions of them (perhaps 50%) return to school or enrolled in General Education Development (GED) programs.
4. Labor market opportunities, as measured by employment and earnings, were poor for youth who had not completed high school, and were worse for blacks than for whites.

Who are these youth? Given that precise and uniformly accepted definitions for at-risk students do not exist, Brodinsky suggested that "the basis of a definition, as well as the basis of a district's program for

identifying students at risk, then becomes a list of characteristics of the potential dropout" (1989, p. 40). Because a single definition of *at-risk* is probably unattainable and may even be undesirable, a set of characteristics that recognizes the interaction between students, school, and the social environment may be more useful in identifying the at-risk youth in a given culture.

A synthesis of recent literature and research on at-risk students reveals that they have one or more of the following characteristics: (a) are from a home in which the income is below the poverty level, (b) are chemically dependent, (c) have a criminal record, (d) are frequently in detention or under suspension, (e) have a poor attendance record, (f) demonstrate a dislike for school, (g) show poor academic performance relative to the student body, (h) receive poor grades, (i) have undiagnosed learning disabilities or emotional problems, (j) are older than their peers, (k) become pregnant, and (l) have language difficulties (Brodinsky, 1989; Davis & McCaul, 1990; Fine, 1987; Hahn, Danzberger, & Lefkowitz, 1987; Mann, 1987; Ralph, 1989; Wehlage & Rutter, 1987).

Rather than looking at the characteristics of individual students (as illustrated in the above synthesis), some researchers have looked at the entire school population for indications of being at-risk. Schools with large at-risk populations are identified by high percentages of the following: (a) students coming from low income homes; (b) entering ninth graders who fail to graduate; (c) students entering military service before graduation; (d) students whose academic performance, behavior, and attendance can be characterized as poor; (e) students retained in one or more grades; (f) student mobility; and (g) student feelings of alienation (Brodinsky, 1989; Hahn, Danzberger, & Lefkowitz, 1987; Mann, 1987; Natriello, 1987; Orr, 1987; Ralph, 1989; Wehlage & Rutter, 1987). Additionally, states have developed at-risk profiles to project characteristics of future school populations and to identify key factors in the state that may contribute to the at-risk issue. Table II.1 summarizes key factors for the state of Arizona (Morrison Institute for Public Policy, 1989).

While it is not expected that schools alone can solve all of the aforementioned problems, educators can use the descriptive research to

Table II.1
Arizona At-Risk Profile

Poverty (1988):	Estimated 13% of the population (475,000 people)
Free and reduced lunch (1988-89):	Over 29% (188,808) of Arizona's K-12 students
Minority students (1987):	35.5% of elementary school students
Limited English proficient (1987-88):	7.2% (44,676) of K-12 students; 41.5% increase since FY 1984-85
Iowa Test of Basic Skills (1986-87):	19% of K-3 students below the 25th percentile; 42% of 7-12 students below the 40th percentile
Graduation rate (1987):	64.4%, while national average was 71.1%
Arizona cost for high school dropouts (1987):	Estimated at $5.39 billion annually
Penal institution inmates (1987):	85%-90% are high school dropouts
Divorce rate (1987):	Third highest among 48 reporting states
Single parent households (1989):	Estimated 27% of all households
Births to unwed mothers (1987):	27% of Arizona births (17,000)—nearly twice the 1975 rate
Teen pregnancy (1986):	9th highest in the nation; on average, 32 teens become pregnant each day
Drug usage (1988):	Of 9th grade students, 27% have tried marijuana, 9% cocaine, 20% inhalants
Suicide rate (1987):	20.9 per 100,000 among teenagers age 15-19; 39% increase over previous year
Juvenile arrests (1987):	20.8% of total arrests; 11.8% (5,435) of these were age 12 or under
Public assistance benefit level (1987):	Ranked 37th in nation
Mental health funding per capita (1987):	Ranked last in nation

From *1988-89 Status and Evaluation Report: The Arizona At-Risk Pilot Project* (p. 15) by Morrison Institute for Public Policy, 1989, Tempe, AZ: Arizona State University.

recognize at-risk conditions that affect children's lives and select appropriate programs to meet those identified needs within the context of the educational setting.

The second wave of research examined programs and services specifically targeted at addressing the needs of at-risk youth. The GAO, in its report *School Dropouts: Survey of Local Programs* (1987), described characteristics of model programs based on a survey of 479 local dropout programs nationwide that were in operation during the 1985-1986 school year, and described on-site visits to 14 dropout prevention programs. The school dropout programs surveyed by the GAO showed several basic patterns:

1. Programs targeted poor and minority teenagers with multiple problems.
2. Programs usually provided multiple services, with most at-risk youth receiving instruction in basic skills, counseling, and social service assistance.
3. Local program administrators cited several program elements as being critical to influence dropout reduction: a caring and committed staff, a safe and secure learning environment, individualized instruction, and school hours and support services that responded to individual needs.

Most programs reported multiple objectives, but two primary objectives emerged from all programs: (a) to improve youths' academic performance, and (b) to change their attitude toward school.

Two types of interventions were reported by over 90% of the programs surveyed: personal counseling and basic education. Other program foci included career counseling, parent involvement, job-related activities, GED classes, day care, and instruction in English as a second language (ESL).

Programs surveyed by the GAO cited five primary obstacles to program effectiveness:

1. Inadequacies in school-wide conditions, such as school and class overcrowding, a "culture" of skipping classes, and a poor physical plant.

2. Difficulties outside the school environment, such as troubled homes with apathetic parents who had lost influence over their children.
3. Poor academic preparation of youth before high school.
4. The negative image of some dropout prevention programs.
5. Problems in program implementation, such as inadequate coordination between school program staff and social service agencies.

In a review of model programs, Peck, Law, and Mills (1987) drew the following general conclusions regarding the core elements of successful dropout prevention programs:

1. Programs should be student centered.
2. Staff selection and training are of paramount importance.
3. Programs should begin as early as possible and involve families as much as possible.
4. Programs should include attention to overall school climate and to effective school development.

According to Peck et al. (1987), programs should have an impact on the following:

1. *Organizational and administrative arrangements* that assist teachers in responding to the needs of at-risk youth in the classroom and in the school setting.
2. *Policies, procedures, and mechanisms* that affect the overall school climate and the way that schools respond to learning and behavioral problems to reverse the cumulative process leading to dropping out.
3. *Staff development and training* in recognizing and responding in the most helpful way to meet the needs of at-risk youth in the context of the normal role of each staff member in the school and in the nature of their day-to-day interactions with students.
4. *Effective interventions* aimed at individual needs of youth for counseling, advocacy, support, and caring in a way that assists youth to function at higher levels of mental health, positive motivation, and learning ability in educational settings.

5. *A broadening of the range of legitimate school activities* responding to the interests of all groups of students and helping them see the relevance of their education to their personal aspirations, strengths, and interests.

While there is scant empirical research on the effectiveness of dropout prevention programs, Orr (1987) stated that the existing evidence was quite favorable: "When measures are available, they show good retention of students, improved attendance rates, academic gains, and good completion and graduation rates" (p. 198). However, program evaluation data are rare. Orr (1987) remarked that since programs were not intended as experiments, districts did not generally document whether program strategies actually achieved specified outcomes. Only 1 of the 14 programs she surveyed used a comparison group, and no program randomly assigned students to a program or to a comparison group. Because of the lack of program evaluation, it is difficult to draw conclusions on what program variable or combination of variables is most effective in dropout prevention.

Because of the plethora of programs that exist, and the lack of a large body of empirical data on what works, some researchers have suggested that a conceptual framework or classification model should be developed to capture differences among program variables that then may be related to differences in outcomes (Cox, 1985; Clifford, 1987).

Clifford (1987) examined a variety of previous efforts to classify at-risk programs and found two primary approaches to classification. The first approach looked at program components related to elements such as size of the program, community linkages, student-teacher ratio, and resource materials. The second approach to classifying programs looked at program focus. Examples of program focus components included counseling, basic skills remediation, vocational training and awareness, and social support services.

The first approach identified by Clifford may be found in a report issued by the U.S. Department of Education (1987). With a group of school administrators from major cities throughout the nation, a report was issued that focused on "keeping these youngsters in school and...helping

them to achieve while they are there" (p. 7). Their six "best bet" strategies for achieving that goal were:

1. Intervene early.
2. Create a positive school climate.
3. Set high expectations.
4. Select and develop strong teachers.
5. Provide a broad range of instructional programs.
6. Initiate collaborative efforts.

The second approach identified by Clifford examined at-risk programs from the perspective of the focus of those programs. Programs were identified in terms of foci such as counseling and support service, parental involvement, job placement, remedial instruction, and self-awareness activities.

One such classification was reported by Cox (1985) who examined dropout prevention programs in Appalachian school districts. He classified programs using the following seven focus clusters:

1. Tutorial activities.
2. Alternative curriculum or classes.
3. Work-related activities.
4. Counseling/advising.
5. Attitudinal/self-awareness activities.
6. Attendance incentive activities.
7. Parental involvement.

The primary focus of each program determined the assignment of individual dropout prevention programs in the Appalachian study to one of the above clusters.

Building on the previous studies, Clifford (1987) developed a taxonomy of dropout prevention strategies as a framework for organizing and analyzing dropout prevention program variables. Clifford's taxonomy differentiated programs according to the strategy each employed. His taxonomy was based upon an analysis of program variables in 25 dropout prevention programs nationwide. The variables, which are most often used for the analysis of curriculum, included: data about objectives, learner diagnosis, program content, program delivery, resources, and pupil progress evaluation. He further divided those six major headings into

seventy-one subcategories. For example, the program's content was classified as "academic" (enrichment, remedial, interdisciplinary), "vocational" (work-study, career education, career exploration, job-specific vocational training), or "guidance" (family counseling, life skills, social skills). Clifford's study produced a content analysis of programs that showed an array of programs and interventions being tried. Clifford recommended further refinement of his classification system to secure a better identification of program variables that would provide a clear picture of what schools are doing to address the needs of at-risk youth. Given that his taxonomy was based on survey responses from school districts, he recommended that future validation of the taxonomy be based on direct field observations and interviews with at-risk program providers.

Although there is scant empirical research on what works for holding at-risk youth in school, the body of data is increasing. Two studies conducted at Johns Hopkins University (Slavin & Madden, 1987; Madden & Slavin, 1987) examined effective classroom and pull-out programs for students at risk. *Program* in these studies was defined as "a set of procedures intended to be implemented as a total package and capable of being replicated by others" (Slavin & Madden, 1987, p. i). The focus of the programs was to increase achievement in reading and/or math in grades one through six.

Effective classroom programs fell into three major categories: continuous progress, cooperative learning, and individualized instruction. Effective pull-out programs also fell into three major categories: tutoring, computer-assisted instruction (CAI), and diagnostic-prescriptive activities. Results of Slavin and Madden's (1987) research revealed that:

> the most consistently successful classroom models were continuous progress programs in which students are taught in skill-level groups and proceed through a hierarchical set of skills, and cooperative learning programs in which students also receive instruction at their appropriate levels, but then practice skills in mixed-ability learning teams. (p.15)

On the basis of this and other evidence, they concluded that "effective programs for at-risk students balance adjustment of instructional approaches to meet students' unique needs with provision of adequate direct instruction. In addition, effective classroom programs provide

frequent assessment of student progress through a well specified, hierarchical set of skills" (p. 15). The examination of effective pull-out programs supported these same conclusions (Madden & Slavin, 1987): "the most successful models, tutoring and CAI, completely adapt instruction to students' unique needs and provide plentiful direct instruction appropriate to students' levels of readiness" (p. 16).

Taken together, the conclusions of the above studies and Orr's (1987) findings suggest that the achievements of at-risk students can be significantly increased through intervention. Thus, providing monies to fund programs and activities for at-risk youth would appear to be an effective use of fiscal resources. Slavin and Madden (1987) concluded that an increase in student achievement can be accomplished either by making relatively inexpensive but extensive modifications in the regular instructional program (such as continuous progress programs), or by implementing relatively expensive but intensive pull-out programs (such as one-on-one tutoring and CAI). The authors suggested that a combination of these strategies may be more effective than either one by itself.

Current Policy and Funding Preferences

From an economic viewpoint, Levin (1989) argued in favor of funding at-risk programs because of the cost to society if the present situation is allowed to continue. He contended that those costs include: (a) the creation of a dual-class society, (b) disruption of higher education, (c) reduced national and state economic competitiveness, and (d) higher public service costs associated with poverty and crime. For these reasons he asserted that "the social benefits of such investments are likely to be well in excess of their costs" (p. 52). He further hypothesized that a serious effort would require an additional annual expenditure nationally in excess of $25 billion. However, the annual cost of the current dropout problem on the national level reflects $71 billion in lost tax revenues, $3 billion in increased expenditures related to welfare and unemployment, and $3 billion in crime-related costs (Grossnickle, 1986; Hodgkinson, 1985; Kunisawa, 1988; Natriello, Pallas, & McDill, 1987). Such high social and economic costs suggest that it would be cost effective to invest in programs for students at-risk of dropping out of the educational system. Such an effort, Levin

maintained, would be best accomplished by the coordinated efforts of federal, state, and local governmental units to increase funding efforts for at-risk programs.

During the last several years, state policymakers have responded to the problem by allocating funds specifically targeted at dropout prevention and programs to serve at-risk youth. Several state efforts, including California, Florida, New York, and North Carolina, have been funded at relatively high levels and have been well documented (Sherman, 1987).

Currently, most funds are distributed by the state based on budgeted or anticipated costs. Districts submit budgets with grant proposals based on the anticipated costs for delivering services. Thus, funding to date for at-risk programs is based primarily on grants to cover total program costs rather than on unit costs such as per-pupil costs (Sherman, 1987). Before other types of funding strategies can be considered (for example, categorical grants per pupil or pupil weights), cost information in unit cost terms must be available.

A key factor influencing the cost of at-risk programs is the type of services to be provided. As Levin (1989) stated, there is a wide range of costs involved in providing services for at-risk students. Sherman (1987) remarked that "ideally, research would be available to policymakers that provides definitive answers about 'what works' in dropout prevention and recovery" (p. 23). Unfortunately, the current state of research is primarily descriptive in nature and provides anecdotal information on model programs that "appear to work."

Policymakers therefore are limited in their ability to estimate the potential resources required to fund at-risk initiatives. Sherman (1987) suggested three responses to this dilemma:

1. To study the problem further by reviewing evaluation reports on the costs of programs and by conducting a small-scale empirical study of existing programs to identify the cost of different types of interventions.
2. To fund a variety of demonstration projects through discretionary grants to develop more refined estimates of program costs and to provide a basis for an analysis of cost effectiveness of different types of strategies.

3. To proceed with a full scale initiative, even though all the evidence about what works is not yet available, by drawing on available data to develop "ballpark estimates" as data from new programs are generated (p. 24).

In determining comprehensive funding of at-risk programs, Sherman (1987) presented policymakers with several decision points. He stated that policymakers must: (a) decide whether funds should be distributed to all districts or targeted to districts with high concentrations of at-risk youth, (b) determine if funding should be included in the general state aid formula or provided through categorical programs, (c) evaluate whether or not funding should be linked to the wealth of the school district, and (d) coordinate new programs and funding with existing funding and programs both within and outside the structure of the schools.

Sherman (1987) made five recommendations regarding the state funding of dropout prevention or at-risk programs:

1. State dropout/at-risk funding initiatives should allow districts to design programs that match services to student needs.
2. In addition to potential high school dropouts, funds should also be targeted at youth in elementary and intermediate schools who exhibit characteristics which put them at risk.
3. State dropout prevention programs should be funded to encourage parental involvement and monitoring of children's progress.
4. State at-risk funding strategies should accommodate and encourage student choice in selecting programs and providers.
5. State at-risk programming and funding should encourage the involvement of the private sector and the community at large.

Funding Strategies

Over the last three decades, the federal government and state governments have established a variety of categorical funding programs to serve the various needs of specialized populations of school-aged children. Among the programs that employ need-based cost adjustments are: special education, compensatory education, bilingual education, and vocational education (Chambers & Hartman, 1981). Among the most widely used strategies to adjust state allocations based on differentiated need are pupil

weights, categorical aid, excess cost reimbursements, and unit cost adjustments (Webb et al., 1988). A more recent addition is the index of need (Arizona Department of Education, 1989). Each of these strategies will be described in the following discussions.

Pupil weights. The theoretical basis for pupil weights is that different dollar amounts per pupil are needed to provide programs and services to overcome the variation in the educational needs of students (Webb et al., 1988). Typically, a weight of 1.00 is assigned to elementary school children in the intermediate grades who are not in special programs; other weights are assigned based on the comparative costs of educating a student enrolled in other grade levels or in specialized programs.

Categorical aid. A common method in many states for allocating resources to special need students is through categorical grants which are used in addition to the basic state allocations. Categorical grants may be distributed based on a per-pupil amount or per classroom unit with special demographic characteristics. The grants may be straight sum amounts based on a fixed amount of money per child, or may be a percentage of approved costs for educating a specific category of child (Hartman, 1980).

Competitive grants. When funds are limited or the theoretical base for programs have not been well-developed, local school districts submit applications to the funding agency and compete for a limited amount of funds. Assurances are given in the application that the school district will comply with applicable state laws and regulations. This application or program plan is reviewed on its merits by the funding agency, and awards are made to the school districts whose applications best meet the criteria for funding (Sherman, 1987).

Excess cost reimbursements. In some states, the excess cost model is used to provide state aid to high cost programs. In this model, the difference between the cost of educating a regular elementary school student and a student enrolled in a special program is the excess cost. A state may pay all of the excess cost of a program, or a percentage of the excess cost. Cost-based formulas require detailed cost accounting procedures, since actual program expenditures are reimbursed (Hartman, 1980).

Unit cost adjustments. This funding strategy allocates resources based on the number of teachers or classroom units needed for specific programs, rather than on the number of students in a program (Webb et al., 1988). Under this resource-based adjustment, a minimum number of children with special needs qualifies a district to receive full funding for a classroom or teacher. State standards are usually established regarding minimum and maximum class size (Hartman, 1980).

Index of need. In this allocation strategy, individual students are not identified for funding calculations. The index is a proxy for the magnitude of need in a given district, rather than being a predictor of the number of students, or a count or listing of actual students. Quantifiable indicators are selected to provide a composite view of the relative magnitude of the need. Limiting factors of an index of need using multiple indicators include the assumptions that all indicators are of equal importance, and that valid and reliable data are available.

Cost Methodologies for Categorical Programs

In reviewing cost methodologies used for categorical programs, three primary types emerged: cost per student; determination of supplemental, replacement, and common costs of programs; and resource-cost models (Chambers & Hartman, 1981).

Cost per student. The cost per student approach has taken two primary forms. In the first form, the *average dollar cost* per student is calculated by summing the overall direct costs of a program for a particular type of student and the indirect costs allocated to that program; the total cost then is divided by the number of students in the program. This provides summary per-pupil expenditure data, but has shortcomings for funding purposes (Chambers & Hartman, 1981). The use of the average cost figure obscures cost differences among districts in the level of funds required to provide equivalent programs and services. The differences among programs in selection, quantity, and organization of resources that may cause cost differences are masked by the average.

The second method is the *cost factors* approach. The general procedures for this approach were used in the special education component of the National Educational Finance Project (NEFP) by Rossmiller, Hale,

and Frohreich (1970). In the NEFP educational cost studies, each program area was studied in depth with the following purposes:

1. To develop criteria for identifying the target population to be served.
2. To develop accurate estimates of the number of clients in each target group.
3. To indicate the nature of educational programs needed to meet the needs of each target group (i.e., how each differs from the regular or basic educational program).
4. To calculate the cost index attributable to each program.

The cost index is a ratio of the cost per student of a special education program to the cost per student of the regular education program, and is often referred to as a *per-pupil weight*. According to Rossmiller and Moran (1973), this approach presents a number of problems for funding applications. They listed four basic limitations that should be considered in the application of cost indices in planning for the financing of educational programs:

1. Cost indices, even when based on a complete state sample, are averages that will not necessarily provide sufficient funds to support equivalent programs in all districts. Therefore, cost indices are most appropriately used for state-wide planning purposes.
2. Cost indices reflect current educational practice, and in most cases do not reflect the efficiency or efficacy of educational programs.
3. Cost indices show the relative cost of educating pupils in special programs compared with the cost of educating pupils in regular programs, and provide no information concerning how wisely or efficiently funds are being expended in either type of program.
4. Costs differ for identical programs among districts for a variety of reasons, such as pupil/teacher ratio or local expenditures for salaries, materials, and supplies.

Bentley (1970) found that the cost factors which contributed most significantly to the differences in expenditures among eight categories of programs for exceptional children were: teacher salaries, operation and

maintenance, transportation, supportive services, administration, fringe benefits, instructional supplies and equipment, and teacher aides. Clerical services, secretarial services, and food services did not make a discernible difference to the cost differential existing between regular and special education.

Determination of Supplemental, Replacement, and Common Costs of Programs. The second methodology used to determine costs of categorical programs focuses on the supplemental, replacement, and common costs for overall programs. "The analytical emphasis is on specifying which activities, resources, and costs are appropriate for each classification and making the subsequent adjustments to the regular and categorical program costs to reflect these changes" (Chambers & Hartman, 1981, p. 9).

Supplemental costs are those that are in addition to the regular education program. Replacement costs are for those programs that are substituted for regular education. The procedure for determining these costs is to total the direct costs of the replacement programs, and deduct those costs from the costs for the regular education program. The supplemental costs are added and then the common costs for general services (i.e., district administration, debt service, etc.) are allocated on a pro rata basis. The major difficulty with this methodology according to Chambers and Hartman (1981) is deciding specifically which regular education programs and services are being replaced. In addition, it is more accurate to deduct the *marginal* costs per student rather than to deduct the *average* cost per student; however, marginal costs generally cannot be identified in the financial accounting systems used by local school districts.

Resource-Cost Model. The final cost methodology used in studies of categorical programs is the resource-cost model (RCM). In this approach, the analysis focuses on specifying in programmatic terms the components of the educational program to be provided. Thus, program costs are explicitly derived from the structure of the educational program itself. According to Chambers and Hartman (1981), there are three components in the specification of RCM:

1. Assessment of student needs and program assignment.

2. Specification of the input configurations corresponding to: (a) instructional programs and program units, (b) instructional administration and operation of programs, and (c) general administration.
3. Determination of resource prices and total district costs.

RCM is a cost-based funding approach that recognizes differences in the cost of resources across districts, as well as programmatic differences in service costs across districts. Thus, among school districts, different levels of funding would be provided for similar programs. The keys to RCM are identification of the programs to be recognized and the resource inputs required to adequately meet those needs.

Evaluating Funding Alternatives

If state level policymakers wish to maximize the efficiency and effectiveness of need-based supplemental aid to at-risk youth, a procedural framework for evaluating alternative methods for the allocation of this aid might be helpful. In determining what elements to include in such a framework, two topics were reviewed. The first topic was a review of need-based funding methods used to date and an analysis of potential incentives and disincentives associated with these methods. The second topic was a review of existing evaluation criteria that could be used to evaluate funding alternatives to provide fiscal resources for programs and services for at-risk youth.

Review of Incentives and Disincentives of Need-based Funding Alternatives. States employ a variety of approaches for need-based funding. Six of the most common were discussed in the previous section on "Funding Strategies and Cost Methodology." Although states use several types and combinations of formulas, Hartman (1980) made the case that the distinctions between them are more nominal than substantive. He stated that any formula is simply a mechanism for transferring dollars earmarked for a targeted population from one governmental level to another. Hodge (1981) supported this concept, using the special education formulas of Utah and Oregon as examples. "These 'formulas' yield approximately the same amount per pupil in spite of the fact that Utah employs a comprehensive weighting system and Oregon uses the cost

reimbursement approach" (Hodge, 1981, pp. 26-27). Hartman contended that each of the alternative methods of allocation can be made to yield the same amount of money.

Given that alternative methods of funding are not the critical discriminator for the overall amount of monies allocated, the issues become the way in which different funding alternatives affect the distribution of monies, and how the inherent incentives and disincentives of each funding alternative affect program and management issues. Hartman (1980) analyzed those issues relevant to need-based formulas that were utilized to fund special education programs. His analysis is also useful in evaluating options for at-risk funding; decision makers can learn from the incentives and disincentives that resulted from various funding mechanisms used in allocating monies for special education.

In reviewing each of the need-based formulas, Hartman addressed several program and management issues that are summarized in Table II.2. The broad categories were classification and assignment of students, retention of students in programs, flexibility in program delivery systems, student/staff ratios, program and fiscal planning, and cost reporting and containment. Special education funding strategies were categorized into three broad types: resource-based formulas (unit allocations), child-based formulas (categorical grants and equalized per-pupil weights), and cost-based formulas (percentage and excess cost reimbursements).

The *resource-based formulas* offer a reduced incentive to overclassify students, since funding is based on allocated teacher/classroom units rather than directly related to each child in the program. A child's disability is determined through eligibility standards, while funding is based on a range in the number of eligible students used to allocate each unit of service or number of personnel. These formulas tend to discourage mainstreaming, since funding is based on students used to justify a unit or teacher of a special class.

The *child-based formulas* are the most likely to encourage over-classification of children. They provide the greatest incentive to serve unserved populations, but also have provided the strongest incentives for maximizing class size and for labeling children as handicapped. Child-based formulas provide some funding to all districts, but pose a problem for

Table II.2

Summary of Incentives and Disincentives of Special Education Funding Formulas

PROGRAM AND MANAGEMENT ISSUES	TYPE OF FUNDING FORMULA		
	RESOURCE BASED	CHILD BASED	COST BASED
Classification of handicapped children	Less direct incentive for overclassification	Encourage more children to be served, may lead to over-classification; straight sum encourages more mildly and fewer severely handicapped children	Least effect on overclassification
Choice of appropriate program	Personnel formula may bias toward greater use of personnel	Encourage placement in higher reimbursement or lower cost programs	Depend upon distinct share of costs
Change of educational program	Less direct incentive for keeping children in special education	Encourage keeping children in special education and in higher reimbursement programs	Depend upon district share of costs
Class size or caseload	Encourage maximum class size to reduce costs; full funding can encourage minimum class sizes	Encourage maximum class size	Encourage maximum class size (except fully funded excess costs)
Labeling of handicapped children	Labeling not needed by funding formulas; can fund for program and personnel units	Formulas generally require labeling in order to qualify for funding	Labeling not needed by funding formulas
Support of mainstreaming costs	Must include mainstreaming units or personnel as acceptable for funding	Funding provided for children in mainstreaming programs	Reimburse approved costs of mainstreaming programs
Ability of small districts to provide programs	Full funding amount with minimum number of students, but no funding below this level	Inadequate funding with minimum number of students, but some funding below this level	Governed by regulations, not the funding formulas
Record keeping and reporting requirements	Little information needed beyond normal pupil, personnel, and cost records and reports	Need accurate data on number of children; may require great detail to obtain time spent in different programs	Require detailed cost records, submission and approval of expenditure reports, and greater involvement and control by funding agency
Program and fiscal planning	Most fitted to planning sequence; based on student needs with funding an automatic calculation	Less direct process; tend to be based on available dollars, not educational needs	Fit planning sequence, but available dollars are an early planning factor
Control of costs	Done through regulations	Done through regulations	Percentage formula may help hold down costs through requiring district share
Obtaining state and federal priorities	Higher funding levels for certain program units or personnel can encourage these programs	Differential funding amounts can encourage service to certain students	Priority on higher funding for certain items/programs can encourage these programs
Tracking special education funds	Relatively simple to track funding to expenditures	Not as possible to trace individual child funding and expenditures; must be done on an aggregate basis	Most direct connections between funding and expenditures
Incorporation of future changes	Updating funding amounts is straightforward, changes apparent	Updating funding amounts more difficult to explain; may become arbitrary	Updating funding amounts tied to cost changes

From "Policy Effects of Special Education Formulas" by W. T. Hartman, 1980, Journal of Education Finance, 6, pp. 152-153. Copyright 1980 by Journal of Education Finance. Reprinted by permission.

smaller districts with low numbers of qualifying children. The number of children may not generate enough monies to fund a complete program. Planning under these formulas is less straightforward, and there may be a tendency to base programs on available dollars rather than on student needs. One advantage of the child-based approach is that school districts can explore the possibility of innovative delivery systems. As with the other formulas, funding cannot be tracked to expenditures on a specific child. Expenditures are accounted for and reported on an aggregated basis for each program or classroom unit. Changes are difficult to document or explain, because they are reported in program or classroom unit cost terms, then recalculated into per-pupil expenditures.

Cost-based formulas offer the least incentive for overclassification. Percentage costs require districts to pay a portion of the increased costs, and excess cost formulas are theoretically fiscally neutral if all costs are reimbursed. Cost-based formulas require more detailed accounting records than the other types of formulas, since the expenditures themselves are reimbursed. For tracking the use of funds, the cost-based formulas are most effective, since reimbursement amounts are the actual expenditures. They also accommodate future increased program costs if funded on the basis of actual costs incurred.

As illustrated by the previous discussion, Hartman's (1980) analysis of need-based funding formulas provides a framework for decision-making. It allows policymakers to: (a) select a funding approach and (b) consider rules and regulations that could mitigate the problem areas of that approach so that the resulting funding mechanism would maximize the impact of programs.

Evaluation Criteria. In the school finance research literature, experience with funding for other educational programs suggests a set of criteria that could be used in evaluating alternative methods for allocating funds to programs for at-risk youth. Jordan (1989) discussed seven such criteria. They are:

1. Stability and Predictability. If programs to serve special students are to continue without adversely affecting school district tax rates, state funds should not fluctuate from one year to the next. Initial funding for a program carries an implied commitment to

continue funding until sufficient evidence is available to determine if the program is a success or if the need for funding continues.

2. Adequacy. The level of funding should be sufficient to enable the local school districts to provide the needed services and programs. Unrealistic expectations and an insufficient level of funds are legitimate concerns when the state decides to provide funds for a specific program or target group of students, or to require that districts provide a special program to serve a particular group of students. Local school administrators are very sensitive to the nagging issue of "unfunded" or "underfunded" mandates.
3. Efficiency. In this context, efficiency refers to components in the funding formula that encourage cost containment, targeted use of funds, program selection based on maximization of resources, minimal data burden on local districts, and mainstreaming of special students into the regular school program.
4. Accountability. Accountability refers to the extent to which special funding is expended for programs or services to serve the target group that generated the funds rather than diverted to programs or services for other students, or diluted because of the absence of a discrete program to serve the target students.
5. Equity. Equity can be viewed in two dimensions—student equity and taxpayer equity. *Student equity* is attained when a district's entitlement under the state school finance program is based on the different levels of funding required to provide individual students with an educational program congruent with their particular needs. *Taxpayer equity* is attained when the state school finance program provides equal revenues (combined from state and local tax sources) for equal units of tax effort. If all funds are allocated to a few districts whose students have special characteristics but not greater need, then the student equity criterion will not be satisfied. If the differences in the fiscal capacity of school districts are not considered in the allocation of state funds, then the taxpayer equity criterion will not be satisfied.

6. Responsiveness. Districts and pupils differ from a variety of perspectives. One cannot assume that all students projected to be in a target group have the same types of needs, so a state funding program should be sufficiently flexible to accommodate different types of programs as well as students with different programmatic needs. Among localities, the extent of out-of-school services will vary among school districts, and some districts will have to provide services that are available from other agencies in other districts.
7. Non-Manipulability. Especially with a new program, student counts and program definitions should be sufficiently precise and objective to ensure that local school officials cannot manipulate the student counts and program data to benefit their district in an unfair manner.

Combining Hartman's (1980) analysis of incentives and disincentives of various funding formulas with Jordan's (1989) evaluation criteria provides a powerful decision model for policymakers when weighing alternatives for funding at-risk programs.

Summary

The review of the related literature has focused attention on issues in several key areas regarding the funding of at-risk programs. First, there is no accurate means of determining the number of children who are at-risk in our nation's schools or the number who leave school each year. There is no uniform definition, but there is some support for the contention that a uniform definition may not even be desirable. Knowledge about what works with these youth is limited, but some intervention strategies have empirically shown positive program effects.

Second, given the social and economic impact of having large numbers of students not complete high school, decisions cannot be delayed until all the information is available before allocating resources for at-risk youth. Many states have already taken the initiative to provide funds for this population.

Third, there is adequate information on the costing and funding of other need-based programs that provide direction in looking at alternative

funding strategies. The research on special education funding in particular offers valuable information on the impact of various funding methodologies.

And finally, the analysis of Hartman (1980) and the evaluation criteria offered by Jordan (1989) provide a means by which funding alternatives might be assessed to ensure that those selected have maximum impact on at-risk youth.

PART III

DEFINING AT-RISK YOUTH AND IDENTIFYING STATE PROGRAMS

Introduction

Given the apparent increase in the numbers of students identified as at-risk and the potential human, social, and economic cost associated with student dropouts, there appears to be sufficient justification for programs and funding to stem and eventually eliminate this loss. This need, coupled with the prevailing premise that education is primarily a state function, necessitates that states and local school districts address the issue of at-risk youth. In spite of the increased attention directed toward responding effectively to the needs of at-risk youth, information is limited on these issues. Therefore, it seemed prudent to discover how the 50 states currently define or identify at-risk youth and how each of the states provides funding for at-risk programming.

To establish baseline data, one of the initial activities of Project FAIR was to conduct a national survey of state at-risk program administrators, state school finance officers, legislative liaisons for members of the Council of Great City Schools, and selected national experts on at-risk programming and funding. The survey had two parts. The results of the first are presented in this section and the results of the second are reported in Part IV of this report.

Focus of the Activity

A national survey was conducted to discover how the 50 states currently define at-risk youth and to ascertain how the states funded programs for them.

Procedures

A direct mail questionnaire (Appendix B) was used to obtain this information. After initial preparation, the questionnaire was field-tested, revised, and finalized. Respondents were asked for their state's definition of at-risk youth and for information regarding programming and funding for at-risk youth. The survey population included national experts on

school finance and/or at-risk programming, state school finance officials, state dropout prevention/at-risk program coordinators, and legislative liaisons of The Council of Great City Schools member districts.

Analysis of the Data

The survey was conducted in the spring of 1990, and responses were received from all of the states. As discussed in the following section, responses from the states were summarized to indicate the extent to which general patterns could be identified. The analysis has been organized around two research questions. The first reported definitions of at-risk youth.

How many states have official definitions of at-risk youth, what are those definitions, and what are their characteristics?

According to the survey responses, 29 states have no official definition of at-risk youth. See Table III.1 for a complete list of states. Of those 29 states, 10 states indicated their methods for identifying youth at-risk.

In Delaware, Hawaii, Indiana, New York, and Ohio, the state departments of education have lists of characteristics that increase a youth's at-riskness. In some of these states, the characteristics were limited to school performance. In other states the list included socio-economic conditions also. Using the characteristics developed by the state, local educational agencies (LEAs) identified their at-risk populations when applying for competitive grants to underwrite their designed programs.

In New York, in addition to the list of state characteristics, local units may develop their own list of characteristics. In Illinois, the local program deliverer defined at-risk youth when writing competitive grants for funding. Also in Illinois, intermediate units and community college districts in addition to LEAs were eligible to submit grants for funding. In Mississippi, each LEA was required to define its at-risk youth and then develop and implement a program to meet the needs of those identified youth.

Kentucky had no official definition of at-risk youth, but did target programming toward youth with a pattern of academic failure and/or unsatisfactory social behavior.

Lastly, the Colorado Department of Education developed a list of characteristics which increase a youth's at-riskness; the state targeted programs for preschool services for four- and five-year-old children in need of language development. See Appendix C for a more complete description by state.

Returning to the survey responses, 13 states were identified as having limited definitions for at-risk youth. A listing of these states is found on Table III.1. In this context, a limited definition is one that keys primarily on factors or characteristics of youth relative to their academic performance. Individual state definitions are summarized in Appendix C.

The definitions of Alabama, Connecticut, Tennessee, and Washington defined as at-risk those youth who were likely to or had dropped out of school before graduation.

The definition used in Texas did not specifically mention dropping out of school but instead enumerated poor academic performance criteria which placed a student at-risk. Those criteria included: retention, reading two or more years below grade level, and failure on sections of the state standardized test. Wisconsin's definition was similar to that of Texas, with the addition of student attendance criteria.

The definitions of Arizona and Missouri referred to unspecified factors which impeded educational development and increased the likelihood of students dropping out before graduation.

Alaska, New Mexico, South Dakota, Utah, and Wyoming defined as at-risk those youth who were in danger of not graduating or not attaining the skills, knowledge, and social skills necessary to achieve personal, economic, and social sufficiency in society.

According to the survey responses, eight states had comprehensive definitions for at-risk youth. In this study, a comprehensive definition is one that enumerates both academic performance and socio-economic

Table III.1

State Definitions of At-Risk Youth

State	No State Definition	Limited Definition	Comprehensive Definition	Defined by Local Education Agencies
Alabama		●		
Alaska		●		
Arizona		●		
Arkansas			●	
California			●	
Colorado	●			
Connecticut		●		
Delaware	●			●
Florida	●			
Georgia			●	
Hawaii	●			
Idaho	●			
Illinois	●			
Indiana	●			●
Iowa			●	
Kansas			●	
Kentucky	●			
Louisiana	●			
Maine	●			
Maryland	●			
Massachusetts	●			
Michigan	●			
Minnesota	●			
Mississippi	●			●
Missouri		●		
Montana	●			
Nebraska	●			
Nevada	●			
New Hampshire	●			
New Jersey	●			
New Mexico		●		
New York	●			●
North Carolina			●	
North Dakota	●			
Ohio	●			
Oklahoma			●	
Oregon	●			
Pennsylvania			●	
Rhode Island	●			
South Carolina	●			
South Dakota		●		
Tennessee		●		
Texas		●		
Utah		●		
Vermont	●			
Virginia	●			
Washington		●		
West Virginia	●			
Wisconsin		●		
Wyoming		●		

factors and characteristics that place a youth at risk of not graduating from high school or not attaining the skill, knowledge, and attitudes necessary to successfully function in society. The definitions from the states typically mention progress in school but key on social factors which hamper or preclude success in school. Examples of the cited factors or characteristics included: poverty, substance abuse, health, nutrition, limited English proficiency, pregnancy and parenthood, minority status, unstable home environments, delinquency, and attempted suicide. Two states (California and Iowa) listed a characteristic that was unique to their particular definition. California listed membership in a gang as a characteristic of at-riskness; Iowa cited cultural isolation as a characteristic. Complete definitions for each state as supplied by respondents are found in Appendix C.

The second research question was designed to provide information about funding practices in the states.

How many states funded at-risk programming, and what were the characteristics of the funding methods used by the states surveyed to fund their at-risk programs?

According to the survey responses, 33 states did not specifically provide funding for programs to serve at-risk youth. See Table III.2 for a complete list of states. See Appendix C for a more complete description of individual state at-risk program funding methods.

Of these 33 states, 21 did not provide funds for at-risk programs generally but did provide funds that targeted particular segments of the youth population which would be considered at-risk. Of those 21 states, 7 funded programs through competitive discretionary grants. The types of programs funded included: academic remediation, counseling, life skills curriculum, peer tutoring and mentoring, parenting programs, career education, and dropout and suicide prevention programs. Through competitive grants, Maryland and Illinois funded locally designed programs that targeted particular segments of the at-risk student population.

Table III.2

State Funding of At-Risk Programs

State	FUNDING			METHOD	
	No Specific At-Risk Funding	Funding for Selected Groups	At-Risk Funding	Competitive Grants	Formula-Based Funding
Alabama	●				
Alaska	●	●		●	
Arizona			●	●	
Arkansas	●				
California		●	●	●	●
Colorado			●	●	
Connecticut			●		●
Delaware			●	●	
Florida	●	●			●
Georgia	●	●			●
Hawaii	●	●			
Idaho	●	●			
Illinois	●	●		●	
Indiana			●	●	
Iowa			●	●	●
Kansas			●	●	
Kentucky	●	●		●	
Louisiana	●				
Maine	●				
Maryland	●	●		●	
Massachusetts	●	●		●	
Michigan	●	●			●
Minnesota	●	●			●
Mississippi	●	●			●
Missouri	●				
Montana	●				
Nebraska	●				
Nevada	●				
New Hampshire	●				
New Jersey	●	●			●
New Mexico			●	●	●
New York			●	●	
North Carolina			●		●
North Dakota	●				
Ohio	●	●			●
Oklahoma			●	●	
Oregon	●			●	●
Pennsylvania	●	●		●	
Rhode Island			●		●
South Carolina	●	●			●
South Dakota			●	●	
Tennessee	●	●			●
Texas			●		●
Utah			●		●
Vermont	●	●			●
Virginia	●	●			●
Washington	●				
West Virginia	●	●			
Wisconsin			●		●
Wyoming	●	●			

The remaining 14 states in this group of 21 funded programs aimed at particular at-risk populations through a variety of formula based funding mechanisms. Florida and New Jersey funded programs through a pupil weight. The types of programs funded in these two states included academic remediation, dropout prevention, compensatory education, and bilingual education. Virginia funded remediation programs based upon a local district's "economic index of need." The remaining 11 states did not specifically fund programs to serve at-risk youth, but did fund programs for particular segments of the at-risk population and used categorical grants to distribute funds to school districts.

The types of programs funded by formulas were much like those funded by competitive grants; the difference was that funds were available to all school districts who qualified. Additional program examples mentioned in these states included: early childhood development programs, youth employment programs, learning centers, research and development grants for at-risk programs, latchkey programs, and substance abuse programs.

Of the 17 states that provided specific funding for programs for at-risk youth, 8 states indicated that they funded various at-risk programs through competitive discretionary grants. Arizona has provided four year funding for 55 at-risk pilot projects that focus on academic remediation, alternative and vocational programs, and support services for at-risk youth. Colorado's at-risk grants were targeted specifically at language arts development programs for four- and five-year-olds. The remaining states which funded at-risk programs through competitive grants were Delaware, Indiana, Kansas, New York, Oklahoma, and South Dakota. In each of these states, local school districts developed at-risk programs and submitted grant proposals for funding. The variety of programs was generally the same in these states; the list of state programs typically included: all-day kindergarten, summer school, pre-school, parent education, tutorial and mentoring programs, family-based services, counseling, substance abuse programs, and dropout prevention and awareness. Oklahoma's program authorizes school districts and non-profit organizations to submit cooperative proposals for funding.

According to the responses, 6 states funded at-risk programming through their state aid formulas. North Carolina, Rhode Island, and Utah funded programs through categorical grants to eligible school districts. The largest share of North Carolina's at-risk funding was for two categorical programs. The first was an in-school suspension program which operated in every high school in the state. The second program provided counseling services for at-risk students.

Rhode Island, through categorical grants, funded programs which addressed the academic, social, and personal needs of potential dropouts. Connecticut funded various at-risk programs through a combination of categorical grants, a pupil weight, and an index of need to target funds to districts with a high incidence of at-risk youth. Utah provided funds to local school districts based upon the number of at-risk students they serviced. Texas funded a state compensatory education program through a pupil weight based upon a school district's free/reduced lunch population. Wisconsin provided criteria for identifying at-risk youth and then funded programming through a pupil weight for students so identified. Programs in Wisconsin focus on academic remediation, parent/community involvement, and development of community support services.

Of the 50 states, 3 funded at-risk programs through two or more funding mechanisms. The variety of programs funded in these states was very similar to those already cited. California funded programs through a combination of competitive and categorical grants. Iowa funded programs through a combination of competitive discretionary grants and limited categorical funding. Finally, New Mexico funded its at-risk programming through a combination of pupil weights and competitive grants.

Summary

The major findings of this research activity related to state funding methods for at-risk programs are summarized below:

1. Statutes in 29 states did not contain an official definition of at-risk youth.
2. In 13 states, limited definitions of at-riskness focused on a student's academic performance.

3. Comprehensive definitions of at-risk youth in 8 states included both academic performance and socio-economic characteristics.
4. Specific funding was not being provided in 33 states; however, 21 of those states provided funds aimed at segments of the at-risk population. These funds were distributed primarily through competitive or categorical grants.
5. Specific funding was being provided for at-risk programs in 17 states. In these states, funds were being allocated through competitive grants in 8 states, through formula-based mechanisms in 6 states, and through a combination of formula-based mechanisms and competitive grants in 3 states.

PART IV
PREFERRED FOCUS, DELIVERY, AND FUNDING

Introduction

Different opinions have been expressed concerning how states should address the focus, delivery, and funding of programs for at-risk youth. State allocation practices differ, and the issue is further complicated because programs are implemented and delivered at individual sites (schools). Various researchers have attempted to identify successful at-risk programs. Davis and McCaul (1990) and Slavin and Madden (1989) have asserted that classroom change programs were most effective and that pull-out and in-class interventions were less effective. Other research focused on academic interventions to help youth succeed in the existing school culture (Brodinsky, 1989; Orr, 1987b; Pellicano, 1987).

Typical programs have been designed to address specific portions of the school population (Center for Research on Elementary & Middle Schools, 1987; Durian & Butler, 1988; Wehlage, 1983). Building upon this research base, the second component of the national survey discussed in Part III focused on identifying the attitudes and opinions of national experts about at-risk programs.

Focus of the Activity

Data for this activity came from the opinionnaire section of the national survey. Given the diversity of fiscal capacity and the diversity in the proportion of the school population that is at-risk among school districts, the objective of this component was to identify preferred target group(s) for programming; preferred method(s) of program delivery; and preferred program funding methodology.

This activity was accomplished as a part of the direct mail questionnaire (Appendix B). To reiterate, the survey population consisted of national experts on school finance and/or at-risk programming, state school finance officials, state dropout prevention/at-risk program coordinators, and legislative liaisons of The Council of Great City Schools member districts. Their attitudes and opinions were secured on the focus,

delivery, and funding of at-risk programs at the state level. Finally, respondents were asked to rank order program funding options.

Procedures

The first task was to prepare the survey questionnaire. After initial preparation, the questionnaire was field-tested on selected individuals including doctoral students at Arizona State University to evaluate and make suggestions regarding the document's clarity, to note areas of language ambiguity and bias, and to determine the approximate time needed to complete the questionnaire. After this first field-test, the instrument was revised and field-tested with two state school finance officers who were part of the survey population to evaluate the questionnaire for content and to determine if the instrument addressed the major issues associated with state funding of at-risk programs. The procedure described above was repeated a second time and the questionnaire instrument was finalized.

Once the questionnaire was in final form, a letter of transmittal and the questionnaire were mailed to the selected aforementioned population. Follow-up letters were sent to non-respondents.

Analysis of the Data

The questionnaire asked respondents to react to a series of statements by means of a Likert response to each item to determine the pondents' attitudes and opinions about the focus, delivery, and funding of programs for at-risk youth. To each statement, respondents numerically indicated: (1) if they strongly agreed (SA); (2) if they agreed (A); (3) if they neither agreed or disagreed (N); (4) if they disagreed (D); or (5) if they strongly disagreed (SD).

Responses to items in this part of the questionnaire were analyzed as follows:

1. Items were tabulated for the entire population and by group. A frequency distribution was calculated for each item. The frequencies were reported as a percentage of the population and for each of the four groups which made up the population.

2. Each item also was analyzed using the descriptive statistics of mean, median, and standard deviation for the total population and each of the four groups.
3. F-ratios were calculated to determine if there was a significant difference at the .05 level between the attitudes and opinions of the four groups surveyed. The Scheffe multiple comparison test was calculated for each item to pinpoint where differences existed between the four groups. The data from this analysis were put in tabular form and used to address research question 1.

The second part of the questionnaire asked respondents to rank order various methods which might be used to fund at-risk programming. Responses to this portion of the questionnaire were analyzed as follows:

1. A frequency distribution of the rank ordered responses was calculated for the population and for each of the four groups which composed the population.
2. A mean rank ordered response to each item was calculated for the total population and the four groups.
3. F-ratios were calculated to determine if there was a significant difference at the .05 level between the attitudes and opinions of the four groups surveyed. The Scheffe multiple comparison test was calculated for each item to pinpoint where the differences existed between the four groups. The data from this analysis were put in tabular form and used to address research question 2.

Findings

This section includes a discussion of the pattern of survey responses among the sub-groups of the sample. Detailed information is provided about the responses to each question, with an analysis of the instances in which responses of a sub-group differed from the profile of the larger group.

The survey was conducted in the spring of 1990. The original mailing consisted of 215 questionnaires. A total of 159 responses were received, for a total response rate of 74%. Detailed information on responses by category are shown in Table IV.1.

Table IV.1
Survey Respondents

Group	Questionnaires Mailed	Responses Received	Response Rate
TOTAL	215	159	74%
CGCS	45	29	64%
SFO	50	40	80%
SCDP	68	51	74%
NE	52	39	74%

The first series of research questions was designed to ascertain the opinions of four selected national groups about funding methods for at-risk programs.

What were the attitudes and opinions of national experts (NE), state school finance officials (SFO), state coordinators of dropout prevention (SCDP), and legislative liaisons of The Council of Great City Schools (CGCS) member districts toward state level focus, delivery, and funding of at-risk programs?

What was the frequency distribution of responses for the entire population and for each of the four groups that comprised the population?

What were the mean, median, and standard deviations for the entire population and for each of the four groups that comprised the population?

Were there significant differences at the .05 level between the attitudes and opinions of the groups surveyed?

Where significant differences occurred, which of the four groups responded differently?

For each of the 14 questions on the survey, the response of the total population will be reported first. Following that discussion, the responses

of particular groups will be discussed if they were divergent and/or statistically significant from the responses of the other groups.

Survey Question 1

The first survey question asked respondents their preferred target group of youth for at-risk programs. The complete results are reported in Table IV.2.

The most popular target population for programming was pre-school youth; 72% of the total respondents strongly agreed that programming be aimed toward this group. The only other preferred target group was K-3 children (69%); this group was followed by intermediate school youth (43%) and junior high youth (36%). Fewer than 20% strongly supported programming directed toward high school youth.

Table IV.2
Preferred Target Group for At-Risk Programs

Population	SA	A	N	D	SD	Mean	Median	STD
Pre-School Children								
CGCS	81%	11%	4%	4%	0%	1.30	1.00	0.72
SFO	65%	22%	7%	2%	2%	1.55	1.00	0.72
SCDP	75%	19%	6%	0%	0%	1.31	1.00	0.59
NE	70%	14%	11%	5%	0%	1.51	1.00	0.90
TOTAL	**72%**	**17%**	**7%**	**3%**	**1%**	**1.42**	**1.00**	**0.79**
K-3 Children								
CGCS	64%	29%	7%	0%	0%	1.43	1.00	0.63
SFO	72%	21%	5%	3%	0%	1.38	1.00	0.71
SCDP	74%	20%	7%	0%	0%	1.33	1.00	0.60
NE	65%	24%	5%	5%	0%	1.51	1.00	0.84
TOTAL	**69%**	**23%**	**6%**	**2%**	**0%**	**1.41**	**1.00**	**0.77**

table continues

Table IV.2 continued

Population	SA	A	N	D	SD	Mean	Median	STD
Intermediate School Youth (Grades 4-8)								
CGCS	54%	35%	12%	0%	0%	1.58	1.00	0.70
SFO	36%	51%	10%	3%	0%	1.79	2.00	0.73
SCDP	46%	43%	9%	2%	0%	1.70	2.00	0.81
NE	38%	46%	11%	5%	0%	1.84	2.00	0.83
TOTAL	**43%**	**45%**	**10%**	**2%**	**1%**	**1.74**	**2.00**	**0.78**
Junior High School Youth (Grades 7-9)								
CGCS	46%	46%	4%	4%	0%	1.65	2.00	0.75
SFO	32%	37%	26%	5%	0%	2.05	2.00	0.90
SCDP	31%	44%	13%	9%	2%	2.07	2.00	1.01
NE	38%	41%	16%	5%	0%	1.89	2.00	0.88
TOTAL	**36%**	**42%**	**16%**	**6%**	**1%**	**1.95**	**2.00**	**0.91**
Senior High School Youth (Grades 10-12)								
CGCS	24%	48%	12%	12%	4%	2.24	2.00	1.09
SFO	24%	42%	18%	16%	0%	2.26	2.00	1.00
SCDP	14%	39%	25%	16%	7%	2.64	2.00	1.12
NE	16%	38%	35%	11%	0%	2.41	2.00	0.90
TOTAL	**19%**	**41%**	**24%**	**14%**	**3%**	**2.41**	**2.00**	**1.03**
Local School District Discretion								
CGCS	48%	36%	4%	4%	8%	1.88	2.00	1.20
SFO	14%	22%	24%	24%	16%	3.08	3.00	1.30
SCDP	13%	24%	30%	20%	13%	2.96	3.00	1.23
NE	22%	11%	27%	24%	16%	3.03	3.00	1.38
TOTAL	**21%**	**22%**	**23%**	**19%**	**14%**	**2.82**	**3.00**	**1.38**

The last item in the question asked if local school districts should have discretion in determining the target programming population. The majority of the respondents did not agree with this statement. However, the F-ratio indicated that a statistically significant difference existed between the groups ($F = 5.5$, $p < .001$). The Scheffe indicated a significant difference between CGCS and SCDP at a .05 level; and between the CGCS and SFO and NE at a .01 level of significance. The significance was evidenced in the 84% of CGCS who "strongly agreed" (SA) and "agreed" (A) with the discretionary approach to determining the target population.

Survey Question 2

The second survey question asked respondents to indicate their preferred at-risk program focus. The complete results are reported in Table IV.3. The preferred program focus for the total population was socio-emotional programming (62%), followed by parent/family programs (55%), academic remedial programs (51%), and vocational education programs (19%).

The F-ratio indicated that a statistically significant difference existed between the groups ($F = 5.3$, $p < .002$). The Scheffe indicated a significant difference between NE and the other groups at the .05 level. The significance was evidenced in the 51% of NE who disagreed that vocational education programs should be the primary focus of at-risk programming.

The SCDP and SFO preferred parent/family program focus. CGCS and NE preferred academic remedial program focus. The least preferred program focus of all groups was vocational education programs.

Table IV.3
Primary Focus of Programs for At-Risk Youth

Population	SA	A	N	D	SD	Mean	Median	STD
Academic Remedial Programs								
CGCS	56%	32%	8%	4%	0%	1.60	1.00	0.82
SFO	40%	35%	15%	10%	0%	1.95	2.00	0.99
SCDP	49%	33%	16%	2%	0%	1.71	2.00	0.82
NE	62%	32%	3%	3%	0%	1.46	1.00	0.69
TOTAL	**51%**	**33%**	**11%**	**5%**	**0%**	**1.70**	**1.00**	**0.85**
Socio-emotional Support Programs								
CGCS	63%	19%	11%	4%	4%	1.67	1.00	1.07
SFO	62%	26%	8%	5%	0%	1.56	1.00	0.85
SCDP	71%	24%	4%	0%	0%	1.33	1.00	0.55
NE	50%	33%	8%	8%	0%	1.75	1.00	0.94
TOTAL	**62%**	**26%**	**7%**	**4%**	**1%**	**1.55**	**1.00**	**0.85**
Vocational Educational Programs								
CGCS	20%	48%	12%	16%	4%	2.36	2.00	1.11
SFO	23%	41%	18%	18%	0%	2.31	2.00	1.03
SCDP	21%	40%	28%	9%	2%	2.33	2.00	0.99
NE	11%	23%	14%	40%	11%	3.17	4.00	1.25
TOTAL	**19%**	**37%**	**19%**	**20%**	**4%**	**2.54**	**2.00**	**1.14**
Parent/Family Programs								
CGCS	41%	48%	7%	3%	0%	1.72	2.00	0.75
SFO	56%	38%	3%	3%	0%	1.56	1.00	0.85
SCDP	64%	36%	0%	0%	0%	1.36	1.00	0.48
NE	51%	38%	8%	3%	0%	1.62	1.00	0.76
TOTAL	**55%**	**39%**	**3%**	**2%**	**0%**	**1.55**	**1.00**	**0.72**

Survey Question 3

The third survey question asked respondents to indicate their preferred form of at-risk program delivery. The complete results are reported in Table IV.4. The most preferred method of program delivery for the total population was mainstreaming in the regular classroom (46%), followed by off-campus alternative programs (15%) and pull-out programs (9%). Almost half of the total respondents (47%) disagreed with the statement that pull-out programs "best" served the majority of at-risk students. The mean responses to mainstreaming in the regular classroom

Table IV.4
Type of Programming that Best Serves the Majority of At-Risk Students

Population	SA	A	N	D	SD	Mean	Median	STD
Mainstreaming in Regular Classrooms								
CGCS	46%	39%	11%	4%	0%	1.75	2.00	0.93
SFO	38%	46%	10%	0%	5%	1.87	2.00	0.98
SCDP	55%	18%	12%	10%	4%	1.90	1.00	1.21
NE	42%	28%	24%	5%	0%	1.94	2.00	0.95
TOTAL	**46%**	**32%**	**14%**	**5%**	**3%**	**1.87**	**2.00**	**1.04**
"Pull-Out" Programs Outside the Regular Classrooms								
CGCS	15%	31%	8%	35%	12%	2.96	3.00	1.34
SFO	8%	14%	28%	36%	14%	3.33	3.00	1.51
SCDP	5%	25%	16%	23%	32%	3.52	4.00	1.30
NE	9%	31%	26%	26%	9%	2.94	3.00	1.14
TOTAL	**9%**	**25%**	**20%**	**29%**	**18%**	**3.23**	**3.00**	**1.24**
Off-Campus Alternative Programs								
CGCS	12%	36%	20%	20%	0%	2.84	3.00	1.25
SFO	24%	30%	30%	14%	0%	2.41	2.00	1.09
SCDP	9%	30%	32%	14%	16%	2.98	3.00	1.21
NE	17%	22%	28%	25%	8%	2.86	3.00	1.22
TOTAL	**15%**	**29%**	**28%**	**18%**	**10%**	**2.77**	**3.00**	**1.20**

as the method of program delivery were almost identical between the groups ($F = .2$, $p < .9$).

CGCS respondents were almost equally divided between agreeing (46%) and disagreeing (47%) with pull-out programs as a delivery method for at-risk programs. SFO was the only group with a median response of agreement with the statement that off-campus alternative programs best served the majority of at-risk students.

More than any other group, SCDP disagreed that pull-out programs best served the majority of at-risk youth (55%); their median response was "disagree."

Survey Question 4

Survey question 4 asked respondents if at-risk programs should concentrate on a limited number of high need students. The complete results are reported in Table IV.5. All groups disagreed with this statement.

Table IV.5
At-Risk Programs Should Concentrate on a Limited Number of High Need Students

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	17%	17%	7%	38%	21%	3.28	4.00	1.44
SFO	7%	20%	10%	42%	20%	3.47	4.00	1.24
SCDP	2%	12%	16%	42%	28%	3.82	4.00	1.04
NE	13%	18%	13%	42%	13%	3.24	4.00	1.28
TOTAL	**9%**	**17%**	**12%**	**41%**	**21%**	**3.49**	**4.00**	**1.24**

Survey Question 5

Survey question 5 asked respondents if at-risk programs should be available to all students as needed. The complete results are reported in Table IV.6.

The "strongly agree" (SA) responses represented 70% of the total population. The F-ratio indicated that a statistically significant difference existed between the groups ($F = 3.4$, $p < .019$); the Scheffe indicated a difference between SCDP and NE at the .05 level. The difference is evidenced in that 82% of SCDP "strongly agreed" (SA) with the statement, while 58% of NE "strongly agreed" (SA) that at-risk programs should be available to all students.

Table IV.6
At-Risk Programs Should Be Available to All Students as Needed

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	66%	28%	3%	3%	0%	1.45	1.00	0.74
SFO	67%	27%	5%	0%	0%	1.43	1.00	0.75
SCDP	82%	16%	2%	2%	0%	1.20	1.00	0.45
NE	58%	29%	8%	5%	0%	1.74	1.00	1.16
TOTAL	**70%**	**24%**	**4%**	**1%**	**1%**	**1.43**	**1.00**	**0.81**

Survey Question 6

Survey question 6 asked respondents how at-risk program funds should be allocated. The complete results are reported in Table IV.7. For the total population, the "strongly agree" (SA) responses indicated that the preferred allocation method was for funds to be included in the state funding formula and equalized to provide more funds per pupil to poorer school districts (40%), followed by allocations to individual schools (30%) and unequalized categorical grants (8%).

CGCS was the only group in the population with a median response of "strongly agree" (SA) to equalized allocation through the state funding formula.

CGCS and NE preferred at-risk equalized funding through the state funding formula. SFO favored allocations to individual schools. The majority of SFO and NE disagreed with funding of at-risk programs through unequalized categorical grants.

Table IV.7
Distribution of Program Funds for At-Risk Students

Population	SA	A	N	D	SD	Mean	Median	STD
Allocations to Individual Schools								
CGCS	39%	26%	9%	4%	22%	2.43	2.00	1.59
SFO	28%	49%	3%	18%	3%	2.18	2.00	1.12
SCDP	32%	30%	17%	15%	6%	2.34	2.00	1.26
NE	24%	27%	30%	16%	3%	2.46	2.00	1.12
TOTAL	**30%**	**34%**	**15%**	**14%**	**7%**	**2.34**	**2.00**	**1.24**
Included in State Funding Formula & Equalized								
CGCS	56%	30%	7%	4%	4%	1.70	1.00	1.03
SFO	24%	39%	18%	16%	3%	2.34	2.00	1.10
SCDP	40%	29%	20%	7%	4%	2.07	2.00	1.14
NE	46%	31%	15%	5%	3%	1.87	2.00	1.03
TOTAL	**40%**	**32%**	**16%**	**8%**	**3%**	**2.02**	**2.00**	**1.09**
Provided through Unequalized Categorical Grants								
CGCS	13%	21%	33%	17%	17%	3.04	3.00	1.27
SFO	11%	16%	22%	41%	11%	3.24	4.00	1.19
SCDP	4%	33%	27%	20%	16%	3.09	3.00	1.16
NE	8%	14%	22%	35%	22%	3.49	4.00	1.22
TOTAL	**8%**	**22%**	**25%**	**29%**	**16%**	**3.22**	**3.00**	**1.20**

Survey Question 7

Survey question 7 asked respondents for their opinion about the method of distributing limited funds for at-risk programs. The complete results are reported in Table IV.8.

The total population strongly agreed with targeting funds to districts with high concentrations of at-risk youth (46%), followed by distribution through an equalization formula to provide more funds per pupil to poorer school districts (28%), and shared among all districts on the basis of the number of at-risk youth in the school district (16%).

Table IV.8
Distribution of Limited Funds for At-Risk Programs

Population	SA	A	N	D	SD	Mean	Median	STD
Shared Among All Districts Based on Number of At-Risk Youth								
CGCS	19%	31%	12%	23%	15%	2.85	2.00	1.41
SFO	21%	45%	16%	13%	5%	2.37	2.00	1.13
SCDP	7%	35%	26%	17%	15%	3.00	3.00	1.19
NE	18%	26%	18%	29%	8%	2.82	3.00	1.27
TOTAL	**16%**	**34%**	**19%**	**20%**	**11%**	**2.76**	**2.00**	**1.25**
Targeted to Districts with High Concentrations of At-Risk								
CGCS	69%	19%	4%	0%	8%	1.58	1.00	1.14
SFO	24%	39%	16%	16%	5%	2.39	2.00	1.17
SCDP	49%	36%	6%	9%	0%	1.74	2.00	0.92
NE	47%	34%	11%	5%	3%	1.82	2.00	1.01
TOTAL	**46%**	**34%**	**9%**	**8%**	**3%**	**1.90**	**2.00**	**1.08**
Distributed Through an Equalization Formula								
CGCS	40%	32%	4%	16%	8%	2.20	2.00	1.35
SFO	18%	32%	24%	18%	8%	2.66	2.00	1.21
SCDP	21%	27%	25%	15%	13%	2.71	3.00	1.30
NE	38%	43%	11%	0%	8%	1.97	2.00	1.12
TOTAL	**28%**	**33%**	**18%**	**12%**	**9%**	**2.43**	**2.00**	**1.27**

Comparing the responses between groups for targeting the distribution of limited funds to districts with high concentrations of at-risk youth, there was a significant difference ($F = 4.1$, $p < .008$). The Scheffe indicated a significant difference between CGCS and SFO, and between SCDP and SFO at the .05 level. The significance was evidenced in that 88% of CGCS and 85% of SCDP agreed with the targeting of limited funds, while only 63% of SFO agreed with the concept.

The total population strongly agreed with targeting funds to districts with high concentrations of at-risk youth (46%), followed by distribution

through an equalization formula to provide more funds per pupil to poorer school districts (28%), and shared among all districts on the basis of the number of at-risk youth in the school district (16%).

Comparing the responses between groups for targeting the distribution of limited funds to districts with high concentrations of at-risk youth, there was a significant difference ($F = 4.1$, $p < .008$). The Scheffe indicated a significant difference between CGCS and SFO, and between SCDP and SFO at the .05 level. The significance was evidenced in that 88% of CGCS and 85% of SCDP agreed with the targeting of limited funds, while only 63% of SFO agreed with the concept.

A significant difference also existed between groups regarding the distribution of limited funds through an equalization formula ($F = 3.2$, $p < .026$). The Scheffe indicated a significant difference between the NE and SCDP at the .05 level. The significance was evidenced in that 81% of NE supported the distribution of limited funds through an equalization formula, but only 48% of SCDP agreed with the statement.

The most favored method for distribu ion of limited funds was targeting funds to districts with high concentrations of at-risk youth. CGCS favored this method the most; SFO favored it the least. SFO preferred sharing limited funds among all districts on the basis of the number of at-risk youth in the school district. The majority of the NE and SCDP did not agree with this method of funding. NE favored the distribution of funds through an equalization formula; this method was rejected by a majority of SCDP.

Survey Question 8

Survey question 8 asked respondents if state funded programs should require cooperative arrangements or programming with other school districts, public service agencies, or private social service agencies. The complete results are reported in Table IV.9.

The preferred cooperative arrangement by the total population was with other public service agencies (51%), followed by cooperative programs with private social service agencies (28%), and cooperative agreements between school districts (22%).

Table IV.9
Components of State Funding Programs Should Require

Population	SA	A	N	D	SD	Mean	Median	STD
Cooperative Agreements Between School Districts								
CGCS	12%	23%	23%	31%	11%	3.08	3.00	1.23
SFO	23%	23%	33%	13%	3%	2.49	3.00	1.07
SCDP	23%	42%	35%	0%	0%	2.13	2.00	0.76
NE	26%	26%	29%	16%	0%	2.39	2.00	1.08
TOTAL	**22%**	**30%**	**32%**	**13%**	**3%**	**2.45**	**2.00**	**1.06**
Cooperative Programs Between School Districts & Public Service Agencies								
CGCS	55%	31%	7%	7%	0%	1.66	1.00	0.90
SFO	42%	38%	7%	13%	0%	1.90	2.00	1.01
SCDP	56%	40%	4%	0%	0%	1.48	1.00	0.58
NE	51%	36%	8%	5%	0%	1.67	1.00	0.84
TOTAL	**51%**	**37%**	**6%**	**6%**	**0%**	**1.66**	**1.00**	**0.83**
Cooperative Programs Between School Districts & Private Social Service Agencies								
CGCS	30%	7%	37%	15%	11%	2.70	3.00	1.35
SFO	18%	34%	21%	21%	5%	2.61	2.00	1.17
SCDP	27%	38%	29%	6%	0%	2.15	2.00	0.90
NE	37%	21%	29%	8%	5%	2.24	2.00	1.20
TOTAL	**28%**	**27%**	**28%**	**12%**	**5%**	**2.38**	**2.00**	**1.15**

CGCS more than any other group disagreed with cooperative programs between districts (42%); 26% of the CGCS respondents also disagreed with cooperative programming with private social agencies. This was the only group in which a majority of respondents did not support the concept of cooperative programming between school districts and private social service agencies.

In spite of the fact that 80% of the SFO supported cooperative programs between school districts and public service agencies, 13% of this

group disagreed with this program arrangement. SFO also had a median response of 2.00 to this item; all other groups had a median response of 1.00.

The only statistically significant difference between groups was in the use of cooperative agreements between school districts ($F = 5.0$, $p < .002$). The Scheffe indicated that the difference existed between SCDP who supported cooperative arrangements and CGCS, the majority of whom did not support such arrangements ($p < .01$).

All groups supported the development of cooperative programs with other public service agencies. SCDP and NE also supported cooperative arrangements between school districts and with private social service agencies. In addition to cooperative programs with other public service agencies, the majority of SFO also supported cooperative programs between school districts and private social service agencies. The majority of CGCS did not support cooperative agreements between school districts or with private social service agencies.

Survey Question 9

Survey question 9 asked whether the per pupil payment per at-risk youth should be higher in districts where the percentage of at-risk youth is higher than the state average. The complete results are reported in Table IV.10.

When the "strongly agree" (SA) and "agree" (A) responses were combined, all groups agreed with the statement The CGSC most strongly supported the statement (86%), followed by NE (71%), SCDP (68%), and SFO (62%).

A statistically significant difference existed in the responses among the groups ($F = 2.7$, $p < .047$). The Scheffe indicated the difference existed between the CGCS and SFO ($p < .05$). In other words, CGCS more strongly supported higher per pupil payments per at-risk youth in districts with a higher than state average concentration of at-risk youth than did SFO respondents.

Table IV.10

In Districts Where the Percentage of At-Risk Youth Is Higher Than the State Average, the Per Pupil Payment Per At-Risk Youth Should Be Higher

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	62%	24%	7%	3%	3%	1.62	1.00	1.01
SFO	22%	40%	22%	10%	5%	2.35	2.00	1.10
SCDP	33%	35%	20%	8%	4%	2.14	2.00	1.10
NE	29%	42%	21%	3%	5%	2.13	2.00	1.04
TOTAL	**35%**	**36%**	**18%**	**6%**	**4%**	**2.09**	**2.00**	**1.09**

Survey Question 10

Survey question 10 asked respondents if state funds should be allocated for specific state approved programs and activities for at-risk students. The complete results are reported in Table IV.11. Of the total population, 26% "strongly agreed" (SA) with this statement. SCDP more than any other group "strongly agreed" with this statement (31%), followed by SFO (30%). Fewer NE (18%) and CGCS (21%) supported the statement.

A statistically significant difference existed between the groups in their responses to this statement ($F = 6.0$, $p < .001$) The Scheffe indicated

Table IV.11

State Funds Should Be Allocated for Specific State Approved Programs and Activities for At-Risk Students

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	21%	24%	14%	28%	14%	2.90	3.00	1.40
SFO	30%	38%	25%	5%	2%	2.12	2.00	0.99
SCDP	31%	41%	18%	8%	2%	2.08	2.00	1.00
NE	18%	26%	21%	21%	15%	2.90	3.00	1.35
TOTAL	**26%**	**33%**	**19%**	**14%**	**8%**	**2.44**	**2.00**	**1.23**

differences between SCDP and CGCS and NE at the .05 level. A difference also existed between SFO and NE at the .05 level. In other words, SCDP and SFO respondents supported allocation of state funds for specific state approved programs and activities for at-risk students, while CGCS and NE did not support this concept.

Survey Question 11

Survey question 11 asked respondents if, in view of the different needs of at-risk youth, the state should make special provisions for funding these programs (i.e., fund them outside of the general state aid program). The "strongly agree" (SA) responses represented 36% of the total population. The complete results are reported in Table IV.12.

A statistically significant difference existed between the responses of the groups ($F = 3.1$, $p < .027$). The difference was due to the large number of CGCS who "strongly agreed" (SA) with the statement (57%).

Table IV.12
In View of the Different Needs of At-Risk Youth, the State Should Make Special Provisions for Funding These Programs, (i.e., Fund Them Outside of the General State Aid Program)

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	57%	21%	11%	7%	4%	1.79	1.00	1.13
SFO	30%	35%	17%	17%	0%	2.23	2.00	1.07
SCDP	35%	46%	13%	2%	4%	1.94	2.00	0.98
NE	29%	29%	11%	21%	11%	2.55	2.00	1.39
TOTAL	**36%**	**34%**	**13%**	**12%**	**5%**	**2.14**	**2.00**	**1.17**

Survey Question 12

Survey question 12 asked respondents if school districts should be required to demonstrate that they have used state at-risk funds to support district programs for at-risk youth. The complete results are reported in Table IV.13.

The "strongly agree" (SA) responses represented 65% of the total population in this research component. Individually, the groups overwhelmingly supported this statement: NE (64%), CGCS (59%), SCDP (80%), and SFO (52%).

Table IV.13
School Districts Should Be Required to Demonstrate that They Have Used State At-Risk Funds to Support District Programs for At-Risk Youth

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	59%	38%	3%	0%	0%	1.45	1.00	0.57
SFO	52%	38%	2%	2%	5%	1.70	1.00	1.02
SCDP	80%	16%	4%	0%	0%	1.24	1.00	0.52
NE	64%	33%	0%	3%	0%	1.41	1.00	0.64
TOTAL	**65%**	**30%**	**3%**	**1%**	**1%**	**1.44**	**1.00**	**0.73**

Eighty percent (80%) of SCDP and 52% of SFO "strongly agreed" (SA) with this statement. This difference was illustrated in the statistically significant difference between the mean responses of SCDP and SFO ($F = 3.1$, $p < 0.028$, Scheffe $p < .05$).

Survey Question 13

Survey question 13 asked respondents if school districts should be required to demonstrate that state funds for at-risk youth are used to supplement existing programs. The complete results are reported in Table IV.14. The "strongly agree" (SA) responses represented 44% of the total population.

More than any other group, SCDP most strongly supported the statement (55%); the group median response was "strongly agree". A statistically significant difference existed between SCDP and CGCS responses ($F = 3.7$, $p < .013$, Scheffe $p < 0.05$). When the "strongly agree" (SA) and "agree" (A) responses are combined, the difference becomes evident.

Table IV.14
School Districts Should Be Required to Demonstrate that State Funds for At-Risk Youth Are Used to Supplement Existing Programs

Population	SA	A	N	D	SD	Mean	Median	STD
CGCS	32%	32%	14%	11%	11%	2.36	2.00	1.34
SFO	38%	32%	20%	7%	2%	2.05	2.00	1.06
SCDP	55%	31%	12%	2%	0%	1.61	1.00	0.79
NE	46%	36%	10%	8%	0%	1.79	2.00	0.92
TOTAL	**44%**	**33%**	**14%**	**6%**	**3%**	**1.90**	**2.00**	**1.03**

Eighty-six percent (86%) of SCDP respondents supported the concept that state at-risk funds supplement existing programs; the combined response rate of CGCS was 64%.

The second series of research questions focused on the preferences of the four selected national groups about funding methods for at-risk programs.

What was the rank ordered response of national experts (NE), state school finance officials (SFO), state coordinators of dropout prevention (SCDP), and legislative liaisons of The Council of Great City Schools (CGCS) member districts regarding preferred state funding methods for at-risk programming?

What was the frequency distribution of the rank ordered responses for the entire population and for each of the four groups that comprised the population?

What were the mean rank ordered responses of the total population and of the four groups that comprised the population?

Were there significant differences at the .05 level between the rank ordered responses of the four groups that comprised the population?

Where significant differences occurred, which of the four groups responded differently?

For each funding method to be rank ordered, the response of the total population will be reported first. Following that discussion, the responses of particular groups will be discussed if they were divergent and/or statistically significant from the responses of the other groups.

When asked to rank six methods of funding at-risk programs in order of preference from 1 (most favored) to 6 (least favored), 30% of the population selected categorical grants as their first preference, followed by weighted pupil allocation (24%), and allocation basis on the predicted number of at-risk youth or index of need (22%). See Table IV.15 for complete results. The least preferred funding alternative was competitive discretionary grants; 45% of the population gave it a rank of 6.

Table IV.15
Total Population Percentage Distribution and Mean Responses for Rank Order of Funding Methods

Rank Order	Competitive Grants	Categorical Grants	Excess Cost	Index of Need	Weighted Pupil	Personnel Units
1	12%	30%	8%	22%	24%	5%
2	7%	16%	22%	22%	28%	9%
3	10%	18%	13%	24%	20%	16%
4	10%	16%	25%	18%	14%	16%
5	16%	14%	20%	7%	9%	29%
6	45%	7%	12%	7%	5%	24%
M	4.474	2.882	3.632	2.875	2.730	4.270

When the mean response for each funding method was calculated, weighted pupil ranked first (M = 2.730) followed by index of need (M = 2.875), categorical grants (M = 2.882), excess cost funding (M = 3.632), personnel units (M = 4.27), and competitive discretionary grants (M = 4.474). The discrepancy between the mean ranks and the percentage frequency ranks was due to the number of respondents who assigned ranks of 2 and 3 to a particular funding method. For example, 72% of the respondents assigned

a rank of 1, 2, or 3 to weighted pupil funding while 64% assigned a rank of 1, 2, or 3 to categorical grants as a funding method.

For the CGCS respondents, 24% assigned a rank order of 1 to index of need as a funding method, followed by weighted pupil allocation and categorical grants which each received 21% of the CGCS ranks of 1. See Table IV.16 for complete results. CGCS least favored funding method was competitive discretionary grants; as a funding method, it received a rank of 6 from 59%.

When the CGCS mean responses were calculated, allocation by weighted pupil ranked first (M = 2.448) followed by index of need (M = 2.690), categorical grants (M = 3.379), excess cost funding (M = 3.586), personnel units (M = 3.759), and competitive discretionary grants (M = 5.000). The discrepancy between the percent frequency rank order and the mean rank order can be accounted for by the distribution of rankings 2 and 3. Eighty-three percent (83%) of CGCS respondents assigned a rank of 1, 2, or 3 to weighted pupil funding, compared to 69% for index of need.

Table IV.16
CGCS Percentage Distribution and Mean Responses for Rank Order of Funding Methods

Rank Order	Competitive Grants	Categorical Grants	Excess Cost	Index of Need	Weighted Pupil	Personnel Units
1	10%	21%	14%	24%	21%	14%
2	3%	14%	10%	21%	34%	17%
3	3%	21%	10%	24%	28%	14%
4	0	7%	41%	28%	14%	10%
5	24%	28%	17%	0	3%	24%
6	59%	10%	7%	3%	0	21%
M	5.000	3.379	3.586	2.690	2.448	3.759

Among the SFO respondents, 48% assigned a rank of 1 to categorical grants, as compared to 26% who gave a rank of 1 to weighted pupil funding

and 11% who gave a rank of 1 to index of need. The complete results are reported in Table IV.17.

None of the SFO assigned a rank of 1 to personnel units. A rank of 6 was assigned to competitive grants by 44% of the SFO respondents.

The mean SFO rankings indicated a first preference for categorical grants (M = 2.436) followed by allocation by weighted pupil (M = 2.868), index of need (M = 3.342), excess cost funding (M = 3.385), competitive grants (M = 4.385), and personnel unit funding (M = 4.526).

Table IV.17
SFO Percentage Distribution and Mean Responses for Rank Order of Funding Methods

Rank Order	Competitive Grants	Categorical Grants	Excess Cost	Index of Need	Weighted Pupil	Personnel Units
1	10%	49%	5%	11%	26%	0
2	13%	5%	41%	21%	21%	3%
3	10%	18%	10%	21%	16%	24%
4	5%	15%	13%	26%	21%	16%
5	18%	8%	15%	3%	8%	34%
6	44%	5%	15%	8%	8%	24%
M	4.385	2.436	3.385	3.342	2.868	4.526

In contrast to the other groups, 29% of SCDP assigned a rank of 1 to index of need as a funding method; 24% assigned a rank of 1 to categorical grants; and 21% gave a rank of 1 to competitive discretionary grants. At the other end of the scale, 33% of SCDP assigned a rank of 6 to personnel units as a funding method. See Table IV.18 for complete results.

The mean rankings of SCDP indicated their first preference for funding to be categorical grants (M = 2.735), followed by index of need (M = 2.854), weighted pupil funding (M = 2.979), competitive discretionary grants (M = 3.714), excess cost (M = 3.917), and personnel units (M = 4.563).

Table IV.18
SCDP Percentage Distribution and Mean Responses for Rank Order of Funding Methods

Rank Order	Competitive Grants	Categorical Grants	Excess Cost	Index of Need	Weighted Pupil	Personnel Units
1	20%	24%	8%	29%	15%	2%
2	8%	24%	17%	15%	35%	10%
3	10%	24%	8%	27%	19%	10%
4	24%	12%	25%	10%	10%	17%
5	14%	8%	25%	8%	10%	27%
6	22%	6%	17%	10%	10%	33%
M	3.714	2.735	3.917	2.854	2.979	4.563

More than any other group, NE favored pupil weights as a funding method; 35% assigned a rank of 1 to this category. Categorical grants were ranked 1 by 25% of the NE, and index of need was given a rank of 1 by 24%. Only 3% of NE ranked competitive discretionary grants as 1, while 68% ranked competitive discretionary grants as 6. See Table IV.19 for complete results.

NE mean rankings indicated weighted pupils as their preferred funding method ($M = 2.486$), followed by index of need ($M = 2.568$), categorical grants ($M = 3.167$), excess cost funding ($M = 3.556$), personnel units ($M = 4.027$), and competitive discretionary grants ($M = 5.162$). More than any other group, NE favored pupil weights as a funding method; 35% assigned a rank of 1 to this category.

The only statistically significant difference in the ranked responses between the groups was in regard to competitive discretionary grants ($F = 6.205$, $p < .001$). The Scheffe indicated that differences existed between SCDP who gave competitive discretionary grants a mean rank of 3.714 and CGCS with a mean rank of 5.000 and NE with a mean rank of 5.162.

Table IV.19
NE Percentage Distribution and Mean Responses
for Rank Order of Funding Methods

Rank Order	Competitive Grants	Categorical Grants	Excess Cost	Index of Need	Weighted Pupil	Personnel Units
1	3%	25%	6%	24%	35%	8%
2	3%	17%	19%	32%	22%	8%
3	14%	6%	22%	22%	19%	19%
4	5%	28%	25%	11%	11%	19%
5	8%	19%	22%	5%	11%	30%
6	68%	6%	6%	5%	3%	16%
M	5.162	3.167	3.556	2.568	2.486	4.027

Summary

In summary, the total population preferred pupil weights, index of need, and categorical grants as funding methods. Their least preferred method was competitive discretionary grants. CGCS preferred pupil weights and index of need as funding methods; their least preferred funding methods were competitive discretionary grants and personnel units. SCDP and SFO favored categorical grants as a funding method. Their least favored funding method was personnel units. NE most favored pupil weights and index of need as funding methods. The competitive discretionary grant method was their least favored funding approach. It received more low ranks from NE than from any other group.

The major findings of this research component were as follows:

1. Respondents most favored targeting at-risk programs on pre-school and K-3 children.
2. Socio-emotional and parent/family programs were the most preferred program foci of respondents. NE and CGCS also favored academic remedial programs. A majority of national experts, unlike the other groups, disagreed that vocational education programs should be an at-risk program focus.

3. The most favored program delivery by all respondent groups was mainstreaming in the regular classroom. Pull-out programs as a method of program delivery were not favored by any respondent group.
4. Respondents generally agreed that program funds should be available to all youth, but gave different responses to questions about whether funds should be provided through the state funding formula and equalized.
5. When limited state funds were available, the most favored method of distribution was to target funds to districts with high concentrations of at-risk youth.
6. Respondents agreed that state funding programs for at-risk youth should require that school districts develop cooperative programs with other public service agencies.
7. Both groups of state level respondents supported the idea that school districts be required to demonstrate that state at-risk funds were used to support state approved at-risk programs; district level respondents and national experts did not endorse this concept.
8. In view of the different needs of at-risk youth, all respondent groups supported the idea that states should make special provisions to fund at-risk programs.
9. Respondents strongly endorsed the concept that school districts should be required to demonstrate that state at-risk funds were being used to supplement existing programs.

PART V

CLASSIFICATION OF PROTOTYPE PROGRAMS

Introduction

Efforts to analyze programs for at-risk youth have been frustrated because of the differences among program purposes and target groups and the absence of a framework that can be used to classify programs. To address this problem, one of the first activities of Project FAIR was to develop a framework that could be used to group and classify programs.

The need to conduct research beyond descriptive studies of at-risk characteristics and model programs has been emphasized by several researchers. Wehlage and Rutter (1986) emphasized that attention needed to be given to the policies and practices that schools use in delivering services and programs to at-risk students. Clifford (1987) stressed the need to inventory and classify the educational options and programs which schools provide for at-risk students.

In the review of the literature specific to taxonomies for classifying at-risk programs, the most comprehensive model (Clifford, 1987) categorized at-risk programs based on the program strategy used and on a description of program elements within a curriculum framework. The limitations of Clifford's study were in the size of its sample (only eleven districts across the country), and the self-reporting of data by the districts, without further confirmation.

The collective points of Clifford (1987) and Wehlage and Rutter (1986) were the focus for developing a classification model of at-risk program interventions. According to Clifford (1987), "real progress in improving the school's holding power will be possible when prevention program strategies can be truly isolated and assessed for separate impacts on student outcomes" (p. 13). The goal in refining Clifford's classification model was to develop a system that would be helpful in isolating program variables, that could be used to evaluate program effectiveness, and that would be useful as a tool in identifying generic programs to use as prototypes in the cost study activity.

Focus of the Activity

The purpose of this activity was two-fold: (1) to develop a system for classifying at-risk programs that permitted the identification of their distinctive program variables, and (2) to adapt the classification system so that it could be used to identify prototype programs that could be used as the basis for assigning per-pupil weights (program funding indices) in the cost study. The initial research activity included data from 200 selected at-risk programs offered in 31 schools in 15 school districts in Maricopa County, Arizona.

Development of the Classification Model

The research question related to the development of the classification model was:

What system(s) can be used to classify at-risk programs that will permit the identification of distinctive program variables?

Procedures

The initial classification model was developed by:

1. Examining at-risk programs in a purposeful sample of schools and districts in Maricopa County, Arizona, through direct field observation and interviews.
2. Conducting on-site interviews with public school district and school building personnel in 15 selected school districts to collect data on at-risk programs.
3. Developing a data base about the programs that the sample school districts were operating.
4. Creating a classification scheme. This was accomplished in two phases:
    a. Reviewing the literature to compile a list of the demographics used to describe at-risk students and the programs serving them.
    b. Expanding and revising Clifford's (1987) taxonomy by subjecting it to a large sample of direct observations of programs and increasing the scope of the model.

5. Recording occurrences of each classification variable in the sample.
6. Describing representative programs within each cell of the classification system, based on the analysis.

Analysis of the Data

Analysis of the data from both the district and school interviews produced the preliminary coding categories. These categories continued to be refined as the interviewing progressed. (See Appendix D for the final list.) The codes reflected the program characteristics cited most frequently in the responses on the questionnaires.

From the three primary variables (focus, strategy, and delivery), the subcategories emerged as specific cells within the model. This resulted in a three dimensional model (see Figure V.1). The model contained the categories of focus, strategy, and delivery and their respective sub-categories. *Program focus* categorized the primary emphases of programs into four areas: academic, socio-emotional, vocational, and parent/family. *Program strategies* grouped interventions into three types: integrated programs within the regular classroom, non-integrated resource-based programs, and alternative programs conducted off-campus. The *program delivery* dimension identified the primary means of delivering services: class, small group, and one-to-one.

Each sub-category was considered a cell in the classification model. Thus, the model contained 36 cells; each was a description of a potential cluster of at-risk programs.

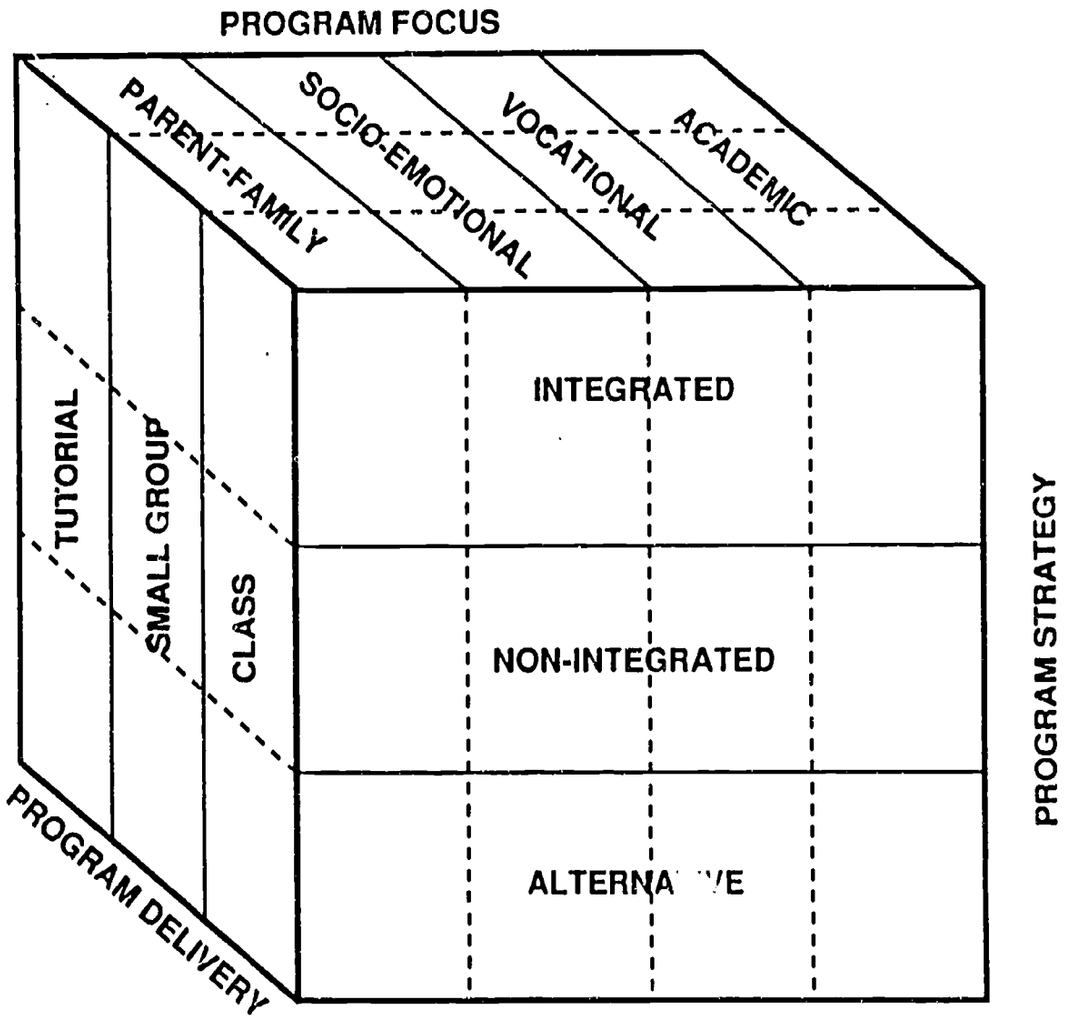
Findings

The three-dimensional classification model was developed from an analysis of the data on the programs that the sample school districts were operating and from a review of the literature. A list was compiled of the demographics used to describe at-risk students and the programs serving them.

The initial questionnaire and interview of district level administrators and program coordinators used open-form and closed-form questions. Open-form questions were used so that subjects could use their

Figure V.1

A Classification Model for At-Risk Programs



own words to describe the programs that were offered. The closed-form questions elicited quantifiable information, such as total school enrollment and number of Chapter 1 students.

One difficulty in the initial interviews at the district level was that district administrators had inadequate knowledge of program characteristics at the school level. Thus, the questionnaire was revised to include different survey questions to be asked of district personnel and building program facilitators. District personnel were asked to describe strategic characteristics of the at-risk programs offered, such as definition of at-risk students and coordination of programs. The building facilitators were asked questions that addressed specific program information and operational characteristics, such as teacher-to-student ratios, and types of personnel involved in program delivery.

The analysis of the data from the initial interviews produced 50 recurring program descriptors. These descriptors were sorted and coded. The coded descriptors reflected the program characteristics cited most frequently in the responses on the questionnaires. These coding descriptors continued to be refined and tested as further interviewing occurred. The coded descriptors were grouped into the three variables that formed the basis of a classification system.

The three variables identified as the primary variables in this activity—program focus, program strategy, and program delivery—remained constant as further interviewing and analysis of programs occurred. As the number of coding descriptors increased to 75, categories or levels of the primary variables emerged.

The remaining program descriptors were subsumed under the primary variables. Thus, the classification system allowed functionally related categories to be grouped and analyzed. For example, a specific cell might contain programs having academic focus (A), non-integrated strategy (N), and class delivery (C); thus, the programs in this specific cell were denoted as ANC cluster.

Frequencies of Program Variables

The most frequent focus of at-risk programs was academic: 114 of the 200 programs studied had this focus. The second most frequent focus was socio-emotional (63 programs). Only 12 programs had a vocational focus, and only 11 program focused on parent/family (see Table V.1).

Table V.1
Frequencies of Programs by Focus

Focus	n	%
Academic	114	57.0
Socio-Emotional	63	31.5
Vocational	12	6.0
Parent/Family	11	5.5
	200	100.0

Non-integrated program strategies were used far more frequently (134) than integrated programs (58). Only eight programs had an alternative strategy (see Table V.2).

Table V.2
Frequencies of Programs by Strategy

Strategy	n	%
Non-integrated	134	67.0
Integrated	58	29.0
Alternative Management	8	4.0
	200	100.0

As indicated in Table V.3, 109 of the programs were delivered in a class setting. Small group delivery was used in 55 programs, and a one-to-one was used in 36 programs.

Table V.3
Frequencies of Programs by Delivery

Delivery	n	%
Class	109	54.5
Small Group	55	27.5
One-to-One	36	18.0
	200	100.0

Frequencies of the Program Clusters

Using each of the previously noted sub-categories of the program variables, 36 cells occurred in the classification model. Each cell constituted a potential program cluster since the programs in a given cell shared a similar focus, strategy, and delivery (see Figure V.1). Of these 36 cells, 21 actually contained programs. The frequencies of programs in the 21 clusters of the model are presented in Table V.4.

Results of the initial classification activity showed that the three most commonly occurring program clusters accounted for 41.5% of the 200 programs studied. The most frequently occurring programs were in the ANC cluster, accounting for 35 of the 200 programs in the study. Of the ANC programs, 22 were special classes providing basic skills remediation at the secondary level. Of the 15 selected districts in the study, 12 had programs in the ANC cluster. Programs in the ANS cluster were the second most frequent, with 25 programs. The majority of these programs were resource pull-out programs such as instruction, tutoring, reading assistance, and math assistance. Nine of the 15 selected districts had programs in this cluster. Programs in the AIC cluster were the third most common type, with 23 reported. The majority of these programs were early prevention efforts, such as extended day kindergarten and K-3 academic assistance within the regular classroom setting. Nine districts had programs in the AIC cluster.

Table V.4
Frequencies of Program Clusters

Program Cluster	Abbrev.	Freq.
Academic, Non-integrated, Class	ANC	35
Academic, Non-integrated, Small Group	ANS	25
Academic, Integrated, Class	AIC	23
Socio-emotional, Integrated, Class	EIC	19
Socio-emotional, Non-integrated, Class	ENC	16
Socio-emotional, Non-integrated, Small Group	ENS	16
Academic, Non-integrated, One-to-One	ANO	14
Socio-emotional, Non-integrated, One-to-One	ENO	11
Academic, Integrated, Small Group	AIS	9
Vocational, Integrated, Class	VIC	6
Academic, Alternative, Class	ALC	5
Parent/Family, Non-integrated, Class	PNC	4
Parent/Family, Non-integrated, One-to-One	PNO	4
Vocational, Non-integrated, One-to-One	VNO	4
Parent/Family, Non-integrated, Small Group	PNS	3
Academic, Integrated, One-to-One	AIO	1
Academic, Alternative, One-to-One	ALO	1
Academic, Alternative, Small Group	ALS	1
Vocational, Non-integrated, Class	VNC	1
Vocational, Non-integrated, Small Group	VNS	1
Socio-emotional, Alternative, One-to-One	ELO	1

These three program clusters, and an additional five program clusters focusing on counseling/social services and tutoring assistance, accounted for 79.5% of the programs offered in the sampled districts. These findings were consistent with the GAO report (1987) which stated that services for at-risk youth usually involved academic basic skills instruction, counseling, and social service assistance.

While at-risk youth present multi-dimensional problems requiring multi-dimensional solutions, the classification activity demonstrated that

these solutions do have common variables that permit programs to be grouped into manageable units of analysis. This initial taxonomy was valuable for providing a framework for the identification of discrete program variables and may be useful in further studies of program effectiveness, but when applied directly to identifying and grouping prototypes for the cost study, the results of this initial effort were too detailed.

Identification of Prototype Programs

The research question in this activity was:

> **What classification system can be used as the basis for assigning per-pupil weights (program funding indices) in the cost study?**

Procedures

To determine the optimal method for classifying those programs in the cost study activity, four different classification systems were analyzed. Each of the 88 programs in the cost study was coded and sorted under the four different systems. The first system was based on the three-dimensional classification model described in the previous section. Individual programs were categorized according to program focus, strategy, and delivery. This yielded 16 different program clusters (see Table V.5).

The second classification system was based on the primary intervention strategy employed (i.e., an alternative school program, a program integrated into the regular classroom, or a non-integrated program where students were removed from the regular classroom to provide services). This classification yielded three program clusters (see Table V.6).

The third classification system was based on how the program was delivered (i.e., in a classroom, in a small group, or one-on-one). This classification yielded three program clusters (see Table V.7).

Table V.5
Distribution of Programs by Roberts' Classification System

Classification Code	N	%
Academic Alternative Class	4	4.5
Socio-Emotional Alternative Class	1	1.1
Academic Integrated Class	21	23.9
Academic Integrated Small Group	3	3.5
Academic Non-integrated Class	25	28.5
Academic Non-integrated Small Group	3	3.5
Academic Non-integrated One-to-One	11	12.5
Socio-Emotional Non-integrated Class	1	1.1
Socio-Emotional Non-integrated Small Group	3	3.5
Socio-Emotional Non-integrated One-to-One	2	2.3
Parent/Family Non-integrated Class	8	9.0
Parent/Family Non-integrated Small Group	1	1.1
Parent/Family Non-integrated One-to-One	1	1.1
Vocational Non-integrated Class	2	2.3
Vocational Non-integrated Small Group	1	1.1
Vocational Non-integrated One-to-One	1	1.1

Table V.6
Distribution of Programs by Instructional Strategy

Classification Code	N	%
Alternative School Programs	7	8.0
Integrated Programs	24	27.2
Non-Integrated Programs	57	64.8

Table V.7
Distribution of Programs by Delivery System

Classification Code	N	%
Classroom Based Programs	64	72.8
Small Group Programs	9	10.2
One-on-One Programs	15	17.0

The final classification system was a simplification of the initial classification system. It clustered all alternative programs together and all programs with a parent-family focus together. All summer school programs were clustered separately, and the integrated/nonintegrated distinction was not used. However, the delivery distinction of class, small group, and one-on-one was retained. This classification system yielded eight program clusters from those programs in the cost study activity (see Table V.8).

Table V.8
Distribution of Programs by Project FAIR Classification System

Classification Code	N	%
Alternative School	5	5.7
Academic/Vocational Classroom	35	39.8
Academic/Vocational Small Group	4	4.5
Academic/Vocational One-on-One	14	15.9
Group Counseling	4	4.5
Individual Counseling	2	2.3
Parent/Family Programs	10	11.4
Summer School Programs	14	15.9

Findings

This final classification system, or the Project FAIR System (PFS), was selected to determine the prototype programs to be used in the simulation study. The rationale for the PFS selection was based on the following:

1. For policy purposes, the initial classification system was too discrete and yielded too many program types, which would result in an excessive number of program funding weights.
2. The classification systems based on strategy and delivery respectively were not discrete enough and masked important program distinctions and their relative costs.
3. The PFS resulted in a manageable number of program types, yet recognized the cost variables in distinctive programs. For

example, it accounted for the high cost of providing programs in an alternative school as well as the modest expense of providing programs for at-risk youth during an extended school year or summer school.

The PFS classification system categorized programs into nine clusters yielding the following prototype programs:

1. Programs provided in an alternative school separate from the regular school facility (AS).
2. Classroom programs that had an academic and/or vocational focus (AC).
3. Programs delivered in small groups with an academic and/or vocational focus (AG).
4. One-on-one programs with an academic and/or vocational focus (AT).
5. Summer school programs (SS).
6. School-wide/classroom programs with a focus on preventive socio-emotional issues such as drug abuse and child abuse (SC).
7. Group counseling/support groups (GC).
8. Individual counseling (IC).
9. Programs focused on parent/family involvement (PF).

A summary description of a prototype for each of these programs appears in Appendix E.

Summary

The utilization of a classification system is a critical requirement for at-risk program research efforts. The challenge in developing a classification system is maintaining a balance between the need to have a sufficient number of discrete program categories for research and analysis, and the need to keep the classification system from being overly complex. In this project, the result was the development of the PFS system which retained an emphasis on focus, delivery, and strategy, but sacrificed some of the symmetry in the three dimensional model.

PART VI

COST STUDY OF PROGRAMS FOR AT-RISK YOUTH

Introduction

A general principle in school finance is that the cost of an educational program is influenced by the varying characteristics of students and school districts. Thus, "providing the same resources for all students and all school districts will not ensure that educational programs are adequate and equitable" (Webb, McCarthy, & Thomas, 1988, p. 148). While the initial thrust of school finance reform was horizontal equity (i.e., the equal treatment of equals), more recently attention has been given to the concept of vertical equity (i.e., the different treatment of dissimilarly circumstanced groups) (Webb et al., 1988). Chambers (1981) stated that "vertical student educational equity, or more simply educational equity, may be said to be attained when the quantity and mix of school resources and services vary in direct relation to discernible differences in the educational needs of students" (p. 5).

The rationale for the unequal allocation of resources based on educational need rests on the social justice principle. The contention of the social justice principle is that "neither children nor school systems operate in isolation from society, but function within the larger social system which, absent government subventions, tends to produce resource flows that correlate with factors such as social status and wealth" (Hodge, 1981, p. 7). The allocation of supplemental resources to populations with special needs such as at-risk youth thus becomes a defensible position in light of the social justice principle:

> While the educational system is unable to compensate fully for social and economic imbalances, it is generally recognized to be one of the prime vehicles of upward mobility. The attempt to overcome systematic disadvantages has therefore been viewed as an important role of education (Hodge, 1981, p. 9).

An implicit assumption in this social justice principle is that efforts to compensate school systems for different levels of resource spending

potentially increase the benefits of education and strengthen society in general (Hansen, 1980).

Both Levin (1989) and Sherman (1987) made a case for the necessity of educational equity in a state school finance system and specifically discussed allocating resources to meet the needs of at-risk students. In addition, from an economic viewpoint Levin (1989) argued in favor of funding at-risk programs because of the cost to society if these programs are not funded. If the present situation is allowed to continue, Levin contended that those costs to society will include (a) creation of a dual-class society, (b) disruption of higher education, (c) reduced national and state economic competitiveness, and (d) higher public service costs associated with poverty and crime. For these reasons he asserted that, for at-risk programs, "the social benefits of such investments are likely to be well in excess of their costs" (p. 52).

The problems related to funding for at-risk programs are multi-dimensional. First, there is not uniform agreement as to the criteria that should be used in identifying at-risk youth. Second, programs have not been underway for a sufficient period to establish patterns or to have research on "what works." Third, virtually no cost studies have been conducted to determine the funds required to provide the programs.

Focus of the Activity

The major purposes of this activity were: (1) to identify the cost estimates of at-risk programs and (2) to assign a program funding index to each prototype group of at-risk programs.

Procedures

This activity consisted of a cost analysis of pilot programs to serve at-risk youth that were funded by the Arizona Department of Education through competitive discretionary grants. Of the 45 school districts contacted, 26 participated in the cost study. Data were collected on 88 programs for at-risk youth.

A cost study form was developed to gather pertinent information on the resource inputs at the district level and program level for each of the programs. The preliminary form was developed in consultation with the

Morrison Institute for Public P.licy at Arizona State University, which is responsible for the evaluation of programs funded through the at-risk pilot project (Arizona State Board of Education, 1988). The preliminary cost study form was field tested in one district and revisions were made.

As a result of the field test, the final form was divided into two parts. Part 1 included district-level information pertinent to the district's overall at-risk project. It included such information as a list of program components included in the project, the average district work week for specified personnel, average salary information, and average per-pupil expenditures for maintenance and operations in the district.

Part 2 requested information on each separate program component within the district. Information requested included number of students served; number and type of certified and classified personnel assigned to the program; materials, supplies, and equipment purchased; and outside contracted services utilized.

The cost estimates of the at-risk program in the 26 participating districts were determined in three steps. In the first step, a district's overall at-risk project was organized into separate discrete programs that could lend themselves to determining a per-pupil expenditure. A "program" for this study was defined as *a type of educational delivery system that involved a designated input configuration and focus for the delivery of educational services* (Chambers & Hartman, 1981). If there was a question as to whether a project component should be included as a discrete program or considered as a subactivity within a program, the component was classified as a discrete program if it served different numbers of students. For example, if a school-within-a-school program served 75 students and the staff development activities were targeted only at the teachers who staffed those programs, then staff development was costed as a subcomponent of the school-within-a-school program. However, if this staff development program was a school-wide effort to sensitize all teachers to the needs of all at-risk youth in the school, then it was costed as a separate program.

In the second step, a resource input approach to costing out educational programs was utilized to determine the cost of each at-risk program. This approach required: (a) the delineation of all personnel and

material resource inputs required for a program's implementation, (b) the determination of the cost of each input, and (c) the summing of all resource input costs to determine the program's expenditures. On the basis of these cost data and the number of pupils served in a program, the program expenditure per pupil (PEP) was determined. The final step in the cost estimates was the determination of the program funding index (PFI), or add-on weight, for each program.

After determining PFIs for each at-risk program, the 88 programs were coded and clustered into prototypes. The clusters were the basis for assigning the add-on weight used in the simulations in Part VII.

Analysis of Data

The program expenditure methodology used in this activity consisted of three steps; the first was the calculation of the program expenditures per pupil. The second was the calculation of the program funding index, or the per-pupil add-on weight, for the programs to be included in the state school finance program. The third step was the clustering of similar programs and the determination of the program funding index (PFI) to be used in the simulated special funding for programs to serve at-risk youth in the prototype state.

The program expenditure per pupil for the programs to serve at-risk youth was determined by the following formula:

$$PEP = \frac{[(PW * SE) + (SU + TB + TR + CS + SD + EQ + FA + UT + PC)]}{PP} \quad (1)$$

where:

PEP is the program expenditures per pupil that would be used to calculate the index for use in the state school finance programs to allocate funds to local school districts for these programs.

PW is the number of weeks that the sample program was in operation.

SE is the expenditures (salaries and fringe benefits) per week for staff members who work directly with the project. This component includes all staff (i.e., teachers, professional support personnel, administrators, school

secretaries and clerks, teacher aides, tutors, and parent liaisons). The SE amount for each staff group was calculated by multiplying the number of persons in that group who were in the program by the average hours per week that individuals in that group worked in the program by the hourly pay for persons in that staff group in that school district. For consistency among school districts, hourly pay was calculated by assuming a 35-hour work week and a 36-week work year for all teachers. The SE amounts for all staff groups were summed to obtain the SE amount for the program.

SU is the total expenditures for supplies directly related to the program.

TB is the expenditures for textbooks directly related to the program.

TR is the expenditures directly related to the program for transporting students in the program.

CS is the expenditures for contracted services directly related to the program.

SD is the expenditures for staff development activities directly related to the program.

EQ is the expenditures for equipment items purchased for direct use with the program.

FA is the expenditures for facilities used to house the program.

UT is the expenditures for utilities used directly with the program.

PC is the expenditures for portable classrooms used directly with the program.

PP is the number of participants in the program.

As indicated in Equation 2 below, for each program, the program expenditures per pupil (PEP) were divided by the product of the amount of the current expenditures per pupil (CEP) for the school district multiplied times a constant of .75 to determine the program funding index (PFI):

$$PFI = \frac{PEP}{CEP * .75} \qquad (2)$$

For each school district that provided information for the research component, the CEP was calculated from The Annual Report of the Superintendent of Public Instruction (Arizona Department of Education,

1990) by dividing the district's total expenditures from the maintenance and operations fund by the district's average daily add-on weight for that cluster. The .75 constant reflects the proportion that direct expenditures for educational programs were of current expenditures per pupil. The median add-on weight then was used as the per-pupil add-on weight in the simulation.

Findings

The research efforts were designed to provide answers to the following questions:

What are the cost estimates for each of the prototype programs?

What program funding index should be assigned to each prototype group of at-risk programs?

Program costs ranged from $0.31 per pupil for a school-wide/class prevention program to $11,237.72 per pupil for an alternative high school for dropouts and at-risk students. The highest cost programs were for students demonstrating multiple at-risk characteristics and requiring alternative placement outside the regular school setting. High cost programs within the regular school tended to have low professional staff/student ratios, had multiple professional staff involved (such as teachers, counselors, and program coordinators), occurred in non-integrated settings, and were in operation during the entire school year. Low cost programs tended to utilize more paraprofessional or volunteer/peer staff, were not full-time programs (for example, summer school), or were integrated into the regular school program with the only additional cost being staff development activities and program/curriculum adaptations.

The next step was to determine the program funding index (PFI) or add-on weight for each program costed above. The PFI was calculated by dividing the PEP by the product of the amount of the current expenditures per pupil for the school district, multiplied by a constant to adjust for administrative and operations expenditures not included in the PEP calculation. PFIs ranged from 0.01 to 3.38. They illustrated the wide variation in program delivery strategies employed by districts to provide

services for at-risk youth. Because of the wide variability of programs and their costs, similar programs were clustered to determine generic prototype programs that had common variables. Similar programs were grouped using the PFS system outlined in Part V. The results of this classification are shown in Table VI.1.

Table VI.1
Distribution of Per-Pupil Add-On Weights
by Project FAIR Classification System

Classification Code	N	Max	Min	SD	Mean	Median
Alternative School	5	3.38	.92	.92	1.58	1.26
Academic/Vocational Classroom	35	1.63	.01	.46	.37	.38
Academic/Vocational Small Group	4	.82	.21	.25	.40	.28
Academic/Vocational One-on-One	14	2.61	.04	.74	.69	.41
Group Counseling	4	.37	.03	.04	.15	.10
Individual Counseling	2	.15	.15	.00	.15	.15
Parent/Family Programs	10	.38	.01	.13	.16	.14
Summer School Programs	14	.57	.03	.15	.18	.15

The PFI or add-on weight for each prototype program was determined by assigning the median PFI for all programs within that cluster as the PFI. The median was selected as the most rational index due to the wide variance of the cost of programs within a cluster and was supported by the research literature from other need-based cost studies which recommended using the median (Rossmiller, Hale, & Frohreich, 1970).

The range of PFIs was from 1.26 for placing an at-risk pupil in an alternative school to 0.01 for providing school-wide programs. A PFI of 1.26 means that if it cost $4,000.00 to educate a pupil in the regular school program, it would cost an additional $5,040.00 (or total cost of $9,040.00) to educate that pupil in ar alternative school. A PFI of 0.01 with a regular per-pupil expenditure of $4,000.00 would yield an additional $40.00 to provide a schoolwide socio-emotional program. Independent of the cost study, data were gathered on school-wide programs and an index of 0.01 was assigned as the add-on weight for these programs.

To ascertain the fiscal resources required by using the derived weights to fund programs for at-risk youth, the total amount of funds was calculated using data from a prototype state. (See Part VII for a description of the prototype state.) The funds required to meet the fiscal requirements of the weights are shown in Table VI.2. In school year 1990-91, the total

Table VI.2
Number of Students, Add-on Weight, and Funding Amount for Categorical Program Option in the Prototype State

Prototype Program	Number of Students	Weight	Funding Amount
Alternative School (AS)	9,083	1.26	$ 27,466,992
Academic/Vocational Class (AC)	49,968	0.38	45,570,816
Academic/Vocational Group (AG)	23,216	0.28	15,601,152
Academic/Vocational Tutorial (AT)	6,200	0.41	6,100,800
Summer School (SS)	1,967	0.15	708,120
Schoolwide Socio-Emotional (SC)	77,206	0.01	1,852,944
Group Counseling (GC)	5,738	0.10	1,377,120
Individual Counseling (IC)	3,283	0.15	1,181,880
Parent/Family Programs (PF)	14,555	0.14	4,890,480
TOTAL	191,216		$104,750,304

requirement in state funds in the prototype state for these programs would represent a 10% increase in state funds to provide programs and services for at-risk youth.

Based on program participation data and the PFI, the largest amount of funds would be allocated for AC (academic/vocational class), and the smallest amount for summer school (SS). The most costly program per student was AS (alternative school). Academic/vocational class (AC) programs served the largest number of students.

Summary

Using the results of the classification study (Part V), data from the cost study were organized into a format that resulted in the selection of funding indices for nine clusters of at-risk programs. Based on observations from previous cost study research, the wide ranges in the PFI for some clusters of programs were to be expected. If these PFIs were incorporated into a state school finance program, the projection is that these additional funds would result in an increased entitlement value for the state program of about 10 percent.

PART VII

ANALYSIS OF THE SIMULATION OF FUNDING ALTERNATIVES

Introduction

Program goals and objectives are critical considerations in the selection of funding alternatives. Hartman (1980) stressed the extent to which incentives and disincentives are associated with various funding alternatives. Sherman (1987) discussed the implications of certain strategies for public policy preferences. Among the policy choices are: (1) the extent to which funds should be provided to all school districts or targeted to districts with high concentrations of at-risk youth, (2) the extent to which funds should be distributed through the general state aid formula or through categorical grants, and (3) the extent to which funds should be fiscally equalized so that larger state payments are made to low wealth districts irrespective of the incidence of at-risk youth. These and related issues have implications for the analysis of funding alternatives in the following sections of this part.

Focus of the Activity

This activity focused on the impact analysis of the alternative funding strategies using simulation data from prototype school districts that comprised a prototype state. The particular focus was on the distribution of funds among different types, sizes, and classifications of school districts utilizing the funding alternatives.

Procedures

A search of the literature and the findings of the national survey resulted in the selection of six alternatives for funding programs for at-risk youth. Criteria for selection were the frequency of an alternative's use in need-based funding mechanisms and/or the extent to which an alternative was preferred by state and national experts on at-risk programming and school finance. The alternatives were competitive discretionary grants, categorical grants, equalized per-pupil grants, personnel (classroom) unit allocations, excess cost reimbursements, and index of need.

Cost data on at-risk programs and an index of need proxy for incidence and severity of at-riskness were utilized in a series of simulations to determine the distribution of state monies using the various funding alternatives. Only five of the six alternative funding strategies were used. The unit allocation strategy was not included in the simulation because of the lack of data that could be used in determining the standards for the unit allocation system. For the index of need strategy, the Arizona Department of Education's index of need was utilized, with modifications. The simulation was conducted on 36 prototype school districts that comprised a prototype state. The prototype state included all of the districts in the cost study funded for pilot K-3 and 7-12 at-risk programs by the Arizona Department of Education in 1989-90, and selected other districts to ensure that all types of school districts were represented in the prototype state. (See Appendix F for the characteristics of the districts that comprised the prototype state.) At-risk student data for the additional districts were obtained from the findings of the initial field study conducted at Arizona State University during the 1988-89 school year. For each of the 36 districts in the prototype state, the following data were used in the simulation:

1. Estimates of the number of students in the various types of programs for which program funding indices were developed from the program expenditure study.
2. Index of need calculated from the Ed. STAT Report compiled by the Arizona Department of Education (1989). (The index of need was based on the cumulative "Z scores" for the following variables: absentee rate, number of limited English proficiency students, number of students scoring below the 25th percentile for K-3 students and below the 40th percentile for 7-12 students, 7-12 dropout rate, K-3 mobility index, and socio-economic status index for the school district.)
3. Amount of the grant for K-3 and 7-12 at-risk programs from the Arizona Department of Education (Morrison Institute for Public Policy, 1989).
4. Indices of personal income per student in average daily membership based on the 1980 census (DePrez, 1990).

5. Indices of primary assessed valuation of property per student, using data from The Annual Report of the Superintendent of Public Instruction (Arizona Department of Education, 1990).
6. Using demographic data (DePrez, 1990), assignment of geographic classification for each district. The classifications were rural, independent area, suburban area, and urban area.

The following simulations were used in this activity:

SIM 1 used the Ed. STAT indices of need (Arizona Department of Education, 1989) with funds going only to districts with an index of need above 0.000. Indices above 0.000 were treated as percentages and multiplied by the average daily membership (ADM) of the eligible districts to determine the district's proportional entitlement of the total funding for the program from state sources.

SIM 2 also used the Ed. STAT indices (Arizona Department of Education, 1989), but gave all districts an initial allocation of 2.0% per ADM and then added this base amount to the indices for each district. (Minus indices were converted to positive numbers by adding a positive number equal to the lowest index to the indices for all school districts in the prototype state.)

SIM 3 estimated allocations utilizing the number of students in at-risk programs in each of the prototype districts. The weights from the cost study were multiplied by the number of students in the programs in the prototype districts, and the product was used to determine the portion of funds allocated to each district.

SIM 4 was identical to SIM 3, except that a district's allocation under SIM 4 was fiscally equalized using the current Arizona state school finance program. The add-on weights in the cost study were added to the weighted ADM (WADM) for each of the prototype districts. The "new" weighted ADM was used to calculate the at-risk funds that would accrue to the district under SIM 4. Each district's proportion was based on the funds attributable to the add-on at-risk weights.

SIM 5 used the data from the per-pupil expenditures from the cost study to calculate the excess cost per pupil for at-risk programs on a district-by-district basis. For districts in the prototype state that were not

included in the cost study, the median excess cost was used. This constraint was necessary because excess cost data were not available for those additional districts which were required to make the prototype state more representative. (The magnitude of the differences in the various comparisons was most likely reduced by this selection of a central tendency measure.)

SIM 6 used the amount of funds granted to local school districts through the Arizona At-risk Pilot Project funded through the Arizona Department of Education. Under this discretionary grant program, funds were allocated to local school districts throughout Arizona based on the following demographic data: (a) districts serving economically depressed areas, (b) districts with high absenteeism, (c) districts with large numbers of limited English proficient students, and (d) districts with large numbers of students who fell below the 25th percentile in math, language, and reading on the state norm-referenced test.

Analysis of the Data

For purposes of analyzing the effects of different state funding options for at-risk programs, six simulations were conducted using data for a prototype state consisting of 36 school districts. The simulations were based on the funding strategies discussed above. The at-risk program weights developed in this project and the number of students in each program were used to calculate the simulated application of funding using a weighted pupil approach. In the following section, the distributive effect of the funding alternatives is discussed in terms of size, district type, property wealth per ADM, personal income per ADM, and geographic classification.

Findings

The intent of the research efforts was to respond to the following research question:

Based on a simulation of at-risk programs in prototype districts within a prototype state, how would fiscal resources be distributed among different types, sizes, and classifications of school districts utilizing the funding alternatives?

The results of the simulations provided information about the manner in which distributions would differ under the various alternatives if a fixed amount of state funds were allocated among the prototype school districts. In the analysis, attention was given to the potential benefits to different types of school districts; particular attention was given to the potential impact on different enrollment groups, incidence of "at-riskness," types of school districts (K-8, 9-12, and K-12), relative wealth as measured by primary assessed valuation per student, relative wealth as measured by personal income per student, and geographic location. (See Appendix G for a detailed discussion of the six simulations.)

Distribution of Funds by Total ADM. When districts were grouped in quartiles according to size by total ADM (Table VII.1), those districts in quartile 1 or the smallest school districts in the prototype state benefited most from an allocation of funds based on discretionary grants (Simulation 6) or an unadjusted index of need (Simulation 1). With 26.4% of the total state school population, they received 94.0% of the monies under discretionary grants and 69.7% of the monies under the unadjusted index of need. Those districts in the second quartile benefited most from the adjusted index of need (Simulation 2). With 28.3% of the population, they received 23.7% of the monies. Quartile 3 had an even distribution across Simulations 1 through 5, and benefits did not differ greatly from one alternative to another. However, Quartile 3 received no funds under Simulation 6. The last quartile or the largest district in the prototype state benefited most from equalized per-pupil allocations (Simulation 4). With 21.6% of the population, this district received 38.3% of the at-risk funds. In general, smaller districts benefited from some type of discretionary grants or index of need, and larger districts benefited from some type of categorical funding.

Distribution of Funds by Type of School District. When districts were grouped according to type (Table VII.2), elementary districts benefited most from the allocation of funds by discretionary grants (Simulation 6) or an adjusted index of need (Simulation 2). With 33.5% of the total population, they received 53.8% of the monies under discretionary grants and 36.4% of the monies under the adjusted index of need. High school districts benefited most from an unadjusted index of need (Simulation 1). With

Table VII.1

Percentage of State Aid Distributed to Districts in Prototype State, Grouped in Quartiles by Total ADM

Simulation	Quartile 1	Quartile 2	Quartile 3	Quartile 4
SIM 1	69.7	4.8	25.5	0.0
SIM 2	40.6	23.7	22.9	12.8
SIM 3	23.4	18.5	23.1	35.0
SIM 4	23.1	20.3	18.3	38.3
SIM 5	20.9	19.7	22.3	33.1
SIM 6	94.0	6.0	0	0
No. of Districts	26	6	3	1
% students	26.4	28.3	23.7	21.6

Table VII.2

Percentage of State Aid Distributed to Districts in Prototype State, Grouped by Type of School District

Simulation	Elementary	High School	Unified
SIM 1	32.9	25.5	41.6
SIM 2	36.4	19.0	44.6
SIM 3	27.3	15.4	47.3
SIM 4	28.4	8.9	62.7
SIM 5	27.3	14.9	57.8
SIM 6	53.8	0.0	46.2
No. of Districts	17	3	16
% students	33.5	15.3	51.2

15.3% of the total state school population, they received 25.5% of the allocated funds for at-risk programs and services. Unified districts benefited most from an equalized per-pupil allocation (Simulation 4). With 51.2% of the population, they received 62.7% of the allocated state monies.

Distribution of Funds by Primary Assessed Valuation per ADM. When districts were grouped in quartiles according to district property wealth (Table VII.3), those districts in Quartile 1 or the poorest property wealth districts benefited most from an allocation of funds based on discretionary grants (Simulation 6) or an unadjusted index of need (Simulation 1). With 7.8% of the population, they received 46.2% of the funds under discretionary grants and 37.3% under the unadjusted index of need.

Those districts in the second quartile benefited most from discretionary grants (Simulation 6) and the adjusted index of need (Simulation 2). With 19.1% of the population, they received 28.7% of the monies under discretionary grants and 20.1% of state monies for at-risk programs under the adjusted index of need.

Quartile 3 benefited most from an equalized per-pupil allocation (Simulation 4). With 50.5% of the population, they received 71.3% of the funds.

The last quartile, representing the wealthiest school districts according to property wealth, benefited most from the adjusted index of need (Simulation 1). With 22.5% of the students, they received 41.3% of the allocated state funds.

In this simulation discretionary grants also benefited poorer districts, but this was due to the criteria that the state used to distribute discretionary funds. The state used an index of need as a factor in determining how the grants were awarded. Thus, discretionary grants tended to have the same distribution pattern as the index of need.

Distribution of Funds by Personal Income per ADM. When districts were grouped in quartiles according to the personal income wealth of a district (Table VII.4), those districts in Quartile 1, or the poorest districts based on personal income, benefited most from an allocation of funds based on discretionary grants (Simulation 6) or an unadjusted index of need

Table VII.3
Percentage of State Aid Distributed to Districts in Prototype State, Grouped in Quartiles by Primary Assessed Valuation per ADM

Simulation	Quartile 1	Quartile 2	Quartile 3	Quartile 4
SIM 1	37.3	15.4	6.0	41.3
SIM 2	16.6	20.1	34.2	29.1
SIM 3	6.8	6.6	65.2	21.4
SIM 4	7.4	7.3	71.3	14.0
SIM 5	3.9	8.7	67.6	19.8
SIM 6	46.2	28.7	10.3	14.8
No. of Districts	9	9	9	9
% students	7.8	19.1	50.5	22.6

Table VII.4
Percentage of State Aid Distributed to Districts in Prototype State, Grouped in Quartiles by Personal Income per ADM

Simulation	Quartile 1	Quartile 2	Quartile 3	Quartile 4
SIM 1	40.1	15.7	18.0	26.2
SIM 2	17.2	15.6	33.3	33.8
SIM 3	8.2	6.0	51.8	34.0
SIM 4	9.0	6.6	56.6	27.8
SIM 5	5.4	7.8	54.7	32.1
SIM 6	48.0	31.2	11.5	9.3
No. of Districts	9	9	9	9
% students	8.0	11.6	43.6	36.8

(Simulation 1). With 8.0% of the total state school population, they received 48.0% of the monies under discretionary grants and 40.1% of the monies under an unadjusted index of need.

Those districts in the second quartile also benefited from discretionary grants (Simulation 6) as well as from both indices of need (Simulations 1 and 2). With 11.6% of the population, they received 31.2% of the monies under discretionary grants, 15.7% under the unadjusted index, and 15.6% under the adjusted index.

Quartile 3 benefited most from an equalized per-pupil allocation (Simulation 4). With 43.6% of the population, these districts received 56.6% of the allocated at-risk funds.

The last quartile, representing the wealthiest school districts according to personal income per ADM, benefited most from categorical (flat) grants (Simulation 3) and from an adjusted index of need (Simulation 2). With 36.8% of the population, they received 34.0% and 33.8% of the funds respectively. In this distribution, as in the previous one, poorer districts benefited most from discretionary grants and from the indices of need.

Distribution of Funds by Geographic Classification. When districts were grouped according to geographic location (Table VII.5), those districts in urban areas benefited most from the indices of need (Simulations 1 and 2). With 35.0% of the population, they received 48.9% of the monies under the unadjusted index of need and 42.0% of the monies under the adjusted index.

Suburban districts benefited most from an equalized per-pupil allocation (Simulation 4). With 52.1% of the total school population, they received 62.5% of the allocated funds.

Independent area districts and rural districts benefited from discretionary grants (Simulation 6). In addition, they both benefited from an unadjusted index of need. With 11.0% of the population, independent area districts received 34.9% of the allocated state funds under the unadjusted index. Rural areas, with 1.9% of the population, received 15.1% of the state monies allocated for at-risk programs and services under Simulation 1 (unadjusted index of need).

Table VII.5
Percentage of State Aid Distributed to Districts in Prototype State, Grouped by Geographical Classification

Simulation	Urban	Suburban	Indep. Area	Rural
SIM 1	48.9	1.1	34.9	15.1
SIM 2	42.0	33.1	19.7	5.2
SIM 3	31.8	58.1	7.4	2.7
SIM 4	26.5	62.5	8.1	2.9
SIM 5	32.8	60.5	4.5	2.2
SIM 6	25.3	0.9	50.5	23.3
No. of Districts	9	8	12	7
% students	35.0	52.1	11.0	1.9

A summary of the least and most preferred funding alternatives by distribution groups is shown in Table VII.6. Discretionary grants were not included in this table for two reasons. First, their distribution was an artifact of the criteria for awarding grants; secondly, they were the least preferred method given in the national survey discussed in Parts III and IV.

Summary

In reviewing the six simulations, several summary observations can be made. The indices of need tended to benefit poor districts; urban, rural, and independent area districts; and districts with small populations. The categorical (flat) grants tended to benefit wealthy, suburban, and unified school districts. Equalized per-pupil allocations and excess cost reimbursements tended to benefit large, moderately wealthy, suburban, and unified districts. Discretionary grants tended to benefit small, poor, independent area, and elementary districts, but this was primarily an artifact of the criteria used in Arizona for the distribution of grants.

Table VII.6

Most Beneficial and Least Beneficial Funding Alternative by Distributions

DISTRIBUTION BY:	GROUP	% TOTAL POP.	MOST BENEFICIAL	% DISTRIB.	LEAST BENEFICIAL	% DISTRIB.
SIZE OF DISTRICT	Q1 (smallest)	26.4	Unadjusted Index	69.7	Excess Cost	20.9
	Q2	28.3	Adjusted Index	23.7	Unadjusted Index	4.8
	Q3	23.7	Unadjusted Index	25.5	Equalized Weight	18.3
	Q4 (largest)	21.6	Equalized Weight	38.3	Unadjusted Index	0.0
TYPE OF DISTRICT	Elementary	33.5	Adjusted Index	36.4	Categorical/ Excess Cost	27.3
	High School	15.3	Unadjusted Index	25.5	Equalized Weight	8.9
	Unified	51.2	Equalized Weight	62.7	Unadjusted Index	41.6
WEALTH (PAV)	Q1 (poorest)	7.8	Unadjusted Index	37.3	Excess Cost	3.9
	Q2	19.1	Adjusted Index	20.1	Categorical Weight	6.6
	Q3	50.5	Equalized Weight	71.3	Unadjusted Index	6.0
	Q4 (wealthiest)	22.6	Unadjusted Index	41.3	Equalized Weight	14.0
WEALTH (PI)	Q1 (poorest)	8.0	Unadjusted Index	40.1	Excess Cost	5.4
	Q2	11.6	Indices of need	15.7 5.6	Categorical Weight	6.0
	Q3	43.6	Equalized Weight	56.6	Unadjusted Index	18.0
	Q4 (wealthiest)	36.8	Excess Cost	36.8	Unadjusted Index	26.2
GEOGRAPHIC LOCATION	Urban	35.0	Unadjusted Index	48.9	Equalized Weight	26.5
	Suburban	52.1	Equalized Weight	62.5	Unadjusted Index	1.1
	Independent area	11.0	Unadjusted Index	34.9	Excess Cost	4.5
	Rural	1.9	Unadjusted Index	15.1	Excess Cost	2.2

PART VIII

PROCEDURES FOR THE INTEGRATION OF FUNDING ALTERNATIVES

Findings

From a public policy perspective, concerns about alternative mechanisms for funding programs to serve at-risk youth include the extent to which an alternative can be integrated into the general state school support program and the extent to which it will contribute to equalization or disequalization. The review of the literature and research, and the various research activities in this project, were utilized in preparing the following discussion of procedures for integrating the options into the funding alternatives:

Competitive discretionary grants: The basic premise of competitive discretionary grants is that they will not be integrated into the state's school finance program, but will remain separate from both an administrative and funding perspective. An additional premise of this alternative is that all districts would not receive funds; therefore, this alternative could not be integrated into typical state school support programs. Further, the alternative likely would contribute to fiscal disequalization because larger and more wealthy districts are more likely to have the expertise and resources needed to compete for discretionary grants. However, the criteria used in awarding the grants can be altered to ensure that certain types of districts receive funds.

Special purpose categorical (flat) grants: This alternative could be integrated into typical state school finance programs as an add-on to the general state program; allocations would be the product of the per-pupil or per-unit value of the program times the number of eligible students in the program. However, traditionally by definition, flat grant funds are not fiscally equalized; the underlying premise is that funds per-pupil would be allocated on the basis of program standards or criteria associated with the grant.

Equalized per-pupil grants: This alternative could be easily integrated into the state school support program. The grants per eligible pupil would be included in the calculations of the local school district's

basic entitlement, and the local share would be subtracted from the total to determine the amount of state aid that the district would receive. One issue would be whether state regulations would require that the funds be expended on the pupils who generated them.

Personnel (classroom) unit allocations: Under this alternative, a fixed amount of funds would be provided for each approved personnel or classroom unit. This alternative could be easily integrated into the state school support program. Grants per unit could be included in the calculations of the local school district's basic entitlement; then the local share would be subtracted from the total to determine the amount of state aid that the district would receive. Given the tradition of unit funding, accountability likely would be high, and the district would be required to demonstrate that the personnel unit had been provided. Under this option, the state likely would have eligibility standards and units based on the type and number of pupils served, as well as standards for staffing patterns.

Excess cost reimbursements: The basic premise of excess cost reimbursements is that they will not be integrated into the state's school finance program, but will remain separate from both an administrative and funding perspective. An additional premise of this alternative is that districts will receive different amounts for similar services; therefore, this alternative could not be integrated into typical state school support programs. Further, even if only proportional reimbursement is provided, reimbursements likely would contribute to fiscal disequalization because larger and more wealthy districts are likely to spend more per unit of service, and therefore would have greater excess costs.

Index of need: This option could be incorporated into the state school finance program as an adjustment index on the district's total entitlement or could be calculated and disbursed separately. In the latter instance, each district would have a share of the total available funds; the share would be based on the district's index multiplied by the number of students in the district. Variables used in calculating the index could include a number of educational and socio-economic factors associated with at-risk students. Ensuring that the funds were used to serve the group that generated the funds would not be possible because individual students would not be required to determine funding calculations. However,

recipient local school districts could be required to demonstrate that the funds were used to provide programs and services for at-risk youth and that the funds were used to supplement not supplant current district programs.

Summary

The ease with which a funding alternative for at-risk programs can be integrated into an existing state school finance system is related to the extent to which the state's public policy goal for funding at-risk programs is congruent with the state's public policy goal for the state's overall school finance system. Integration of competitive discretionary grants does not appear feasible because the rationales for these grants are different from the basic premises for general state school finance systems. Excess cost reimbursements as a funding method also would be difficult to integrate because they also are based on a different set of premises. Both approaches assume differential treatment of students in similar circumstances.

Special purpose categorical grants and the index of need could be integrated; however, answers will be needed to the public policy question of whether the state funds to be allocated to school districts should be subjected to fiscal equalization calculations. If they are not to be fiscally equalized, their inclusion in most state school finance programs would be for administrative convenience. Of these two alternatives, the index of need would be more easily integrated.

The per-pupil and personnel (classroom) unit allocation alternatives could be easily integrated into most state school finance programs. The underlying premises for these alternatives are similar to the educational program components in most state school finance programs.

PART IX

EVALUATION OF THE FUNDING ALTERNATIVES

Introduction

Nationally, the interest in improving educational opportunities for "at-risk" students is high. This interest has recently been reinforced by the educational goals adopted by President Bush and the state governors (National Governors' Association, 1990); goals which, in part, directly target at-risk populations. For the future social well-being and economic growth of the nation, it is critical that these students be adequately educated (Levin, 1989; CED, 1987). The state, as the level of government with the primary responsibility for ensuring that each child has access to an adequate education, has a special interest in identifying alternative methods for allocating funds through the state funding formula to local districts to support programs and services for at-risk youth.

If state level policymakers wish to maximize the efficiency and effectiveness of need-based supplemental aid to at-risk youth, a procedural framework for evaluating alternative methods for the allocation of this aid might be helpful. This section looks at a variety of funding alternatives and evaluates them based on specific evaluation criteria.

Focus of the Activity

This activity focused on the evaluation of six funding alternatives based on a set of specified criteria. The following research questions were addressed:

What alternative methods could be selected for allocating state funds to local school districts to support programs and activities for at-risk youth?

How did these alternatives compare using the following accepted set of criteria for evaluating funding formulas: stability and predictability, adequacy, efficiency, accountability, equity, responsiveness, and non-manipulability?

Procedures

From the literature, six funding alternatives were selected to determine their applicability for funding programs for at-risk youth. Selection of the alternatives was based on: (a) their frequency of use in need-based funding mechanisms, and/or (b) their being preferred by state and national experts on at-risk programming and school finance.

In determining what elements to include in the evaluation, two topics were reviewed: Hartman's (1980) potential incentives and disincentives associated with need-based funding methods, and Jordan's (1989) school funding evaluation criteria. (See Part II for a discussion of both topics.)

Selection of Funding Alternatives

The following six alternatives were selected for analysis:

1. Equalized per-pupil allocations: These grants are per-pupil allocations within the general aid formula. Under an equalized foundation formula, the combined state and local funding per pupil from the guaranteed foundation program and the at-risk programs would be the same in all districts, but the state share would be higher in poorer districts and lower in wealthy districts (Sherman, 1987).

2. Index of need: This option is similar to the federal Chapter I model for education of the disadvantaged. Eligibility for funds and the measure of need are based on a number of educational and socio-economic factors associated with at-risk students. Individual students need not be identified for funding calculations. The index is a proxy for the magnitude of the problem in a given school district, rather than being a predictor of the number of students, or a count or listing of actual students (Arizona Department of Education, 1989).

3. Categorical (flat) grants: Funds per pupil are allocated on the basis of the programs in which the students are being served; the state prescribes program standards and per-pupil funding amounts for specific programs. This model resembles the pupil weighting system used to fund special education programs in several states (Benson, 1968).

4. Excess cost reimbursements: In this option, districts are reimbursed for the costs of providing special programs and services to the target group that are higher than the expenditures for regular pupils. Districts may be reimbursed for a percentage of the excess cost, or for the total excess cost of the program (Guthrie, Garms, & Pierce, 1988).

5. Personnel (classroom) unit allocations: A fixed amount of funds is provided for each approved personnel or classroom unit. Under this option, the state has eligibility standards for units based on the type and number of pupils served, as well as standards for staffing patterns. The state sets minimum and maximum class size and standards for staffing patterns (Hartman, 1980).

6. Competitive discretionary grants: School districts compete for funds by submitting a project proposal and an application supporting need, and giving assurances of compliance with state laws and regulations relative to the grant (Sherman, 1987). Assurances might include documentation of the target group to be served and a statement that grant monies would be utilized to supplement and not supplant current district programs.

Review of Existing Evaluation Criteria

In the school finance research literature, experience with funding for other educational programs suggests a set of criteria that could be used in evaluating alternative methods for allocating funds to programs for at-risk youth. Jordan (1989) discussed seven such criteria. They are:

1. Stability and Predictability
2. Adequacy
3. Efficiency
4. Accountability
5. Equity
6. Responsiveness
7. Non-Manipulability

Rather than having similar purposes, these criteria are designed to accomplish different public policy goals. (See Part II for a discussion of the criteria.) The ways in which they interact are illustrative of the various

interests that often merge in the political process leading to the enactment of legislation.

Criteria such as equity and adequacy can be classified as "justice-oriented" goals. They represent the desires of various public interest groups who seek fairness in the operation of the program. The desire that the program's funding level be responsive to changes and that funding levels be stable and predictable might be classified as "administrative" goals. These goals will be valued highly by local school district policymakers and administrators. Efficiency, accountability, and non-manipulability are "state-level management or control" goals designed to promote the effective use of funds and provide funding agencies with information about program accomplishments. State-level policymakers and program administrators will be advocates of these goals.

Hartman's (1980) analysis of incentives and disincentives of various funding formulas and Jordan's (1989) evaluation criteria provide a powerful decision model for policymakers when weighing alternatives for funding at-risk programs. The two methodologies have been combined in the following analysis of the effects of the selected funding alternatives.

Analysis of the Data

The evaluation of the six funding alternatives utilized a six by seven matrix design to analyze the options based on the seven specified criteria as outlined by Jordan (1989). The six funding alternatives were located on the horizontal axis of the grid and the seven evaluation criteria were placed on the vertical axis. Each cell provided a "+", "–" , or "±" score, and a written analysis was prepared of how each funding alternative measured against each criterion.

A content analysis of each criterion description was performed to identify sub-topic areas for each criterion. In addition, the incentives and disincentives in the Hartman (1980) analysis that were applicable to Jordan's seven criteria were coded and then incorporated into the content analysis. The analysis yielded 21 subtopic areas that were discussed in the written description and summarized in the evaluation matrix. (See Appendix H for subtopics of the seven evaluation criteria.)

Findings

The analysis of the six alternatives is summarized in the six by seven matrix in Table IX.1. The order of analysis follows the rank order reported in the national survey of preferred funding methodologies for at-risk programs (i.e., from most to least preferred).

Funding Alternative 1: Equalized Per-Pupil Allocations

This option provides *stable and predictable* funding, and *adequate* resources if the overall allocation is sufficient. As with unit allocations, it may penalize small districts if they do not have sufficient students to generate adequate monies to fund a program. This option is *efficient* in terms of specifically targeting the use of funds; however, it allows for a less direct program and fiscal planning process. Programs may be based on available dollars rather than on educational need.

Equalized per-pupil allocations encourage the labeling of pupils since funds are based on pupil costs. The option requires accurate data on the number of pupils served and may require great detail to determine the amount of time each pupil spends in a given program if full-time equivalent pupils are used in the formula. This option provides for *accountability* since funding requires identifying who is to be served. However, tracing funds to program expenditures is not required as in the cost-based options.

With regard to *equity*, equalized per-pupil allocations are the most equitable in terms of taxpayer equity because wealthier districts pay a greater share than poorer districts. However, it may not result in educational or student equity. Equalized allocations tend to penalize large urban districts with high property wealth and high at-risk needs. This option is *responsive* in that it could allow for a variety of different programs and services. However, a standard cost is required in order to assign an add-on weight for per-pupil allocation. This option is basically *non-manipulable* depending on accompanying rules and regulations.

Equalized per-pupil allocations do, however, provide an incentive to overclassify pupils since allocations are based on the number of students served. It also offers an incentive to keep children in programs since

Table IX.1
Summary Evaluation of Funding Alternatives*

EVALUATION CRITERIA	COMPETITIVE DISCRETIONARY GRANTS	UNIT ALLOCATIONS	EXCESS COST REIMBURSEMENTS	CATEGORICAL GRANTS	INDEX OF NEED	EQUALIZED PER PUPIL ALLOCATIONS
STABILITY AND PREDICTA-BILITY	— • Pilot/demonstration projects • Specified time period • May not be renewed	+ • Funds awarded based on qualified number of units	+ • Funds reimbursed for extra cost of providing special service	+ • Funds allocated based on number of students identified for services	+ • Funds allocated based on indicators of student need	+ • Funds allocated based on number of students identified for services
ADEQUACY	— • Funding narrowly targeted • Unserved and underserved target population	± • Adequate if funding level sufficient • Adequate if full reimbursement • Percentage reimbursement may penalize poorer districts	± • Adequate if funding level sufficient • Adequate if full reimbursement • Percentage reimbursement may penalize poorer districts	+ • Adequate if funding level sufficient	± • Adequate if funding level sufficient • Adequate if adjusted so all districts qualify	+ • Adequate if funding level sufficient
EFFICIENCY	+ • Pre-planned, specified program • Anticipated cost/ budget	— • Encourages traditional delivery modes • May encourage greater use of specialized personnel • Disincentive to mainstream • Can encourage minimum class size • Minimal data burden	— • Full reimbursement provides incentive to maximize costs • Percentage reimbursement may offer incentive for prudent use of funds • Detailed cost accounting required	± • Targeted use of funds • Programs may be based on available dollars rather than educational need • Incentive for labeling children • May encourage placement in higher reimbursement programs • Detailed cost accounting not required	+ • Provides resources based on single measure • Incentive for mainstreaming • Minimal data burden	± • Targeted use of funds • Programs may be based on available dollars rather than educational need • Incentive for labeling children • May encourage placement in higher reimbursement programs • Detailed cost accounting not required • Requires some district participation

*Ordered from least to most preferred, according to McDonough's (1990) survey.

table continues

Table IX.1 continued

EVALUATION CRITERIA	COMPETITIVE DISCRETIONARY GRANTS	UNIT ALLOCATIONS	EXCESS COST REIMBURSEMENTS	CATEGORICAL GRANTS	INDEX OF NEED	EQUALIZED PER PUPIL ALLOCATIONS
ACCOUNTABILITY	+ • Highly accountable • Program evaluation component • Pre-specified budget progress updates	+ • Able to track targeted use of funds to units	+ • High degree of accountability • Detailed cost accounting required • Direct connection between funding and expenditures	+ • Funds based on identified number of children • Not as easy to track targeted use of funds	— • Least ability to track monies to targeted population	+ • Funds based on identified number of children • Not as easy to track targeted use of funds
EQUITY (TAXPAYER)	— • Not equalized	± • Equitable if equalized	— • Not equalized • Benefits wealthier, suburban, unified districts	— • Not equalized	+ • Benefits poorer, smaller, urban, rural districts	+ • Equalized
EQUITY (STUDENT)	— • Limited target population • May not reflect distribution of problem	± • May penalize smaller districts due to lack of minimum number to qualify for unit	± • Equitable if total cost reimbursed; if not, may penalize smaller districts	+ • Provides fixed amount per identified student	+ • Monies targeted based on magnitude of the problem	— • May penalize smaller districts • May penalize high wealth/high need districts
RESPONSIVENESS	— • Possible only partial funds awarded • Not responsive to total state need	— • Limited flexibility • Disincentive for innovation	+ • Allows program flexibility to meet student needs • Allows updating of funding amounts as program changes occur	+ • Allows for program flexibility to meet student needs	+ • Highly flexible • Incentive for innovation	+ • Allows for program flexibility to meet student needs
NON-MANIPULABILITY	+ • Highly non-manipulable • Terms pre-specified	± • Less direct incentive to over-classify	± • Manipulable in terms of providing program and cost data • Disincentive for overclassifying	± • Basically non-manipulable • Incentive to overclassify	+ • Non-manipulable to degree that funding is based on socio-economic factors outside district control	± • Basically non-manipulable • Incentive to overclassify
TOTAL SCORE	+ = 3 ± = 0 − = 4	+ = 2 ± = 3 − = 2	+ = 3 ± = 3 − = 1	+ = 4 ± = 3 − = 0	+ = 5 ± = 1 − = 1	+ = 4 ± = 3 − = 0

dismissal results in loss of funding. A major weakness of this alternative is that those districts with the highest incidence of at-risk youth may not receive sufficient funds to provide the needed level of programs and services.

In summary, equalized per-pupil allocations scored positively on four of the seven evaluation criteria: stability and predictability, adequacy, accountability, and responsiveness. It also scored positively on some aspects of efficiency, equity, and non-manipulability. This option was the most preferred by state and national experts on programming and funding for at-risk youth.

Funding Alternative 2: Index of Need

This option provides a *stable and predictable* funding level and an *adequate* level if the overall allocation is sufficient and the index is adjusted so that all districts are able to qualify for some base level of funding. It is *efficient* in that it provides monies based on a single measure (the index) according to need, which offers an incentive to maximize resources. The data burden involved depends, in part, on the complexity of the index used. However, there is not an inherent requirement in this option for districts to identify students. This option maximizes mainstreaming since funding is not based on a "special class" unit. In terms of *accountability,* this option offers the least ability to track monies to the target group.

In terms of *equity,* it has the potential to maximize student equity since the monies are allocated based on the magnitude of the problem. The characteristics that are selected to determine the index, however, will affect the student equity issue. In terms of taxpayer equity this option tended to benefit poor, urban, rural, independent, and small districts; however, the index is not equalized.

With regard to *responsiveness* this option is probably the most flexible in being able to accommodate different types of programmatic needs. It does not inherently stipulate the programs to be funded. It is *non-manipulable* to the degree that funding is based on socio-economic indicators outside the school district's control.

The advantages of the index of need are that students do not have to be labeled to receive funds, it allows for maximum flexibility in

programming, and it has the potential for maximizing educational equity. Its primary disadvantage is the lack of accountability inherent in the funding mechanism. If an index of need were selected as the funding alternative, policymakers would want to build accountability measures into the rules and regulations.

In summary, the index of need meets five of the seven criteria. The only criterion receiving a minus score was accountability. For the adequacy criterion it has the potential of providing adequate funding if it is adjusted so that all districts are eligible to qualify for some level of funding.

Funding Alternative 3: Categorical (Flat) Grants

Funding is *stable and predictable* under this option because districts are assured of a given amount per pupil for those students identified as needing services. As long as the overall funding level is sufficient, categorical grants provide *adequate* fiscal resources. This option is *efficient* in terms of specifically targeting the use of funds. However, it allows for a less direct program and fiscal planning process. Programs may be based on available dollars rather than on educational need. It encourages the labeling of children, since funds are based on child costs. If there is a range of program services at various costs, this option may encourage placing students in higher reimbursement programs.

Categorical grants provide for *accountability* in that funds are based on the identified number of pupils; however, tracking actual individual pupil funding and expenditures is not required. Categorical (flat) grants do not meet the taxpayer *equity* criterion since they are not equalized. Districts receive a fixed amount per identified pupil regardless of their fiscal ability to provide the program. In terms of *responsiveness*, categorical grants may allow for great flexibility in programming depending on the accompanying policy rules and regulations. This option is basically *non-manipulable*, again depending on accompanying rules and regulations. It does, however, provide an incentive to overclassify since allocations are based on the number of pupils.

This funding alternative has great flexibility and offers multiple options through state incentives and regulations. Its drawbacks are that it necessitates the labeling of pupils to get services, and it puts a greater

burden on those districts who are poorer or in urban areas — districts that may also have the greatest number of at-risk youth to serve — unless the funding level is sufficient to pay the full cost.

In summary, categorical per-pupil allocations scored positively on four of the seven evaluation criteria: stability and predictability, adequacy, accountability, and responsiveness. The option scored positively on student equity but not taxpayer equity. It was most favored by state school finance officers (possibly because of its flexibility and the level of state control through rules and regulations) and least preferred by the liaisons of The Council of Great City Schools (possibly because urban districts tend to benefit less).

Funding Alternative 4: Excess Cost Reimbursements

This funding option provides *stable and predictable* funding, and if the overall funding level is sufficient, it provides *adequate* fiscal resources if the total excess cost is reimbursed. If a percentage of the total cost is reimbursed it may penalize poorer districts who could not provide the local contribution. It does not meet the *efficiency* criterion on two counts: cost containment and data burden.

This option does require detailed accounting to document the cost of the program. If a percentage of the excess cost is reimbursed this may offer an incentive to keep costs down since districts are contributing; however, if the total excess costs are reimbursed there is no incentive inherent in this option to require the prudent use of fiscal resources.

This alternative allows for a high degree of *accountability* because of the detailed cost accounting required. This option provides the most direct connection between funding and expenditures.

Excess cost reimbursements do not meet the *equity* criterion for taxpayer equity because funds are not equalized. In terms of student equity, this option would meet educational needs if the total excess costs were reimbursed. This option meets the *responsiveness* criterion because it allows for the flexibility of different program options. It also allows for updating of funding amounts as changes in programs occur. It can be *manipulable* in terms of providing student and program data. This option provides little incentive for overclassifying students.

In summary, the excess cost alternative meets three of the seven evaluation criteria: stability and predictability, accountability, and responsiveness.

Funding Alternative 5: Unit Allocations

This option provides *stable and predictable* funds to districts, since funds are allocated based on the needed number of units and an assumption of continued funding. It fulfills the *adequacy* criterion as long as the overall funding level is sufficient and the full unit amount is funded. If a percentage is reimbursed, it may penalize poor districts who could not provide the local contribution.

Unit allocations may be *inefficient* because they can encourage traditional delivery modes. They encourage organization in terms of teachers and classrooms rather than in terms of services. The personnel formula may bias toward greater use of certified personnel, which would have a marked impact on program costs. Many model at-risk programs provided services through low-cost or no-cost personnel (i.e., paraprofessionals, volunteers, peer-tutors).

Unit allocations are *accountable* because funds can be tracked to expenditures. Unit allocations are *equitable* in terms of taxpayer equity if equalized. They may penalize smaller districts because these districts may not have the minimum number of students to qualify for a unit. *Responsiveness* to the needs of districts may be limited because this alternative does not encourage flexibility and innovation in programming since approved units are pre-specified.

This option is primarily *non-manipulable* because there are specified standards for what constitutes a unit. It also offers less direct incentive to overclassify students since a unit is awarded on the basis of a minimum class size. As class size reaches the maximum, however, it may encourage identification of additional students in order to secure an additional unit.

Given the wide variation of needs and delivery strategies used in at-risk programs, this particular funding option has several limitations. It may tend to encourage conventional, non-integrated approaches to service delivery. It may also encourage the use of specialized certified personnel since it is the teacher or unit that is funded. This would have a direct

impact on the cost of providing services for at-risk students. Many at-risk programs utilize low-cost personnel. If unit allocations were selected as a funding mechanism, policymakers would want to encourage flexible staffing patterns.

In summary, unit allocations scored positively on three of the evaluation criteria: stability and predictability, adequacy, and accountability.

Funding Alternative 6: Competitive Discretionary Grants

This alternative does not allow for *stability and predictability*, as districts may not be assured that funding will continue. Discretionary grants often fund demonstration or pilot projects for a specified duration. Once funding stops, districts either must look for other sources of funding or must subsume the cost of the program. When neither of these may be feasible, programs may be discontinued and those requiring their services are left underserved or unserved.

With regard to *adequacy*, discretionary grants typically are not sufficient to meet the total state needs of a targeted population. These grants are usually an initial method for funding a target population. When there are no definitive answers on what types of programs and services to provide or the costs of such programs, and when fiscal resources are scarce, discretionary grants are a means for states to gather data and determine future policy regarding the targeted population.

Discretionary grants are *efficient* in that they specify the amount and duration of funds to be received. There is a written agreement between the grantor and the grantee as to how funds will be utilized. *Accountability* is one of the advantages of discretionary grants. Most require an evaluation component to document the programs impact. Status and budget reports demonstrate that funds are being spent on the target group. Discretionary grants are not equitable for the following reasons: (a) they may be awarded based on criteria that do not reflect the distribution of the problem; (b) a district may be awarded a grant because it has the necessary personnel and/or expertise to write a proposal, rather than as a result of a high incidence of need; and (c) grants may be awarded based on limited criteria so that only some districts would be eligible to apply. Typically, with

discretionary grants, only a small percentage of the population needing services receives them. Grants may or may not be *responsive* to local program needs, depending on the requirements of the grant. They are not responsive to the total state need since they are selective. Discretionary grants are *non-manipulative* in that programming and funding are pre-specified.

In summary, discretionary grants scored positively on three of the seven evaluation criteria. They are efficient, non-manipulable, and provide a high degree of accountability.

They do not meet the criteria for being responsive, stable and predictable, adequate, or equitable in meeting a state's at-risk needs. Discretionary grants seem most appropriate as an initial data gathering effort to determine future policy and not as a means of meeting the needs of the state's at-risk population. In the national survey, this option was the least preferred alternative among state and national experts on programming and funding for at-risk youth.

Summary

The six primary funding alternatives appear to be viable options for allocating state fiscal resources for programs and services for at-risk youth. The simulations indicated that the two most preferred methods of funding at-risk youth, according to the national survey, tended to benefit very different types of districts. The preferred alternative in the survey, an equalized per-pupil allocation, benefited large, moderately wealthy, suburban, and unified school districts. The survey's second most preferred funding option, an index of need, benefited small, poor, urban, rural, elementary, and high school districts.

An evaluation of the efficacy of the alternatives using Jordan's (1989) and Hartman's (1980) evaluation criteria scored the index of need highest, followed by the equalized per-pupil allocation and the categorical grants. Accepting the underlying assumption that the at-risk dilemma can best be resolved by the state's facilitating dynamic, innovative approaches to programming, several possible policy directions were identified that would maximize local innovation and decision-making.

As the highest rated alternative, the index of need scored positively on five of the criteria: stability and predictability, efficiency, equity, responsiveness, and non-manipulability. For the adequacy criterion, it has the potential for providing adequate services if it is adjusted so that all districts are eligible to qualify for some level of funding. The advantages of the index of need are that students do not have to be labeled to receive services, it allows for maximum flexibility in programming, and it has the potential for maximizing educational equity.

Its primary disadvantage is the lack of accountability inherent in the funding mechanism. If an index of need were selected as the funding alternative, policymakers would want to build accountability measures into the rules and regulations. Process and product measures can be used to determine the effectiveness of local programs. An additional disadvantage is that the index does not provide the types of information required to prepare and justify budgetary requests from a legislative body.

One of the conceptual challenges in the use of the index of need is identifying the variables to be used in developing the index. There is probably no single best indicator or set of indicators for all states. Each state would need to determine what set of indicators best reflect the need in its unique set of circumstances. Rather than summing "Z scores" for variables as in the example, an alternative would be to use canonical correlation to develop the index. This statistical technique would permit the use of multiple dependent and independent variables to predict each district's level of at-riskness.

The findings from this research activity support state policies that provide local school districts with flexibility in designing and delivering programs for at-risk youth to encourage diversity and innovation in local programs. The challenge is to select a funding alternative that facilitates attainment of this goal. This study and the related research support the following observations concerning the selection of a funding alternative:

1. Since at-risk programs are still in an evolutionary state, program evaluation data are limited and variations in delivery and cost of programs are so great, selection of a per-pupil weight, even based on a median, may be premature. This is particularly true in the

absence of studies on the cost effectiveness of alternative delivery systems.

2. Waiting until there is consensus that the research base is adequate before selecting a method of funding may not be prudent. The social and economic cost to society for ignoring at-risk students may be too great.
3. If the goal is to ensure that all eligible students receive adequate services, using a fiscally-equalized funding approach may be counter-productive. Equalized options tend to penalize property-wealthy inner-city districts that often have the highest incidence of at-risk youth. Thus, the local burden to provide programs and services would be disproportionate.
4. If the public policy goal is to target resources on those districts with the greatest need and to encourage local creativity in addressing the problem, the index of need appears to be the preferred funding alternative based on the findings of the simulation study.

Programmatically, the index of need has certain advantages. First, this option does not require the labeling of children in order to obtain funding to serve them. Second, it does not inherently promote rigid stipulations for the delivery of services in order to receive funds. Thus, it maximizes a district's flexibility to explore programs that best match fiscal resources to identified student needs.

PART X
POLICY ISSUES AND RESEARCH RECOMMENDATIONS

This part consists of two sections. The first part includes a set of policy issues related to the development of funding options for at-risk programs, and the second lists recommendations for further research that have been identified during this research project.

Policy Issues

As policymakers consider the adoption of various alternatives for funding programs to serve at-risk youth, concerns likely will be raised about different program issues such as the target group and types of programs. The purpose of this discussion is to address a series of policy questions related to the development of state at-risk programs. The review of the literature and research on at-risk programs and services, findings from the national survey, and additional data from the cost study and the simulation constitute the knowledge base used in answering the following questions:

1. *Who should be in the target group?* The majority of the 50 states do not have official definitions of at-risk youth. Comprehensive definitions should include both academic performance criteria and the socio-economic characteristics of at-risk youth. Efforts to be definitive in describing who should be in the target group for at-risk programs are frustrated by the lack of agreement on a definition of at-risk youth as illustrated by the diversity of social, demographic, and educational conditions associated with a student being classified as currently or potentially at risk. Attaining agreement on precise criteria for identifying at-risk youth also is exacerbated by the variations in conditions among schools and school districts that result in a child being considered at-risk.

One critical decision about identification of the target group for at-risk programs is whether to serve all students who are potentially at-risk, or to limit the programs to students at certain age/grade levels. For example, the most visible problems typically are found in the senior high schools, but the most effective corrective actions can be taken earlier or even

before the child attends school. Therefore, one critical issue is whether the schools should use limited resources to address the problem in the early school years or focus attention on high school youth. If early intervention to reach youth at-risk is deemed critical, this suggests that program development be focused to provide children with early and sustained success in school. However, if at-risk programming is targeted at pre-school and K-3 children, the needs of a decade of school-aged youth who are beyond that program focus may be neglected.

The concept of a target group assumes the capacity of the school district to identify students as being at-risk. Criteria for the identification of students and the allocation of funds based on target group/program criteria can offer an incentive for the district to classify students into programs so that the district's benefits from state funding may be maximized. This may be a legitimate concern because experts are in general agreement that certain special education funding mechanisms do not provide sufficient incentives for districts to assign students to the regular classroom. Programs do not encourage districts to terminate a student's participation in a program that the student no longer needs.

Target group decisions can be made at different levels. National criteria can be adapted to local conditions, and identification criteria such as those discussed previously might be considered. At least two options can be used to identify the target group. First, the state legislature or state board of education can adopt a top-down stance and impose target group criteria upon local school districts. Second, given the diversity of conditions associated with a student being at-risk, responsibility for identifying students to be served can be delegated to the local school district.

Of the six funding alternatives, only the index of need would not require the identification of a target group of students to calculate the funds that the district would receive from the state.

2. *What kinds of program delivery systems should be funded through the state school finance system?* The findings from this project indicate that the most prevalent programs had an academic focus and were delivered either in a class or small group. Research about "what works" in programs for at-risk youth is limited; therefore, state program restrictions and prescriptions may not be advisable because of the lack of an

information/research base about programs for at-risk youth. (No effort was made in this project to evaluate program effectiveness.)

The choice of a delivery system and the role of the school become more complex when consideration is given to the numerous factors outside the school environment that place youth at-risk. To address these problems, programs that focus on the socio-emotional and the family/parent situation seem most appropriate. Since socio-emotional and parent/family issues are largely beyond the control of schools, consideration might be given to working with other public service agencies to establish cooperative at-risk programming.

3. *Should at-risk funding to local school districts be fiscally equalized as in typical state school finance programs, or should funds be allocated solely on the basis of educational need as under the federal Chapter1 program for the education of the disadvantaged?* The majority of the 50 states do not specifically fund for at-risk youth, but do fund programs targeted at specific portions of the at-risk population. The findings from the national survey were not definitive; respondents advocated that states consider general funding for their at-risk population through an equalization formula and also that funds be distributed outside of the general state aid program. Findings and conclusions from the simulation and the evaluation of funding alternatives suggested that state funds be allocated solely on the basis of educational need to increase the probability that services will be provided to eligible students.

4. *Should the money be spent on the student who generated the funds to ensure service?* Under all funding alternatives except the index of need, funding could follow the student if the rules and regulations indicate that funds are to be expended on the student who generated the funds. One of the dilemmas with strict adherence to the principle of the funds following the child is that funding levels for programs may be insufficient in some instances and more than sufficient in others; consequently, school districts need flexibility in the use of funds.

5. *What types of outcome measures should be required?* Outcome measures might include reductions in the dropout rate, increased attendance, reductions in discipline referrals, and increased performance on standardized tests. However, given the current status of programs for

these youth, the simplest and most relevant outcome measures may be to utilize the criteria used in identifying the students to be served and measure changes in students in terms of the original criteria. Pre- and post-program data will provide information concerning changes during the course of the program.

Recommendations for Further Research

The following recommendations for further research are based upon the findings of this study and the review of related research:

1. Programmatic evaluations of at-risk programs should focus on the cost-effectiveness and impact of different delivery arrangements on student outcomes.
2. As programs become better defined, further cost studies need to be conducted to determine the necessary resources to provide such programs.
3. Additional research needs to be undertaken to refine the concept of an index of need. Issues for research include: (a) identifying the optimal set of indicators that most closely mirror the distribution and magnitude of the educational need of the at-risk population and (b) identifying the most appropriate statistical technique for calculating the index.
4. The relative merits of making allocations to individual schools should be compared with the merits of making allocations to school districts to determine if school-based allocations provide a better match of fiscal resources with the actual incidence of educational need without imposing excessive administrative burdens on local school districts.

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APPENDIX A

Definition of Terms

Definition of Terms

The following definitions apply to the terms used in this project:

Academic Focus: An educational program consisting of regular academic subjects (Roberts, 1990).

Alternative Program Strategies: Programs in which instruction is provided in an environment different from the context of the regular school (Roberts, 1990).

Alternative Programs: Programs for students with special needs conducted outside the regular school structure (Orr, 1987a).

Assessed Valuation: The taxable value of property derived by applying the appropriate percentage as provided in A.R.S. §42-227 to the full cash value or limited property value, whichever is applicable, of the property (A.R.S. §15-101, 1985).

At-Risk Students: For elementary pupils, those students who "are currently experiencing significant academic difficulty in school as judged by criterion-referenced tests, standardized test performance, and/or teacher report or who have identifiable characteristics, recognized as decreasing the likelihood of their succeeding in school;" for secondary level pupils, "those students who have dropped out or who have identifiable characteristics, including academic and economic factors, which are recognized as increasing the likelihood of their dropping out of the educational system" (Morrison Institute for Public Policy, 1989, p. 20).

Average Daily Membership: The total enrollment of fractional students and full-time students, minus withdrawals, of each school day for the current year (A.R.S. §15-901, 1985).

Categorical Grants: Grants to school districts to support particular programs or activities; they are a means by which state governments seek to influence local district operations (Benson, 1968).

Category: A term used to refer to values of a variable that can yield more than two discrete, noncontinuous scores (Glass & Hopkins, 1984).

Class Delivery: Programs in which instruction or experiences take place in a regular classroom setting (Roberts, 1990).

Class: A group consisting of 12 or more students (Roberts, 1990).

Cluster: A grouping of variables that designate the particular categories contained within the group (Roberts, 1990).

Competitive Discretionary Grants: Funds for which school districts compete by submitting an application supporting need, providing a "program plan" (which is reviewed and ranked by the funding agency), and giving assurance of compliance with state laws and regulations relative to the grant (Sherman, 1987).

Content Analysis: A research technique for the objective, systematic, and quantitative description of the manifest content of communication (Borg & Gall, 1974).

Cost: The total dollar amount of a given program or unit of operation for a program (Hartman, 1988).

Council of Great City Schools Legislative Liaisons (CGCS): Individuals who represent the interests of "Great City Schools" to their respective state legislatures and the U. S. Congress. These individuals comprised one of the four groups in the survey population of this study (McDonough, 1990).

Elementary School District: A school district that encompasses grades kindergarten through eight. In Arizona, this type of district is denoted by the state processing code as type 03 or 04 (A.R.S. §5-901, 1985).

Equalized Per-Pupil Grants: Per-pupil allocations within the general aid formula. Under an equalized foundation formula, the combined state and local funding per pupil from the guaranteed foundation program and the at-risk programs would be the same in all districts, but the state share would be higher in poorer districts and lower in wealthy districts (Sherman, 1987).

Excess Cost Funding: A funding system under which districts account for special program expenditures, deduct state-defined costs of educating normal students, and receive state reimbursement for all or a portion of the extra costs (Guthrie, Garms, & Pierce, 1988).

Formula Funding Adjustments: A grant to a local school district, the amount of which is determined by the legislated state aid formula (Sherman, 1987).

High School District: A school district that encompasses grades 9 through 12. In Arizona, this type of district is denoted by the state data processing code as type 05 (A.R.S. §15-901, 1985).

Independent School District: School districts in a population center that is outside an urban area and contains a population of at least 2,500. Each independent area contains a Census Designated Place and includes an incorporated or unincorporated settlement (Bureau of the Census, 1982).

"Index of Need" Entitlement Allocations: A funding option similar to the federal Chapter I model for education of the disadvantaged. Under the index of need, eligibility for funds and the measure of need are based on a number of educational and socio-economic factors associated with at-risk students. Individual students need not be identified for funding calculations. The index is a proxy for the magnitude of the problem in a given school district, rather than a predictor of the number of students or a count or listing of actual at-risk students (Arizona Department of Education, 1989).

Integrated Program Strategies: Programs within the regular classroom that involve the use of resource teachers and/or instructional assistants to provide at-risk students with increased one-to-one instruction (Roberts, 1990).

Interventions: Specifically focused activities aimed at reducing a student's degree of at-riskness (Roberts, 1990).

Local Educational Agency (LEA): Local school district.

National Experts (NE): Individuals who are recognized as experts in school finance and/or at-risk programming and have done research and been published on those topics. These individuals comprised one of the four groups in the survey population of this study (McDonough, 1990).

Non-Integrated Program Strategies: Pull-out programs in which students attend a block period of classes as a self-contained unit (Roberts, 1990).

One-to-One Delivery: Program delivery in which the student interacts with another adult or student on a one-to-one basis (Roberts, 1990).

Parent/Family Programs: Educational programs designed to promote parent/family involvement and understanding (Roberts, 1990).

Per Capita Personal Income: The average income generated by wage earners (Arizona Department of Education, 1988).

Personal Income Per ADM: The total personal income of the school district divided by the average daily membership for that district.

Personal Income: Personal income reported in the "Test Print of Data" from the 1980 Census School District File as household income. Data are estimates calculated by the Census Bureau (Bureau of the Census, 1982).

Personnel (Classroom) Unit Allocations: A fixed amount of funds for each approved personnel/classroom unit. Under this option, the state has standards for the type and number of pupils served, as well as standards for staffing patterns (Hartman, 1980).

Primary Assessed Valuation (PAV): The valuation of property derived by applying the appropriate percentage as provided in ARS 42-227 to the full cash value, or limited property value, of the property (ARS 15-101).

Program Cluster: Groupings of at-risk program variables based on program focus, program strategy, and program delivery (Lyons, 1990).

Program Delivery: Groupings of the cohort size used in a specific program: classroom, small group, or one-to-one (Lyons, 1990).

Program Focus: The instructional content of the program: academic, socio-emotional, parent/family, or vocational (Roberts, 1990).

Program Funding: The method(s) a state uses to specifically fund at-risk programs (Lyons, 1990).

Program Strategy: The instructional mode used in the program: integrated into traditional classroom activities, non-integrated, or alternative modes outside the classroom (Roberts, 1990).

Program: A type of educational delivery system that involves a designated input configuration for the delivery of educational services (Chambers & Hartman, 1981).

Public Funds: Funds which come from foundation grants, philanthropic organizations, private businesses, and private organizations (Roberts, 1990).

Pull-Out Programs: School programs for students with special needs conducted within the school but outside the regular classroom setting (Orr, 1987a).

Purposeful Sampling: The method of sampling in analytic induction in which particular subjects are included because they are believed to facilitate the expansion of the developing theory (Bogden & Biklen, 1982).

Rural Area: Areas outside of urbanized areas. They may consist of farmland, countryside, forested lands, or settlements of less than 2,500 inhabitants (Cox, 1985).

Rural School District: School districts in rural areas outside of urbanized areas. Rural areas may consist of farmland, countryside, forested land, or a settlement of fewer than 2,500 (Schultz & Kasen, 1984).

School District: A political subdivision of a state that has geographic boundaries organized for the purpose of the administration, support, and maintenance of the public schools (A.R.S. §15-101, 1985).

Small Group Delivery: Programs in which instruction or experiences take place in a small group, typically fewer than 12 students (Roberts, 1990).

Socio-Emotional Focus: An educational program consisting of experiences such as personal counseling, career guidance, and social skills development (Roberts, 1990).

Socio-Emotional Programs: Educational programs consisting of experiences such as personal counseling, career guidance, and social skills development (Roberts, 1990).

Special Purpose Categorical (Flat) Grants: Funds allocated per pupil on the basis of the programs in which the students are being served; the state prescribes program standards and per-pupil funding amounts for specific programs. This model resembles the pupil weighting system used to fund special education programs in several states (Benson, 1968).

State Coordinators of Dropout Prevention (SCDP): Individuals in state departments of education and local school districts responsible for dropout prevention programming. These individuals comprised one of the four groups in the survey population of this study (McDonough, 1990).

State School Finance Officials (SFO): Individuals in state departments of education in charge of administration of the state school funding formula. These individuals comprised one of the four groups in the survey population of this study (McDonough, 1990).

Suburban Area: The suburban area or urban fringe is the closely settled area which surrounds and is contiguous with a major central city and is within an urbanized area (Bureau of the Census, 1986).

Suburban School District: School districts within a closely settled area which surrounds and is contiguous with a major central city and within an urban area (Bureau of the Census, 1982).

Survey Population: National experts, state school finance officials, state coordinators of dropout prevention, and Council of Great City Schools legislative liaisons (McDonough, 1990).

Survey Sample: For the purpose of this study, those individuals who responded to the questionnaire in the study (McDonough, 1990).

Unified School District: A political subdivision of the state that offers instruction to students for grades kindergarten through twelve or grades one through twelve (A.R.S. §15-901, 1989).

Urban Area: A statistical standard used by the Bureau of Census to identify the central economic and population center within a standard metropolitan statistical area (Bureau of the Census, 1982).

Urban School District: A school district located within the central economic and population center in a standard metropolitan statistical area (Bureau of the Census, 1982).

Variable: A quantitative expression of concept that is inferred from observed phenomena (Borg & Gall, 1989).

Vocational Education Programs: Educational programs designed to make students aware of occupations and provide students with entry-level job skills (Roberts, 1990).

Vocational Focus: An educational program designed to make students aware of occupations and provide students with entry-level job skills (Roberts, 1990).

Weighted Pupil: A funding system under which an amount of money is provided for each child equal to the regular per-pupil reimbursement times a factor; the result is a per-pupil funding amount (Hartman, 1980).

APPENDIX B

Survey Questionnaire

AT-RISK PROGRAMMING
FOCUS, DELIVERY AND FUNDING QUESTIONNAIRE

The increase in the numbers of students identified as at-risk and the potential human, social and economic cost associated with student drop-outs has resulted in a high level of interest in programs and special funding for these youth. The purpose of this study is twofold. The first purpose is to survey state and local school officials and program directors to determine their attitudes toward and opinions about the focus, delivery and alternative methods of financing at-risk programs. The second purpose is to determine the current types of at-risk programs, their focus, and the method used by the state in funding the programs.

There is no universal definition of at-risk students, but they are the students who typically do not benefit from conventional school practices. A synthesis of the literature indicates that at-risk youth generally have one or more of the following characteristics or indicators.

a. are from homes in which the income is below the poverty level

b. are chemically dependent

c. are frequently in detention or under suspension

d. have a poor attendance record

e. demonstrate a dislike for school

f. receive poor grades

g. have undiagnosed learning disabilities or emotional problems

h. are older than their peers

i. become pregnant and

j. have language difficulties.

The more characteristics an individual youth possesses, the greater that youth's risk of not graduating from high school.

With this general discussion of the goals of this survey in mind, thank you for taking time to complete this questionnaire.

At-Risk Program
Focus, Delivery and Funding Questionnaire

For each of the following statements, circle the number which best represents your position. Please use the following scale to indicate your response to each item.

1 Strongly Agree (SA)
2 Agree (A)
3 Neither Agree or Disagree (N)
4 Disagree (D)
5 Strongly Disagree (SD)

	SA	A	N	D	SD
1. The preferred target group of youth for at-risk programs should be:					
early intervention with pre-school children	1	2	3	4	5
K-3 children	1	2	3	4	5
intermediate school youth (grades 4-6)	1	2	3	4	5
junior high school youth (grades 7-9)	1	2	3	4	5
high school youth (grades 10-12)	1	2	3	4	5
local school district discretion in determining target group	1	2	3	4	5
2. The primary focus of programs for at-risk youth should be on:					
academic remedial programs	1	2	3	4	5
socio-emotional support programs	1	2	3	4	5
vocational education programs	1	2	3	4	5
parent/family support programs	1	2	3	4	5
3. The majority of at-risk students are best served by:					
mainstreaming in regular classrooms	1	2	3	4	5
"pull-out" programs outside the regular classrooms	1	2	3	4	5
off-campus alternative programs	1	2	3	4	5
4. At-risk programs should concentrate on a limited number of high need students.	1	2	3	4	5
5. At-risk programs should be available to all students as needed.	1	2	3	4	5
6. Program funds for at-risk students should be:					
allocated to the individual school based on the estimated number of at-risk youth at each particular school site.	1	2	3	4	5
included in the state funding formula and equalized to provide more funds per pupil to poorer school districts.	1	2	3	4	5
provided through unequalized categorical grants.	1	2	3	4	5

		SA	A	N	O	SD
7.	With limited funds, at-risk program funds should be:					
	shared among all districts on the basis of the number of at-risk youth in the school district	1	2	3	4	5
	targeted to districts with high concentrations of at-risk youth	1	2	3	4	5
	distributed through an equalization formula to provide more funds per pupil to poorer school districts	1	2	3	4	5
8.	State funding programs should require:					
	cooperative agreements between school districts to provide programs	1	2	3	4	5
	school districts to develop programs in cooperation with other public service agencies	1	2	3	4	5
	school districts to develop programs in cooperation with private social service agencies	1	2	3	4	5
9.	In districts where the percentage of at-risk youth is higher than the state average, the per pupil payment per at-risk youth should be higher	1	2	3	4	5
10.	State funds should be allocated for specific state approved programs and activities for at-risk students	1	2	3	4	5
11.	In districts with significant numbers of at-risk youth, additional state funds per youth should be allocated	1	2	3	4	5
12.	In view of the different needs of at-risk youth, the state should make special provisions for funding these programs, i.e., fund them outside of the general state aid program	1	2	3	4	5
13.	School districts should be required to demonstrate that they have used state at-risk funds to support district programs for at-risk youth	1	2	3	4	5
14.	School districts should be required to demonstrate that state funds for at-risk youth are used to supplement existing programs	1	2	3	4	5

Rank the following from "1" to "6" in priority order as the preferred state funding for at-risk programs:
(Use "1" as the top priority; use each rank number only once.)

	RANK
competitive discretionary grants to applicant school districts from the state educational agency	☐
special purpose categorical grants to all school districts with eligible students	☐
reimbursement to local school districts for **"excess costs"** required to educate at-risk youth	☐
allocations in the general state aid program based on the **predicted number of at-risk youth** in the school district (i.e., entitlement as under federal chapter 1 program)	☐
weighted pupil allocations in the general state aid program based on the number of at-risk youth in specific programs in the school district	☐
allocations of **personnel (teacher) units** in the general state aid program based on the number of at-risk youth in specific programs in the school district	☐

Please answer the following questions about at-risk programming in your particular state.

1. Does your state have an official definition for at-risk youth?

   ☐ YES ☐ NO

   If yes, what is that definition?

2. Does your state currently fund at-risk programs?

   ☐ YES ☐ NO

   If yes, what are the current provisions for your state's at-risk programs?

3. Please provide copies of the statutory provisions, state regulations and legal citations for your state's at-risk programming.

Would the individual completing this questionnaire please provide the following information.

Name _____

Title _____

Address _____

Daytime telephone _____

Please return to:

K. Forbis Jordan
College of Education
Division of Educational Leadership and Policy Studies
Arizona State University
Tempe, Arizona 85287-2411

APPENDIX C

State Definitions of At-Risk Youth

State Definitions of At-Risk Youth

ALABAMA	An at-risk youth is defined as one who is in danger of dropping out of school before graduation. The state does not specifically fund for at-risk programming.
ALASKA	At-risk students are those who are not acquiring the knowledge, skills, and attitudes necessary for success in their next level of schooling; skills which will enable responsible citizenship, and/or productivity and personal fulfillment. The state does not specifically fund at-risk programming; it does fund programs that are targeted at students who would be considered at-risk. Examples include: suicide prevention project, summer school, life skills curriculum, and a talent bank.
ARIZONA	At-risk youth are defined as those students who have dropped out or who have identifiable characteristics, including academic and economic factors, which are recognized as increasing the likelihood of their dropping out of the educational system. Through two competitive grant programs, the state is funding 55 at-risk pilot projects throughout the state. Three million dollars annually is targeted to K-3 projects; $1.5 million is targeted to secondary level at-risk pupils and dropout prevention programs.
ARKANSAS	At-risk children are those enrolled in school or eligible for enrollment whose progress toward graduation, school achievement, or preparation for employment and futures as productive workers and citizens is jeopardized by a variety of health, social, educational, familial and economic factors. They are the children with special needs who are

underserved, categorized, ignored, and unchallenged and for whom expectations are low.

The state does not specifically fund at-risk programs.

CALIFORNIA

At-risk students may be described as pupils who are victims of extenuating circumstance and/or are exhibiting behaviors which result in participation in gang activities. These circumstances and behaviors may include child abuse, poverty, inadequate housing, inadequate nutrition, delinquency, absenteeism, and alcohol and drug abuse.

The state currently funds programs that are targeted at various segments of the at-risk population. Programs include: pupil dropout prevention with a proposed 1990-91 budget of $11.7 million and a tobacco use prevention program with a proposed 1990-91 budget of $32.6 million.

COLORADO

The state has no official definition for at-risk youth; however, the state has identified a series of factors which increase a youth's at-riskness. The state is targeting its at-risk efforts in the development of pre-school services for four- and five-year-old children who are in need of language development.

Funding of programs is through competitive discretionary grants.

CONNECTICUT

Connecticut defines youth at risk as those who are in danger of academic failure or dropping out of school.

The state provides funds for at-risk youth through the state funding formula by a weighted pupil count. Additionally, the state employs an index of need to target funds to districts with a high percentage of at-risk youth. Need is determined by the number of students in a district who score at or below the remediation level on state achievement tests. The state also funds some programming through categorical grants. The total state

expenditure for at-risk programs is approximately $7 million.

DELAWARE

The state has no official definition for at-risk youth. Within a particular legislated program titled "Children-at-risk Intervention Program," at-risk youth are defined as: those children who exhibit or who can be reasonably projected to exhibit poor performance in traditional academic programs and classroom settings and are, therefore, considered to have an increased propensity toward dropping out of school or who upon graduation are likely to enter society without the skills necessary to be responsible individuals, competent employees, or successful continuing education students.

Funding for programming is provided by state competitive discretionary grants matched by local school district resources.

FLORIDA

The state has no official definition for at-risk youth.

The state does not specifically fund at-risk programming; however, the state provided over $5 million for student enrichment, remedial and dropout prevention programs. Program funding is provided through program cost factors and a pupil weight within the general Florida Education Finance Program.

GEORGIA

The state definition defines at-risk children at three educational levels: pre-school, primary grades, and intermediate-secondary grades. Among the characteristics cited that place a child at-risk are: living in poverty, limited English proficiency, poor academic performance, retention in one or more grades, frequent absences, emotional problems, health problems, behavior problems, use of alcohol or drugs, pregnancy or parenthood, and attempted suicide.

The state does not specifically fund at-risk programs. Through categorical grants, the state funds a number of special instruction assistance programs which target the at-risk youth population.

HAWAII	The state has no official definition for at-risk youth; the state department of education defines a child or youth at-risk as one who is consistently failing to make satisfactory progress in school. Symptoms of at-risk may be academic, psychological, or social/behavioral in nature. Hawaii has a single statewide public school system; there are no local funds. Funds for at-risk programming are provided through categorical grant funding.
IDAHO	The state has no official definition for at-risk youth. The state education appropriation bill has special provisions that fund programs directed at portions of the at-risk youth population. The state also supports alternative schools where the ADA is greater than 12.
ILLINOIS	The state has no official definition for at-risk youth. Primarily through the Truants' Alternative and Optional Education Programs, the state provides programs which address various segments of the at-risk population. With an appropriation of $16.5 million for fiscal year 1990, the state funds various programs under this provision through competitive grants to local school districts, regional service units, and community college districts.
INDIANA	The state has no official definition for at-risk youth. The state department of education has guidelines for local units to develop programs. Within the guidelines is a list of indicators of risk which include low academic achievement, low self-esteem, under-developed language skills, discipline problems, delinquent and/or disruptive behavior, poor attitude toward school and teachers, and poor school attendance. Funds for the establishment of programs for at-risk students are provided through section 26 of the

Indiana Code titled "Educational Opportunity Program for At-risk Students." The funds are provided through competitive discretionary grants.

IOWA

A student who is at-risk is in danger of not meeting the goals of the educational program established by the district, not completing a high school education, or not becoming a productive worker. These students may include, but are not limited to, dropouts; potential dropouts; teenage parents; substance users and abusers; low academic achievers; abused and homeless children; youth offenders; economically deprived; minority students and culturally isolated students; those with sudden negative changes in performance due to environmental or physical trauma; and those with language barriers, gender barriers, and disabilities.

The state funds a variety of at-risk programs targeted at various segments of the at-risk population through competitive discretionary grants and limited categorical funding.

KANSAS

At-risk pupil means any person of school age who is at risk of failing or dropping out of school and who may be characterized by one or more of the following: (1) has an excessive rate of unexcused absences from school attendance, (2) is a parent or is pregnant and will become a parent, (3) has been adjudicated as a juvenile offender, (4) is two or more credits behind other pupils in the same age group in the number of graduation credits attained, or (5) has been retained one or more grades. The definition of at-risk pupil shall not include within its meaning any person determined to be an exceptional child under the provisions of the Special Education for Exceptional Children Act.

The state provides funding through its "Educational Excellence Grant Program," which is a program of competitive discretionary grants.

KENTUCKY

The state has no official definition for at-risk youth; however, the state does fund various programs

targeted toward at-risk youth. These youth are identified as students with a pattern of academic failure and/or unsatisfactory social behavior.

Funding is through discretionary grants awarded for a two-year period.

LOUISIANA

The state does not presently have an official definition for at-risk youth, but is developing one.

The state does not specifically fund at-risk programs.

MAINE

The state has no official definition for at-risk youth.

The only funding toward a segment of the at-risk population is through alternative programs for high school dropouts; there is no specific funding for at-risk programming.

MARYLAND

The state has no official definition for at-risk youth. The state funds a statewide dropout prevention program, Maryland Tomorrow, which has been established for students ages 14-21. Targeted for students with histories of grade retention and underachievement, the program was operational in 76 Maryland secondary schools in 1990. The program provides supplemental and support services for youth in accordance with locally designed plans constructed by school systems and private industry councils.

The program receives $5.1 million from general state support funds. Funds are allocated through competitive grants which the state has named "challenge grants."

MASSACHUSETTS

The state has no official definition for at-risk youth.

Through discretionary grants the state supports essential and basic skills programs and dropout prevention programs. The dropout prevention programs may include counseling programs, work-study or cooperative education, alternative education part-time employment, and school-to-

work transition programs. Dropout prevention programming is to be targeted to students in grades seven to twelve, inclusive.

MICHIGAN

The state has no official definition for at-risk youth.

The state funds a series of categorical/special grants in addition to the general membership formula grant. Several of these categorical/special grants are targeted toward sub-populations which include youth demonstrating the characteristics of at-riskness; (e.g., low-income, poor attendance, teenage parenthood, and language difficulties).

MINNESOTA

The state has no official definition for at-risk youth.

The state has various programs that serve segments of the at-risk youth population. Program funds are provided through categorical grants from state or federal funds. The state does not specifically fund at-risk programming.

MISSISSIPPI

The state has no official definition for at-risk youth. A definition is currently being reviewed by the interim state superintendent. Each district must develop and implement a program to meet the needs of at-risk students.

Funds are allocated to assist students who fail or who are at risk of failing the state functional literacy exam. School districts received $157.00 in the 1989-90 school year for every pupil who was identified as at-risk based upon performance on the state literacy exam; the state expenditure for the year totaled approximately $500,000.

MISSOURI

At-risk individuals are those who are still of school age, but whose educational outcomes are in jeopardy because they are experiencing academic deficits, have become disaffected with school and learning, or are impacted by other factors which impede educational and social development.

The state does not specifically fund specifically for at-risk programming.

MONTANA	The state has no official definition for at-risk youth. The state does not currently fund specifically for at-risk programming. The state relies on federal funding through chapters I and II of the Education Consolidation and Improvement Act for such programming.
NEBRASKA	The state has no official definition for at-risk youth. The state does not specifically fund at-risk programming.
NEVADA	The state has no official definition for at-risk youth. The state does not specifically fund at-risk programming.
NEW HAMPSHIRE	The state has no official definition for at-risk youth. The state does not specifically fund at-risk programming.
NEW JERSEY	The state has no official definition for at-risk youth. The state does not specifically fund at-risk programming, but it does provide categorical aid for bilingual and compensatory education.
NEW MEXICO	The state department of education defines at-risk students as those whose school achievement, progress toward graduation, and/or preparation for employment are in serious jeopardy. In fiscal years 1989-90 and 1990-91 the state provided approximately $2 million for at-risk programming through its general equalized aid formula; additionally, $1 million was provided through competitive grants.

NEW YORK

The state has no official definition for at-risk youth. The state does have a definition that is used in awarding competitive grant funds. It is not the only definition applicable for at-risk youth; local definitions in other instances are acceptable.

The state funds a variety of programs targeted at particular segments of at-risk youth through competitive grants.

NORTH CAROLINA

Children and youth at-risk in North Carolina are young people, who because of a wide range of personal, familial, social, or academic circumstances, may experience school failure or unwanted outcomes unless there is intervention to reduce the risk factors. Primary factors that may identify these children include the following: school performance two or more years below grade level; CAT scores below the 25th percentile; academic failure; non-promotion (being older than classmates); truancy; substance abuse; delinquency; disinterest in school; low self-esteem; learning disabilities; physical, mental, or emotional handicaps; physical or mental health problems; physical or sexual abuse; pregnancy; unstable home environment/family trauma; family income at or below the poverty level; negative parental attitudes toward school; low parental educational attainment; frustration of unchallenged giftedness and unrecognized talent; and limited English proficiency.

Through the state's Basic Education Program, approximately $25 million is allocated for a variety of at-risk programs. The money is disbursed through flat and categorical grants. Coordinators of in-school suspension programs in every high school in the state are funded by $14 million. Nearly $7 million is distributed through categorical grants for counseling of at-risk students. Other funded programs include: academic remediation, early identification/intervention, alternative school/class, extended school day, and work-related services.

NORTH DAKOTA	The state has no official definition for at-risk youth. The state does not specifically fund at-risk programming.
OHIO	The state has no official definition for at-risk youth; however, the Ohio Department of Education defines at-risk children and youth as individuals from birth through 21 years of age who are unlikely to complete elementary and secondary school successfully and to acquire skill necessary for higher education and/or employment. The department also lists contributing factors of at-riskness which include: alcohol/drug abuse, cyclical poverty, delinquency/truancy, family abuse/neglect, health condition, inadequate readiness skills/developmental delay, inappropriate school curriculum, inappropriate school placement, limited English/non-English speaking, low self-esteem, and pregnancy/ parenting. The state funds programs that target segments of the at-risk population through categorical grants. The state also has established grants for research and development of at-risk and excellence programs.
OKLAHOMA	At-risk youth are members of a household or family whose income is at or below the poverty level under criteria used by the U.S. Bureau of the Census; or they have not made substantial progress in mastering skills that are appropriate for students of their age; or they have grades that consistently indicate major underachievement; or they have been retained in a grade for one or more years; or they have been a school dropout or have had excessive absences during a school year; or they have been determined to be at-risk based on assessment by school staff familiar with the students' health, social, or family status. Influences may include, but are not limited to, evidence of abuse of the students, the students' use of alcohol or drugs, pregnancy or parenthood, delinquent behavior, or attempted suicide.

The state funds at-risk programming through two competitive grant programs for which applications are taken and evaluated annually.

OREGON

The state has no official definition for at-risk youth.

The state does not provide funds specifically for at-risk programming. The state funds a student retention initiative, and a special grant program for promoting at-risk programs is funded through the governor's office.

PENNSYLVANIA

The term "student at-risk" at the most general level refers to any elementary or secondary student who runs the risk of not acquiring the knowledge, skills, and attitudes needed to become a successful adult. More specifically, at-risk refers to students who behave in ways that put them at risk of not graduating from high school. These behaviors include not engaging in classroom and school activities, using drugs and alcohol, committing disruptive and delinquent acts, becoming pregnant, dropping out, or attempting suicide—behaviors that would not be expected of students who, in particular, had acquired the knowledge, skills, and attitudes associated with such goals as self-esteem, citizenship, family living, health, and work. Finally, the term refers to students whose family background and home and community conditions (e.g. poverty, low parental education) correlate with low achievement and the lack of school success.

The state currently funds a "Teen Parent Program" and a dropout prevention initiative program through state department of education competitive grants.

RHODE ISLAND

The state has no official definition for at-risk youth.

The state funds 26 at-risk demonstration projects primarily through the Rhode Island Literacy and Dropout Prevention Act of 1987 and vocational education funds. The funds are dispensed through categorical grants to local school districts.

SOUTH CAROLINA	The state has no official definition for at-risk youth. Through categorical grants, the state funds a wide range of district programs that include parenting programs, mentoring programs, summer enrichment, summer employment, and individual remediation. The state budget for these programs is in excess of $4 million, and grants are funded for three years.
SOUTH DAKOTA	An at-risk youth is any person under the age of 21 who is in danger of not graduating from high school or attaining personal, economic, and social sufficiency. The legislature established during the current session an at-risk trust fund with the interest to be used for at-risk programming; the funds will be distributed to local school districts through competitive discretionary grants.
TENNESSEE	The state defines at-risk youth as any student who (for any reason other than death) leaves school before graduation without transferring to another school or institution. The state currently funds 15 different programs targeted specifically at segments of the at-risk student population. These funds are disbursed through categorical grants.
TEXAS	A person below 21 years of age who meets one or more of the following criteria is identified as at-risk: (1) has not been promoted one or more times in grades 1-6 and continues to be unable to master the essential elements in the 7th or higher grade level; (2) is two or more years below grade level in reading or mathematics; (3) has failed at least two courses in one or more semesters and is not expected to graduate within four years of the time the student entered the 9th grade; or (4) has failed one or more of the reading, writing, or mathematics sections of the most recent TEAMS test beginning with the 7th grade.

At-risk programming is funded under the state compensatory education program which is a weighted allocation based on a district's free/reduced lunch population.

UTAH

A student at-risk is any student who, because of his/her individual needs, requires some kind of uniquely designed intervention in order to achieve literacy, graduate, and be prepared for transition from school to post-school options. Without appropriate intervention, a student is at increased risk for failing to achieve commensurate with his/her ability, for truancy, and for dropping out. Without appropriate intervention, such a student may not be able to participate meaningfully in society as a competent, productive, caring, and responsible citi[illegible]

At-risk programming is funded by a combination of a base grant per school district and a formula allocation to school districts based upon the incidence of at-risk youth within the district. Total allocation for 1990-91 is $1,669.000.

VERMONT

The state has no official definition for at-risk youth.

The state does not specifically fund at-risk programming. The state does fund programs that are targeted at segments of the at-risk population (e.g., early childhood education, youth employment, and juvenile delinquency population).

VIRGINIA

The state has no official definition for at-risk youth.

The state does not specifically fund at-risk programming. The state funds remediation programs, including summer school, based on a composite index of the local economy.

WASHINGTON

At-risk students are defined as those students in elementary, middle, or secondary school who are identified as not succeeding in school, have considered dropping out of school, or have dropped out of sch[illegible]

As of the spring of 1990, the legislature has not funded dropout or at-risk programming. The only available funds for such programming are federal funds.

WEST VIRGINIA

The state has no official definition for at-risk youth.

The state does not specifically fund at-risk programming. The state does fund programs for youth institutionalized in correctional or health facilities; it also funds child development programs.

WISCONSIN

At-risk children are defined as those described by any of the following three categories:

1. Pupils who are one or more years behind their age group in the number of credits attained or in basic skill levels and are also one or more of the following: (a) dropouts; (b) absent, in any school semester, for more than 15% of the number of hours of direct pupil instruction required during that semester; (c) parents; or (d) adjudicated delinquents.

2. Pupils in grades 5 to 8 who are two or more years behind their age group in basic skill levels.

3. Pupils in grades 5 to 8 who are one or more years behind their age group in basic skill levels and have been absent, in any school semester, for more than 10% of the number of hours of direct pupil instruction required during that semester.

The state funds at-risk programming through a pupil weight of 10% of the LEAs average base aid per pupil times the number of at-risk students enrolled. At risk programming was funded at nearly 1.9 million dollars in 1989-90.

WYOMING

At-risk youth are defined as individuals of school age who appear likely to fail economically, socially, and academically.

The state does not specifically fund at-risk programs but does fund compensatory education programs.

APPENDIX D

Program Codes for At-Risk Programs

PROGRAM CODES FOR AT-RISK PROGRAMS

PROGRAM FOCUS

Primary Codes	
Academic	A
Vocational	V
Socio-emotional	E

Subcodes	
Readiness Skills	RS
Basic Skills	BS
Transition Class	TR
Classroom Management Program/Study Skills	CM
Vocational Training	VT
Career Exploration	CX
Work/Study	WS
Drug Education	DE
Sex Education	SX
Self-Esteem	SE
Suicide Prevention	SP
Drug Abuse	DA
Teen Parenting	TP
Group Counseling	GC
Individual Counseling	CI
Mentoring	MT
Basic Ed/GED for Adults	GD
ESL for Adults	EA
Parent Training	PT
Day Care	DC
Other	OT

PROGRAM STRATEGIES

Primary Codes	
Integrated	I
Nonintegrated	N
Alternative	L

Subcodes	
Developmental Curriculum	DV
Curr./Materials Adaption	CA
Individualized Educ. Plan	IP
Computer Assisted Inst.	CP
Competency Based Inst.	CB
Learner Paced Instruction	LP
Enrichment Activities/Projects Personl Growth Activities	EP
Interdiciplinary Courses	IC
Flexible Schedule	FS
Evening/Summer Schedule	ES
Extended Day	ED
In-Service Training	IS
Professional Workshops/ Institutes	PW
University Course Work	UC
Collegial Teaching	CT
Peer Coaching	PC
Teacher Trainer	TT
School Business Partnership	SB
School Social Service Partnership	SS
School Government Partnership	SG

PROGRAM DELIVERY

Primary Codes	
One-to-One	O
Small Group	S
Class	C

Subcodes	
Classroom Teacher	RC
Resource Teacher	TR
Instructional Aide	AI
Guidance Counselor	NC
Psychologist	SP
Community Liaison	LC
Nurse	SN
Social Worker/Caseworker	WS
Juvenile Justice Liaison	LJ
Parent	AP
Volunteer	TV
Tutor/Peer	RP
Tutor/Cross Age	CT
Director	RD
Teacher/Student Ratio	:
FTE	.
Consultant	OC
Other	TO

APPENDIX E

PFS Classification System

PFS CLASSIFICATIONS

1. **ALTERNATIVE SCHOOL**
   - •Sanders Alternative High School - Sanders
   - •Pinal County Alternative Education Program
2. **CLASSROOM PROGRAM**
   - •Program S.T.A.R.T. - Roosevelt
   - •WICAT Lab - Kayenta
3. **SMALL GROUP PROGRAM**
   - •TUTORS - Chinle
   - •Language Enrichment (LERTS) Program - Somerton
4. **ONE-ON-ONE PROGRAM**
   - •Tutoring Program - Kayenta
   - •LAP (Learn and Play) - Student Tutoring - Picacho
5. **SUMMER SCHOOL PROGRAM**
   - •K-3 Extended School Year - Nogales
   - •Summer School - Somerton
6. **GROUP COUNSELING**
   - •Group Counseling - Buckeye
   - •Enrichment Seminar - Dysart
7. **INDIVIDUAL COUNSELING**
   - •Art Therapy - Littleton
   - •Individual Counseling - Buckeye
8. **PARENT/FAMILY INOLVEMENT**
   - •Parent Assisted Tutoring (PAT) - Coolidge
   - •Parent-Student Workshops - Creighton
9. **SCHOOL-WIDE/CLASS PREVENTION PROGRAM**
   - •C.A.P. (Children Are People) Program - Mesa
   - •Chemical Abuse Prevention Program - Dysart

FOCUS - PFS Classification

- ■ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ☐ K-3
- ☐ 4-6
- ■ 7-8
- ■ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*4 Classroom Teachers
*Substance Abuse Counselor (PT)
*Indian Counselor (PT)
*Project Director (PT)
*Project Coordinator (PT)

NUMBER OF STUDENTS SERVED:

33

PROGRAM COST PER PUPIL:

$ 3,454.96

"SANDERS ALTERNATIVE HIGH SCHOOL"
Sanders Unified School District #18

OVERVIEW:

Sanders Unified School District is located in northeastern Arizona along the southern boundary of the Navajo Indian Reservation. Approximately 95% of Sanders' 900 students are Navajo and about 90% come from low-income families.

Sanders Alternative High School has two goals:
•to improve the academic skills of school dropouts age 12 to 21 so that they may either return to the regular school program or earn a high school diploma or G.E.D.; and
•to improve students' vocational awareness and skills through an entrepreneurial program, career workshops, and linkages to job training programs and potential employers.

The program has several components: **academic, vocational,** and **support**. The alternative high school program offers classes in math, language arts, reading, and social studies. Classroom techniques range from traditional lectures to computer-assisted instruction. The program is limited to approximately 50 students, ages 12 - 21, who have dropped out of school. In addition, an entrepreneurial program offers a selected alternative program that gives students the opportunity to run student businesses outside of class time. Part-time jobs and training are offered to qualified students. Teaching staff counsel alternative program students and guest speakers address student attitudes.

Identification Process:
Priority for acceptance into the program is given in the following order:
1. Former students age 12-17 who have been out of school at least six months.
2. Current students age 12-16 whose academic progress and attendance has faltered dramatically.
3. Former students age 17-21 who have been out of school more than one year.
Referrals may be made by parents, teachers, the prospective student or others. Screening occurs through an interviewing process with the staff.

FOCUS - PFS Classification

- [x] Alternative School
- [ ] Classroom Program
- [ ] Small Group Program
- [ ] One-on-One Program
- [ ] Summer School Program
- [ ] Group Counseling
- [ ] Individual Counseling
- [ ] Parent/Family Involvement
- [ ] School-Wide/Class Prevention Program

LEVEL

- [ ] Pre-School
- [ ] K-3
- [ ] 4-6
- [ ] 7-8
- [x] 9-12
- [ ] Adults
- [ ] K-12

TARGET AUDIENCE

- [x] Students
- [ ] Teachers
- [ ] Parents

STAFFING:

*4 Classroom Teachers (PT)
*JTPA Representative
*Prevention Coordinator
*Community-Based Counselor (PT)
*Computer Lab Manager
*Program Director

NUMBER OF STUDENTS SERVED:

82-95

PROGRAM COST PER PUPIL:

$ 2,452.58

"PINAL COUNTY ALTERNATIVE EDUCATION PROGRAM"

Pinal County Consortium

OVERVIEW:

Pinal County is the third most populated county in the state, with a concentration of population growth along the Interstate 10 corridor connecting the metropolitan centers of Phoenix and Tucson. Nine sites in Pinal County formed the Partnership and cooperatively initiated an at-risk program. The Pinal County Alternative Education Program is located on the Central Arizona College campus grounds and serves students from all county schools.

Pinal County efforts to address the needs of the at-risk population involve two major goals:
- to reduce poverty in Pinal County; and
- to increase per capita income in Pinal County.

Toward these goals, services are focused on several specific objectives such as reducing the number of school dropouts and increasing job skills.

The Pinal County Alternative Education Program is an established alternative education program which has been in existence for several years. The program offers individualized and small group academic instruction, computer-assisted instruction and skills training. This program offers more flexible scheduling of classes and tends to serve a diverse at-risk student population, a majority of whom have dropped out or been pushed out of "traditional" academic programs.

Identification Process:

High priority for participation in the alternative education program is given to overage seniors and students experiencing academic deficiency .

"PROGRAM S.T.A.R.T."
Roosevelt Elementary School District #75

FOCUS - PFS Classification

- ☐ Alternative School
- ■ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Early Childhood Classroom Teacher
*Speech Therapist (PT)
*P.E. Teacher (PT)
*Counselor
*Psychologist (PT)
*Coordinator/Teacher Consultant
*Parent Volunteers (PT)

NUMBER OF STUDENTS SERVED:

104

PROGRAM COST PER PUPIL:

$2,018.53

OVERVIEW:

The Roosevelt School District is located in south Phoenix and enrolls approximately 10,500 students in 17 schools. The district's student body has a high mobility rate (45%), a large minority population (Hispanics and Blacks comprise 78%), and 80% are eligible for free or reduced lunch programs. Fifty percent of the 1,200 kindergarten students are considered to be at risk of failure in school. The S.T.A.R.T. program targets children most at risk in four of the district schools.

The Roosevelt S.T.A.R.T. program offers full-day magnet kindergarten classes focusing on child-centered and hands-on experiences. The aim of the program is for children to perform at or above grade level in social, fine and gross motor, and academic skills.

Magnet classrooms are the principal student component of Program S.T.A.R.T. Four kindergarten classes are distinguished from regular classes by:

- hiring of parents as instructional aides
- the reduction of class size (15 maximum)
- classroom setup - "center"-based, not row-by-row configuration
- more hands on, experimental, oral activities (e.g., cooking classes, discussion groups, role-playing exercises)
- supplementary curriculum materials (e.g., math manipulatives, big books, predictable literature, culturally-relevant lessons)

Identification Process:

Scores on the Brigance battery of tests, as well as geographic, physical, emotional, and special needs, were used to determine student eligibility for S.T.A.R.T. classrooms. The program coordinator, parents, teachers, special education teachers and administrators all have input into the selection process.

FOCUS - PFS Classification

- ☐ Alternative School
- ■ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ☐ K-3
- ☐ 4-6
- ☐ 7-8
- ■ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*5 Remedial Reading Teachers (PT)
*5 Remedial Math Teachers (PT)
*WICAT Director

NUMBER OF STUDENTS SERVED:

527

PROGRAM COST PER PUPIL:

$ 366.18

"WICAT LAB"

Kayenta Unified School District #27

OVERVIEW:

Located in the northeast corner of Arizona on the Navajo Reservation, the Kayenta District, which encompasses 3,400 square miles, has an approximate enrollment of 2,350. Ninety-five percent of the students ride a school bus to school, some from distances as far as 54 miles one way. Over 80% of the parents speak Navajo as the primary language and many students live in hogans without electricity, running water, or books. Monument Valley High School, where the WICAT Lab is located, has a 97% Native American population and a 65% dropout rate.

The program focuses on increasing grade equivalent scores in English, mathematics, and reading through computer-assisted instruction in the WICAT computer lab. The lab consists of 32 computer workstations networked to a file server and a manager's station.

High school students receive instruction in reading, mathematics, and language arts with their entire class once a week for about 30 minutes in the WICAT lab. Teachers of students in low ability sections of English, math, and reading bring their students to the lab two to three times per week.

Identification Process:

Kayenta District has instituted a system of identifying it's at-risk population. Student absenteeism is tracked daily by the hour. Other identifiers include academic failure in one or more courses, emotional disabilities and severe adjustment problems. Students are referred by teachers, counselors, or the dean of students.
All students scoring below grade level on the Stanford Diagnostic Reading Test are enrolled in reading classes that utilize the WICAT lab. In addition, student achievement scores on the mathematics test of basic skills and written essays determine placement by class group into math and English/language classes. These classes also use the WICAT lab.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ■ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*K-3 Classroom Teacher
*2 Teacher Assistants

NUMBER OF STUDENTS SERVED:

40

PROGRAM COST PER PUPIL:

$ 597.76

"TUTORS"
Chinle Unified School District #24

OVERVIEW:
Chinle Unified is the largest school district on the Navajo Reservation. The district serves 1,366 K-3 students of which 98% are Native American; 90% qualify for the Chapter I program; 80% qualify for free or reduced lunches; and 50% are designated as limited English proficient (LEP).

The overall goal of the Chinle at-risk project is to improve the basic skills of at-risk students through "whole family literacy" programs. The TUTOR Program focuses on a whole language curriculum which emphasizes parent-child reading, small group discussion, lap reading, cross-age tutoring, and other small group instructional strategies. The addition of one teacher and two teacher assistants helps reduce class size and student-staff ratios, thereby allowing all classroom teachers to implement the curriculum.

Identification Process:
Students identified by teachers as most at risk are prioritized each year on the basis of low achievement, low self esteem, and poor attendance. However, all students may receive services of the at-risk program through reduced class size, reduced student-staff ratios, and the placement of computers in the classroom.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ■ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*2 Literature Resource Teachers
*Migrant Coordinator (PT)
*Parent Volunteers (PT)

NUMBER OF STUDENTS SERVED:

400

PROGRAM COST PER PUPIL:

$ 444.13

"LANGUAGE ENRICHMENT (LERTS) PROGRAM"

Somerton Elementary School District #11

OVERVIEW:

Somerton School District serves an agricultural community located approximately ten miles south of Yuma, Arizona, and eleven miles from the Mexican border. The community of Somerton has a population of less than 5,000 people. The school district serves more than 1,700 students in kindergarten through eighth grade in four schools. Approximately 95% of the student body are Hispanic; 3% Cocopah Indian; and 2% Anglo. Over 75% of the students in the district are on free breakfast and lunch program.

Language enrichment is the primary focus of Somerton's K-3 at-risk program. It involves working with primary grade students who are classified as limited English proficient (LEP) so that they will:

- become more proficient in the English language;
- improve in speech and writing; and
- understand and love the world of books.

Two language enrichment resource teachers and two bilingual aides work with the K-3 ESL classroom teachers to develop thematic units linked to basal reader stories. Using the story as a point of departure, the LERTS teachers supplement the lesson with whole-language activities related to a monthly theme.

The LERTS teachers work with small reading groups for an hour each day for several weeks while the classroom teacher meets with a second small group, and the ESL aide with a third. The groups are then rotated.

Identification Process:

Children attending the Somerton Schools are screened for proficiency in English using the Language Assessment Scoring test (LAS). Students who score three or below (out of a possible five) are targeted for Somerton's small group at-risk program.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ■ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ☐ K-3
- ☐ 4-6
- ☐ 7-8
- ■ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Teacher/Director (PT)
*Classroom Teachers (PT)

NUMBER OF STUDENTS SERVED:

35

PROGRAM COST PER PUPIL:

$1,193.28

"TUTORING PROGRAM"

Kayenta Unified School District #27

OVERVIEW:

Located in the northeast corner of Arizona on the Navajo Reservation, the Kayenta District, which encompasses 3,400 square miles, has an approximate enrollment of 2,350. Ninety-five percent of the students ride a school bus to school, some from distances as far as 54 miles one way. Over 80% of the parents speak Navajo as the primary language and many students live in hogans without electricity, running water, or books. Monument Valley High School, where the tutoring program is located, has a 97% Native American population and a 65% dropout rate.

Kayenta's at-risk project focuses on decreasing the dropout rate by increasing grade equivalent scores. Students are assisted in academic and vocational courses through an after-school one-on-one tutoring program.

The after-school program provides one-on-one tutoring in academic and vocational courses. Teachers are paid through at-risk monies to tutor on an as-needed basis, usually for two hours per week. Tutoring session are held at the high school in the classrooms of the individual teacher/tutor. The tutoring program director receives individual applications from students and then places them with a teacher/tutor other than their regular classroom teacher.

Identification Process:

Kayenta District has instituted a system of identifying it's at-risk population. Student absenteeism is tracked daily by the hour. Other identifiers include academic failure in one or more courses, emotional disabilities and severe adjustment problems. Students are referred by teachers, counselors, the dean of students, or self. Any student is eligible, regardless of whether or not he/she is failing a course, but those on the weekly failure list are targeted. Normally, teacher/tutors commit to two nights per week after school. If the student needs more time, arrangements are made.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ■ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*LAP Teachers (PT)
*Volunteer Peer Tutors

NUMBER OF STUDENTS SERVED:

50

PROGRAM COST PER PUPIL:

$ 396.12

"LAP (LEARN AND PLAY)-STUDENT TUTORING"

Picacho Elementary School District #33

OVERVIEW:

Picacho, a tiny isolated community, is located in Pinal County midway between Phoenix and Tucson. Picacho Elementary School District serves a population of approximately 175 students - 80% Hispanic and 20% white non-Hispanic. One-third of the primary grade children are classified as limited English proficient. Approximately 80% of the families meet poverty guidelines for free and reduced lunches; many families are migrant farm workers. A single school serves all K-8 students.

The Picacho at-risk program is designed to improve the basic and critical thinking skills of the K-3 student population. Implicit to the program are efforts to form a positive self-concept in the at-risk pupil and a commitment to providing these youngsters with as much success as possible.

The LAP Tutoring Program operates after school four days a week and is operated by the school's bilingual teacher and an aide. Students from grades 5-8 serve as tutors on a one-on-one basis to primary students. The older students/tutors go through peer tutor training and are assigned to a K-3 student whom they help with vocabulary words, reading stories and other areas in language arts. LAP tutors make a semester commitment to the program.

Identification Process:

Picacho determined that because of low family income, excessive absenteeism, a high rate of mobility, and a high percentage of LEP students in the primary grades, that all of the K-3 students fall into the category of "at-risk". Students participating in the after school one-on-one tutoring program are registered for the program by their parents.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ■ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

- *Principal (PT)
- *25 Classroom Teachers (PT)
- *Music Teacher (PT)

NUMBER OF STUDENTS SERVED:

469

PROGRAM COST PER PUPIL:

$ 139.22

"K-3 EXTENDED SCHOOL YEAR" 169
Nogales Unified School District #1

OVERVIEW:

Located near the Mexican border, Nogales School District serves over 6,000 pupils (K-12), of which 93% are Hispanic, and 34% were born in Mexico. The population of the community is approximately 20,000, with an 18-20% unemployment rate. The district's entire population of K-3 pupils (1,800) has been targeted to receive additional assistance through one or more aspects of the at-risk program. Of these targeted students, 50% have been identified as limited English proficient, and 75% are eligible for free/reduced lunches.

The primary goal of the Nogales program is to increase language proficiency of targeted students in grades 1-3 through an extended year program. These students attend a four-week summer session operated four mornings per week, with teachers using the fifth morning for planning. The program emphasizes enrichment activities that focus on language development and self-esteem.

Attempts are made to integrate regular school lessons into the summer school program. Teachers focus on the development of skills noted as deficient by the classroom teachers or through a pre-screening process.

Identification Process:

The Nogales School District considers all of it's K-3 students as "at-risk". Teachers refer students specifically into the summer school program. The criteria utilized for these referrals are not formalized and will vary dependent upon the school and the individual teacher.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ■ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Summer School Director (PT)
*4 Classroom Teachers (PT)
*Volunteer Student Assistants (PT)

NUMBER OF STUDENTS SERVED:

80

PROGRAM COST PER PUPIL:

$ 142.45

"SUMMER SCHOOL" 170
Somerton Elementary School District #11

OVERVIEW:

Somerton School District serves an agricultural community located approximately ten miles south of Yuma, Arizona, and eleven miles from the Mexican border. The community of Somerton has a population of less than 5,000 people. The school district serves more than 1,700 students in kindergarten through eighth grade in four schools. Approximately 95% of the student body are Hispanic; 3% Cocopah Indian; and 2% Anglo. Over 75% of the students in the district are on the free breakfast and lunch program.

Language enrichment is the primary focus of Somerton's K-3 at-risk summer school program. It involves working with primary grade students who are classified as limited English proficient (LEP) so that they will:

- become more proficient in the English language;
- improve in speech, reading, and writing; and
- understand and love the world of books.

The summer school program targets students who are referred for extra help by their teachers. Summer school sessions run for four weeks.

Identification Process:

Children attending the Somerton School are screened for proficiency in English using the Language Assessment Scoring test (LAS). Students who score three or below (out of a possible five) are targeted for Somerton's at-risk program. However, all K-3 students may register for summer school.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ■ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Counselor (PT)

NUMBER OF STUDENTS SERVED:

22

PROGRAM COST PER PUPIL:

$ 53.56

Buckeye Elementary School District #33

OVERVIEW:

Buckeye Elementary School District is located in a rural area of Maricopa County, west of Phoenix. The district is in an economically depressed area with excessive absenteeism and high mobility rates. Approximately 30% of the students at the K-3 level have been identified as being bilingual and many others have limited English proficiency.

The two major goals of the Buckeye program are to:

- develop student self-esteem and confidence; and
- teach students to learn and achieve success.

The school counselor is responsible for coordinating and implementing a systematic procedure for identifying "at-risk" K-3 students. These students, once identified, receive group counseling services which focus mainly on areas regarding the loss of a parent through death, separation, or divorce. Lessons include:

- "How It Feels When A Parent Dies"
- "Why Am I Different?"
- "All Kinds of Separation"
- "My Kind of Family"
- "She's Not My Real Mother"

Students spend an average of one hour per week for six weeks in group counseling.

Identification Process:

Students with the greatest number of identified risk factors are targeted. The screening of students is completed through:

- an information survey which is completed by teachers, the school nurse and the principal.
- a counselors report that identifies learning styles and assesses developmental levels.

Students are referred to the program with input from parents, teachers, counselors and administrators.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ■ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ☐ K-3
- ☐ 4-6
- ■ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*2 Case Managers (PT)
*Classroom Teacher (PT)

NUMBER OF STUDENTS SERVED:

15

PROGRAM COST PER PUPIL:

$ 474.51

"ENRICHMENT SEMINAR"
Dysart Unified School District #89

OVERVIEW:

Dysart Unified District is located in a rural area of Maricopa County, west of Phoenix. Fifteen percent of the students are limited English-proficient, 65% are Hispanic, and 22% are classified as migrant farm workers. Fifty-five percent of all students have been identified as potential dropouts. and over 50% scored below the 50th percentile on recent ITBS tests.

The junior high enrichment program is a daily class which uses the "master student" curriculum to help students increase their academic and social successes. A supervising teacher leads students in exercises designed to bolster self-esteem and increase life-skills (e.g., goal setting and role-playing activities). This group counseling seminar is designed for students who have been retained and need academic help to be promoted to high school.

Identification Process:

Students exhibiting one or more of the following characteristics are screened by the case managers, KIDWATCH team members, and/or Project Director:

- language minority background
- poor attendance
- academic deficiency
- low self-esteem

Students can be referred by administrators, teachers, parents, counselors or self.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ■ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Art Therapist (Consultant) (PT)

NUMBER OF STUDENTS SERVED:

18

PROGRAM COST PER PUPIL:

$ 339.11

"ART THERAPY"
Littleton Elementary School District #65

OVERVIEW:

The Littleton School District serves Cashion, a community within the city limits of Avondale (15 miles west of Phoenix). The district serves approximately 1,275 students in grades K-8. About one-third of the student population are limited English speakers and come from low-income families. Approximately 15% of the K-3 children are migrant students. In 1988, teachers rated nearly 40% of the K-3 students as "high risk" based on achievement, attendance, and language proficiency.

Individual counseling services (art therapy) are provided one day per week for K-3 students who are experiencing emotional problems or family crisis. The program's overarching goal could be characterized as a desire to increase. Specifically, the program seeks to foster gains in:

- student achievement
- student development
- student self-esteem
- individual attention
- home/school communication

Services are provided by a professional art therapist (an outside consultant contracted by the district).

Identification Process:

Littleton considers all K-3 children eligible to be program participants. Referrals for participation in the art therapy counseling program are made by teachers or parents.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ■ Individual Counseling
- ☐ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Counselor (PT)

NUMBER OF STUDENTS SERVED:

25

PROGRAM COST PER PUPIL:

$ 196.22

"INDIVIDUAL COUNSELING" 174

Buckeye Elementary School District #33

OVERVIEW:

Buckeye Elementary School District is located in a rural area of Maricopa County, west of Phoenix. The district is in an economically depressed area with excessive absenteeism and high mobility rates. Approximately 30% of the students at the K-3 level have been identified as being bilingual and many other have limited English proficiency.

The two major goals of the Buckeye program are to:

- develop student self-esteem and confidence; and
- teach students to learn and achieve success.

The school counselor is responsible for coordinating and implementing a systematic procedure for identifying "at-risk" K-3 students. These students, once identified, receive individual counseling that includes:

- home visits
- individual counseling sessions
- individual learning programs

Students spend an average of one hour per week for 24 weeks in individual counseling.

Identification Process:

Students with the greatest number of identified risk factors are targeted. The screening of students is completed through:

- an information survey which is completed by teachers, the school nurse and the principal.
- a counselors report that identifies learning styles and assesses developmental levels.

Students are referred to the program with input from parents, teachers, counselors, and administrators.

"PARENT ASSISTED TUTORING (PAT)" 175
Coolidge Unified School District #21

FOCUS - PFS Classification
- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ■ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL
- ☐ Pre-School
- ■ K-3
- ☐ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE
- ■ Students
- ☐ Teachers
- ■ Parents

STAFFING:
*2 Classroom Teachers
*Parent Liaison (PT)
*Family Resources Center/Social Worker (PT)

NUMBER OF STUDENTS SERVED:

140

PROGRAM COST PER PUPIL:

$ 196.57

OVERVIEW:
Coolidge is located approximately halfway between Phoenix and Tucson in Pinal County. This rural community serves a multi-ethnic population which is comprised of 45% Anglo, 30% Hispanic, 15% native American, and 10% Black students. Seventy-two percent of these students are eligible for free or reduced lunches. District and standardized achievement tests show that many K-3 students are at risk for early academic difficulties, with 14.5% retained.

The main objective of the PAT program is to empower parents with the skills and knowledge needed to successfully participate in the education of their children.

This program offers parent training classes, encourages home instruction, and uses parents as volunteers in classrooms. First, there is a training component to teach parents strategies and techniques for assisting their children with academics. Second, opportunities are designed for parents to utilize their training in assisting their children. They are provided with materials to use with their children in providing tutoring at home and are recruited to assist in the classrooms.

Identification Process:
At-risk K-3 students and their parents are identified to participate in this program. Efforts are made to ensure a balance of ethnic and gender representation of students.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ■ Parent/Family Involvement
- ☐ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ☐ K-3
- ☐ 4-6
- ■ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ■ Parents

STAFFING:

*Parent Trainer (PT)
*Guest Speakers (PT)
*Social Worker (PT)

NUMBER OF STUDENTS SERVED:

20

PROGRAM COST PER PUPIL:

$ 362.13

"PARENT - STUDENT WORKSHOPS" 176

Creighton Elementary School District #14

OVERVIEW:

Creighton Elementary School District is located amidst commercial development in central Phoenix. The district houses approximately 5,000 students of which 64% are eligible for free and reduced lunch, 23% are limited English proficient, and 52% are ethnic minorities. Creighton Middle School (site of this project) has identified approximately 27% of their students at risk of dropping out of school.

The formal goals of the Creighton program are:

- to provide counseling and social support for students; and
- to increase parent participation and parental support for students' school activities.

The program looks to improve school attendance and increase students' self-esteem and self-motivation through parent - student workshops. Parent - student workshops are held one night a week in the school library, usually in six-week sessions. Parents and students meet separately, each with their own speaker. Presenters have been from the Maricopa County Parent Support Center, with topics including communication strategies, goal setting, and drug prevention. A social worker is used as a facilitator.

Identification Process:

The process for selecting program participants began with the identification of students having a high percentage of at-risk indicators. All of these students and their parents were then interviewed by the program coordinator and social worker, who then selected the participants. The interview decision was made on the basis of whether the family seemed to be aware that there was a problem and if the parents and students seemed open to the possibility of receiving help. Written parent permission is required.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ■ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ■ K-3
- ■ 4-6
- ☐ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ■ Teachers
- ☐ Parents

STAFFING:

*Classroom Teacher
*Guidance Counselor
*Volunteers (PT)

NUMBER OF STUDENTS SERVED:

904

PROGRAM COST PER PUPIL:

$ .31

"C.A.P. (CHILDREN ARE PEOPLE) PROGRAM"
Mesa Unified School District #4

OVERVIEW:

Mesa Unified School District is the largest K-12 school district in the state. It covers 202 square miles and serves 62,800 students in 63 schools. Eisenhower Elementary, where the C.A.P. program is located, has identified 51% of its students receiving free or reduced lunch and an ethnic breakdown of 65% Anglo; 9% Black; 24% Hispanic; and 2% American Indian.

The Children Are People Program targets all students at the Eisenhower Elementary School in Mesa. This program is incorporated into the curriculum of regular classrooms. It focuses on providing chemical awareness education, the development of interpersonal and intrapersonal skills, and the development of problem solving and decision-making skills.

Strategies are integrated throughout the curriculum and include enrichment activities, personal growth activities, in-service training, professional workshops and institutes teachers, and opportunities for collegial teaching.

Identification Process:

All students participate in the Children Are People Program.

FOCUS - PFS Classification

- ☐ Alternative School
- ☐ Classroom Program
- ☐ Small Group Program
- ☐ One-on-One Program
- ☐ Summer School Program
- ☐ Group Counseling
- ☐ Individual Counseling
- ☐ Parent/Family Involvement
- ■ School-Wide/Class Prevention Program

LEVEL

- ☐ Pre-School
- ☐ K-3
- ☐ 4-6
- ■ 7-8
- ☐ 9-12
- ☐ Adults
- ☐ K-12

TARGET AUDIENCE

- ■ Students
- ☐ Teachers
- ☐ Parents

STAFFING:

*Resource Teacher
*Community Liaison

NUMBER OF STUDENTS SERVED:

495

PROGRAM COST PER PUPIL:

$ 3.80

"CHEMICAL ABUSE PREVENTION PROGRAM"
Dysart Unified School District #89

<u>OVERVIEW:</u>
Dysart Unified District is located in a rural area of Maricopa County, west of Phoenix. Fifteen percent of the students are limited English-proficient, 65% are Hispanic, and 22% are classified as migrant farm workers. Fifty-five percent of all students have been identified as potential dropouts, and over 50% scored below the 50th percentile on recent ITBS tests.

The Dysart Chemical Abuse Prevention Program targets all students at Dysart Junior High School. It focuses on drug education and prevention through two major goals:

- to improve and expand opportunities for students to develop increased self-esteem and healthy coping and decision-making skills for dropout and chemical abuse prevention; and
- to continue to increase staff and student awareness of the importance of chemical abuse prevention.

Several strategies are incorporated into the program, including: enrichment activities and projects; in-service training; professional workshops and institutes; and a school-social service partnership. Most activities and instruction take place in the classroom setting.

<u>Identification Process:</u>
All students participate in the Chemical Abuse Prevention Program.

APPENDIX F

Characteristics of Districts in Prototype State

Prototype Districts in Prototype State

DIST #	DIST TYPE	GEO CLASS	PERCENT STATE'S ADM	INCOME INDEX	PAV INDEX	PERCENT AT-RISK	INDEX OF NEED
1	Unified	Suburb	1.33%	0.93	0.90	9.44%	0.7453
2	Elem	Ind Area	0.92%	0.78	0.53	10.44%	1.6143
3	Elem	Ind Area	0.36%	1.14	0.77	56.91%	0.1864
4	Elem	Urban	4.82%	1.00	0.38	0.00%	-1.5315
5	Unified	Suburb	3.52%	0.70	1.15	40.51%	-1.5950
6	Unified	Ind Area	1.29%	0.52	0.04	34.91%	9.1417
7	Elem	Ind Area	0.90%	0.51	0.30	19.54%	0.7685
8	Elem	Urban	1.57%	2.81	1.36	1.90%	0.3992
9	Unified	Ind Area	1.49%	0.48	0.29	63.85%	2.8805
10	Unified	Ind Area	1.31%	0.72	0.60	5.45%	1.6702
11	Elem	Ind Area	0.46%	0.29	0.29	20.61%	2.8560
12	Unified	Rural	0.15%	0.44	0.17	291.46%	3.5042
13	HS	Urban	5.44%	2.99	0.88	54.36%	-2.258
14	Unified	Ind Area	0.82%	0.44	0.80	111.74%	4.8890
15	Elem	Suburb	2.65%	1.37	1.24	101.78%	-2.8412
16	Elem	Ind Area	0.45%	0.53	0.31	35.65%	2.8183
17	Elem	Urban	1.34%	3.87	3.31	120.55%	-3.5548
18	Unified	Ind Area	0.77%	0.56	1.04	1.00%	-0.6568
19	Unified	Suburb	21.61%	0.97	0.85	44.85%	-2.8499
20	Elem	Urban	0.88%	0.57	0.68	13.96%	2.9841
21	Unified	Ind Area	1.92%	0.43	0.37	37.71%	1.6501
22	Unified	Suburb	9.12%	0.96	1.11	25.26%	-3.1593
23	Unified	Suburb	6.43%	2.09	0.71	35.27%	-3.0267
24	Elem	Urban	2.61%	1.18	1.79	71.41%	4.9524
25	HS	Urban	6.75%	3.81	1.81	79.01%	3.2704
26	Elem	Rural	0.06%	0.68	0.85	192.41%	3.6447
27	Elem	Urban	3.74%	0.68	0.45	22.75%	1.1035
28	Elem	Rural	0.03%	1.46	3.98	138.96%	0.7040
29	Unified	Rural	0.32%	0.42	0.51	44.74%	9.0241
30	Unified	Rural	0.18%	0.97	2.92	5.45%	0.9168
31	Elem	Rural	0.57%	0.57	0.19	37.70%	5.5477
32	Unified	Ind Area	0.30%	0.61	0.40	1[illegible].20%	-1.7804
33	Elem	Suburb	4.29%	1.68	1.65	28.67%	-1.8381
34	HS	Suburb	3.[illegible]3%	3.39	1.56	41.11%	-2.5399
35	Elem	Urban	7.85%	1.59	1.04	60.74%	-2.5991
36	Unified	Rural	0.61%	0.29	0.07	53.35%	9.9605

APPENDIX G

Description of Simulations

Description of Simulations

SIM 1 used the Ed. STAT indices of need calculated by the Arizona Department of Education with funds going only to those districts with an index of need above 0.000. Each district's index was treated as a percentage and multiplied by the district's average daily membership; these products were summed and the district's percentage of the state total was calculated. These percentages were used in the impact analysis.

For each district

$$IN > 0 * ADM = DE \qquad (3)$$

$$DE / \Sigma DE = DS$$

where:

IN > 0 — index of need of district greater than "0"

ADM — average daily membership by district

DE — district's entitlement

DS — district's proportional share of state total

SIM 2 used the Ed. STAT indices of need with all districts receiving funds under this "adjusted index of need" option. A base of 2.0% per ADM was added to the index for each district. The index of need was adjusted by converting the negative indices to positive numbers by adding a positive number equal to the lowest index to the indices for all districts in the prototype state. The district's index was treated as a percentage and multiplied by the district's average daily membership; these products were summed and the district's percentage of the state total was calculated. These percentages were used in the impact analysis.

For each district

$$(IN + .02) * ADM = DE \quad (4)$$

$$DE / \Sigma DE = DS$$

SIM 3 estimated allocations using the number of students in the particular at-risk programs in each of the prototype school districts. For each district, the appropriate Project Fair Index (PFI) was multiplied by the number of students in each program in the district. The products were summed and the district's percentage of the state total was calculated. These percentages were used in the impact analysis.

For each district

$$\text{Sum of } (PFI * ARP) = DE \quad (5)$$

$$DE / \Sigma DE = DS$$

where:

PFI — Project Fair Index for each program

ARP — number of at-risk youth by program

SIM 4 was identical to SIM 3 except that each district's allocation was fiscally equalized using the concepts in the current Arizona state school finance program. For each district, the PFIs for each program were multiplied by the number of students in the program and added to the weighted ADM (WADM) for each district to generate a "new" WADM. As a first step, for each district, the "new" WADM was used with a base allocation of $2,400.00 per WADM and a local tax rate of $0.0472 for unified districts and $0.0236 for elementary and high school districts on the district's primary assessed valuation to calculate the total state funds that

would accrue to each district. In the second step, the district's "regular" WADM was used with a base allocation of $2,400.00 per WADM and the applicable local tax rate to calculate the total state funds that would accrue to each district without at-risk funding. The product in the first step was subtracted from the product in the second step. The amounts for each district were summed and the district's percentage of the state total was calculated. These percentages were used in the impact analysis.

For each district

$$(((WADA + ARWP) * \$2400) - (QTR * PAV)) - ((WADA * \$2400) - (QTR * PAV)) = DE \quad (6)$$

$$DE / \Sigma DE = DS$$

where:

WADA — weighted average daily attendance

ARWP — at-risk weighted pupils

QTR — qualifying tax rate

PAV — primary assessed valuation

SIM 5 used the data from the per pupil expenditures in the cost study as the excess cost for at-risk programs on a district-by-district basis. For districts in the prototype state that were not included in the cost study, the median excess cost was used. The amounts for each district were summed and the district's percentage of the state total was calculated. These percentages were used in the impact analysis.

By district

Sum of (EC * ARP) for applicable programs = DE (7)

$$DE / \Sigma DE = DS$$

where:

EC — excess cost per pupil in program

SIM 6 used the amount of funds granted to local school districts through the Arizona At-Risk Pilot Project funded through the Arizona Department of Education. The amounts for each district were summed and the district's percentage of the state total was calculated. These percentages were used in the impact analysis.

$$PP\$ = DE \quad (8)$$

$$DE / \Sigma DE = DS$$

where:

PP$ — amount of grant under the Arizona At-Risk Pilot Projects

APPENDIX H

Subtopics of Evaluation Criteria

Subtopics of Evaluation Criteria

STABILITY AND PREDICTABILITY	• Continuation of programming • How monies were funded
ADEQUACY	• Sufficiency of level of funding • Type of district that might be hurt — ability of small districts to provide programs
EFFICIENCY	• Targeted use of funds • Maximization of resources — if districts contributed • Ease of program and fiscal planning • Cost containment • Incentive/disincentive to mainstream • Incentive/disincentive to maximize class size • Incentive/disincentive to label children
ACCOUNTABILITY	• Detailed cost accounting • Tracking of funds to programs
EQUITY — TAXPAYER	• Equalized/unequalized • Distributional effects — benefiting poor districts
EQUITY — STUDENT	• Distribution in relation to magnitude of the problem • Penalize provision of funding in some districts — restricting meeting the needs of students
RESPONSIVENESS	• Flexibility of programming — degree of program accommodation • Incentive for innovation
NON-MANIPULABILITY	• Manipulability of student counts, cost data • Incentive/discentive to overclassify

APPENDIX I

Project Staff

Project Staff

K. Forbis Jordan — Principal Investigator. Jordan is a professor of Educational Leadership and Policy Studies in the College of Education at Arizona State University. He has been a faculty member at Indiana University and the University of Florida, and was the Senior Specialist in Education with the Congressional Research Service in the Library of Congress. His primary research interests are school finance and intergovernmental relations. His Ed.D. was awarded by Indiana University.

Teresa S. Lyons — Co-Principal Investigator. Lyons is an assistant professor in Educational Administration at the University of Nevada/Las Vegas. She has been a public school administrator, teacher, and speech language pathologist. Her primary research interests are the role of the administrator in curriculum improvement, program development for special populations, and the impact of teacher belief systems on instructional decision making. Her Ph.D. was awarded by Arizona State University.

John T. McDonough — Co-Principal Investigator. McDonough is an administrative assistant in the Romeo Public Schools (Michigan). He has 20 years experience as a high school teacher. His primary research interests are school finance and school management. His Ed.D. was awarded by Arizona State University.