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ABSTRACT
                Based on the proceedings of a national conference titled
"Implementation of the Title I Program: Implications for Improving Schools'
Capacity for Achieving Success," this publication is intended to bring
critical attention to the issues that will improve the learning of
economically disadvantaged students in urban and rural schools. Chapters
provide an overview of the research base and an analysis of the current state
of education practice. Each chapter contains specific proposals for policy
development and research and development agendas. The chapters are: (1)
"Financing Title I: Meeting the Twin Goals of Effective Resource Targeting
and Beneficial Program Interventions" (Martin Orland and Stephanie Stullich);
(2) "Educational Practices and Policies that Promote Achievement" (Margaret
C. Wang, Geneva D. Haertel, and Herbert J. Walberg); (3) "Redesigning the
Federal Compensatory Education Program: Lessons from the Implementation of
Title I Schoolwide Projects" (Kenneth K. Wong, Gail L. Sunderman, and
Jaekyung Lee); (4) "Sustaining State Reform through Research and Recognition"
(Gerald L. Richardson); (5) "Reading Achievement, Reading Instruction, and
Title I Evaluation" (Richard L. Venezky); (6) "English-Language Learners and
Title I Schoolwide Programs" (Diane August); (7) "Meeting Student Diversity
Needs in Poor, Rural Schools: Ideal Practices and Political Realities"
(Barbara L. McCombs and Bill Bansberg); and (8) "Epilogue: A Summary of
Recommendations" (Margaret C. Wang and Kenneth K. Wong). Each chapter
contains references. (Contains 23 tables.) (SLD)

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Practice and Policy Imperatives

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Preface

Margaret C. Wang and Kenneth K. Wong

For the first time in the history of federal involvement in education, students who receive compensatory education through Title I programs are no longer left at the margins of school reform. As part of a national effort toward systemic reform, the 1994 reauthorization of Elementary and Secondary Education Act, the Improving America's Schools Act (IASA), aims at providing more coherent educational services to schools with a high concentration of students at risk.

Two of the provisions made in the reauthorized legislation are likely to have far-reaching implications on teaching and learning. First, vigorous new standards for our nation's students will be applied to all Title I students. As announced by President Clinton, "Title I bilingual education, and dozens of other federal programs will become integral to, not separate from, state and community education reforms that center on high standards" (U.S. Department of Education, 1993, p.3; also see U.S. Department of Education, 1996).

The second initiative is the expansion of the Title I schoolwide project provision, which creates an opportunity for high-poverty schools to allocate Title I resources with few restrictions (Commission on Chapter 1, 1992). Extending on the 1988 Hawkins-Stafford amendment, the 1994 legislation lowered the eligibility threshold for the schoolwide project from 75% low-income students in a school to 50% low-income students. Indeed, the number of schoolwide projects grew from fewer than 1,200 in 1991—a mere 10% of the eligible Title I schools—to over 4,500 in 1995.

This special publication is based on the proceedings from a national invitational conference "Implementation of the Title I Program: Implications for Improving Schools Capacity for Achieving Student Success." The conference, organized in light of the unique opportunity presented by the 1994 reauthorization of the Elementary and Secondary Education Act, was co-sponsored by the National Center on Education in the Inner Cities and the Mid-

Atlantic Laboratory for Student Success at Temple University Center for Research in Human Development and Education, and the Office of Compensatory Education Programs of the U.S. Department of Education.

The chapters consist of both an overview of the research base and an analysis of the current state of education practice. Each chapter contains specific proposals for policy development and future research and development agendas. The authors include researchers, practitioners, and policymakers from a wide range of disciplines. Although each author concentrates on a specific aspect related to implementation of Title I programs, all authors share two basic assumptions: (a) there is a substantial research base and much practical know-how on effective and innovative implementation strategies and practices that can be culled to improve learning in high-poverty schools; and (b) assessment and evaluation must stem from the belief that all students can learn. The task at hand is to use what is known to work to develop site-specific strategies for overcoming known barriers to effective implementation in the service of academic achievement of every student.

This publication is intended to bring critical attention to the issues and the steps that will improve the learning of children and youth in urban and rural schools with a high concentration of students from economically and educationally disadvantaged backgrounds. We believe the interdisciplinary perspective of this volume will be of much interest to educators, researchers, practitioners, and policymakers from a variety of disciplines whose work is closely tied to education, children and family services, and/or programs to revitalize urban and rural communities, particularly those operating under or eligible to operate under this Title I schoolwide project provision of the IASA.

The first chapter, "Financing Title I: Meeting the Twin Goals of Effective Resource Targeting and Beneficial Information" by Orland and Stullich, provides an overview of Title I's key funding provisions for allocating resources to states, school districts, schools, and students. The authors explore the question of how well the program has met the perennial challenge of ensuring that program resources reach jurisdictions and children who can most benefit from them, highlighting recent efforts to improve targeting. They go on to discuss one of the more recent concerns among Title I analysts—the extent to which the program's financing arrangements and fiscal accountability arrangements may inhibit effective instructional practice. Finally, they summarize key findings on the success of Title I in reaching those in greatest need and their implications for designing financing mechanisms that are likely to promote effective instruction.

Chapter 2, "Educational Practices and Policies that Promote Achievement," examines the gap that exists between research and practitioner knowledge about what makes learning effective, and methods to help improve educational policies and practices. In this chapter, Wang, Haertel, and Walberg

identify the context of educational reform through research findings on the relative effects of policies and practices on learning. The authors present a theoretical framework based on prior syntheses from which observations and recommendations are made.

In Chapter 3, "Redesigning the Federal Compensatory Education Program: Lessons from the Implementation of Title I Schoolwide Projects," Wong, Sunderman, and Lee examine the degree of innovation in resource allocation and instructional organization in schoolwide programs. The authors provide a synthesis of the emergent knowledge base on Title I schoolwide projects addressing such issues as: "What kinds of instructional strategies work and do not work?" and "How do innovations affect student learning?" Findings on effective whole school reform initiatives, instructional strategies that work for disadvantaged students, and major barriers that impede teaching and learning improvement schoolwide are also discussed. The authors conclude the chapter with policy recommendations to improve both quality and coordination in curriculum, instruction, and professional development.

In Chapter 4, "Sustaining State Reform Through Research and Recognition," Richardson examines scaling-up reform based on a wide-scale evaluation of high-poverty elementary, middle, and high schools in Florida. The author draws on a rich database to discuss research design and evaluation issues to measure performance of high-poverty schools and to identify schooling circumstances that facilitate student learning and effective reform. The discussion considers what resources are available to diverse communities to unify classrooms, schools, and communities in an effort to bring about successful reform and help all children in reaching common educational goals.

Venezky's chapter on "Reading Achievement, Reading Instruction, and Title I Evaluation" provides a candid discussion of the implications of findings on the potential impact of new legislative mandates on assessing all students, including Title I, with the same assessment framework nationwide. The concerns raised include whether or not Title I practices make use of the knowledge base on reading improvement and instructional strategies and which kinds of strategies show the most promise in improving reading among Title I students. Venezky also suggests how effective practices can be scaled-up systemwide.

In Chapter 6, "English-Language Learners and Title I Schoolwide Programs," August addresses Title I issues related to cultural and linguistic diversity, drawing on the resources of the National Research Council report published in Fall 1996. Here, the author discusses the research base on the issues covered in the report and provides an outline of policy recommendations for the broad policymaking and professional community.

In the chapter on "Meeting Student Diversity Needs in Poor, Rural Schools: Ideal Practices and Political Realities," McCombs and Bansberg examine the aspects of schooling opportunities in rural Title I sites. In this

chapter, the authors discuss how high-poverty rural schools meet educational challenges. The issues of creative hiring of well qualified Title I teachers, incentives for staff development in Title I schools, and in-service training are also addressed. McCombs and Bansberg investigate the effect of new statewide assessment frameworks and standards on poor, rural Title I schools. Recommendations on Title I to improve the rural school situation are made to policymakers of all levels. Finally, the chapter considers the out-of-school learning experience and its effect on the rural student while examining the schooling opportunities for migrant children in high-poverty rural settings.

The final chapter, the Epilogue, provides a summary of the deliberations and next-step recommendations by the conference participants. Conferees devoted much of the conference to small work groups, where recommendations for next steps in research, policy development, and improvement of practices were generated. The next-step proposals from these work groups are summarized in this chapter. Although none of the recommendations were voted on formally by the full set of conferees, and there were disagreements on some matters, all conference participants agreed on the urgency for improvement. The Epilogue reflects that tenor and some of the specifics of the conference proceedings, considering all voices—authors of the commissioned papers, commentators, organizers of the conference, and conferees.

not necessarily reflect the position of OERI and no official endorsement should be inferred.

-Margaret C. Wang
-Kenneth K. Wong

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Financing Title I: Meeting the Twin Goals of Effective Resource Targeting and Beneficial Program Interventions

Martin Orland and Stephanie Stullich

> *Author's Note: This paper is intended to promote the exchange of ideas among researchers and policymakers. The views are those of the authors, and no official support by the U.S. Department of Education is intended or should be inferred.*

The financing of the Elementary and Secondary Education Act's (ESEA) Title I[1] has long captured the attention of education policymakers. From its inception, Title I has been the largest single federal aid program supporting elementary and secondary education. Indeed, its approximately $1 billion appropriation in its first year (1966) was larger than the entire federal elementary and secondary education aid budget a year earlier, representing over 40% of all federal monies for elementary and secondary education (Bailey & Mosher, 1968). Thirty years later, Title I's size still dwarfs all other federal aid programs in elementary and secondary education. The 1996 Title I appropriation of $6.7 billion constitutes about one-third of all federal aid to elementary and secondary schools. The program currently serves approximately 6.5 million students (15% of all students) residing in roughly 14,000 school districts (Sinclair & Gutmann, 1996).

Much more important to policymakers than Title I's absolute size, however, is its earmarked purpose. After all, while Title I may be a large federal education program, it has always represented a relatively small share of overall education spending in this country (roughly 2.5% in 1996). The program's purpose, however, has never been to provide general aid to local school systems. Rather, it is to improve the educational achievement of low-achieving students living in areas with high concentrations of poverty. However imperfectly, Title I's allocation formula and program regulations have been designed to reflect this purpose. As a result, Title I frequently represents the principal source of revenue supporting special services for the educationally disadvantaged in schools throughout the country.

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[1] From 1982 through 1994, this program was formally known as Chapter 1 of the Education Consolidation and Improvement Act. We use the program's original and current designation—Title I—throughout this paper.

The rationale for a unique federal role to support the special educational needs of children living in high-poverty areas has its basis in both scholarship and politics. Researchers for several decades have been documenting and commenting on the gap between the needs of school districts with high concentrations of students from low-income families and the revenues necessary to meet them (Wise, 1968; Taylor & Piché, 1990; Kozol, 1991; Commission on Chapter 1, 1992; Rotberg & Harvey, 1993; U.S. Department of Education, 1993). But this fact alone does not necessarily suggest the need for a federal financing role unless two other arguments also hold. First, it must be clear that states and local school districts are either unwilling or unable to provide the needed revenues on their own. Second, the continuation of inadequately funded school programs for low-income children must be considered antithetical to the national interest.

Decades of research in school finance document that shortfalls in local revenue raising on behalf of children from low-income families is less a function of inadequate local political will than of limited resource capacity to meet high levels of need. Children from families in poverty are more likely than other children to reside in school districts with low revenue-raising capacity (Wise, 1968; Cibulka, 1986; Orland, 1988; Taylor & Piché, 1990; Rotberg & Harvey, 1993). Equally as important, students from families in poverty—especially those attending schools with large concentrations of other children from low-income families—are more likely than their peers to require supplemental educational services to enable them to reach their academic potential (Orland, 1990; U.S. Department of Education, 1993). While states have the legal authority to redress these inequities, they continue to persist despite some 25 years of state school finance litigation (Tan, Orland, & Van Slyke, 1994).

The notion that the inadequate education of children from families in poverty runs counter to the national interest is now accepted—at least rhetorically—by nearly all sides in conventional political discourse. Significantly, in the three decades since the initial passage of Title I, the national interest argument has been considerably broadened from concerns over morality and fairness to an emphasis on economic productivity, interdependence, and human capital. Despite the likelihood that the nation is generally considerably more politically conservative today than it was when Title I was first enacted in 1965, there is probably greater acceptance now by political leaders of all persuasions that our future national well-being greatly depends on our ability to educate *all* students successfully. Since our current system is not adequately educating large numbers of low-income students, a more proactive federal role is viewed as legitimate.

This is not to argue that there is necessarily a national political consensus that interventions such as Title I represent the preferred federal strategy for addressing the need of underachieving children living in disadvantaged areas. Indeed, political conservatives are much more likely to

argue that reforms such as school choice and charter schools would constitute more potent policy instruments. However, the belief that there is a real national stake in helping to ensure improved educational performance for these children has probably never enjoyed more widespread political support.

Title I represents one of many potential federal policy responses for meeting the needs of low-achieving children living in poor communities. Its funding philosophy can not be divorced from its overall policy assumptions. From its beginnings, the program has been grounded in the belief that the achievement of children from high-poverty areas could be substantially improved if federal resources could be efficiently targeted to those children who most need additional support, and if such targeting could lead to effective interventions on behalf of such children. The major purpose of this paper is to investigate how successfully these two conditional premises have been met and, more fundamentally, if they are mutually compatible.

Over the years, Title I has adopted a complex series of fiscal, legal, administrative, and regulatory structures for delivering resources to its target population. These structures include federal formulas for allocating program monies to states and counties, county rules for allocating resources to school districts, district procedures for allocating resources to schools and children, and overall requirements for ensuring that program funds supplement (rather than replace) state and local support for these same children. The design and implementation of these seemingly mundane financing provisions have enormous impact on the program because they can profoundly affect the correspondence between resource allocation and need, as well as the ability to orchestrate an effective instructional intervention. That is, they strongly influence the answers to the most fundamental questions about the Title I program: "Who benefits?" and "With what kinds of services?" Policymakers well know the importance of such provisions, as they are invariably the areas of greatest contention during program reauthorization.

This paper begins by describing Title I's key funding provisions for allocating resources to states, school districts, schools, and students. The question of how well the program has met its perennial challenge of ensuring that program resources reach the jurisdictions and the children who can most benefit from them is then explored. Recent efforts to improve program targeting will receive particular attention.

The next section focuses on a more recent concern among Title I analysts: the extent to which the program's financing arrangements and fiscal accountability arrangements may inhibit effective instructional practice. Three related topics are discussed: (a) what is known about effective instruction for disadvantaged children; (b) how compatible these models are with Title I's financing provisions; and (c) recent reform efforts. The paper concludes by summarizing key findings regarding the success of Title I in reaching those in

greatest need and designing financing mechanisms likely to promote effective instruction.

Description of Major Title I Funding Provisions

Since 1965, Title I funds have been allocated through a multistage process, whereby the federal government allocates funds to the county level, states suballocate these funds to school districts within each county, school districts allocate resources to individual schools, and schools provide additional services to designated children. Title I funds are allocated to counties, school districts, and schools primarily based on their numbers of school-age children in poverty.[2] However, many other factors influence allocations under a complex set of formulas. The following sections describe how funds are allocated to states and school districts, how these resources are targeted to schools and students, other fiscal requirements, and new requirements for Title I to use updated census poverty data and make federal allocations directly to school districts.

Allocating Resources to States and School Districts

Under the current law, there are four different formulas for allocating Title I funds to states, counties, and school districts: (a) Basic Grants, (b) Concentration Grants, (c) Targeted Grants, and (d) the Education Finance Incentive Program. However, only the formulas for Basic and Concentration Grants have been used to date. Although Congress created the Targeted Grant and Incentive Program formulas in the 1994 reauthorization (P.L. 103-382), funds have not been appropriated for these formulas.

Basic Grants. The Basic Grant formula has allocated the vast majority of Title I funds since 1965 with few changes to the formula. In 1996, $6 billion were appropriated for this formula (90% of all Title I funds). School districts are eligible for Basic Grants if they have at least 10 children in poverty *and* a poverty rate over 2%. Prior to the 1994 reauthorization, Basic Grants went to 93% of all school districts; however, this number probably declined slightly in the 1995-96 school year as the new 2% eligibility minimum went into effect.

The Basic Grant formula essentially allocates funds in proportion to each county's share of the nation's children in poverty. The county allocations are adjusted using state average per-pupil expenditures (limited to between 80 and 120% of the national average), a factor intended to compensate for differences in the cost of education among the states. A hold-harmless provision protects districts from sudden sharp reductions in funding by guaranteeing that

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[2] Although Title I allows different definitions of "poverty" or "low-income" for different purposes (including census poverty data at the state, county, school district levels; Free and Reduced-Price Lunch; Aid to Families with Dependent Children [AFDC]; and other data at the district and school levels), for simplicity's sake we use the term "children in poverty" throughout this article regardless of the type of data used.

each district will receive at least 85% of its prior-year allocation.[3] Finally, a state minimum grant provision guarantees a floor allocation level for each state.

Concentration Grants. The Concentration Grant formula was first enacted in 1978 to target funds to higher poverty school districts, but was funded for only three years. With renewed calls for greater targeting of Title I funds, Concentration Grants were reauthorized in the 1988 Hawkins-Stafford amendments and have been funded since that time, rising gradually to 10% of total Title I funds. The Concentration Grant formula is similar to the Basic Grant formula, with the exception that funds are allocated only to counties and school districts with at least 6,500 eligible children or more than 15% eligible children. While the Concentration Grant formula includes a state minimum provision, it does not include a hold-harmless provision (except in 1996 when a 100% hold-harmless applied).

Targeted Grants. This formula was created in the 1994 reauthorization to increase targeting on higher poverty districts by allocating "new" money through a weighted-child formula. However, although the new law stated that funds over the 1995 funding level were to be allocated through the Targeted Grant formula, the 1996 and 1997 appropriations bills overrode this provision, continuing to allocate new money solely through the old Basic Grant and Concentration Grant formulas.

The Targeted Grant formula would allocate funds through a weighted-child approach. This approach considers both the percentage and number of poor children in the county or district, applies the weights "stepwise" so that only those children above each weighting threshold receive the higher weight, and then uses the higher of the percent- and number-weighted child counts to allocate funds. Table 1 shows the weights for school district allocations; the weights for counties are the same except that the weighting categories are adjusted for the relatively larger size of counties. In addition, the Targeted Grant formula includes somewhat stricter eligibility thresholds than the Basic Grant formula (at least 10 children in poverty *and* a poverty rate over 5%).

Education Finance Incentive Program. This formula, also created in the 1994 reauthorization, would allocate funds to states based on the number of all school-age children in the state multiplied by factors that provide higher levels of funding to states that have higher levels of fiscal effort and within-state equalization (as measured by the specific factors established in the law); a state minimum provision also applies. States would suballocate these funds to school districts in proportion to all other Title I funds received by each district.

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[3] The hold-harmless provision was revised in the 1994 reauthorization, increasing to 100% in 1996, and then shifting to a variable rate in 1997 and future years. The variable rate ranges from 95% for high-poverty districts (30% or more poor children) to 90% for districts with 15% to 29% poverty and 85% for districts with 14% or less poverty.

Table 1

Targeted Grants Weights for Allocations to School Districts

Percent Weights		Number Weights	
Poverty rate	Weight	Number of poor children	Weight
0-14.265%	1.0	1-575	1.0
14.265%-21.553%	1.75	576-1,870	1.5
21.553%-29.223%	2.5	1,871-6,910	2.0
29.223%-36.538%	3.25	6,911-42,000	2.5
Over 36.538%	4.0	42,001 or more	3.0

The Incentive Program formula incorporated the fiscal effort and equity factors contained in the Senate version of the bill. Whereas the House had proposed the Targeted Grants approach of allocating new money through a weighted formula, the Senate wanted to "target all of the money" by allocating funds to states through a single weighted-child formula that incorporated effort and equity incentives and then allocating funds to school districts through a second formula with stronger weights and eligibility provisions. These dramatically divergent approaches, with their different effects on allocations, resulted in a stalemate until the final days of the session, when the two sides compromised by placing the effort and equity factors in a separate formula—the Education Finance Incentive Program—while retaining the House's weighted formula as the Targeted Grant formula. This legislative compromise creates the potential for future appropriations battles over levels of funding for each of the two new formulas.

School and Student Targeting

Districts select school recipients of Title I services by ranking their schools (or school attendance areas) according to the percentage of children from low-income families. Schools with a poverty rate at or above the district-wide average are eligible for Title I funds; however, districts may also serve schools below the district average if their poverty rate is at least 35%. Districts may rank schools separately by grade span, but they must serve schools with poverty rates of 75% or more before serving lower poverty schools, regardless of grade span.

Funds are allocated to schools based on the number of low-income students in each school. Each participating school must receive a Title I allocation per child in poverty that is at least 125% of the district-wide allocation per child in poverty—a provision intended to counter a tendency among districts to spread the funds thinly across a number of eligible schools (Birman et al.,

1987). However, the "125% rule" does not apply if all participating schools are at least 35% poor.

Schools may be designated "schoolwide programs" if their poverty rate is at least 50% and they have a plan demonstrating how they will use the funds to improve the quality of the school, with a particular focus on meeting the needs of educationally disadvantaged students. The number of schoolwide programs has been increasing rapidly, from about 200 in 1988-89 to 3,900 in 1993-94 (37% of schools eligible for using the schoolwide approach). Indeed, the number of schoolwide programs rose 40% from 1992-93 to 1993-94 alone (Sinclair & Gutmann, 1996).

Schools that choose not to implement a schoolwide approach or do not meet the eligibility threshold provide "targeted assistance" to students identified as educationally disadvantaged (i.e., low-achieving) based on the district's definition of educational disadvantage. These schools (or their districts) often choose to focus Title I resources on early intervention strategies; half of Title I students are in preK-3, while only 20% are in grades 7-12 (Sinclair & Gutmann, 1996). Title I students are served predominantly through pull-out arrangements, leaving their regular classrooms to receive remedial instruction in reading or math from a Title I teacher (typically for approximately 30 minutes a day). However, the number of schools using the pull-out approach has declined somewhat in recent years, from 84% in 1985-86 to 74% in 1991-92. Other common strategies used to assist educationally disadvantaged students include in-class help from aides (58%) and computer-assisted instruction (51%). Much less common are extended-time strategies, such as summer school (15%) and before- and after-school programs (9%) (Millsap, Moss, & Gamse, 1993).

Seventy percent of elementary classroom teachers reported that students missed academic instruction in the classroom while they were participating in Title I instruction (Millsap et al., 1993). The most recent national assessment of the program concluded that Title I programs contributed an average of 10 minutes of additional instructional time per day (U.S. Department of Education, 1993).

Other Fiscal Requirements

Districts receiving Title I funds must comply with three "fiscal requirements" intended to ensure that the funds are used to expand and improve the existing level of educational services to meet the special needs of low-achieving children in higher poverty schools. These rules were enacted in the early 1970s after a NAACP report described numerous cases in which Title I funds were used as general aid for purchasing such things as instructional materials available to all schools in the district, audiovisual systems, data processing equipment, and even for sewage disposal (Martin & McClure, 1969).

Supplement, not supplant. School districts may use Title I funds only to supplement, not supplant, the amount of funds that, in the absence of Title I funds, would have been made available from state and local sources for the education of children receiving Title I services. In effect, this rule means that schools must use Title I funds only to provide services to students identified as eligible for Title I, so that children not identified for Title I are unable to receive assistance from a Title I teacher or use a computer purchased with Title I funds. Schools with "schoolwide" Title I programs, however, have more flexibility with respect to this requirement, since they are permitted to use Title I funds to improve the entire educational program of the school and need not identify particular children as eligible for Title I services.

Although the law states that compliance does not require districts to provide Title I services through a particular instructional method, the rule has encouraged the prevalence of the "pull-out" approach. A major reason for the popularity of this method is that it is the easiest and safest way to demonstrate compliance. Additionally, penalties for violating Title I's fiscal requirements can be severe. However, from an educational perspective, it is difficult to see the pull-out approach as anything but the supplanting of normal services, since these children are missing the learning experiences that occur in their regular classroom while they are receiving "supplemental" services. The 1994 reauthorization encouraged the use of "extended-time" strategies (such as summer school and before- and after-school programs), but the "supplement, not supplant" rule itself was not fundamentally changed.

Comparability. Districts must use state and local funds to provide services in Title I schools that are comparable to services in non-Title I schools before Title I funds are added. Districts may demonstrate compliance with this requirement by either demonstrating that Title I and non-Title I schools have comparable student-teacher ratios or per-pupil expenditures on instructional staff, or through written assurance that they maintain a district-wide salary schedule and policies to assure equivalence among schools in teachers, other staff, curriculum materials, and instructional supplies.

Despite the abuses of the past, today there appear to be few violations of the comparability provision. A recent intensive study of Title I resource use in 30 districts found that most had achieved comparability on a broader array of resource measures, including overall expenditures per student, teacher training and experience, and availability of instructional materials and equipment (Chambers, Parrish, Goertz, Marder, & Padilla, 1993). However, the authors also found that schools did differ within districts on more qualitative measures. For example, principals of the high-poverty schools tended to rate their teachers less highly than principals of low-poverty schools, while the low-poverty schools tended to receive more "parent-funded extras," such as additional funds for purchasing library books. In addition, some have questioned the adequacy of applying the comparability requirement only *within* districts, as inequitable state

school finance systems may result in "Chapter 1 funds [being] used in property-poor districts to furnish services that are routinely available to all students in property-wealthy districts" (Taylor & Piché, 1990, p.51; see also Commission on Chapter 1, 1992; Rotberg & Harvey, 1993).

Maintenance of effort. This provision was intended to prevent school districts from using Title I funds to reduce local revenues. Districts meet the maintenance of effort requirement if their state and local expenditures per pupil (or their aggregate state and local expenditures) are at least 90% of the prior year amount. The law authorizes waivers in cases of natural disasters, sudden declines in a district's financial resources, and other uncontrollable circumstances.

Census Poverty Updates and Direct Allocations to School Districts

Perhaps the most significant changes in the 1994 reauthorization affecting Title I allocations are the new requirements to use census poverty data that are updated once every two years, beginning with the 1997 allocations, and to make federal allocations directly to school districts, beginning in 1999. These changes were enacted despite concerns about the reliability of the updated poverty estimates and district-level estimates due to sampling errors and other estimation problems. To address these concerns, the law stated that the new data would be used *unless* the Secretaries of Education and Commerce jointly determined that the data are inappropriate or unreliable, based on the recommendations of an upcoming study to be conducted by the National Academy of Sciences.

The use of decennial census data to allocate funds causes inefficiencies and inequities for a number of reasons. First of all, the data become significantly out of date as the decade progresses and demographic conditions change. From 1980 to 1990, half of the states experienced increases or decreases of over 20% in their population of children in poverty, and the share of the nation's children in poverty in the two largest states (California and Texas) rose from 16% to 21% (Moskowitz, Stullich, & Deng, 1993). At the district level, changes in poverty rates can be even more extreme, with some districts experiencing increases of 600% or more, while others experienced decreases of up to 100% (analysis of Census Bureau data).

Second, the use of decennial census data causes abrupt funding shifts when data from the new census become incorporated into the funding formula. When the 1990 census data was first used for Title I allocations in 1993, states and districts with sharp declines in poverty had to quickly adjust to substantial reductions in their Title I allocations. At the same time, districts with large increases in poverty during the 1980s felt that their funding increases were long overdue.

Finally, the two-stage process of allocating funds to counties and then to school districts within each county causes inequities in the distribution of funds. High-poverty school districts may not receive Concentration Grant funds if they are located in low-poverty counties that fail to meet eligibility thresholds for Concentration Grants. At the same time, other districts receive very large Concentration Grant allocations because they are the only eligible district in an eligible county; funds generated by all of the children in poverty in the county can be allotted to a district that has a relatively small share of the county's children.

Despite these problems, the current allocation process has generally been followed since 1965. This is due to concerns about the unreliability of using census poverty updates for small school districts and the absence of an alternative data source.[4] The National Academy of Sciences has been assigned the difficult task of assessing whether using census poverty updates at the school district level would be better or worse than the status quo. Census Bureau work on producing updated poverty estimates for counties has been proceeding for several years, and Census staff say they are on track for completing the first set of updates by the end of 1996. The decision whether or not to use these data for the 1997 Title I allocations will need to be made very quickly, as the U.S. Department of Education normally announces preliminary allocations in January and final allocations in July.

The Perennial Title I Challenge:
Getting the Right Resources to the Right Children

Calls for greater targeting of Title I funds on the highest-poverty districts and schools have been made repeatedly throughout the program's history. The rationale for targeting is that the program will have the greatest impact on reducing the achievement gap among schools and students if the resources are concentrated on the schools with the greatest needs. Research has found that the poverty level of the school has a strong effect on student achievement that is independent of the impact of the level of family poverty (Kennedy, Jung, and Orland, 1986; Orland, 1990; Anderson, Hollinger, & Conaty, 1992; U.S. Department of Education, 1992). Stated more simply, children in poverty enrolled in high-poverty schools have lower achievement levels than children in poverty enrolled in low-poverty schools. However, the deleterious impact of high concentrations of poverty in school is not restricted only to children in poverty. In schools with above-average poverty rates, the poverty level of the school influences the test scores of *all* children, including those from more advantaged families (Orland, 1990; Anderson et al., 1992). In fact, in high-poverty schools,

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[4] While Free and Reduced-Price Lunch counts are available annually, they exclude many poor children, particularly high school students, immigrants, and students in private schools. In addition, the program uses a "looser" definition of poverty (up to 185% of the poverty line), which would reduce the targeting of Title I funds on the poorest children and schools.

"average" students have lower achievement levels than Title I students in low-poverty schools (Puma, Jones, Rock, & Fernandez, 1993). In general, schools with high concentrations of poor children face greater challenges than low-poverty schools in breaking the link between poverty and low achievement, and need more concentrated support in order to meet those challenges.

However, a basic fact about Title I that has not changed since 1965 is that Title I funds are spread to a large majority of districts and schools, even while many of the nation's poorest schools go unserved (Birman et al., 1987; Moskowitz et al., 1993; U.S. Department of Education, 1993). In 1993-94, Title I funds were distributed to 92% of all school districts, 62% of all public schools, and 45% of all low-poverty schools (less than 20% poor)—yet 19% of the highest-poverty schools (at least 75% poor) did not receive any Title I funds (U.S. Department of Education, 1996). This occurs because many high-poverty districts choose to focus their Title I resources on their highest poverty schools, while low-poverty districts are able to serve schools with substantially lower poverty rates. In addition, many districts choose not to serve their high-poverty high schools and middle schools; instead they provide elementary Title I programs in schools with lower poverty concentrations. As a result, many low-achieving students in high-poverty schools fail to receive Title I services, while higher-achieving students in low-poverty schools are served. For example, in 1992, one-third of first-grade students in high-poverty schools who scored at or below the 35th percentile on reading tests did not receive Title I services (Abt Associates, 1993).

Impact of the 1994 Reauthorization on Targeting to States and Districts

The need for improved targeting was one of the key principles promoted by the Clinton Administration throughout the 1994 reauthorization and was perhaps the most hotly debated issue as the bill wound its way through Congress. Nevertheless, the changes that resulted may have little impact on targeting at the state, county, and school district levels because improved targeting was made largely dependent on increased funding for Title I, which was to flow through the new Targeted Grant formula. Based on the belief that relying on "new money" would not cause sufficient improvements in targeting, the President's budget requests for 1996 and 1997 proposed directing $1 billion (14% of the total Title I request) through the Targeted Grant formula, including $700 million shifted from Basic Grants, resulting in a total Title I budget increase of 4.5%. This would have increased funding for urban and rural high-poverty counties (e.g., an 11% gain for New York City—33% poverty) and a 15% gain for rural East Carroll, Louisiana—69% poverty) while reducing funding to low-poverty areas (e.g., a 7% funding reduction for Loudoun, Virginia—3% poverty). However, Congress has been unwilling to allow even new money to flow through the Targeted formula, let alone shifting funds from Basic Grants.

The Targeted Grant formula itself is an imperfect mechanism for targeting funds to high-poverty districts. The specific sets of weights used in the Targeted Grant formula have an urban tilt, so that small counties and districts with moderately high poverty rates tend to do less well than large districts with lower poverty rates; states with many poor rural counties (such as southern states) tend to do less well than more urban states. For example, under the President's budget proposal, West Virginia (24% poverty) would receive a 3.7% increase, while New York (20% poverty) would receive a 7.6% increase.

Even with these weaknesses, however, the Targeted Grant formula provides a stronger and fairer targeting effect than the Concentration formula. The "cliff effect" inherent in the Concentration Grant formula, causes counties just below the 15% threshold to receive no Concentration Grant money, while counties that barely qualify receive the same proportional benefit as the highest-poverty counties. For districts near the cut-off point, an increase or decrease of a few children can have a large impact on the district's total Title I allocation. The weighted formula used for Targeted Grants is more finely tuned to provide a smoother range of funding increases to counties and school districts with varying poverty rates.

The other new Title I funding formula, the Education Finance Incentive Program, would (if funded) decrease targeting on the highest-poverty areas, largely because it would allocate funds based on counts of all school-age children rather than just children in poverty. Thus, allocating additional Title I funds through the Incentive formula would provide larger funding increases to low-poverty counties and districts than to higher poverty areas; for example, if $200 million (3% of the current Title I funding level) were allocated through the Incentive formula, suburban Loudoun, Virginia (3% poverty) would receive a 4% increase in its Title I allocation, while New York City (33% poverty) and rural East Carroll, Louisiana (69% poverty) would gain only 2%. Proponents of the Incentive formula argue that providing incentives for states to increase their spending on education and to distribute education funds more equitably would benefit high-poverty schools (Barro, 1994). However, because Title I provides a relatively small share of all education funds (2.5%), incentive factors that partially influence how a small portion of those funds are allocated are unlikely to have a significant impact on overall state fiscal decision making.

One change that will produce some targeting improvements is that, beginning in 1996, school districts with 2% or fewer low-income children are no longer eligible for Title I grants. Although this change seems desirable as a minimal step towards concentrating the funds, the percentage of districts below

this threshold is relatively small and the percentage of funds that will be redirected towards higher poverty districts is inevitably even smaller.[5]

Impact of the 1994 Reauthorization Changes on Targeting to Schools

The 1994 reauthorization is likely to have a greater impact on targeting at the school level, due to stricter requirements governing how districts allocate funds to schools. Although data are not yet available to examine the impact of these changes, it can be expected that they will result in funds being targeted to a smaller number of schools, while providing funds to a larger number of high-poverty schools (particularly middle and high schools).

Eligible schools. The new law tightened exceptions to the general rule that districts may serve only schools above the district-wide average poverty level. Under the previous law, districts could serve schools below the district poverty rate if (a) they had poverty rates of at least 25% (the "25% rule"), (b) they had been eligible for services in the prior year (the "grandfather clause"), or (c) all of the schools in the district were within 5% age points of the district poverty average ("no wide variance"). The 1994 reauthorization eliminated the grandfather and no wide variance exceptions, and increased the 25% threshold to 35%. In addition, the new law requires that schools with at least 75% low-income students be served first, without regard to grade span—a provision intended to ensure that high-poverty middle and secondary schools receive Title I services.

Minimum allocation rule. Another significant change is the "minimum allocation rule," where districts are required to ensure that participating Title I schools receive an allocation per child in poverty of at least 125% of the district-wide allocation per child in poverty. However, this provision does not apply if all participating schools are at least 35% poor. This provision was intended to prevent districts from spreading funds too thinly across schools. The impact of this provision is difficult to predict. While it may reduce the number of schools served in some districts, many districts can meet this requirement simply by choosing not to serve high schools and/or middle schools.

Allocations based on low income, not low achievement. Perhaps the most significant change in within-district allocation rules is that districts are now required to allocate funds to schools based on the number of low-income students rather than the number of low-achieving students.[6] The rationale for this change was that schools that were successful in using their Title I funds to raise

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[5] School districts with poverty rates of less than 2% based on the 1990 census accounted for 5% of all districts and 0.5% of all Title I funds in 1993-94. Even these data somewhat overestimate the impact of the new minimum, because one-third of the states use data with more liberal definitions of "low-income" to allocate Title I funds.

[6] Districts may allocate different amounts per low-income student to some schools, as long as higher poverty schools do not receive less than lower poverty schools.

student achievement were penalized under the old system, receiving decreased funding for increased student achievement levels. This change is likely to significantly alter the distribution of Title I funds within many districts, as the distribution of low-income children among schools within a district often differs substantially from the distribution of low-achieving children.[7]

Waivers. The new law contains provisions allowing the Secretary of Education to waive any statutory or regulatory requirement for the Elementary and Secondary Education Act if the waiver is designed to increase the quality of instruction or improve the academic performance of students. The waiver provision was intended to increase flexibility for states and districts whose efforts at innovative or more effective educational practices might be inhibited by federal requirements. It is interesting to note that roughly 75 waiver requests for the 1995-96 school year were withdrawn after the U.S. Department of Education informed the district that no waiver was needed. Of the remaining waiver requests, 86% related to exceptions to Title I within-district targeting rules (e.g., to provide services to ineligible schools) and 89% of these targeting waiver requests were approved (analysis of U.S. Department of Education waiver files). Although these waivers have affected a small proportion of Title I schools so far, exceptions to school targeting provisions could have a significant impact on targeting if their numbers increase in subsequent years as more districts become aware of the waiver option.

Title I Financing and Instructional Effectiveness

While the above discussion demonstrates the shortcomings in Title I resource targeting, a more fundamental question is whether allocated resources are, in fact, making a difference in student achievement. The most recent assessment data from the U.S. Department of Education's *Prospects Study* indicates that Title I was unable to reduce the learning gap between participants and their peers on its own. When comparing Title I participants (by grade and poverty level) with similar groups of students not receiving Title I, the study concluded that program participation did not reduce the test score gap between disadvantaged students and others. Such gaps remain large, with students in high-poverty schools, irrespective of Title I participation, scoring from 50 to 75% lower than their counterparts in low-poverty schools (Puma et al., 1993).

These findings are not surprising to those who have closely studied the Title I program. Indeed, in the nearly 20-year history of national Title I evaluations, researchers have consistently noted that the program's legal and

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[7] This change also affects the amount of funds reserved for services to private school students. Private schools serving students from eligible school attendance areas must now provide low-income student data in order for their students to receive Title I services, which poses some difficulty for schools that do not participate in the free and reduced-price lunch program (the usual source of low-income data at the school level). U.S. Department of Education guidance clarifies that such schools may obtain comparable information through parent surveys.

administrative framework has not been effective in generating high-quality program interventions for these students. Below are three conclusions, drawn from Title I evaluation studies of the 1970s, 1980s, and early 1990s, respectively:

- "...the basic administrative accountability systems developed by state education agencies (with the strong urging of the federal government) in implementing Title I requirements, while working fairly well in the funds allocation areas was hardly working at all in the program development ones." (Orland, 1978, p. 271)
- "Chapter 1's legal provisions govern local behaviors more directly in some areas than others. In some respects—notably decisions about school and student selection—the law specifies local actions in great detail. . . . In other respects, including most decisions about program design, the law is less prescriptive." (Birman et al., 1987, pp. 161-162)
- "While many states and school districts were moving toward broad-based reforms ... the program improvement provision did not carry the weight needed to move state and local school personnel toward higher standards." (U.S. Department of Education, 1993, p. 2)

This consistent finding across national Title I assessments is especially significant because policymakers have made escalating attempts over the last two decades to amend Title I policy and administration in an effort to secure greater local attention to issues of instructional quality and effectiveness (Herrington & Orland, 1991). This trend continues with the latest reauthorization (1994). In response to a growing research and policy consensus on what constitutes effective programming for the disadvantaged (e.g., Knapp et al., 1992; U.S. Department of Education, 1993; Orland, 1994) and to data from the last national assessment documenting the limited impact of the 1988 reauthorization reforms on local program design determinations (U.S. Department of Education, 1993), the new Title I law contains a number of major changes, including liberalizing eligibility for Title I schoolwide programs, revamping the program's evaluation system so that it links Title I to the regular local instructional program and the attainment of high academic standards, and adding new requirements for the use of local Title I monies to support high quality professional development (U.S. Department of Education, 1996).

While plans are under way to evaluate the impact of these and related changes to "reinvent Title I," it is not too soon—especially in light of the generally disappointing prior efforts at legislated reform—to hypothesize about how financing arrangements for Title I can be expected to continue to affect the creation of local program designs and instructional practices that have a greater likelihood of improving the achievement of disadvantaged pupils. We will do

this by first briefly highlighting types of Title I program design reforms that are generally thought to heighten the prospects for greater instructional effectiveness. We will then attempt to address two questions:

- To what extent are Title I's current financing structures incompatible with high quality program interventions such as these?
- Is any incompatibility between the program's financing arrangements and these designs an intractable tension between fundamentally competing objectives, or potentially remediable?

Directions for Program Reform

Recognizing that Title I's instructional effectiveness has been, at best, modest (U.S. Department of Education, 1996), there has been increasing consensus in recent years (see, for example, Odden, 1987; Smith, 1987; Comer, 1988; Knapp & Turnbull, 1990; Knapp, Shields, & Turnbull, 1992; U.S. Department of Education, 1993; Kirst, Koppich, & Kelly, 1994; Orland, 1994; Wang, Reynolds, & Walberg, 1994) on program design reforms that are more likely to lead to enhanced student achievement. In general, researchers and policy analysts support instructional designs for disadvantaged students that incorporate the following interrelated characteristics:

- Greater emphasis on the school (rather than exclusively on the student) as the focus of improvement.
- Significantly increased performance expectations that include the acquisition of higher order thinking skills.
- Stronger linkages between the special needs and general educational programs as well as between education and other providers of special needs services to high-risk children, their families, and their local communities.
- Increased flexibility in program requirements enabling administrators and teachers to spend much larger portions of their time on issues of teaching and learning rather than documenting compliance.

Taken together, these reforms paint a vision of a radically-altered organizational environment for the delivery of services to the disadvantaged, in which students are challenged academically with high quality curriculum and instruction that is delivered by knowledgeable and motivated program officials and instructors and is well-articulated and reinforced with ongoing school, school district, and other community-wide practices.

At first glance, these changes in program design may be viewed as having little to do with current Title I financing arrangements. But a closer look reveals that, indeed, there are profound interactions at work between Title I

funding and programming arrangements that create significant barriers to reforms like these becoming prevalent local practice.

Funding practices in Title I restrict the adaptation of "leading-edge" program design reforms in two important ways: (a) the generally low level of program funds in relation to local needs, and (b) the continued requirement to comply with basic fiscal accountability provisions. Put simply, a context of limited funds thinly spread for a carefully-designated target population is at serious odds with program design features expected to improve program effectiveness.

Scarce Supplementary Resources

Because Title I represents only a modest amount of aid spread out to include relatively low-need jurisdictions, most districts and schools are disinclined to use their program resources for alternative/innovative designs. The reasons are threefold. First, innovation means taking monies away from established programs and services. To allocate funds previously supporting direct instruction for another purpose (such as professional development in teaching higher order skills to the disadvantaged, investments in noninstructional services, or greater coordination and planning of Title I programs), means removing it from traditional "front-line" instruction. It would be surprising to expect such behavior in an environment where the demand for meeting the basic service needs of disadvantaged students is as pervasive and intense as it is in most jurisdictions. Difficulties in providing basic services may also contribute to the finding that schools implementing Title I schoolwide programs often view the money as general aid rather than an opportunity to fundamentally change how instruction is organized and delivered (U.S. Department of Education, 1996).

Second, the spreading of Title I funds to include a majority of districts and schools results in school allocations that may well be too small to implement innovative programs. While some schools receive allocations as high as $1,500, or even $2,000, per low-income child, allocations of less than $400 per child are not uncommon (analysis of U.S. Department of Education waiver files). Small school allocations result from the tendency at all government levels to spread available funds to benefit a maximum number of constituents. As noted earlier, the federal allocation formulas distribute Title I funds to almost all school districts, and local officials often feel a strong political impetus to provide modest levels of Title I support to large numbers of eligible schools and (often) students. The natural tendency to spread resources widely, while understandable, runs directly counter to efforts to supply threshold concentrations of resources needed to implement more innovative program designs that hold greater promise for dramatically improving the performance of some disadvantaged students.

Finally, even assuming adequate political support for diverting Title I resources for more targeted innovations with enhanced prospects for

effectiveness, the research evidence that the implementation challenges to effective programs are significant (e.g., Comer, 1988; Wang, Reynolds, & Walberg, 1994; Stringfield et al. 1994). Success is not only uncertain, but also likely to require both significant changes in standard practice, and sustained resource commitments over several years.

Even district officials who are initially intrigued by the apparent success of reforms such as Robert Slavin's "Success for All," Henry Levin's "Accelerated Schools," or James Comer's "School Development Program," may become less sanguine about attempting these approaches in their community when they realize the subtle costs associated with effectively implementing such models. For example, as Monk and King point out (1993), Levin's model requires a great deal of parental involvement. If this resource is not available, investments must be "made to either create them or substitute for them" (p. 143). Extended time strategies such as before- and after-school programs may be incompatible with existing transportation schedules and funding levels. The perceived low Title I funding levels in relation to needs means that most school districts will not view themselves as having the marginal resources or perceived "risk capital" with which to address the uncertainties associated with any innovative practice.

A Continued Compliance Orientation

The history of Title I administrative reform since the early 1980s is one of preserving the basic framework for ensuring that program resources are benefiting disadvantaged schools and children, while simultaneously introducing new regulatory changes designed to promote greater programming flexibility and state and local attention to issues of program quality and effectiveness (U.S. Department of Education, 1996). This dual objective is quite understandable. Most of the program's tight fiscal accountability requirements were put into the law in the 1970s as a response to well-documented accounts of funds supporting "general aid" rather than targeting the raising of the achievement of disadvantaged students (Herrington & Orland, 1992). Subsequent studies of local Title I programs have continuously pointed out that these requirements serve as an effective bulwark against these still prevalent tendencies (Orland, 1978; Farrar & Millsap, 1986; Millsap, Moss & Gamse, 1993). The policy has thus been not only to maintain these provisions, but also to add new ones in areas like program coordination, evaluation, school performance accountability, and parental involvement, that promote comparable attention to issues of program design and effectiveness as fiscal accountability.

This approach has had limited success for one fundamental reason: *it ignores the extent to which the basic Title I fiscal accountability framework drives programming.* Because these provisions, unlike those in the more programmatic domains, can be exacting in their specificity, measurement, and consequences for noncompliance, they continue to dominate the landscape of

program decision making. This dominance can best be illustrated with respect to the continued popularity of the pull-out Title I program design.

For years researchers and policymakers have been critical of the pull-out design of most Title I programs. While such programs can be effective (Archambault, 1986; U.S. Department of Education, 1993), the design all too often invites stigmatization of the learner, curriculum fragmentation, and an emphasis on basic skills remediation (Allington & Johnson, 1989; Pugach, 1995).[8] Yet the model continues in 74% of the nation's Title I elementary schools (Millsap, Moss & Gamse, 1993), largely because it is the one model in which compliance with student targeting and "supplement not supplant" requirements can be most easily assured and documented. While many local program administrators are probably well aware that designs in which Title I resources are more closely integrated with the regular instructional program are preferable to pull-out arrangements, as long as their primary rewards and sanctions are associated with compliance with the program's fiscal requirements they are unlikely to turn away from pull-out designs that efficiently demonstrate such compliance.

The continued popularity of pull-out programs is particularly instructive because it illustrates the asymmetry between the influence of fiscal accountability vs. program design requirements on local program practices. Legislative intervention in program design determinations is not as salient in questions of program design as in questions of fiscal accountability for two related reasons. First, the legislative language itself is rarely as prescriptive in program design areas because these areas are considered the legitimate purview of local, rather than federal, decision making. So, for example, the 1994 reauthorization encourages, but does not require, Title I programs to replace pull-out models with extended-time approaches (P.L. 103-382, section 1001[c][4]).

Second, even where the language is direct, compliance with the new provision can usually be documented *without* actually changing behavior. For example, the U.S. Congress explicitly included provisions in the Hawkins-Stafford program amendments of 1988 to ensure greater program coordination. But to demonstrate compliance with this provision, a district was required only to assure their state education agency that their project would "allocate time and resources for frequent and regular coordination of the [Title I] curriculum...with the regular instructional program" (P.L. 100-297, section 1012). This provision could be easily accommodated in most school districts (for example, by collecting teacher logs of meetings between Title I and regular classroom teachers) without any real change in program design to improve the articulation

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[8] This is not to say that nonpull-out program designs are necessarily more effective. For example, equally problematic are in-class models in which inadequately-trained Title I teacher aides are given major responsibilities for instructing Title I children.

between Title I and the regular instructional program. The federal government's monitoring and assessment of the *quality* of the interaction between the Title I and regular instructional program (in as prescriptive a manner as they monitor compliance with fiscal accountability requirements such as school and student targeting and "supplement, not supplant") would represent both a substantial measurement challenge and a level of federal intrusiveness into local programming that is unlikely to be welcomed by federal, state, or local policymakers.

Breaking the Dysfunctional Link Between Fiscal Accountability Requirements and Effective Instruction: Some Hopeful Signs From the New Law

While the latest Title I legislative authorization preserves the program's basic fiscal accountability framework, some noteworthy changes in the law appear to reflect an increasing recognition of the extent to which this framework may unintentionally drive ineffective program practices. One clear example is in new provisions designed to increase both the prevalence and effectiveness of schoolwide programs. Such projects eliminate the requirement that a subset of students within a school be designated as "Title I students" and targeted for supplemental assistance. By permitting resources to be used to benefit the entire school, an opportunity exists to use Title I resources to foster fundamental school-based instructional reform, a strategy long recommended by researchers and policymakers (Purkey & Smith, 1983). Under the new law, eligibility for schoolwide projects has been extended to approximately 10,000 additional schools, whose estimated poverty rate is between 50% and 74% (National Data Research Center, 1995).

In addition, the new Title I law substantially changes how local programs are to be evaluated. Since the late 1970s, evaluation requirements for Title I have required that local projects isolate the effects of this marginal resource investment on students' achievement. Assessments of the academic gains of Title I students were to be conducted independently of other school and district activities and to employ independent standards for success. However well-intentioned, this narrow conceptualization of fiscal accountability led all concerned to view Title I as an isolated appendage to the regular instructional program rather than a core activity. The new Title I law, in contrast, requires states to adopt or develop student assessments over the next five years that are consistent with those for all students and that employ ambitious state content and student performance standards (U.S. Department of Education, 1996). The shift to emphasizing the overall achievement gains of Title I students, irrespective of whether such change can be directly tied to Title I program intervention, can be expected to provide further encouragement to state and local program officials to integrate Title I efforts with their ongoing instructional programs.

These encouraging signs of federal policy change must be tempered with the realization that Title I's traditional fiscal accountability framework is likely to remain a potent barrier to reform, even under a regime of more flexible rules and regulations. For example, Schenck writes (1993) that most schools implementing schoolwide programs continued to target services on particular populations, and that there is little evidence of basic rethinking of program strategies. As Orland and Foley note in another context (1996), the "residue" from years of categorical funding requirements results in administrators and direct service providers to continue to "think categorically," even when formal legislated barriers to reform are modified or removed. Whether federal assistance efforts are sustained and powerful enough to overcome this "residue" will likely determine if the latest round of program improvement reforms to Title I will be any more successful than previous iterations.

Conclusion

Title I is the federal government's principal financial instrument for improving the educational performance of disadvantaged students. In order for Title I to succeed, adequate resources must reach those most in need of assistance and then be marshaled in such a way so as to reduce the achievement gap between educationally disadvantaged students in high-poverty communities and their more advantaged peers. This paper has focused on some of the shortcomings of Title I financing arrangements in this regard, as well as the most recent attempts by the federal government to address them.

Concentrating Title I funds on the schools with the greatest needs, in amounts sufficient to make a difference, is a major change in Title I's financing structure that could improve its effectiveness at meeting the needs of disadvantaged students. Continued weaknesses in targeting indicates that the limited funds that are available from the federal government are spread relatively thinly, thus limiting Title I's potential for launching interventions that hold greater promise for closing the achievement gap between students residing in high-poverty areas and those living in other communities. The 1994 reauthorization includes some new formula provisions designed expressly to improve resource targeting—particularly the new Targeted Grant formula, with stricter requirements for allocating funds within districts and a commitment to using census poverty updates for determining allocations. However, since most funds continue to be allocated to school districts through the Basic Grant formula (which remains essentially unchanged) and have not been appropriated for the Targeted Grant formula, the prospects for more targeted funds allocations to school districts in the foreseeable future do not bode well.

Fiscal accountability structures also affect administrator attitudes and behaviors in ways detrimental to effective interventions. Despite federal efforts to encourage less rigid, more effective program designs, Title I's continued requirement to comply with the "supplement, not supplant" provision sends a

strong, if unintended, signal to local educators that the path of least resistance remains ensuring a "clean" program. The forces of fear, inertia, and lack of knowledge lead all too often to the selection of local program designs that are less likely to invite violations of fiscal accountability standards over those more likely to enhance student performance. Whether new legislative provisions— such as encouraging the development of more schoolwide programs and changing the standards for assessing student progress and program effectiveness—will prove more successful than earlier efforts at redressing this imbalance is an open question.

There will always be some tension in Title I between the goals of effective resource targeting and beneficial instructional interventions. Political considerations will continue to invite the spreading of resources to more school districts and schools than would be ideal; and, despite their deleterious effects on innovative and creative program designs, some fiscal accountability safeguards will clearly remain necessary to protect the program's most vulnerable constituencies. The balance, however, appears misplaced in the current financing structure, which is seemingly less concerned with ensuring equitable resource targeting among school districts and schools than with monitoring the fiscal propriety of the resource expenditure once it reaches the school building. From the perspective of improving the achievement of children living in high-poverty areas, it might well be advisable to reverse these priorities.

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Educational Practices and Policies that Promote Achievement

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Research and practitioner knowledge about what makes learning effective can help improve educational policies and practices. New understandings about how children learn can contribute to such challenges as upgrading the nation's teaching corps, setting opportunity standards, and generally enhancing the academic performance of the nation's children and youth. Such challenges underscore the need to bring what is known about learning to the national agenda of educational reform.

A gap separates what is known about learning and what educators actually do. One reason for this gap is that knowledge about effective practices and policies is generally inaccessible to field-based professionals. In an attempt to narrow this gap, this paper identifies research findings on the relative effects of policies and practices on learning. The survey of both researchers and practitioners can serve as one basis for educational reform.

The Context of Educational Reform

Standard setting has become the most visible activity in the educational reform movement. In fact, in his seminal handbook chapter on standards, Roth (1996) has described the past two decades as the "Era of Standards." Beginning with the National Council of Teachers of Mathematics' (NCTM) *Curriculum and Evaluation Standards for School Mathematics* (1989), professional education organizations have developed content standards that influence curricula, instruction, and assessment practices in mathematics, science, language arts, history, and geography. The U.S. Department of Education regards standard setting as central to achieving the National Education Goals. For example, both the Goals 2000: Educate America Act and the new Title I legislation require that each state establish standards for student achievement and focus educational reform efforts around achieving them. Another example is the National Assessment of Educational Progress (NAEP), which aligned its mathematics assessment to the NCTM standards (Gandal, 1995).

Over the life of the educational reform movement numerous types of standards have emerged. Roth (1996) cites Diez (1994) who identified seven types of standards: content, student performance, system and school delivery, opportunity, assessment, instructional, and standards for standards. Content standards identify the knowledge and skills that students must master, student performance standards identify the degree of competency that must be demonstrated for each content standard, and school delivery standards identify criteria indicating whether a school provides students with the "opportunity to learn" the material identified in the content standards. System delivery standards address the quality of the district, state, or federal systems' capability to educate all students as specified in the content standards. Systemic reform, presumably, coordinates these different types of standards in order to attain its goal of improved learning of all students (Smith, Fuhrman, & O'Day, 1994).

Research findings, expert knowledge, and educators' judgments can help identify school delivery or opportunity to learn standards. These standards can be used to encourage effectiveness and efficiency. To implement such standards, educators must first identify the content and student performance standards they expect children to meet. Second, they must determine what teacher actions, instructional practices, student pursuits, and schoolwide policies should be implemented to guarantee that all students will have an opportunity to achieve the performance standards. Educational research findings should, of course, provide critical information about the design of programs to achieve such delivery and outcome standards.

Research findings provide one foundation for developing opportunity to learn standards. Further guidance can be obtained through the expert judgments of both researchers and practitioners. Their knowledge about what influences student learning can be compared to assess the correspondence of expert and practitioner views. Strong agreement in the judgments of these groups would lend confidence to making their combined judgments of effectiveness a basis for selecting reform strategies. Therefore, the first purpose of this paper is to survey research and practitioner views of such learning influences. A second purpose is to obtain their views on the degree to which each policy and practice can be assessed in schools.

Theoretical Framework

A theoretical framework for the present work is based on prior quantitative syntheses. Some of these syntheses compared the relative effectiveness of multiple influences on learning whereas others focused on the effectiveness of specific instructional practices.

Syntheses of multiple influences on learning. Walberg, Schiller, and Haertel (1979) published one of the first quantitative syntheses of research on teaching. The authors collected reviews published between 1969 and 1979 on the impact or association of instructional variables on students' cognition, affect,

and behavior. Among the instructional practices synthesized were: (a) time on task; (b) mastery learning; (c) psychological incentives; (d) open versus traditional classrooms; and (e) advance organizers. Nearly two-thirds of the effect sizes or correlations synthesized were positive, indicating that many well-established educational practices promote student achievement.

In a systematic examination of 19 reviews of teaching process-student outcome research, Waxman and Walberg (1982) identified instructional processes related to student learning. They identified the following practices as positively associated with student learning: (a) cognitive engagement; (b) motivational incentives; (c) pupil involvement in learning; (d) reinforcement; and (e) classroom management and climate.

During the 1980s, Walberg (1984) and colleagues conducted syntheses of the influence of instruction, environments, and student psychological characteristics on educational achievement. The syntheses focused on nine theoretical constructs hypothesized to be consistently related to achievement: (a) student age or developmental level; (b) ability, including prior achievement; (c) motivation; (d) amount of instruction; (e) quality of instruction; (e) exposure to the mass media; and (f) the psychological environments of the classroom, home, and peer group. The results provided systematic evidence that these constructs are consistently correlated with learning.

In 1987, a special issue of the *International Journal of Educational Research* was dedicated to an extensive review of research by Fraser and colleagues on influences related to school learning. They summarized results of over 2,000 bivariate studies spanning 50 years of research in the United States and abroad. In this special issue, Fraser, Walberg, Welch, & Hattie (1987) presented a meta-review of 135 meta-analyses in which school achievement was an outcome, and 92 meta-analyses in which student attitude was an outcome. Among the influences examined were contextual factors, including student and teacher characteristics, curriculum materials, facilities and equipment, home environment, and school climate. Aptitudinal, instructional, and environmental factors that consistently exhibited strong influences on academic achievement were identified.

Wang, Haertel, and Walberg (1993) synthesized ratings of 61 research experts, 91 meta-analyses, and 179 handbook chapters and narrative reviews representing approximately 11,000 statistical relationships. Results confirmed the primacy of student characteristics, instruction, and home and community influences on academic learning. More distal variables, such as state and district policy, proved less influential.

The dramatic pattern of overall positive results reported in the research syntheses discussed above is characteristic of results from quantitative syntheses and meta-analytic reviews. This pattern of results is not an artifact of meta-

analysis, nor can it be attributed to a generalized placebo effect (Lipsey & Wilson, 1993).

   Syntheses of Specific Instructional Practices that Influence Learning. Since the mid-1970s many quantitative research syntheses have been conducted on specific instructional practices. Specific instructional practices found to consistently improve academic learning are: (a) degree of curriculum articulation and organization; (b) sufficient classroom materials to support the instructional program; (c) maximized learning time; (d) high student expectations; (e) opportunities for students to give extended oral and written responses; (f) degree of classroom engagement; (g) student participation in goal setting and instructional decision-making; (h) opportunities for students to receive intensive instruction in one-on-one or tutoring arrangements; (i) engagement in cooperative learning; (j) frequent assessment; and (k) a home environment that supports learning (Fraser et al., 1987; Lipsey & Wilson, 1993; Slavin, Karweit, & Madden, 1989; Wang et al., 1993).

   Individual meta-analyses on which these syntheses are based concern: (a) computer aided/based instruction (Kulik & Kulik, 1987; Ryan, 1991); (b) programmed or individualized instruction (Bangert, Kulik, & Kulik, 1983); (c) cooperative task structures (Johnson, Johnson, & Maruyama, 1983; Johnson, Maruyama, Johnson, Nelson, & Skon, 1981); (d) student tutoring (Cohen, Kulik, & Kulik, 1982; Cook, Scruggs, Mastropieri, & Casto, 1986); (e) behavioral objectives, reinforcement, cues, and feedback (Lysakowski & Walberg, 1982); (f) mastery learning (Guskey & Pigott, 1988); (g) home environment (Graue, Weinstein, & Walberg, 1983); (h) technology-based instructional strategies (Shwalb, 1987; Williams, 1990); (i) reading instruction strategies (Pflaum, Walberg, Karegianes, & Rasher, 1980); (j) whole-language approach (Stahl & Miller, 1989); (k) vocabulary instruction (Klesius & Searls, 1990; Stahl & Fairbanks, 1986); and (l) bilingual instruction (Willig, 1985).

   Summary of Quantitative Syntheses. These syntheses support the primacy of student characteristics, instructional practices, and home and community influences on student learning. Based on these results, a theoretical framework comprised of 228 influences on student learning was organized within six constructs: (a) State and District Governance and Organization; (b) Home and Community Educational Contexts; (c) School Demographics, Culture, Climate, Policies, and Practices; (d) Design and Delivery of Curriculum and Instruction; (e) Classroom Instructional Practices; and (f) Student Characteristics.[1]

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[1] This framework was updated for purposes of this research. See Wang et al. (1993) for a detailed description of the previous framework and theoretical constructs.

Item Selection and Revision

The 146 survey items used in this research were drawn from an earlier 228-item survey that was used to rate influences on learning (Reynolds, Wang, and Walberg, 1992). Those items that were selected focused on classroom practices, schoolwide practices and policies, curriculum design and delivery, and district, state, and federal policies.

Construction of Rating Scales

Two Likert rating scales were constructed: degree of influence on learning and assessability. For purposes of this research, influence on learning is defined as the degree to which students acquisition of knowledge, skills, attitudes and values is affected by educational practices and policies. The three-point rating scale is presented below:

1 = Little or no influence on learning
2 = Moderate influence on learning
3 = Strong influence on learning

Assessability is defined as the extent to which the presence or absence of the policy or practice can be ascertained by direct observations, archived documents, or other means. The following rating scale was utilized to rate assessability:

1 = Not assessable
2 = Fairly assessable
3 = Very assessable

Background Information and Item Assignment Into Categories

Different background items were prepared for each of the two groups, educational researchers and administrators. Researchers were asked to identify their primary research interest (e.g., administration and curriculum studies) and gender; educational administrators were asked to identify their current position (e.g., principal or superintendent), gender, the type of school administered (e.g., elementary or middle school), and the location of schools or districts (e.g., urban or suburban).

Three independent judges classified the 146 items into four categories: (a) Classroom Practices (70 items); (b) Schoolwide Practices and Polices (39 items); (c) Curriculum Design and Delivery (16 items); and (d) Federal, State, and District Policies (21 items). To save respondents time and to promote high return rates, the 146 items on the survey were randomly divided into three forms so that each recipient received a survey with no more than 50 items drawn from each of the four categories.

Sample Selection

Eight samples were drawn from the following six organizations: American Educational Research Association (AERA) Divisions A (Administration), C (Learning and Instruction), and H (Evaluation); National Association of Elementary School Principals (NAESP); and National Association of Secondary School Principals (NASSP); American Association of School Administrators (AASA); Council of the Great City Schools (CGCS); and Council of Chief State School Officers (CCSSO). Membership lists were used to draw random samples for each organization. In two of the organizations (CCSSO and CGCS), every member was sampled because of their small universes. In the other four organizations (AASA, NAESP, NASSP, and AERA), random samples without replacement were drawn.

Mail surveys were sent to all recipients in November 1993; non-respondents were sent a follow-up survey in January 1994. Survey directions requested that participants rate each item in terms of its influence on student learning and assessability.

Survey Return Rates

Table 1 presents the number of recipients and percent return for each professional group and for the total sample on the original and follow-up mailings. Before combining the original and follow-up survey data, Chi square analyses were calculated. For each of the three forms of the survey, Chi squares were calculated to test differences among return rates by original and follow-up mailings for: (a) males and females; (b) membership in professional groups for researchers (AERA Divisions A, C, and H); and (c) membership in professional groups for administrators (NAESP, NASSP, AASA, CGCS, and CCSSO). Of the 12 Chi squares calculated only one was significant—male versus female researchers on Form 1 of the survey (x^2=6.48, df=1, p<.01). These results suggest that the 42% of the sample of survey recipients that failed to reply may not differ significantly from the 58% that replied, allowing for change in address, loss in the mail, and other reasons. Because there was only an isolated significant difference, and in light of the moderately high return rate for the survey, the data from the original and the follow-up mailings were combined.

The survey results were cleaned, coded, and analyzed. Descriptive statistics on the influence and assessability ratings were calculated for: (a) each of the 146 items in the survey; (b) each of the four categories (i.e., classroom practices, schoolwide practices, curriculum design and delivery, and federal, state, and district policies); and (c) each of the four categories by respondent group (i.e., AERA - Divisions A,C,H; NAESP; NASSP; AASA; CGCS; and CCSSO).

Items were ranked twice; first, based upon average influence ratings and second, by average assessability ratings. The distributions of ratings were

divided into quartiles. Items in the highest quartiles of influence and assessability were identified and discussed within each of the four categories. A four-fold table then was constructed to contrast items in the highest and the lowest quartiles.

To further analyze the data, the eight professional groups were combined into two groups: researchers and educational administrators. Correlations between ratings of influence and assessability within the researcher group and within the educational administrator group were computed. Correlations were also calculated between researchers' and administrators' ratings of influence and of assessability. Finally, one-way analyses of variance were conducted to compare differences among the eight professional groups. Average ratings of influence and assessability were plotted by category for each professional group.

The three AERA Divisions (A, C, and H) were grouped together as "Researchers" and the AASA, CCSSO, CGCS, NAESP, and NASSP respondents were grouped as "Educational Administrators." Averages of the item ratings were calculated for the researcher and the administrator groups. The correlations presented in Table 2 show very high agreement between the researcher and administrator ratings of influence (r=.87, p< .01) and ratings of assessability (r=.68, p<.01). This suggests that the research community has been particularly adept in communicating the knowledge base on effective practices and policies to the school community, and that there is substantial consensus between the two groups on the relative influences of specific policies and practices and the degree to which they can be assessed.

Although researchers and administrators can agree on whether specific practices and policies are influential and whether they are assessable, these groups differ in their judgment of the relationship between the influence and assessability of specific practices and policies. The correlation between influence and assessability ratings for researchers is near zero (r=-.03, p>.10), whereas administrators judgments were moderately correlated (r=.52, p< .01). A possible reason for this difference is that researchers are less optimistic about the assessability of many practices and policies.

Differences Among Professional Groups

Ten one-way analyses of variance (ANOVA) were conducted to determine whether there were differences in average influence and assessability ratings among the eight professional groups. As shown in Table 3, all ANOVAs were statistically significant (p<.0001) indicating variations in the degree of influence perceived by the groups. As shown in Figure 1, the three researcher groups (AERA Divisions A, C, and H) rated practices and policies in each of the four categories as less influential than did the five administrator groups (AASA, CCSSO, CGCS, NAESP and NASSP).

Four of the five ANOVAs for assessability were significant: (a) Classroom Practices (p<.0001); (b) Schoolwide Practices (p<.0001); (c) Federal, State, and District Policies (p. <.0001); and (d) total (p<.003). As shown in Figure 2, the researcher groups rated the Federal, State, and District Policies as more assessable than did the administrator groups. In general, elementary and secondary school principals rated Classroom Practices and Schoolwide Practices as more assessable than did the other groups of administrators and researchers.

The primary findings of this analysis indicate that classroom practices, and, to a somewhat lesser degree, on schoolwide practices, curriculum design and delivery have a high influence on student learning and that such practices were readily assessable. Federal, state, and district policies are judged to have little influence on student learning, although they are also readily assessable.

Applying the Survey Database

From the survey data, a framework emerged that can guide reform efforts. Based on each survey item's influence and assessability ratings, we identified items that illustrate how survey results can be used to: (a) inform the identification of standards; (b) guide the development of site-specific programs; (c) monitor program implementation; (d) evaluate program outcomes; and (e) design teacher education and professional development programs.

Average Influence and Assessability Ratings by Category

Table 4 shows the average influence and assessability ratings for all respondents for each of the four categories of influence on learning and assessability. These averages show the strong influence of proximal influences on the learner—namely classroom, schoolwide, curricular, and delivery practices. By contrast, the respondents saw federal, state, and district policies as relatively weak. Ironically, however, the respondents saw the extramural policies as more assessable than the proximal influences.

Specific Influence Ratings

Average influence ratings for each item within each of the four categories are presented in Tables 5-8. The highest quartile is comprised of items with average ratings equal to or above 2.52; such items are indicated in the tables.

As shown in Table 5, the highest quartile of influence ratings contained 18 of the 70 Classroom Practice items. These items focus on the teacher in the central classroom role, a cognitively challenging environment and on the frequency and nature of teacher-student interactions regarding the learning activity.

Table 6 shows that, of the 39 Schoolwide Practice items, 11 fell in the highest quartile. These items include: a safe, orderly, positive, and academically-oriented school climate; parent involvement programs; guarding of student

instructional time; collaboration and shared decision making among staff and administrators; and low staff alienation and absenteeism.

Table 7 shows that four of the 16 Curriculum Design and Delivery items were in the highest quartile. Curriculum-related practices were perceived as influential when they are sensitive to students' cognitive needs, but less influential when they are responsive to students' interests, preferences, and cultural backgrounds. Highly influential items focus on alignment of curriculum content, instruction, and assessment; tailoring the content to students' cognitive capabilities and prior knowledge; and availability of materials and activities for different instructional groupings.

As shown in Table 8, of the 21 Federal, State, and District Policy items, only two were in the highest quartile of influence: central office and Board of Education support. This finding indicates that the most influential policies are manifested in the form of local resources and assistance for school programs.

Specific Assessability Ratings

Average assessability ratings for each item within each of the four categories are also presented in Tables 5-8. The highest quartile of assessability is comprised of items with average ratings equal to or above 2.34.

Classroom practices items, shown in Table 5, ranked as most assessable concerned observable features of classroom environments and the presence or absence of particular practices. They include, for example, resources and instructional and grouping practices, such as size of instructional groups, well-organized lessons, frequent and corrective feedback, explicit expectations of content mastery, computer-assisted instruction, and frequent measurement of basic skills. Items related to judgments of teacher style, such as encouragement or discouragement, enthusiasm, or other personality features were rarely ranked in the highest quartile.

As detailed in Table 6, only seven of the 39 Schoolwide Practice items were rated as highly assessable. Assessable items were those that were easy to judge—a safe, orderly school climate; school size; explicit schoolwide policies; and low staff absenteeism and turnover. The remaining 32 items, which were judged as less assessable and included those that require evidence of consensus, positive attitudes, and other less observable practices among school staff and students (e.g., schoolwide activities to promote positive, nondisruptive behaviors; a positive attitude toward school, teacher, and subject matter; and promotion of student self-esteem and self-confidence).

Eight of 16 Curriculum Design and Delivery items identified in Table 7 were highly assessable. These items focused on tangible features of curriculum materials and the delivery of curriculum content within the classroom environment. The attributes of materials that were judged most assessable include the presence of specific objectives, assessments, and activities tailored to

different instructional groupings and students' cognitive and academic needs. The most assessable aspects of the delivery of curriculum content are features and practices that are directly observable, including the availability of sufficient materials, human resources, and procedures for effective behavioral and cognitive management.

Of the 21 Federal, State, and District Policies, 10 items were in the highest quartile of assessability as shown in Table 8. Most of these items were judged highly assessable because the presence or absence of a federal, state, or district policy can generally be detected either through document review or minimal data collection. Central office and board of education assistance and support for school programs were judged as highly influential but not highly assessable. This may be because support for school programs consists of a large variety of forms, including provision and training of personnel, tangible resources (e.g., materials, space), intangible resources (e.g., expertise, reinforcement, sponsorship), and fiscal assistance. This complexity in school program support reduces the ease of assessability.

A fourfold table was created to further analyze the items within the highest and lowest quartiles in each of the four categories. Table 9 displays items in the following four cells: high influence-high assessability, high influence-low assessability, low influence-high assessability, and low influence-low assessability.

Conclusions

The research synthesis results show substantial agreement between researchers' and administrators' views on the relative influences of educational policies and practices. Such consensus gives a measure of assurance that a knowledge base on what works might be exploited to assist in the national goal, expressed by many groups, for substantially improving academic achievement.

The results also suggest that instruction, curriculum, and schoolwide practices have considerably stronger learning influences than do federal, state, and district policies. This seems an irony since much educational reform has been imposed by state legislatures and has concerned such governance and organization innovations as charter schools, public school choice, and school-site management.

Though the average influence ratings differ across the four categories—classroom practices, school practices, curriculum design and delivery, and extramural policies—specific practices and policies vary considerably within these groups as shown in Tables 5-9. Many highly influential practices and several highly influential policies can serve as promising candidates for educational reform since both research and administrator groups concur about their efficacy.

Especially promising are highly influential-highly assessable practices since they are not only effective but observable. Those that are effective but less assessable deserve high priority for systematic development and validation of observation, rating, and other means of assessment by research workers.

While the eight groups of researchers and administrators agree on the relative size of the influences, researchers are less sanguine about the size of the effects. Administrators may be somewhat more optimistic than researchers because they must often advocate innovations and because it is often their job to employ observation and rating scales to evaluate teachers and programs.

To our knowledge, the present survey is the first of its kind. It represents in compact form a considerable amount of expert knowledge and administrator judgment about what works to improve achievement. Along with previous efforts to synthesize research, it may serve as one basis for planning education reforms.

Specifically, the survey results can guide site-specific efforts to reform classroom and school practices and district and state policies. Item influence and assessability ratings might be found useful in identifying delivery standards, local program development, the development of accountability measures, monitoring program implementation, and identifying and designing outcomes and indicators for use in summative evaluations.

Though it can be hoped that the items might be widely useful for such purposes, educators would have to determine which survey items are most useful given their circumstances. In addition to considering the influence and accessibility ratings, they would need to judge which of the practices and policies are most suitable to the economic, philosophical, political, and cultural climate of their communities.

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Table 1

Number of Survey Recipients and Original
and Follow-up Survey Return Rates

Professional Group	Survey Mailings N	Returns (%) Original	Follow-Up	Total
AERA-Division A	498	235 (78.1)	66 (21.9)	301 (60.4)
AERA-Division C	500	237 (79.0)	63 (21.0)	300 (60.0)
AERA-Division H	499	245 (80.3)	60 (19.7)	305 (61.1)
AASA	546	227 (73.9)	80 (26.1)	307 (56.2)
CCSSO	57*	22 (56.4)	17 (43.6)	39 (68.4)
CGCS	43	21 (77.8)	6 (22.2)	27 (62.8)
NAESP	500	201 (67.9)	95 (32.1)	296 (59.2)
NASSP	498	178 (73.3)	65 (26.7)	243 (48.8)
Total	3141	1366 (75.1)	452 (24.9)	1818 (57.9)

*The CCSSO mailing was sent to state superintendents from the 50 states and Washington, D.C., the executive director of CCSSO, and the Superintendents of American Samoa, Puerto Rico, the Virgin Islands, and Manila/Philippines.

Table 2

Pearson Product Moment Correlations for Researcher
and Administrator Ratings of Influence and Assessability Ratings

	Researcher Influence	Researcher Assessability	Administrator Influence	Administrator Assessability
Researcher Influence	1.00			
Researcher Assessability	-.03	1.00		
Administrator Influence	.87	-.10	1.00	
Administrator Assessability	.47	.68	.52	1.00

Table 3

Overall Average Influence and Assessability by Category

Category	Average Influence	Average Assessability
Classroom Practices	2.39	2.16
Schoolwide Practices	2.36	2.15
Design and Delivery of Curriculum	2.33	2.25
Federal, State, and District Policies	2.10	2.35

Magnitude of Influence Rating
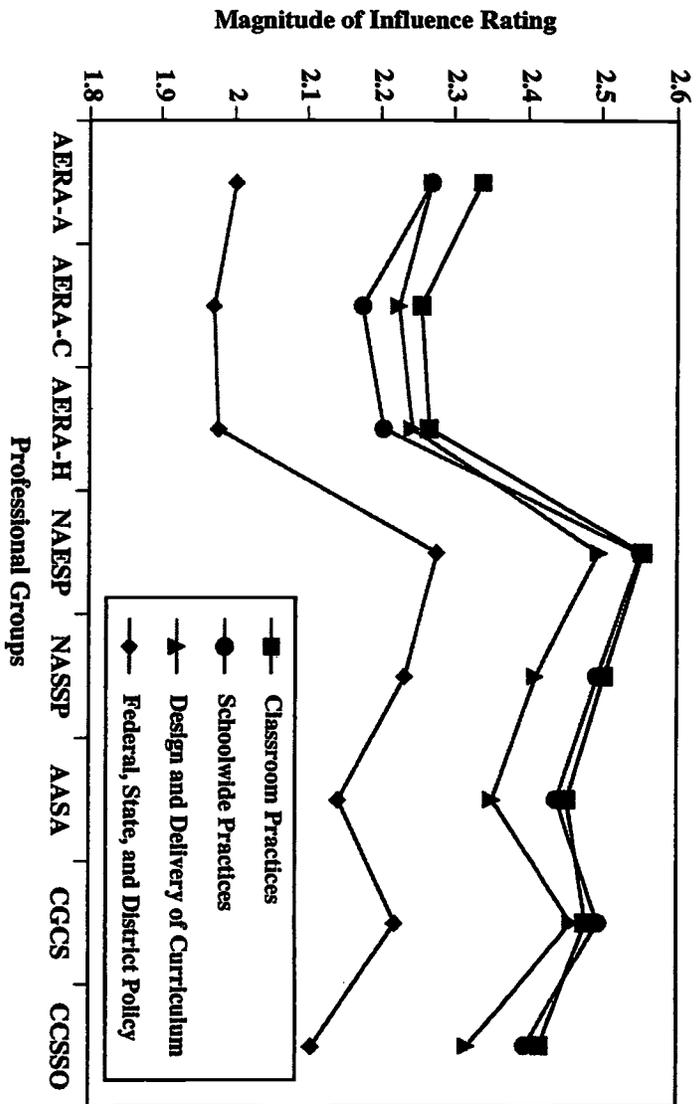
Figure 1. Average Influence Ratings for each Professional Group by Category.

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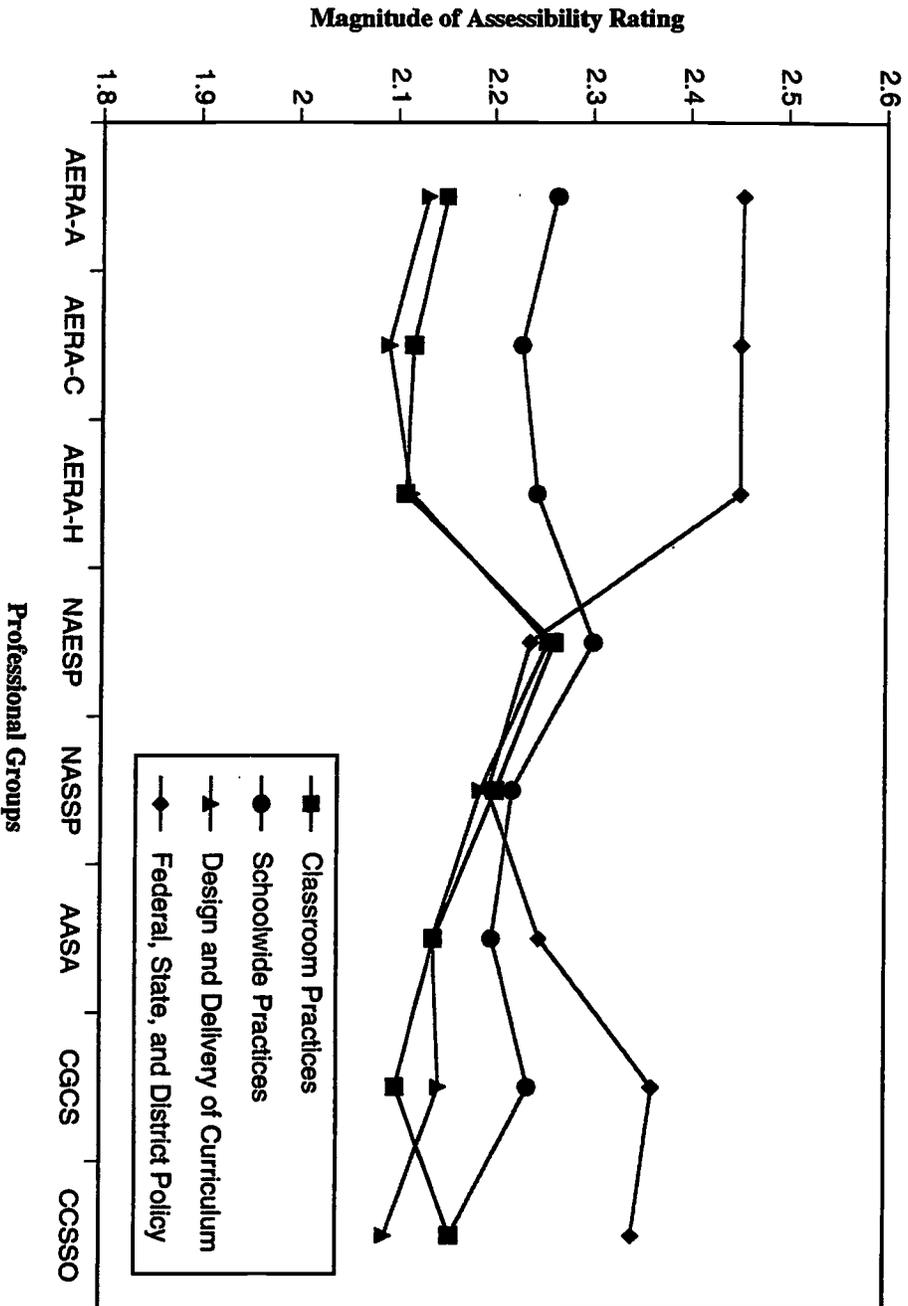
Figure 2. Average Assessibility Ratings for each Professional Group by Category

Table 4

One-Way Analyses of Variance Comparing Influence and
Assessability Ratings of Professional Groups for Each Category

Dependent Variables	N	Mean Square	Probability
Influences			
Classroom Practices	1745	3.21	32.65 (.0001)
Curriculum Design and Delivery	1739	2.34	16.27 (.0001)
Schoolwide Practices and Policies	1744	5.16	47.30 (.0001)
Federal, State, & District Policies	1747	3.72	27.23 (.0001)
Total	1749	3.65	46.08 (.0001)
Assessability			
Classroom Practices	1738	.75	5.55 (.0001)
Curriculum Design and Delivery	1728	.31	1.77 (.089)
Schoolwide Practices and Policies	1737	.75	5.77 (.0001)
Federal, State, & District Policies	1740	3.04	18.36 (.0001)
Total	1744	.29	3.15 (.003)

Table 5

Average Influence and Assessability Ratings of Classroom Practice Items

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Use of appropriate task difficulty.	I	2.84	2.14
Well-organized and well-planned class activities.	I,A	2.79	2.44
Teacher provision of frequent feedback on student performance.	I,A	2.78	2.43
Clearly defined teacher expectation of content mastery.	I,A	2.77	2.34
Teacher enthusiasm about course content.	I	2.77	2.09
Presence of a variety of classroom instructional activities and content.	I,A	2.67	2.40
Teacher provision of helpful feedback to correct answers of students.	I	2.67	2.21
Teacher promotion of student inquiry.	I	2.67	2.10
Teacher "with-it-ness" (awareness of classroom events and activities and minimization of disruptions of timely and non-confrontational actions).	I	2.67	2.03
Teachers use of corrective feedback when students make an error.	I,A	2.63	2.34
Teacher encouragement of constructive student responses to classroom questions.	I	2.63	2.16
Teacher use of example and analogy to concretize abstract concepts and familiarize new ones.	I	2.63	2.13
Teacher posing of questions that are cognitively challenging.	I	2.62	2.15
Teacher use of learner accountability (maintaining student awareness of learning goals and expectations.	I	2.58	2.15
Personalized instructional strategies.	I	2.57	2.18
Smaller instructional groups.	I,A	2.53	2.43

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are Assessability averages equal to or above 2.34 are designated with an A.

Table 5

Average Influence and Assessability Ratings of Classroom Practice Items (Cont'd)

Items	Items In Highest Quartile*	Average Influence Rating	Average Assessability Rating
Teacher use of group alerting (use of questioning/recitation strategies to maintain active participation by all students).	I	2.52	2.20
Teacher promotion of student use of metacognitive strategies (e.g., strategies that are used to monitor, plan and evaluate one's own performance)	I	2.52	2.08
Use of goal direction (specific and explicit objectives of learning activities).		2.51	2.33
Teacher promotion of learning through student collaboration (e.g., peer tutoring).		2.50	2.20
Clearly presented academic, social, and attitudinal program goals.		2.49	2.30
Teacher provision of sufficient time for students to generate detailed responses to classroom questions.		2.49	2.09
Cooperative learning strategies.		2.49	2.28
Discouragement of friction (Students and teacher interact in a considerate and cooperative way with minimal abrasiveness).		2.48	2.02
Lack of favoritism (equal treatment of all students and equal opportunity for participation).		2.48	1.93
Well equipped classroom (ready availability of materials and equipment).	A	2.47	2.43
Teacher use of smooth transitions (e.g., avoidance of learning disruptions, closure of activities, and facility in initiating new activities).		2.47	2.13
Teacher use of scaffolding (gradual transfer of responsibility from teacher to student).		2.46	1.89
Frequent, accurate measurement of higher order thinking skills.		2.46	2.14
Teacher use of systematic sequencing of instructional events.		2.46	2.21

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are Assessability averages equal to or above 2.34 are designated with an A.

Table 5

Average Influence and Assessability Ratings of Classroom Practice Items (Cont'd)

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Teacher use of reinforcement contingencies.		2.46	2.22
Teacher selection of class content for meaningful understanding and application.		2.46	2.06
Teacher encouragement of positive verbal interactions among students.		2.46	2.06
Teacher use of direct instruction.	A	2.45	2.40
Teacher use of rehearsal and elaboration of new concepts.		2.45	2.08
Teacher use of instruction to recognize and dispel student misconceptions.		2.43	1.95
Teacher use of flexible grouping to enable students to improve and change status/groups.		2.43	2.13
Teacher posing of frequent academic questions.		2.41	2.19
Discouragement of apathy (e.g., class members are concerned and interested in classroom activities).		2.40	1.88
Peer tutoring.		2.38	2.28
Use of assessments that measure authentic, integrated real life skills.		2.38	2.14
Encouragement of cohesiveness (members of class share common interest and values and emphasize cooperative goals).		2.34	1.94
Appropriate social behaviors coached by teachers.		2.33	2.01
Use of pacing, which is appropriate for the majority of students.		2.33	2.04
Use of assessment to create detailed learner profiles rather than simple classifications or nonelaborated total scores.		2.33	2.24
Frequent, accurate measurement of basic skills.	A	2.32	2.61

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
         Items that are Assessability averages equal to or above 2.34 are designated with an A.

Table 5

Average Influence and Assessability Ratings of Classroom Practice Items (Cont'd)

Items	Items In Highest Quartile*	Average Influence Rating	Average Assessability Rating
Mastery learning strategies.		2.32	2.27
Frequent requests by teachers for extended, substantive oral responses.		2.32	2.13
Minimal disruption in classroom (e.g., no excessive noise, no students out of place during instructional activities).		2.31	2.22
Diagnostic prescriptive methods.		2.29	2.22
Teacher discouragement of peer rejection among students.		2.29	1.88
Teachers use of review and overview to increase redundancy of the content presented.		2.28	2.16
Encouragement of democracy (explicit involvement of all student in some classroom decisions).		2.27	1.96
Teacher use of advance organizers.		2.27	2.13
Cross-age tutoring.		2.26	2.22
Encouragement of student satisfaction with class activities.	A	2.25	2.59
Instructional teaming.		2.23	2.23
Crisis management techniques to control classroom disruptiveness		2.19	2.04
Minimum use of external classroom disruptions (e.g., broadcast announcements)		2.16	2.18
Teacher prescription of individual instruction based on perceived match of learning tasks to student characteristics.		2.16	2.16
Computer-assisted instruction.	A	2.15	2.44 / 2.17

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are Assessability averages equal to or above 2.34 are designated with an A.

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Table 5

Average Influence and Assessability Ratings of Classroom Practice Items (Cont'd)

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Encouragement of formality (students expected to follow explicitly states rules concerning classroom conduct and activities).		2.11	2.07
Accessibility of educational program (overcoming architectural, communicative, and environmental barriers).		2.06	2.03
Teachers use of formal language during instruction.		2.05	1.93
Prescriptive instruction combined with aspects of informal or open education.		2.02	2.40
Academic tracking for specific school subject areas.		1.98	1.90
Discouragement of cliques (e.g., students work with many different classmates).		1.96	2.21
Multi-age grouping.		1.94	2.27
More students with special needs in regular classes.		1.92	2.05
Encouragement of competition among students.		1.77	

Note: Items that have Influence averages equal to or above 2.52 are designated with an I.
      Items that are Assessability averages equal to or above 2.34 are designated with an A.

Table 6

Average Influence and Assessability Ratings of Schoolwide Practices

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Safe, orderly school climate.	I,A	2.84	2.41
Principal actively concerned with instructional program.	I	2.84	2.32
School policy that promotes parent involvement in improving student's school performance (e.g., ensuring completion of homework).	I	2.77	2.20
Schoolwide promotion of increased direct instruction time.	I,A	2.68	2.38
Teacher involvement in instructional decision making.	I	2.66	2.17
Schoolwide promotion of increased student time on task (amount of time students are actively engaged in learning).	I	2.63	2.22
Collaboration among school personnel.	I	2.61	2.11
Teacher and administrator consensus on school values, norms, and roles.	I	2.61	1.96
Low staff absenteeism.	I,A	2.59	2.65
Schoolwide emphasis on and recognition of academic achievement.	I	2.57	2.30
Low staff alienation.	I	2.52	1.96
Schoolwide activities to promote positive, nondisruptive social behaviors.		2.45	2.05
Effective schools program.		2.44	2.25
Teacher direction of student attention to course content.		2.44	2.13
Schoolwide activities to promote independent learning.		2.43	2.07

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are assessability averages equal to or above 2.34 are designated with an A.

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Table 6

Average Influence and Assessability Ratings of Schoolwide Practices (Cont'd)

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Schoolwide activities to promote a positive attitude toward school, teachers, and subject matter.		2.42	2.09
School policy that promotes parent involvement in the delivery of the instructional program (e.g., parents assist in classrooms, the school library, field trips).		2.42	2.24
Schoolwide activities to increase student academic aspirations.		2.41	2.13
Schoolwide activities to promote perseverance on learning tasks.		2.38	1.98
Explicit schoolwide discipline policy.	A	2.35	2.47
Small school size.	A	2.34	2.56
Schoolwide activities to promote motivation toward lifelong learning.		2.33	1.98
Schoolwide activities to promote self-esteem and self-confidence.		2.33	2.08
Teacher involvement in resource allocation and decision-making.		2.32	2.13
Schoolwide promotion of increased time on homework.		2.31	2.12
Schoolwide promotion of increased out-of-school time spent by students on leisurer eading.		2.30	1.84
Low staff turnover.	A	2.26	2.43
Explicit schoolwide attendance policy.		2.23	2.23
Schoolwide activities to discourage delinquent and criminal behavior..		2.22	2.11
Explicit schoolwide grading and academic progress policies.	A	2.20	2.39
Schoolwide activities to increase student occupational aspirations		2.16	2.06

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are assessability averages equal to or above 2.34 are designated with an A.

Table 6

Average Influence and Assessability Ratings of Schoolwide Practices (Cont'd)

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
School policy that promotes parent involvement in planning the instructional program (e.g., parents review materials, help plan curriculum.)		2.09	2.02
Schoolwide promotion of increased out-of-school time spent by students in informal learning experiences (e.g., museum trips, scouts).		2.09	1.78
Schoolwide activities to discourage student drug use.		2.04	2.14
Schoolwide promotion of student participation in clubs and extracurricular activities.		2.03	2.14
Schoolwide activities to encourage friendships rather than cliques.		1.93	1.78
Minimal use of suspension and expulsion for disciplinary purposes.		1.90	2.25
Schoolwide discouragement of students spending out-of-school time viewing noneducational television.		1.85	1.58
Schoolwide promotion of increased out-of-school time spent by students viewing educational television		1.69	1.64

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are assessability averages equal to or above 2.34 are designated with an A.

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Table 7

Average Influence and Assessability Ratings of Curriculum Design and Delivery Items

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Alignment among goals, contents, instruction, assignments, and evaluation.	I	2.72	2.30
Use of materials tailored to students of different developmental levels.	I	2.67	2.31
Use of materials tailored to students with different abilities.	I,A	2.62	2.34
Availability of materials and activities for use with whole classrooms, small groups, or one on one instruction.	I,A	2.61	2.37
Well-equipped classroom (readily available materials and equipment).	A	2.47	2.43
Use of materials that employ specific objectives.	A	2.38	2.36
Use of materials that include assessments and diagnostic tests.	A	2.37	2.48
Use of materials that reflect experiences of students.		2.37	2.02
Teacher's use of efficient and well-communicated classroom routines, rules, and procedures.	A	2.35	2.35
Teachers use of written records to monitor student progress.	A	2.29	2.34
Curriculum units structured around key discipline-based concepts.		2.28	2.21
Use of student interests to guide selection of curriculum content.		2.17	1.95
Availability of classroom aides.	A	2.14	2.38
Well-configured classroom space.		2.00	2.11
Use of culturally diverse materials.		1.96	2.07
Teacher development of student self-responsibility for studying and for planning activities.		1.91	1.91

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are assessability averages equal to or above 2.34 are designated with an A.

Table 8

Average Influence and Assessability Ratings of Federal, State, and District Policy Items

Items	Items In Highest Quartile*	Average Influence Rating	Average Assessability Rating
Central office assistance and support for school programs.	I	2.53	2.18
Board of Education support for school program.	I	2.52	2.24
Academic course and unit requirements.	A	2.39	2.64
Higher per pupil expenditure.	A	2.35	2.46
Provision of social services for students.		2.33	2.21
Contractual limits on class size.	A	2.28	2.59
Chapter I (compensatory education) funding.	A	2.18	2.46
PL 94-142 (handicapped) funding.	A	2.16	2.43
Increased length of school year.	A	2.15	2.46
Teacher licensure requirements.	A	2.14	2.56
Increased length of school day.	A	2.07	2.37
Small school size district.	A	2.06	2.51
Degree of state control over curriculum.		2.05	2.23
Minimum competency testing requirements.	A	2.04	2.53
Title VII (bilingual) funding.		1.93	2.26
Limited school district bureaucratization.		1.91	2.07

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
        Items that are assessability averages equal to or above 2.34 are designated with an A.

Table 8

Average Influence and Assessability Ratings of Federal, State, and District Policy Items (con't)

Items	Items in Highest Quartile*	Average Influence Rating	Average Assessability Rating
Contractual restrictions on activities performed by aides.		1.87	2.23
Degree of state control over textbooks.		1.86	2.22
School district decentralization.		1.85	2.19
Contractual limits on after school meetings.		1.75	2.22
Efficient transportation system.		1.73	2.22

Note: Items that have influence averages equal to or above 2.52 are designated with an I.
Items that are assessability averages equal to or above 2.34 are designated with an A.

Table 9

Fourfold Classification of Survey Items by Level of Influence
(high vs. low) and Assessability (high vs. low)

Low Influence, High Assessability
Classroom Practices:
Computer-assisted instruction.
Academic tracking for specific school subject areas.

Schoolwide Practices: no items

Curriculum Design and Delivery:
Availability of classroom aides.

Federal, State, District Policies:
Increased length of school year.
Teacher licensure requirements.
Increased length of school day.
Small school size district.
Minimum competency testing requirements.

Classroom Practices:
Well-organized and well-planned class activities.
Teacher provision of frequent feedback on student performance.
Clearly defined teacher expectation of content mastery.
Presence of a variety of classroom instructional activities and content.
Teachers use of corrective feedback when students make an error
Smaller instructional groups

Schoolwide Practices:
Safe, orderly school climate
Schoolwide promotion of increased direct instruction time
Low staff absenteeism

Curriculum Design and Delivery:
Use of materials tailored to students with different abilities
Availability of materials and activities for use with whole
classrooms, small groups, or one on one instruction

Federal, State, District Policies: no items

Low Influence, Low Assessability

Classroom Practices:
Teachers use of formal language during instruction.
Prescriptive instruction combined with aspects of informal or open education.
Discouragement of cliques (e.g., students work with many different classmates).
Encouragement of competition among students.
Schoolwide Practices:
School policy that promotes parent involvement in planning the instructional program (e.g., parents review materials, help plan curriculum.)
Schoolwide promotion of increased out-of-school time spent by students in informal learning experiences (e.g., museum trips, scouts).
Schoolwide activities to encourage friendships rather than cliques.

Schoolwide discouragement of students spending out-of-school time viewing noneducational television.
Schoolwide promotion of increased out-of-school time spent by students viewing educational television
Curriculum Design and Delivery:
Teacher development of student self-responsibility for studying and for planning activities.
Federal, State, District Policies: none

High Influence, Low Assessability

Classroom Practices:
Teacher "with-it-ness" (awareness of classroom events and activities and minimization of disruptions of timely and non-confrontational actions).

Schoolwide Practices:

Teacher and administrator consensus on school values, norms, and roles

Low staff alienation

Curriculum Design and Delivery: none

Federal, State, District Policies: none

Redesigning the Federal Compensatory Education Program: Lessons from the Implementation of Title I Schoolwide Projects

Kenneth K. Wong, Gail L. Sunderman, and Jaekyung Lee

Since the Great Society era of the 1960s, the federal grants-in-aid system has been used as the primary tool to address equity issues in elementary and secondary education. One of the major federal categorical programs that survived partisan shifts is compensatory education, enacted as Title I of the Elementary and Secondary Education Act in 1965. Consistent with the redistributive purpose in the original act, Title I provided supplementary resources to schools with a high number of low-income students over the past three decades. Between 1965 and 1992, the federal government appropriated over $80 billion in compensatory education through Title I. In 1993, the U.S. Congress disbursed over $6 billion to more than 5 million disadvantaged students in pre-kindergarten through grade 12. For Fiscal Year 1995, the Clinton Administration allocated almost $8 billion in Title I funds to over 4 million students. Enjoying bipartisan support over the years, Title I was not targeted for elimination by the new Republican majority in Congress during 1995 and 1996.

Federal funding support notwithstanding, policymakers in Washington have paid increasing attention to classroom learning among disadvantaged students in recent years. Since the publication of *A Nation at Risk* in 1983, there have been renewed concerns for blending Title I with a core academic curriculum (Kirst, 1988). Policy analysts have directed their attention to program redesign at the school level in ways that would strengthen the schools' overall organizational capacity to develop more comprehensive (instead of fragmentary) strategies for helping disadvantaged students (Wong & Wang, 1994; Millsap, Turnbull, Moss, Brigham, Gamse, & Marks, 1992; Commission on Chapter 1, 1992). In light of these concerns, Congress passed the Hawkins-Stafford Elementary and Secondary School Improvement Amendments to Chapter 1 (now Title I) in 1988 which encouraged schoolwide projects (without asking for local matching funds) in schools where at least 75% of the students come from low-income backgrounds. The 1994 Improving America's Schools Act lowers the eligibility threshold for schoolwide projects to schools with 50%

low-income students by 1996-97. In big-city districts, the lower threshold would include virtually all Title I schools. Indeed, the number of schoolwide projects grew from fewer than 1,200 in 1991 to over 4,500 in 1995, representing an increase from 10% to 47% of the eligible Title I schools. During 1995-1996, over 8,000 schoolwide projects were in operation out of a total 16,853 eligible school sites. These regulatory changes would reduce the "categorical" character of Title I, thereby enhancing programmatic coordination between federal, state, and local staff in poor schools. Clearly, schoolwide projects are increasingly encouraged to develop instructional programs that benefit the entire student population.

Federal expansion of schoolwide projects, however, is grounded in a limited knowledge base. At the time of the passage of the Improving America's Schools Act, there were few empirical studies on the implementation of schoolwide projects. Most of these studies are based on cross-sectional analysis and lack a longitudinal perspective. Further, this limited literature has produced mixed results. On the one hand, preliminary findings from the *Prospects*[1] survey suggest that at-risk students in schoolwide projects as a group are performing better than their peers in the more traditionally organized services (e.g., pull-out programs) (U.S. Department of Education, 1993a). On the other hand, nationwide evaluations of the first years of the Hawkins-Stafford reform suggest largely incremental changes in classroom practices. Most schools tended either to reduce their class size or to expand their computer-assisted instruction (Millsap, Turnbull, Moss, Brigham, Gamse, & Marks 1992; Stringfield, Billig, & Davis, 1991). These evaluations suggest that schoolwide projects have continued to encounter difficulties in student needs assessment, program evaluation, and, most importantly, producing sustained academic improvement in inner-city schools. Clearly there is a need to develop a more systematic understanding of how schoolwide projects work beyond the initial years. More importantly, research needs to examine the trends in student outcomes in schoolwide projects over a number of years.

Schoolwide Projects as Institutional Redesign

We see schoolwide projects as an institutional redesign that significantly alters Title I programs. Since the enactment of compensatory education in 1965, the design of the program has been remarkably stable. The categorical program, or single purpose grant, distributed supplementary federal resources to schools with a high number of low-income students over the past 30 years. Because it is a supplemental program, it has always operated on the margin of the mainstream classroom. Now, for the first time in the program's history, the federal

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[1] The Prospects database contains standardized mathematics and reading achievement scores for a nationally representative sample of 40,000 students in three grade cohorts over a three-year period beginning in 1991. In addition, annual surveys were administered to students, parents, teachers, and principals.

government strongly promotes flexibility in the use of resources and coordination between Title I and regular programs in Title I schools that are eligible for schoolwide projects. In light of this significant policy departure, this paper examines three sets of issues pertaining to this program redesign. First, from a broader institutional perspective, we see the implementation of schoolwide projects in high-poverty schools as providing innovative ways to address several major policy challenges. These include the concentration of children in poverty from an underclass environment in neighborhood schools, the fragmentation of curriculum and instruction between Title I and regular programs, and the need for greater school accountability in student learning. The way in which the design of schoolwide projects addresses each of these issues is discussed through a review of the relevant literature. Second, we need to determine whether schoolwide project schools, as a group, offer institutional improvements to disadvantaged students in terms of facilitating student learning in at-risk circumstances. Using student outcome data collected in two urban districts, we analyze academic gains in selected student cohorts across different institutional settings. In Minneapolis, we compare schoolwide projects with regular Title I programs. In Houston, we compare schoolwide projects, regular Title I schools, and schools without a Title I program. In other words, we examine inter-program differences. Third, we focus on variation within the group of schoolwide projects in the two districts. Knowing that "schoolwide" is a broad label and that its substantive focus varies across different schoolwide projects, we conduct detailed case studies to identify instructional and curricular strategies that appear to contribute to better student performance in some schools. Likewise, policies and practices that seem to relate to a lack of student improvement are discussed.

Institutional Functions of Schoolwide Reform

The fairly rapid adoption of schoolwide projects is closely related to reform efforts to improve schools that face seemingly intractable challenges. A review of the literature suggests that schoolwide projects serve three institutional functions. First, the schoolwide initiative grants new flexibility to school-site professionals to address the "concentration effects" of disadvantaged pupils in poor neighborhoods (Wilson, 1987). According to the National Assessment of Chapter 1, educational performance is just as adversely affected by living in a low-income neighborhood as coming from a poor family. As the report pointed out, "[S]tudents were increasingly likely to fall behind grade levels as their families experienced longer spells of poverty, and achievement scores of all students—not just poor students—declined as the proportion of poor students in a school increased" (Kennedy, Jung, & Orland, 1986, p. 107). In other words, if both factors are combined (i.e., if a child comes from a poor family and lives in an impoverished neighborhood), the incidence of educational disadvantage (e.g., doing poorly on tests, failure to move on to the next grade level) is approximately twice as high as when neither factor is present. Similarly, a 1992

General Accounting Office report found that schools with a high concentration of children living in poverty have disproportionately more low achievers than schools with fewer children in poverty (U.S. General Accounting Office, 1992).

Clearly, more effective compensatory education is needed, especially in those neighborhoods where the incidence of poverty is very high. In 1995-96, for example, almost 17,000 schools (roughly one-third of all Title I schools) had enrollments in which at least 60% of the students were poor. Though short of allocating additional resources to the neediest schools, Congress enacted the Hawkins-Stafford Amendments in 1988 that allow for a schoolwide project in schools with a high percentage of poor students. Schools with many students from poor families are permitted to use federal funds to reduce class size, develop staff training, support parent involvement, and recruit new professional support personnel. Equally important is that schoolwide projects have, in some cases, contributed to instructional innovation. For example, in a 1990 survey of district coordinators, over 50% of the respondents reported that schoolwide projects strengthened parent education programs and helped to change practices in student placement in reading and mathematics classes to encourage more heterogeneous student groups.

Second, schoolwide projects are designed to reduce curricular and instructional fragmentation in the classroom (Barr & Dreeben, 1983; Wong, 1994). Fragmentation exists as long as categorical programs are used to provide supplemental services to disadvantaged students. Students who are eligible for Title I are often "pulled out" of their regular classroom and placed in other, often remedial instructional settings as an administrative way to meet the federal auditing requirements. A 1983 survey of district-level program coordinators found that 73% of the respondents used pull-outs mainly to comply with auditing regulations, and "only 18% of district administrators who used a pull-out design indicated they believed it was educationally superior to any other mode of delivery" (Smith, 1988, p. 130). Consequently, coordination between Title I and the regular curriculum remains a challenge. In most schools, coordination relies almost entirely on informal meetings and staff planning sessions that rarely occur.

Schoolwide legislation seems to confront the problem of fragmentation directly. Schoolwide projects permit high-poverty schools to depart in practical ways from the decade-long mandate of "supplement, not supplant," thereby eliminating the major obstacle against service integration within the classroom. Several national trends in classroom organization seem to have emerged following the implementation of the Hawkins-Stafford Amendments. First, an increasing number of Title I schools are beginning to combine pull-out programs with in-class strategies, although the former remain by far the most popular instructional arrangements. Between 1985 and 1990, one study found that there has been almost a 50% increase in the number of districts offering in-class instruction (Millsap, Turnbull, Moss, Brigham, Gamse, & Marks, 1992).

Another study reported that several districts have adopted computer-assisted instruction for the whole class (Stringfield, Billig, & Davis, 1991). Further, recent federal reform has facilitated district activities to promote parental involvement. Between 1987 and 1990, more districts reported disseminating home-based education activities to reinforce classroom instruction, and using liaison staff to coordinate parent activities (Millsap, Turnbull, Moss, Brigham, Gamse, & Marks, 1992). Finally, local districts are directing greater attention to instructional issues, such as whether pull-out practices are educationally sound. In short, the schoolwide initiative has created new opportunities to improve service coordination in the classroom.

Third, schoolwide projects are designed to improve accountability at a time when there is growing public concern over the general quality of public education. Increasing attention is being focused on the need to identify a broad-based range of outcomes and to ensure school accountability for effective instruction and productive learning of all students, including those who attend high-poverty Title I schools. A clear example of such an effort is the passage of the 1994 Improving America's Schools Act. The legislation mandates that rigorous national standards must apply to all students, including those receiving Title I services, as indicated in the Administration's proposal that "Title I, bilingual education, and dozens of other federal programs must become integral to, not separate from, state and community education reforms that center on high standards" (U.S. Department of Education, 1993b, p. 3; also see Smith & Scoll, 1995). States and districts are required to develop student assessment frameworks to measure student progress in reading and mathematics on an annual basis by the year 2000-01. To meet the new policy challenge, states are expected to provide technical support, offer professional development, and develop content standards in Title I schools (U.S. Department of Education, 1996). Within this overall effort toward systemwide improvement, schoolwide projects are required to develop comprehensive school improvement plans that are based on assessments of student needs. Knowledge of student progress may provide a useful basis for teachers to address the particular needs in curriculum and instruction. As eligibility broadens to include schools with 50% to 75% low-income students, the schoolwide initiative will become the primary reform vehicle that drives school accountability.

Research Design and Data Collection

Given the promise of schoolwide projects as an institutional redesign, it is important to determine their impact on student performance in a systematic manner. In examining the effect of Title I schoolwide projects on student learning, this study combines a statistical analysis of selected student characteristics and Normal Curve Equivalent (NCE) gains made by students with a comparative case study design. The statistical analysis sorts out the unique contribution of the project schools to students' academic growth by controlling

for students' racial and socioeconomic backgrounds. We also compare the mean academic performance of students in schools with similar racial and socio-economic characteristics and the "learning gap" between Title I and non-Title I students (that is, whether or not there are differences in student achievement between Title I and non-Title I students). Additionally, the case studies are critical in identifying the schooling factors that account for the effects of schoolwide projects on the distribution of academic achievement. We pay particular attention to how school-level organization, instructional practices, and district policy shape the implementation of schoolwide programs and affect student outcomes.

In examining the implementation of Title I schoolwide programs, two urban districts, the Minneapolis Public Schools (MPS) and the Houston Independent School District (HISD), were selected. These districts differ in significant ways. The Minneapolis Public Schools is a district with 43,932 students and an instructional staff of 3,424 (1993-94). Per pupil expenditure was $6,465 during 1991-92. Table 1 summarizes the socio-demographic characteristics of both districts. In contrast, the Houston Independent School District has 198,013 students and an instructional staff of 11,098 (1992-93). Although there is little difference between the two districts in the level of poverty (Minneapolis, 56%; Houston, 55%), the two districts differ in the percentage and composition of racial and ethnic minorities. In Houston, racial and ethnic minorities constitute 87% of the student population whereas in Minneapolis they comprise 59% of the student population. Houston has a substantial Latino population (48%) when compared to Minneapolis (3%). Minneapolis has a larger percentage of Asian Americans (12%) and Native Americans (7%) than Houston (Asian Americans, 2.7%; Native Americans, 0.1%). The size of the Title I program also differs in the two districts. Title I enrollment in Minneapolis was 9,259 in 1993-94 (21% of the total student population) compared to a Title I enrollment of 74,503 students (66% of the total student population) in Houston for the 1992-93 school year (see Tables 2 and 3). Participation in the Title I schoolwide program in Houston has increased from 51 schools in 1991-92 to 124 schools in 1994-95 (see Table 3). The schoolwide program in Minneapolis is much smaller; there were four schools with a schoolwide project at the time of the study, and the program was limited initially to grades K-3.

To analyze the impact of schoolwide projects on student learning, students in schoolwide Title I projects were compared with students in regular Title I programs. For each city, a subset of students from a larger, district-wide sample was created. In Minneapolis, individual California Achievement Test (CAT) scores in reading and math were collected over four years, from the 1989-90 school year through the 1992-93 school year. A sub-sample was created that consisted of students who started the first grade in 1990 and remained in the same school until the third grade (1990 cohort). In Houston, Texas Assessment

of Academic Skills (TAAS) test scores in reading and math were collected for two years (1993-94 and 1994-95), for students in the third and fourth grades.[2] An analytic sub-sample of students who started the third grade in 1993 and remained in the same school until the fourth grade was created (1993 cohort).

The following analyses were performed on the sub-sample of students. To compare trends in academic achievement by the type of school, a profile analysis of student test scores was conducted. Students were grouped according to the type of school they attended. In Minneapolis, students in schoolwide sites (N=4) were compared with students in schools with a regular Title I program. The regular Title I schools were divided into two groups: (a) poor students exceed 50% of the total enrollment (N=18), and (b) poor students represent fewer than 50% (N=13). The former is labeled "disadvantaged" Title I schools, and the latter is classified as "advantaged" Title I schools. In Houston, students in three types of schools were compared: schoolwide sites (N=116), regular Title I schools (N=19), and schools without a Title I program (N=29). CAT achievement test scores from Minneapolis and TAAS achievement test scores from Houston were converted into NCE scores and a series of t-tests were performed to test for the significance of academic growth for students in different types of schools. An analysis of variance was conducted to determine differences in gain scores between different types of schools. Second, to examine the effect of schoolwide projects on academic growth, a multi-level analysis of the effects of Title I schoolwide projects on student learning was performed using a two-level Hierarchical Linear Model (HLM). The HLM analysis simultaneously explains variation in NCE gain scores at student and school levels.

To identify schooling factors that contribute to the effectiveness of schoolwide projects, case studies of selected sites in each district were conducted. At the time of the study, there were four schools in Minneapolis with Title I schoolwide projects, all of which were included in this study (School AL, School AT, School BI, and School CH).[3] In the second year of the project, schools with a regular Title I program were added to the case studies. Three schools in Minneapolis were selected that matched the schoolwide projects on grade coverage (K-3) and percent of low income students (School BK, School BV, and School CE). The addition of the schools with a regular Title I program allowed for the comparison of classroom and instructional practices between the two types of schools. Table 4 summarizes the socioeconomic characteristics of students in the schoolwide projects and the selected schools with regular Title I programs.

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[2] TAAS is a criterion referenced test. Because of a change in the test form, test data for these two years was the only data available that allowed for comparison. Grade three is the first grade tested under the Texas testing program.

[3] School names are fictitious.

In Houston, seven schoolwide projects were selected that represent significant differences in racial/ethnic characteristics and student performance. All sites selected were in their fourth year as a schoolwide project in the 1993-94 school year. They can be classified into four groups: (a) one school with a predominantly Latino enrollment whose student performance ranks in the district's top third; (b) two predominantly African-American schools with performance in the top third; (c) two predominantly Latino schools with performance in the bottom third; and (d) two predominantly African-American schools with performance in the bottom third (see Table 5). Our classification of performance is based on the district's report on the 1992 Norm-referenced Assessment Program for Texas (NAPT) scores in reading, language arts, and math for students in the third and fifth grades.[4] An eighth school was added in the 1994-95 school year so that each category contained two schools. This school had a high percentage of Latino students and was classified as high performance. Additionally, seven schools with regular Title I programs were selected in Houston and classified into four groups based on performance and racial makeup of the school. These schools are presented in Table 6. The socioeconomic characteristics of the students in the selected schools are presented in Table 7.

Data were collected and site visits were conducted in the two districts during the 1993-94 and 1994-95 school years. Using semi-structured protocols, principals, Title I coordinators, teachers, and instructional aides were interviewed at twelve schoolwide project sites and ten schools with regular Title I programs in the two districts. Each interview lasted an average of one to one-and-a-half hours. Interviews in Minneapolis were conducted in November 1993 and March 1995, and in April 1994 and April 1995 in Houston. Additionally, district Title I program staff were interviewed and statistical data and achievement test scores were collected from the district office. Classroom observations were conducted in both districts.

Statistical Analysis of Schoolwide Impact on Student Achievement

In analyzing the data collected from the Minneapolis Public School District and the Houston Independent School District, several trends emerge:

- In general, students who are placed in different institutional settings—schoolwide, regular Title I, and non-Title I—show similar, incremental gains in both reading and math.

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[4] To arrive at "high performance" and "low performance" classifications, all schoolwide project sites were ranked according to the average percentage of students within a school's third and fifth grades that scored over the mean (50 percentile) on the NAPT reading and math administered in April, 1992. An index of combined performance that averaged the percent of students scoring above the 50 percentile was computed for each school [(3rd Rdg + 3rd Math + 5th Rdg + 5th Math)/4]. Schools were then ranked according to this index, and divided into thirds.

- Schoolwide projects in Minneapolis tend to reduce the learning gap between Title I eligible students and other students.
- In Houston there is a high degree of polarization between Title I and non-Title I students in all of the three types of schools.
- When students' initial level of achievement, poverty, and race are controlled for, schoolwide projects in Minneapolis contribute to equalizing the differences in academic gains between Title I and other students, whereas in Houston, the gap between Title I and other students is larger in schoolwide than in regular Title I schools.

Trends in Reading and Math Achievement by Cohorts

Minneapolis Public Schools. To examine aggregate patterns of academic growth by the type of students and type of school, we first classified the sample students in Minneapolis according to their eligibility for Title I services (eligible or not eligible). Students were then grouped according to the type of school they attended (Title I schoolwide project, regular Title I school). Since the four project schools in Minneapolis are more disadvantaged than regular Title I schools, we selected a comparison group of schools where the poor students exceed 50% of the total enrollment. With this classification, there are 4 schools with a schoolwide project, 18 schools with a regular Title I program where poverty is greater than 50% (disadvantaged), and 13 schools with a regular Title I program where poverty is less than 50% (advantaged). As seen in the first column of Table 8, the 1990 cohort was divided into six groups according to whether they implemented a schoolwide project (Title I schoolwide project, regular Title I school), the proportion of poor students in the school (advantaged or disadvantaged), and Title I eligibility (Title I or non-Title I). The racial and social composition of the schools are presented in the third through sixth columns of Table 8.

The results of our analysis for both the Minneapolis and Houston districts are presented in Tables 8 and 9 in the last three columns under the heading "Academic Gains." The gain is the difference between NCE test scores from 1990 to 1993 in Minneapolis and from 1994 to 1995 in Houston. T-tests were conducted to determine if the gain is significantly different from zero at the .05 level (the t-statistic and probability are presented in columns eight and nine). To determine if there were differences in gain scores between different groups in students in different school types, we also conducted an analysis of variance (ANOVA).

The analysis of NCE gain scores for students in Minneapolis indicates positive and incremental growth in reading for all classification of students (see "Academic Gains" in Table 8). Growth in math, however, was more uneven. Math gain scores ranged from 1.22 for Title I students in regular Title I schools that were advantaged to 9.74 for Title I students in schoolwide projects; math

gain scores for Title I students in advantaged Title I schools were not statistically different from zero (p>.05). Additionally, the results from the analysis of variance found no significant differences between mean gain scores for students attending different types of schools (reading: F=1.69, p>.05; math: F=1.29, p>.05). Title I students and non-Title I students in schoolwide projects, regular Title I schools with a large percentage of poor students, as well as students in schools with few poor students made statistically significant gains in both reading and math over the three-year period.

More importantly, when NCE test scores are analyzed over a period of three years, the gap between the performance of students in schoolwide projects and students in other types of schools narrows. Students in the three types of schools start at different achievement levels, with Title I students in schoolwide projects at the bottom level. At the end of three years, however, this gap narrows, suggesting students in schoolwide projects are making gains at a faster rate than students in other types of schools.

Houston Independent School District. In Houston, the sample students were also classified according to their eligibility for Title I services (eligible or not eligible). The schools were then classified into three groups according to the type of school in 1994: schoolwide project schools (N=116), regular Title I schools (N=19), and non-Title I schools (N=29). As seen in Table 9, this resulted in six different 1994 cohorts classified according to Title I eligibility and type of school. Although a few students in non-Title I schools were classified as eligible for Title I services, it was assumed that they were not likely to receive those services. The racial and social composition of the students are shown in columns two through six.

Houston students also showed growth in academic achievement, with larger gains in reading than in math (see "Academic Gains" in Table 9). The analysis of variance found no significant differences in the rate of academic growth among the six groups of students in reading (F=0.85, p>.05). In other words, students in all types of schools showed about the same amount of growth in reading. In math, on the other hand, the analysis of variance showed significant differences among the six groups of students (F=6.94, p<.001). The largest gains were made by Title I eligible students attending regular Title I schools (mean gain=5.68) and non-Title I students attending non-Title I schools (mean gain=5.02).

A comparison of gains scores for students in Houston schools shows a high degree of polarization in student performance between Title I students and non-Title I students, regardless of school type. Moreover, the gap between the performance of Title I students and non-Title I students remains unchanged from one year to the next. That is, Houston showed little or no progress in reducing the performance gap between Title I and non-Title I students no matter which school students attended. We must caution that this pattern may arise because

we have only two years of data. The high degree of polarization between the gain scores of Title I students and non-Title I students suggests, however, a highly inequitable system.

Distributive Effects of Schoolwide Projects on Student Learning

To examine how school type affects student learning for different groups of students, a two-level Hierarchical Linear Model (HLM) was used to separately analyze the Minneapolis 1990 cohort and Houston 1993 cohort samples. In this analysis, schoolwide projects were compared to schools with a regular Title I program. In Minneapolis there were four schools with a schoolwide project and 31 schools with a regular Title I program. In Houston there were 116 schools with a schoolwide project and 19 schools with a regular Title I program. This analysis was conducted in two steps. First, we were interested in the relationship between individual student characteristics and academic growth. At the student level, academic growth was modeled as measured by gain scores (three-year gains for Minneapolis and a one-year gain for Houston) as a function of individual students' academic aptitude (measured by starting scores), Title I eligibility, race, and poverty as follows:[5]

NCE gain scores = f (starting scores, dummy variable for Title I
eligibility, dummy variable for minorities,
dummy variable for free and reduced lunch)

Second, we were interested in the effect of school type on student academic growth for different classifications of students. We hypothesized that academic growth for different groups of students varies among schools according to whether or not the school implemented a schoolwide project. In order to determine the effect of school type (schoolwide vs. regular Title I school) on student academic growth for different classifications of students, the average gain scores for each type of school were examined along with differences in achievement associated with individual student characteristics. At the school level, the average school gain scores as well as the within-school learning gaps associated with the status of Title I eligibility, race, and poverty were modeled as a function of Title I schoolwide project implementation as follows:

Average gain scores, effect of starting scores, Title I gap,
minority gap, poverty gap = f (dummy variable for schoolwide
projects)

In analyzing the relationship between individual student characteristics and academic growth, the initial level of achievement was found to have a

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[5] The dummy variable is coded 1 for the corresponding category and 0 for the other categories. For example, the dummy variable for Title I eligibility is 1 for eligible students and 0 for non-eligible students.

negative effect on academic growth in both districts. Other things being equal, a ceiling effect appears where students who initially scored high tend to gain less than lower achieving students (see "Effect of Starting Scores" in Tables 10 and 11). At the same time, after controlling for differences in initial test scores, consistent and statistically significant gaps in gain scores were found between different racial, social, and academic groups of students in both Minneapolis and Houston. White students gained more than minority students (see "Minority Gap" in Tables 10 and 11); poor students did not gain as much as non-poor students (see "Poverty Gap" in Tables 10 and 11); and Title I students did not progress as much as non-Title I students (see "Title I Gap" in Tables 10 and 11).[6]

When the effect of school type on academic growth is considered, there is no significant difference in average gain scores between schoolwide projects and regular Title I schools in the Minneapolis district (see "Average Gain Scores" in Table 10). In terms of average gain scores, schoolwide projects in Minneapolis tend to perform better than regular Title I schools. When controlling for racial and social backgrounds, schoolwide projects in Minneapolis were also found to contribute to equalizing differences in academic gains between Title I students and other students, particularly in math (see Table 10, where Title I students in regular Title I schools gain 8.94 less than non-Title I students in math whereas they gain 1.14 less in schoolwide projects). That is, the gap between Title I students and non-Title I students is not as large in schoolwide projects as it is in regular Title I schools, particularly for math. Schoolwide project schools do not, however, significantly narrow the learning gap between different racial and poverty groups over the three-year period.

In Houston, on the other hand, Title I students in schoolwide projects did not gain as much as they did in regular Title I schools (see "Average Gain Scores" in Table 11). Particularly in math, the performance gap between students classified as Title I and those classified as non-Title I within a school is larger in schoolwide project schools than in regular Title I schools (see Table 11 where Title I students in schoolwide projects gain 6.01 less than non-Title I students versus a 3.44 difference in regular Title I schools). Moreover, the Title I gap is much larger than both the minority and poverty gap in math. That is, the difference in math performance between minority and White students in schoolwide projects is 1.35 and the difference between poor and non-poor students is 1.28. Two interpretations are possible. First, students who were classified as Title I eligible may encounter learning difficulties that are not captured by their racial and socioeconomic backgrounds. Second, it is possible that Title I students were treated in somewhat discriminatory ways by their

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[6] For example, the Title I gap, that is, the difference in gain scores between Title I students and non-Title I students, in reading in regular schools in Minneapolis is -6.97. In other words, Title I students gained 6.97 less than non-Title I students. The Title I gap in reading in project schools in Minneapolis is -4.01, that is, Title I students gained 4.01 less than non-Title I students.

teachers and school administrators in terms of academic expectation and learning opportunities.

To summarize, while there were no significant differences in average NCE gain scores between schoolwide projects and other types of schools, differences were found between the two districts on the impact of schoolwide projects on student performance. In Minneapolis, schoolwide projects tend to reduce the learning gap between Title I eligible students and other students. In this regard, schoolwide projects seem to offer a promising strategy to address the challenge of the underclass as discussed earlier. In contrast to Minneapolis, the Houston data show the opposite tendency, with a high degree of polarization in performance between Title I students and non-Title I students. In that district, neither regular Title I programs nor schoolwide projects were able to reduce this performance gap. In the next section, some of the factors responsible for these differences between the two districts are discussed.

Linking School Performance to Schoolwide Structure

A key objective of this study is to identify organizational patterns and instructional strategies that contribute to improving the performance of Title I students in effective schoolwide programs. In analyzing the data collected from the Minneapolis Public School District and the Houston Independent School District, three trends emerge: (a) school and classroom practices are, to some extent, shaped by policies adopted at the districtwide level; (b) school-level organization affects how services are delivered to students; and (c) variation in instructional practices exist between the schoolwide projects and regular Title I programs.

The Impact of District Policies on Schoolwide Programs

Schoolwide projects are an institutional redesign initiated by federal policy. Nonetheless, district level policies can facilitate or impede the scope of the redesign. District level policies were found to influence Title I program design at the site level. In Houston, similarities were observed in Title I program design and the instructional practices used by teachers in regular Title I programs and schoolwide projects that were attributed to district policies. In Minneapolis, district policies may contribute to the improved performance of Title I students in schoolwide projects by encouraging program design at the site level.

Houston Independent School District. The Houston district is highly centralized, with the HISD Board of Education determining Title I program designation, budget allocations to each school, and Title I program design parameters. In order to familiarize schools with district expectations and Title I program requirements, administrators and teachers are required to attend a series of in-service workshops before they become schoolwide projects. Schoolwide projects are evaluated after three consecutive years of implementation and a

determination is made by the district as to whether the schoolwide designation will continue. In addition, the district assists schools with program and instructional design through an extensive staff development program. These are extended to all Title I programs and have resulted in a measure of uniformity in the design of Title I programs. The district encourages both schoolwide and non-schoolwide project schools to adopt program designs that include reach-in staff, pull-out instructional models, regrouping students, computer assisted programs, on-site and off-site extended-day programs, and summer school programs (Houston Independent School District, 1993). To encourage participation, the district provides a substitute for teachers from schoolwide projects attending in-services.

The in-services and district guidelines have brought a measure of uniformity to the programs in Houston's schoolwide sites. For example, each of the eight schools in this study's schoolwide sample used a combination of pull-out instruction and reach-in programs that are complemented with a computer-assisted program. The reach-in program typically uses an aide in the classroom to assist the teacher. The teacher and aide often alternate presenting the material to the classroom as a whole and then work with students in small groups. The pull-out program typically provides extra help for those students identified as Title I eligible or those having difficulty in a particular subject. Some schools supplement the basic program model with before- or after-school programs and parent programs that develop parental skills in working with their children. Title I staff in all project schools consisted of a 40/60 Title I Coordinator and from two to four instructional aides. One school had an additional full time equivalent Title I teacher. Further, there was little difference found in instructional strategies between schoolwide projects and regular Title I programs. The regular Title I schools also used a combination of pull-out, reach-in programs, and supplemental computer programs.

The schoolwide program in Houston is large, with 124 schools designated as schoolwide (84% of all elementary schools are designated as schoolwide). Moreover, the district rapidly expanded the schoolwide program over a two-year period, increasing the number of schoolwide projects from 51 schools in 1991 to 124 schools in 1993 (see Table 7). As the number of schoolwide projects increased, the amount of money available to each schoolwide project decreased as resources were scattered among more schools. School JN, for example, a schoolwide project for four years, experienced an increase in class size and a decrease in the amount of resources (including teachers) it was able to purchase with its Title I funds as the number of schoolwide projects proliferated. Consequently, increasing the number of schoolwide projects may not bring the desired results if resources are diluted and spread more thinly. This rapid expansion may also have prevented the district from developing district-level infrastructure needed to support such a large number of schoolwide sites. This includes, for example, support for student

assessment that tracks student progress or lack of progress, the elimination of the traditional Title I curriculum and the development of a new curriculum for all students, and the training necessary for teachers to learn how to apply the curriculum to all students.

Further, district polices in Houston fail to relieve schoolwide projects from regulatory constraints from the broader, top-down policy environment. There are district policies that affect curriculum and instructional practices at the school level regardless of Title I and schoolwide status. These policies are often reinforced by state policies. Both the district and the Texas Department of Education have curriculum requirements that the schools must abide by which affect the instructional practices of teachers. For example, a third-grade teacher at School ET, a regular Title I school, commented on meeting the needs of very low performing students:

> It's very hard because the district does not allow us as regular
> teachers to teach off level. The [Title I] teachers can come in
> and teach off level. But as a classroom teacher, I'm not allowed
> to. I can modify it to the extent that it might appeal to the lower
> level, but I have to grade according to third grade. (Personal
> communication, interview with classroom teacher, HISD)

The district (and state) emphasis on increasing student achievement as measured by the TAAS also has important implications for instructional practices. Many of the schools visited, such as School OG, identified improving TAAS achievement levels as a primary goal of the school. The TAAS has also structured teachers' approaches to instruction and curriculum. School RT, for example, emphasized the development of test-taking skills as an important component of its Title I instruction. The district reinforces this by offering staff development to assist teachers in incorporating TAAS objectives into their curriculum and instructional practices. The TAAS, which is administrated in grades 3 - 6, can also determine which grades receive Title I services. School BH concentrates Title I services in grades 3 - 6 because of the TAAS.

Minneapolis Public Schools. As our statistical analysis shows, schoolwide projects in Minneapolis tend to reduce the gap between Title I eligible students and other students. These outcomes, in our view, are related to district policies that encourage site-level decision making regarding program design and allocation of instructional staff and support for instructional innovations that were found to be successful in some schools. Additionally, by developing the Title I program to initially serve only students in grades K-3, resources were concentrated on early intervention.

The Minneapolis district sets broad guidelines for the development of Title I programs; these guidelines within each school develop its own specific program. To become a schoolwide project requires consensus among the staff at the participating school. The district provides support during a planning year,

but encourages each school to "think creatively" in developing and designing its schoolwide project. Additionally, the MPS central administration initiated a move towards site-based management that includes the devolution of some budgeting responsibilities to the site, and teacher selection, within union guidelines to school principals. In 1992-93, text book selection was also devolved to the site level. Consequently, Title I program decisions and allocation of instructional staff are made at the school site. While site-based management encourages schools to respond to local needs, this approach also results in differences in program design among schools that can lead to differences in outcomes. For example, School AT developed a schoolwide reading program that was successful in raising the school's reading scores. School CH, on the other hand, was able to implement a schoolwide project without making substantial changes to their program.

District support for particular instructional practices may also account for the improved performance of Title I students by distributing instructional benefits more equally among different types of students. To encourage the coordination of services between the regular and special-needs teachers—special education, Title I, LEP, and community education—the district promotes the use of a collaborative services model for the delivery of compensatory services to at-risk and Title I students. Additionally, the district encourages the use of in-class instruction as a means of reducing pull-out programs and has supported the purchase of computers so schools can expand computerized instruction to more students. These practices may ensure that Title I students receive instruction that more closely approximates that of their non-Title I peers.

The district has recently adopted a number of new policies that pay attention to outcome-based accountability at the school level. In 1994, the Board hired a private firm to manage the schools with the objective of increasing test scores and improving cost efficiency. Under this new administration, the district is becoming more cost conscious and increasingly focused on student achievement. The new superintendent recommended a series of measures in March, 1995 to close an $8 million gap in the district's general fund that included increasing class size. The Board refused to approve the measure, and was unwilling to back away from its promise to taxpayers, who approved a 1990 referendum to increase property taxes to hire more teachers and reduce class size. Instead, the Board voted to cut 5% from the budget for central services and 1.2% from each school budget.

In an effort to raise student achievement, the Board began distributing annual achievement test reports to each school in 1994. These reports include Normal Curve Equivalents (NCE), which are graphed to show changes in average student performance on the California Achievement Tests on a school-by-school basis. This is a shift from earlier efforts to increase student performance by reducing class size in grades K-3. Schoolwide project schools responded to these reports in various ways. School AT, for example, used the

information to develop a Title I math program because student performance in the school was low in math. It is too early to tell, however, how these policies will affect student achievement.

School Level Organization: Fragmentation or Integration

Schoolwide projects differ in the ways in which they organize and coordinate their instruction and curriculum, thereby contributing to variation in student performance across sites. Low-performing schools continue to maintain different expectations for Title I eligible students versus their non-Title I peers, even after several years of implementation of a schoolwide program. In these schools, fragmentation in instruction and curriculum exists. In high-performing schools, in contrast, expectations are the same for all students. These schoolwide projects provide increased benefits to Title I students because they receive additional exposure to regular classroom teachers and the regular curriculum. As a result, the high-performing schools exhibit a higher degree of instructional and curricular integration than the low-performing schools.

A strategy that promotes integration and accounts for differences between high-performing and low-performing schools is the presence or absence of schoolwide goals. These goals can serve as useful guideposts for the teachers to determine how far Title I students are from meeting the expectations of the regular academic program. As Anderson and Pellicer's study on Title I in South Carolina shows, "teachers in successful projects set goals . . . [that] referred to what the students should be able to do at certain points in time [and] were able to maintain the level of effort required to ensure their students were successful." (Anderson and Pellicer, 1994, p. 106-108) High-performance schools are more likely than low-performing schools to develop a program that had schoolwide goals.[7] Low-performing schools, on the other hand, emphasized individual remediation. For example, the principal at one high performing school said, "We have to see what the parents feel about it, what their expectations are, what they think we ought to do, what our goals ought to be," (Personal communication, principal interview at School KY, HISD). In other words, program decisions are linked to goals identified for the entire school. In this school, resources and staffing decisions reflect the schoolwide Title I goals. Expectations are the same for everyone, regardless of Title I eligibility. Teachers are more likely to use information from student assessments to adjust instructional strategies and provide the support necessary to move students towards the school goals. The goals also provide a way for teachers to spend their time and resources, and to provide legitimacy in supporting students in

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[7] A somewhat similar argument is made by Murname and Levy (1996), who found that "establishing clear goals, structuring incentives, providing high-quality training and developing good measures of progress" contributed to improving school performance. See Richard J. Murname and Frank Levy, "Why Money Matters Sometimes: A Two-Part Management Lesson From East Austin, Texas," *Education Week*, September 11, 1996.

particular ways. Decisions regarding how resources are used in a low-performing school, on the other hand, illustrate the lack of integration: "Do they want a 60/40 coordinator? Do they want another aide? [Do] you want more money on instructional materials? Do we need a coordinator?" (Personal communication, principal interview at School RT, HISD). Here, decisions regarding staffing and resource needs lacked a common, orienting goal.

In addition to schoolwide goals, a second set of practices were identified that contribute to more effective schoolwide projects. This set of practices is broadly characterized as the school's value-added strategies. Included in the value-added strategies are pull-out instructional enhancement models, computer assisted programs, reach-in staff, extended-day programs, and summer school programs. Non-valued added strategies include ability grouping, remedial labs, and less demanding curriculum. The interaction of the two key variables, i.e., the presence or absence of schoolwide goals and the use of value-added strategies, help explain the differences in performance between schoolwide sites. Table 12 classifies the project schools according to the presence or absence of schoolwide goals and how the schools use value-added strategies. (See Appendix for an explanation of how school performance was determined.)

This classification represents a rough approximation of school performance levels since it uses data for only one cohort. In some cases, these data reflect the relative emphasis given to a particular subject matter in a school for a given period of time. For example, School AT performed well in reading and vocabulary, but less well in math. This is consistent with a program which focused almost entirely on reading. To improve the low math scores, School AT began to modify its Title I program in 1994-95 and developed a plan to target math.

Strong Goals with Value-Added Strategies. A schoolwide project seems most effective when schoolwide academic goals are supported by an extensive use of value-added strategies. A good example of instructional and curricular integration is School AL in Minneapolis. School AL, whose students showed gains in reading and vocabulary but lagged behind in math concepts, combined a schoolwide vision with a number of value-added programs. To address the schoolwide goal of servicing all students in the school, the Title I program is designed to provide computer assisted instruction for all students. By servicing all students in a class at the same time, the program does not distinguish students according to ability. The use of a collaborative teaching model where the classroom teacher works with the computer assistant in the lab is intended to strengthen the linkages between the skills addressed in the computer lab and the classroom curriculum. In addition, the school created a Title I science position to provide additional instruction in science for all students in the school. Students from each class in the school are provided one hour of extra science instruction per week. The purpose of the program is to emphasize critical thinking, provide a hands-on science curriculum, and encourage students to

incorporate math and reading skills in other subject areas. Further, the school added an after-school program designed to provide additional time on reading and math (the work is closely coordinated with each child's classroom curriculum). The school used Title I funds to hire two teachers, an educational assistant (EA), and bus service to support the after-school program. The program, which is voluntary, services 30 students in grades 1 - 6 identified as needing additional help. Despite its strict attendance and behavior requirements, the program is quite popular, with a waiting list of about 15 students. Finally, the school hired a parent liaison to improve parent participation in school activities, make home visits to answer questions about academic or behavior problems, and develop programs for parent meetings.

Another example where the school successfully integrated the schoolwide curriculum with that of the rest of the school is School AT in Minneapolis. The Title I reading program at School AT is designed to enhance the reading skills of the entire student body. There are several components of the program that contribute to its success. First, the school developed a home reading program that is quite popular with students. Students can check books out to take home and read and are given both individual and classroom rewards for meeting certain goals. The school developed and expanded this program over the past four years to include the participation of all students in the school. Second, the school has what it calls an "integration music program" that all students attend twice a week for 55 minutes. This program teaches academics through music and includes skills work and reading through songs. This program provides additional basic skills instruction and reinforces the reading and vocabulary curriculum of the regular classroom program. In addition, Title I students are given help through pull-out classes. Both the Title I pull-out program and the music program are designed to promote integration with the regular classroom reading curriculum. The school is currently in the process of designing a similar program for math.

School JN, a high-performing school in Houston, also developed schoolwide Title I goals and uses its resources to support these goals. The school targets particular subject areas for improvement based on student achievement test results. For example, in one year test scores were low in reading comprehension. Consequently, reading comprehension was targeted schoolwide for improvement. In math, the school continually targets certain priority areas, such as problem solving with estimation. Additional materials are purchased to support the targeted subject areas and to accommodate teacher needs for that subject area. At one time, the school did not perform well on written composition. Consequently, School JN bought computer programs, developed after school programs, and otherwise emphasized writing in the general curriculum.

In describing the Title I program prior to the introduction of the schoolwide project, school personnel at School KY (HISD) said "it was like a

school within a school." With the introduction of the schoolwide project, efforts were made to incorporate the entire school into the Title I program. The faculty developed a two-pronged program to serve the most needy as well as the remaining students in the school. First, the faculty decided they needed to continue to deal with the individual needs of a core group of children identified as the most needy. The needs of approximately 100 children are met by a pull-out program. These children travel to Title I centers and receive intensive instruction in math and/or reading at their level. Work completed in the lab serves as "reinforcement"; that is, additional work is based on the same lesson plan that is covered in the regular classroom. In addition, the staff developed a plan that would benefit the remaining 600 children in the school. The school purchased computer programs, books, and enrichment programs that would benefit all the children. To accommodate all children, the teaching staff rearranged the previously existing summer school, evening, and after-school programs exclusively for Title I students (the evening and after-school programs have since been dropped as school goals and directions changed). Additionally, the school expanded its field trips and enrichment programs in an effort to expose the children to experiences they otherwise would have little opportunity to encounter.

Finally, a focus on schoolwide goals not only improves academic achievement but also may account for the race equalizing effects observed in Minneapolis. The improved performance noted for minority students in Title I project schools is accounted for by the integration of the schoolwide program with the rest of the school through schoolwide goals. This reduced the stigma often attached to highly segregated Title I programs.

Weak Goals with Value-Added Strategies. In this section, schools that lack a schoolwide goal but utilize a number of value-added strategies are considered. In these circumstances, student performance levels tend to be mixed. Many of these project schools use a variety of instructional practices and strategies that are not well integrated with a broader, schoolwide curriculum. For example, one commonly used practice allows the classroom teacher to identify students needing extra help. This focuses the program around individual remediation and can lead to programs for low-performing students that are not well integrated with the classroom curriculum or schoolwide goals. This is the practice at School TN in Houston where instructional decisions are determined by the classroom teacher's assessment of individual student needs. Although the average scores in School TN are above the district average, student academic growth is below the district's average in both math and reading. Based on teacher requests, Title I students are given extra help in a pull-out program three times a week. The school also employs a reach-in program where the Title I teacher works with small groups of students on a particular skill. While this program can provide extra help in assisting low-performing students, an understanding of schoolwide academic expectations is needed in order to bring

the individual learner closer to these expectations. Moreover, resource allocation within the school reinforces fragmentation. Title I funds are distributed to each grade level where allocation decisions are made.

School RT in Houston also provides Title I services based on teacher recommendations. The school's scores in math and reading are below the district average. Identified students receive additional instruction through a combination of pull-out, reach-in, and computer-assisted instruction. Program decisions are influenced by the administration of the TAAS, resulting in a program focused on remediation in grades three through six. However, since the 1993-94 school year, this school has taken a number of steps to improve collaborative planning between teachers and establish schoolwide goals. Recognizing the importance of providing a strong foundation in the early grades, the school began sending instructional aides into the classroom in the lower grades. This broadened the program beyond the goal of improving test scores to incorporating strategies to improve student achievement. The school also expanded its computer lab to accommodate an entire class.

Weak Goals and Weak Value-Added Strategies. When schools fail to develop schoolwide goals or adopt value-added strategies, students tend to show little or no progress in their performance. This was the case at School CH in Minneapolis where the program was not modified with the introduction of the schoolwide project, even though its students performed below the district average in math and reading. The program includes collaborative teaching, team teaching, and ability grouping within the classroom. The emphasis of the program, however, has been on maintaining current staffing levels. Consequently, little attention has been directed to curriculum changes, assessment, instructional practices, or staffing patterns. The major change that accompanied the introduction of the schoolwide project was the ability of Title I teachers and educational assistants to work with any pupil in a classroom and not limit services to identified Title I pupils. This change, however, is insufficient to affect gain scores and, without additional teachers or EAs, may dilute the amount of Title I time devoted to any one student.

School RN in Houston also did not develop schoolwide goals or adopt value-added strategies. Instead, School RN focused Title I resources on purchasing instructional materials needed by teachers, computer software to update the computer lab, and adding staff to lower the pupil-teacher ratio. Without a schoolwide plan to guide their decisions, the Title I program focused on providing additional instruction to low performing students. Moreover, Title I students were poorly integrated into the regular curriculum. For example, at one time the school used the Title I teacher to pull-out the lowest-performing students in the first grade. This resulted in a more homogeneous first-grade group that according to the Title I coordinator, could then progress more quickly.

Instructional Strategies that Work

Drawing on our case studies of 12 schoolwide projects and 10 regular Title I program sites, a number of instructional strategies were identified that seem to work to improve student performance in highly disadvantaged settings. These strategies include:

- *Teachers receive first-hand knowledge of student academic progress.* Teachers' first-hand knowledge of student academic progress seems to facilitate student learning and performance. School AL (MPS, schoolwide), for example, uses a computer-assisted program that is structured to maximize direct teacher knowledge of student learning. The classroom teacher comes into the lab with the class and, along with the EA, assists students with their work. The school staff capitalizes on the strengths of the computer—individualized instruction, accommodation of different ability levels, easy identification of student's strengths and weaknesses, and an emphasis on skill building—to enhance each child's learning. School JN (HISD, schoolwide) uses a similar strategy with its computer program. Both the classroom teacher and Title I teacher work with students in the computer lab, thereby facilitating their knowledge of student progress.

- *Assessments that inform teachers of individual student progress are used.* The use of assessments to inform student progress leads to the development of strategies that deal with particular student problems. The computer lab is popular in Minneapolis schools in part because it produces printouts of student progress that can be used to assist students. Instructional strategies are changed or modified based on this knowledge of student progress. It is important to note here that assessments that inform teachers of individual-level rather than school-level achievement are the most helpful in altering · instructional practices to meet student needs. The trend in both districts, however, is to rely on school-level assessments. For example, the TAAS often drives school goals and objectives in Houston. The Minneapolis district has recently begun to distribute NCE gain score profiles to each school, thereby directing attention to school-level achievement. While school-level achievement scores may be useful in developing schoolwide goals, individual-level achievement is helpful in looking at the needs of individual students and developing instructional strategies that will bring them closer to the schoolwide level.

- *Title I students receive additional instruction on a specific set of skills.* A close parallel between the Title I curriculum and the

regular classroom curriculum indicates that Title I students receive additional instruction on a specific set of skills. A program that provides a basic educational foundation that is reinforced throughout the curriculum tends to benefit Title I achievement, particularly for low-achieving students. The Title I program at School AT (MPS, schoolwide), for example, was reinforced by integrating the curriculum with the regular classroom program and supplemental programs that emphasized reading skills. Integration of a computer-assisted program with the classroom curriculum benefited students at School AL (MPS, schoolwide). School BV (MPS), a regular Title I school, was able to improve the achievement of Title I students by designing the Title I curriculum to reinforce the regular classroom curriculum. In Houston, teachers at School JN (schoolwide) planned the computer-assisted program to supplement the classroom curriculum. The classroom teacher, the Title I teacher, and Title I aide developed objectives for the computer lab based on the classroom curriculum. In the lab, they divided the class into small groups and worked with each group on the same lesson, providing help based on the students' ability level. Title I centers are used at school KY (HISD, schoolwide) where students are tutored in small groups on skills covered in the regular classroom. The Title I team meets with the regular classroom teachers in grade level meetings to coordinate the Title I curriculum with the classroom curriculum. Finally, School NN (HISD, schoolwide) uses cross-grade level meetings to identify the skills that need to be developed in one grade level for students to be ready for the next. These meetings grew out of a recognition that kindergarten students often were not ready for the first grade.

One of the regular Title I schools in Minneapolis that performed well also used instructional strategies that were identified as those that improve student performance. School BV (MPS, regular Title I) integrated the Title I curriculum with the regular curriculum. Title I instruction was designed to reinforce what was taught in the regular classroom and both classroom and Title I teachers were aware of how a particular child was progressing in the curriculum. Teachers communicated this information through lesson plans and daily assessments of student performance—another strategy that was found to enhance Title I performance. At School BK (MPS, regular Title I), on the other hand, the Title I teacher worked from her knowledge of grade expectations:

> Kids need general work in becoming better readers and writers, as opposed to more complex skills, like verbs. Reading is practice. We work on general practice,

reading practice. It is similar with math. I know the
grade expectations and work on regrouping, addition,
and subtraction, math concepts. (Personal
communication, interview with Title I teacher).

Conclusions and Policy Implications

The redesign of Title I programs to incorporate schoolwide projects
offers a promising strategy to address major challenges facing the schools. By
concentrating resources on disadvantaged pupils in poor neighborhoods,
schoolwide projects function to bring flexibility to school professionals in
addressing the needs of at-risk students. Further, when carefully designed,
schoolwide projects reduce curricular and instructional fragmentation in the
classroom. For example, schoolwide projects were found to encourage the
adoption of schoolwide goals that, when supported by value-added strategies,
promote the integration of the curriculum and expectations for Title I eligible
students with those of other students. Finally, schoolwide projects, when
supported by district policies, can contribute to narrowing the learning gap
between Title I and other students, thereby bringing Title I students in line with
the educational outcomes expected of all students.

These findings suggest several policy implications. First, a schoolwide
project, like any institutional redesign, is not a panacea; that is, schools will not
improve simply due to the implementation of a schoolwide project. Schoolwide
effectiveness depends on a variety of factors, some of which are identified here.
Schoolwide projects where the curriculum and expectations are the same for all
students offered benefits to Title I students. In these schools, instructional
integration was often achieved by adopting schoolwide goals and using value-
added strategies to enhance instruction. Moreover, a number of instructional
practices that tend to benefit Title I students were identified: direct teacher
knowledge of student skills, the use of assessments to inform teachers of
individual level achievement, and additional instruction on a specific set of
skills.

Second, the district role is crucial, as suggested in the comparison of the
district roles in Houston and Minneapolis. Houston expanded the schoolwide
program very rapidly whereas Minneapolis expanded at a much slower rate. The
slower rate of change allowed Minneapolis time to evaluate which strategies
were working and to develop the infrastructure needed to support schoolwide
projects. Students in schoolwide projects continue to show progress in
Minneapolis whereas student achievement gains in Houston are virtually flat. In
other words, the district can play a supportive role in schoolwide efforts. As
such, each district must develop it own timetable for appropriate expansion and
define what it can do to support instructional strategies and program designs
identified as effective. Houston, for example, has a staff development

infrastructure in place and could use this pre-existing structure to support teacher in-services on effective instructional practices and program design.

Third, to the extent that effective strategies are in place, schoolwide projects serve both a learning purpose (i.e., all students progress) and an equalizing function. Minneapolis' schoolwide projects illuminate these possibilities. However, it must to be emphasized that racial, socioeconomic, and academic differentiation effects on students' academic growth remain substantial, even in successful schoolwide project schools, and still need to be addressed.

Finally, we encourage all urban districts to seriously consider using schoolwide projects as a redesign strategy to improve learning in urban schools. Title I schoolwide projects can be a promising tool to bring about real gains in student performance when carefully designed and supported by district policies.

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Appendix

To determine how students were performing in each schoolwide project in our sample, mean achievement scores and average gain scores were examined. The mean scores are presented in Table A1 for the 1993 cohort in Houston and in Table A2 for the 1990 cohort in Minneapolis. Mean gain scores and mean achievement scores for each school were compared to the district averages. Schools were then classified into four categories: schools with *mean* achievement scores that were above or below the district mean, and schools with average *gain* scores that were above or below the district average. Classifications of schools by student performance are presented in Table A3. These classifications were used to compare the schools on those factors (presence or absence of schoolwide goals and use of value-added strategies) that we hypothesize contribute to more effective schoolwide projects.

Table A1
Profile of Houston District and Sampled Schoolwide Sites, Mean Achievement Scores and Gain Scores, 1993 Cohort

Variable	N	Mean	Gain
Reading 1994	5943	50.11	2.40
Math 1994	5943	51.10	4.01

Schoolwide Projects

School	Variable	N	Mean	Gain
School NN	Math	25	49.24	5.27
	Read	25	49.27	-1.49
School JN	Math	43	57.75	12.75
	Read	42	50.45	37.29
School KY	Math	22	53.42	9.61
	Read	23	51.54	6.33
School BH	Math	8	43.45	-8.70
	Read	7	39.58	-9.17
School RT	Math	4	27.87	8.60
	Read	5	43.96	-0.20
School TN	Math	27	56.96	-0.72
	Read	26	51.49	-5.24
School OG	Math	41	52.38	5.08
	Read	41	51.48	3.72
School RN	Math	29	38.52	-2.03
	Read	29	41.55	-2.95

Table A2
Profile of Minneapolis District and Sampled Schoolwide Sites, Mean Achievement Scores and Gain Scores, 1990 Cohort

Variable	N	Mean	Gain
Vocab	1817	40.27	6.60
Read	1817	39.67	9.14
Math Com	1812	47.12	3.18
Math Con	1812	53.80	2.13

Schoolwide Projects

School	Variable	N	Mean	Gain
School AL	Vocab	44	33.38	11.53
	Read	44	30.27	10.46
	Math Com	44	49.63	1.93
	Math Con	44	49.54	0.11
School AT	Vocab	36	30.19	8.08
	Read	36	29.99	14.26
	Math Com	36	42.64	1.88
	Math Con	36	42.15	-1.09
School BI	Vocab	51	29.90	4.75
	Read	51	27.62	10.70
	Math Com	45	34.21	4.64
	Math Con	45	39.26	5.21
School CH	Vocab	118	34.20	0.62
	Read	118	32.74	5.08
	Math Com	118	38.39	0.46
	Math Con	118	45.98	-6.16

Table A3

Classification of Title I Schools by Student Performance,
Schoolwide Project Sites, Houston & Minneapolis

	Mean Scores > district average	Mean Scores < district average
Gain Scores > average	School OG (HISD)- RM School JN (HISD)- RM School KY (HISD)- RM	School RT (HISD)- M School NN (HISD)- M *School BI (MPS)- R MCom MCon* *School AT (MPS)- RV* *School AL (MPS)- RV*
Gain Scores < average	School TN (HISD)- RM *School AL (MPS)- Mcom*	School RT (HISD)- R School NN (HISD)- R School RN (HISD)- RM School BH (HISD)- RM *School BI (MPS)- V* *School AT (MPS)- MCom MCon* *School AL (MPS)- MCon* *School CH (MPS) RV MCom MCon*

R=Reading; M=Math; V=Vocabulary; MCom=Math Computation; MCon=Math Concepts

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Table 1

Socioeconomic Characteristics of Students at the District Level,

Minneapolis Public Schools (MPS), 1993-94 and Houston Independent School District (HISD), 1992-93

District	Total Enroll.	% Minority	% Black	% Latino	% Asian	% Native	% Title I	% Mobility	% Free Lunch
MPS	43,932	59.3%	37.0%	3.2%	11.8%	7.2%	21.1%	46.4%	56.0%
HISD	198,013	87.1%	36.2%	48.1%	2.7%	0.1%	65.9%	38.2%*	55.3%

Source: Minneapolis Public Schools, *Report of the Annual Racial/Ethnic Count of Students*, October 19, 1993; MPS, *Pupil Turnover Report for 1993-94*; MPS, *1993-94 School Year Free and Reduced Lunch Participation*; MPS, *Minneapolis Public Schools Progress Indicators, 1993-94 School Information Report*; Houston Independent School District, *District & School Profiles, 1992-93*.

*1991-92 data.

Table 2
Enrollment in Title I Program; District Enrollment by Percent Free Lunch, Percent Mobility, and Percent Minority, Minneapolis Public Schools, 1989 to 1994

	Title I Enrollment		District Enrollment		Elementary Enrollment
Year	Title I Enroll.	% Increase over previous year	% Free Lunch	% Mobility	% Minority
1989-90	5,175	n/a	46%	42%	51%
1990-91	6,062	17.14%	50%	44%	53%
1991-92	7,233	19.32%	52%	46%	55%
1992-93	7,761	7.30%	54%	43%	57%
1993-94	9,259	19.00%*	56%	46%	60%

*The program was expanded from Grades K-3 to K-4. When the fourth grade student count is eliminated, the percent change shows a decrease of -1.57%.

Source: See Table 1.

n/a: not available

Table 3
Title I Schools With and Without a Schoolwide Project as a Percent of All Elementary Schools, Houston Independent School District, 1992-1995

Year	Total Title I Schools	% of all schools in District	Title I Schoolwide Projects	% of all schools in District	Non-Schoolwide Title I Schools	% of all schools in District
1991-92	n/a	n/a	51	n/a	n/a	n/a
1992-93	143	81%	75	43%	68	39%
1993-94	148	84%	124	70%	24	14%
1994-95	149	85%	124	70%	25	14%

Source: Houston Independent School District
(% based on a total of 176 elementary schools)

n/a: not available

Table 4

Socioeconomic Characteristics of Students at Schoolwide Project Sites, and Sample Schools with a Regular Title I Program, Minneapolis Public Schools, 1993-94

School	Total Enroll.	% Minority	% Title I	% Mobility	% Free Lunch
District	43,932	59%	21%	46%	56%
Schoolwide Project Schools					
School AL	608	83%	73%	58%	79%
School AT	306	78%	61%	66%	77%
School BI	329	62%	68%	54%	73%
School CH	969	77%	75%	37%	83%
Schools with Regular Title I Programs					
School BK	318	59%	61%	56%	67%
School BV	490	53%	48%	33%	55%
School CE	326	65%	63%	50%	72%

Source: Minneapolis Public Schools, *Report of the Annual Racial/Ethnic Count of Students*, October 19, 1993; MPS, *Pupil Turnover Report for 1993-94*; MPS, *1993-94 School Year Free and Reduced Lunch Participation*; MPS, *Minneapolis Public Schools Progress Indicators, 1993-94 School Information Report.*

Table 5
Classification of Title I Schoolwide Projects by Student Performance and Racial Characteristics, Houston Independent School District

	High Performance	Low Performance
High % of Black Population	School JN School KY	School TN School BH
High % of Latino Population	School NN School OG (added in 1995)	School RN School RT

Table 6
Classification of Regular Title I Schools by Student Performance and Racial Characteristics, Houston Independent School District

	High Performance	Low Performance
High % of Black Population	School LS School VI School TS School UT	School WT
High % of Latino Population	School OP	School ET

Table 7

Socioeconomic Characteristics of Students at Selected School-wide Project Sites and Selected Schools with a Regular
Title I Program, Houston Independent School District, 1992-93

School	Total Enroll.	% Black	% Latino	% Title I	% Free Lunch	% Mobility (91-92)
District	198,013	36%	48%	66%	55%	38%
Schoolwide Project Sites						
School NN	774	4%	11%	99%	75%	40%
School TN	372	89%	5%	99%	89%	34%
School BH	358	94%	6%	97%	50%	49%
School JN	520	93%	30%	100%	93%	43%
School KY	506	70%	98%	88%	92%	40%
School RT	301	0%	80%	100%	87%	58%
School RN	389	18%	48%	85%	90%	175%
School OG	589	9%	81%	100%	76%	27%
Schools with Regular Title I Program						
School LS	985	26%	60%	64%	63%	119%
School ET	858	75%	20%	60%	71%	47%
School TS	776	21%	66%	61%	66%	29%
School UT	1,257	12%	63%	53%	49%	22%
School OP	572	94%	6%	53%	75%	34%
School VI	629	4%	68%	56%	52%	36%
School WT	539	8%	69%	65%	63%	31%

Source: Houston Independent School District, *District & School Profiles*, 1992-93.

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Table 8
Profiles of the Minneapolis 1990 Cohort Samples: Student Demographics and Outcomes

Cohorts	No. of students	Racial and Social Composition				Academic Gains		
Reading / Math		Percent White	Percent Black	Percent Latino	Percent Poverty	90-93 Gain	T-statistic	P-value
Non-Title I in Project Schools (N=4)	144 / 167	41.7 / 41.9	41.0 / 41.9	2.8 / 3.6	66.9 / 67.7	7.14 / 4.52	4.37 / 2.62	.0001 / .0095
Title I in Project Schools (N=4)	72 / 44	38.9 / 40.9	45.8 / 45.5	4.2 / 2.3	81.9 / 81.8	11.61 / 9.74	5.46 / 2.95	.0001 / .0052
Non-Title I in Disadvantaged Title I Schools (N=18)	591 / 638	50.2 / 50.2	37.7 / 37.6	1.2 / 1.3	52.5 / 52.7	7.95 / 6.14	10.92 / 7.08	.0001 / .0001
Title I in Disadvantaged Title I Schools (N=18)	134 / 89	29.9 / 19.1	56.7 / 66.3	0.8 / 0.0	61.9 / 67.4	9.58 / 5.65	6.51 / 2.40	.0001 / .0183
Non-Title I in Advantaged Title I Schools (N=13)	535 / 558	63.4 / 62.4	15.0 / 15.6	2.4 / 2.5	27.3 / 28.7	7.37 / 4.39	9.75 / 4.91	.0001 / .0001
Title I in Advantaged Title I Schools (N=13)	84 / 70	36.9 / 38.6	45.2 / 47.1	4.8 / 5.7	53.6 / 54.3	11.68 / 1.22	5.94 / .47	.0001 / .6392

Note: Upper cells represent values for reading sample, and lower cells are for math sample. '90-93 Gain' is the difference between the 1990 and 1993 NCE test scores.

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Table 9
Profiles of the Houston 1993 Cohorts: Demographics and Academic Gains

| Cohorts | No. of Students | Racial and Social Composition | | | | Academic Gains | | |
		Percent White	Percent Black	Percent Latino	Percent Poor	94-95 Gain	T-statistic	P-value
Reading Math								
Non-Title I in Project Schools (N=116)	1058 1067	7.8 8.3	47.5 47.1	43.1 43.2	72.8 72.5	2.80 2.00	5.07 3.57	.0001 .0004
Title I in Project Schools (N=116)	2442 2505	3.1 3.2	57.0 56.7	38.6 38.8	79.6 79.6	1.92 2.81	5.39 7.62	.0001 .0001
Non-Title I in Regular Title I Schools (N=19)	360 360	32.8 33.6	35.6 34.7	26.9 26.9	35.3 35.3	1.12 2.81	1.16 3.16	.2460 .0017
Title I in Regular Title I Schools (N=19)	447 464	12.1 12.7	47.0 47.0	39.2 38.4	70.3 70.5	2.54 5.68	3.63 8.00	.0003 .0001
Non-Title I in Non-Title I Schools (N=29)	1880 1914	47.9 47.8	32.2 32.1	14.3 14.5	23.4 23.3	2.53 5.02	6.80 13.86	.0001 .0001
Title I in Non-Title I Schools (N=29)	32 31	34.4 35.5	31.2 29.0	34.4 35.5	59.4 58.1	2.86 2.13	1.03 1.07	.3101 .2918

Note: Upper cells represent values for reading sample and lower cells are for math sample. '94-95 Gain' is the difference between the 1994 and 1995 NCE test scores.

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Table 10

HLM Analyses of Three-year Gain Scores in Minneapolis 1990 Cohort

HLM estimates of effects		Average gain scores	Effect of starting scores	Minority gap	Poverty gap	Title I gap
Subject	School type					
Reading	Regular n=31	8.11	-.46	-4.41	-4.96	-6.97
	Schoolwide n=4	8.63	-.45	-3.45	-4.75	-4.01
Math	Regular n=31	5.13	-.54	-2.26	-1.50	-8.94
	Schoolwide n=4	5.61	-.53	-1.03	-2.86	-1.14*

Note: All of the estimates reported above are statistically different from zero at .05 level. Asterisk indicates that the estimates of effects for schoolwide projects are statistically different from those for regular Title I schools at .05 level.

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Table 11
HLM Analyses of One-year Gain Scores in Houston 1993 Cohort

HLM estimates of effects		Average gain scores	Effect of starting scores	Minority gap	Poverty gap	Title I gap
Subject	School type					
Reading	Regular n=19	2.34	-.43	-4.71	-2.17	-5.37
	Schoolwide n=116	2.19	-.39	-4.62	-2.45	-6.77
Math	Regular n=19	4.81	-.35	-2.78	-1.58	-3.44
	Schoolwide n=116	2.57	-.41*	-1.35	-1.28	-6.01*

Note: All of the estimates reported above are statistically different from zero at .05 level. Asterisk indicates that the estimates of effects for schoolwide projects are statistically different from those for regular Title I schools at .05 level.

Table 12
Classification of Schoolwide Projects by the Presence or Absence of Schoolwide Goals
And the Use of Value-added Strategies, Houston & Minneapolis

	Presence of schoolwide goals	Absence of schoolwide goals
Extensive use of value-added strategies	School JN (HISD, H+) School KY (HISD, H+) School NN (HISD, H, weak goals) *School AT (MPS, H-)* *School AL (MPS, H-)*	School TN (HISD, H-) School RT (HISD, H-)* School OG (HISD, H, added 1995) *School BI (MPS, H-)*
Limited use of value-added strategies		School BH (HISD, L)* School RN (HISD, L) *School CH (MPS, L)*

Note: (H), high performing school; (L), low performing school. The + and - signs denote strong and weak levels of performance. N<10 students.

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Sustaining State Reform Through Research and Recognition

Gerald L. Richardson

In its most palatable form, the rhetoric of educational reform addresses school improvement and accountability in generic terms, often using sweeping generalizations and truisms that are difficult to refute. However, the mechanics of school reform—the "how to's"—are often difficult to navigate. The purpose of this paper is to highlight the potential contributions of focused research and internal recognition as two Chapter1/Title I activities that can help sustain state-level reform efforts as well as enhance the design of the Title I program.

Inevitably, Title I schools will emerge as one of the most prominent targets of state reform efforts. Low-achieving schools tend to be higher poverty schools; higher poverty schools tend to have substantial Title I projects. Through collaborative research, Title I can help all agents of school improvement focus on the characteristics and needs of those schools that present the greatest challenges. This is not necessarily original research. In fact, it is probably more helpful to replicate or expand on national studies to internalize lessons that need to be learned at home. Equally as important as the research agenda is the modus operandi. Research conducted by representatives of key stakeholders in state reform efforts that models teamwork and cooperation will be more useful and better received than research conducted in isolation. In fact, research to assist state reform efforts will often replicate national studies. The purpose of such research is not necessarily to discover new insights, but rather to illuminate the targets of reform efforts—local schools, their current conditions and needs, and obstacles to improvement.

Internal recognition is another positive force to sustain state reform efforts. One of the toughest challenges for educational reform is to make significant improvements among schools serving large numbers of children from low-income families. These schools are the inevitable victims of accountability because the odds against success are so great. When uniform performance criteria are applied, high-poverty schools stand out as underachievers. Staff in

high-poverty schools tend to be highly resistant to external reform. They reject reform efforts from sources that do not share similar demographics.

One of the most effective ways to promote educational reform in challenging settings is to identify, recognize, and then co-opt certain demographically similar schools that promote at least relatively high achievement. Such schools do exist. They can be found. And they must be recruited into the reform effort as technical assistance partners. These schools have much to share about success in general and success in high-poverty schools in particular.

Accordingly, what follows is the story of one state's recent efforts at nurturing and sustaining reform through collaborative research about and internal recognition of relatively successful high-poverty schools—many of which have Title I programs.

Background

The Successful Schools project in Florida was conceived in the summer of 1993 and was directed by members of the Chapter 1[1] State Evaluation Advisory Panel. This group, composed predominantly of district-level evaluators and several district program coordinators (all of whom were paid through Chapter 1 funds), had been meeting regularly since 1992 to help shape state policy for the evaluation of Chapter 1 (now Title I) programs. Given the reality of local school district limitations, panel members were initially concerned with tempering state requirements for testing and reporting evaluation data. State-level interests were represented by the central and regional office staff responsible for providing technical assistance and for collecting, analyzing, and reporting Chapter 1 evaluation data to the federal government.

During the first year of its existence, the Advisory Panel worked through and beyond the kinds of adversarial relationships that often characterize dialogue between state and district personnel. Within the broader framework of federal evaluation requirements, state policy emerged as consensus opinion. Moreover, as group dynamics within the panel became more collaborative and mutually supportive, the group turned its attention toward a broader agenda and focused on finding ways in which evaluation data could be used to best support decisions about Chapter 1 programs. A common thread among the many diverse opinions shared was the desirability of identifying and studying factors that could distinguish successful high-poverty schools.

This idea became popular as a preemptive step that Chapter 1 could take in the face of recent state reform initiatives. Specifically, the state had just

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[1] In discussing Florida's Successful Schools project, the term "Chapter 1" is used. It was not until 1994, with the Improving America's Schools Act (IASA) that Chapter 1 became known as Title I.

distributed its *Blueprint 2000*[2] to move forward with educational reform and accountability through the 1990s. One component of state accountability called for the identification of extremely low-achieving schools for special improvement efforts and the identification of higher-achieving schools for recognition and rewards. Being strongly associated with Chapter 1, the Advisory Panel knew that most of the lowest achieving schools in the state would be found among those serving large numbers of students from low-income families and, hence, those with Chapter 1 programs—especially at the elementary level. Yet panel members were equally convinced that there were positive counter-examples—high-poverty schools that were actually performing quite well. Without some special, high-profile effort, panel members were certain that rewards for high achievement would go to low-poverty schools, thereby leaving the central targets of reform without helpful examples.

After much discussion and identification of diverse ideas, three initiatives emerged: (a) to conduct research using the statewide database on students and schools; (b) to develop survey instruments for staff and parents in higher poverty schools, and; (c) to visit Chapter 1 schools that were doing well. In addition, the Advisory Panel planned toward the development of nontechnical publications and staff development training for Chapter 1 personnel.

The first initiative of the Successful Schools project, conducting statewide research, capitalized on public school reports that were legislatively mandated and were produced by the Florida Department of Education (FDOE). These documents, the *Florida School Reports*, were school-level reports for elementary, middle, and high schools that contained a broad array of student outcome data (e.g., test scores in reading, writing, and math), school process data (e.g., promotion, attendance rates), student characteristic data (e.g., poverty, minority, mobility, and limited English proficient [LEP]), and school input data (e.g., expenditures, teacher experience, and training). While there seemed to be a wealth of information being generated, no concerted effort was being made to use these data for research purposes. Toward this end, the Advisory Panel proposed a research agenda aimed primarily at identifying factors associated with higher performing, higher poverty schools. They were also interested in identifying actual schools that could serve as exemplars for lower performing schools with similar demographics.

The second initiative of the Successful Schools project was the development of survey instruments for staff and parents in Chapter 1 schools. This initiative focused on identifying existing instruments that might be modified to fit the particular purposes and schools targeted. It was hypothesized that the difference between more and less successful schools might be revealed in attitudes held by staff and/or parents. Furthermore, such survey instruments

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[2] This reform project later became known as Florida's System of School Improvement and Accountability.

would be helpful in needs assessment and planning, especially for Chapter 1 schoolwide projects.

The third initiative of the Successful Schools project was to conduct on-site visits in higher poverty schools where observed performance was clearly higher than might be expected. These visits were conducted to validate instrumentation and to gather first-hand corroboration or additional information to support factors that distinguished successful schools.

Overriding all research and development activities was the desire to model for others the kind of collaborative interaction that existed among panel members and to do so in staff development settings. The panel wanted Chapter 1 to be a major player in emerging school improvement activities required under state accountability. Schools that needed improvement would most likely maintain Chapter 1 projects, especially schoolwide projects in elementary schools. Who better to lead improvement efforts than those who knew the target schools best?

Project Staff and Resources

The Chapter 1 Evaluation Advisory Panel was the primary vehicle through which the staff of the Successful Schools project were recruited. From approximately 40 Panel members, some 15 highly motivated staff, predominantly from local school districts, volunteered to form the Successful Schools Steering Committee. The Steering Committee periodically reported to the larger group and often convinced other members to work on specific projects of limited duration. The small size of the Steering Committee facilitated discussion and decision making. Subgroups were formed to address special topical interests such as statistical analysis, survey design, school observation, and training.

The FDOE also contributed heavily toward staffing the Successful Schools project. Many FDOE staff were members of the Advisory Panel and the Successful Schools Steering Committee. These members were involved in all aspects of project implementation, including: (a) gaining access to the state database and analyzing school, survey, and observational data; (b) coordinating the logistics of school site visits; and (c) participating in some of the early site visits during which protocols were developed. Additional staff were later involved in conducting site visits to elementary, middle, and high schools.

Staffing for the Advisory Panel and the Successful Schools project also came from regional technical assistance centers, whose operations in Atlanta were under federal contract with the Educational Testing Service. Staff from regional Technical Assistance Centers mainly contributed the advantage of a broader rather than single-state perspective, handled certain literature review tasks, and acted as reviewers of draft products. They also participated in a limited number of site visits.

Initial research and development activities associated with the Successful Schools project were sustained without external funding. The main expenses incurred were for staff time to accomplish database analyses, report development, item review and tryout for staff and parent surveys, and the initial on-site visits. Existing resources were also used to offset the limited travel involved in the initial pilot project.

With the publication of the first Successful Schools product, a pilot project research report, the steering committee developed a funding proposal for using Chapter 1 Program Improvement funds to continue and expand project activities. The proposal was approved for $88,000 to hire an external contractor to refine on-site protocols, train on-site observers, coordinate up to 20 on-site school visits, conduct a cross-site analysis, and prepare a final publication. The grant also included $21,000 for travel and related expenses for Steering Committee members and other district personnel to participate in on-site visits and/or committee meetings.

While the Program Improvement grant covered some of the larger expenses associated with continuing the Successful Schools project, an equal or greater portion of moneys expended came from existing budgets for either local Chapter 1/Title I grants or state-level administrative funds. Substantial contributions from state general revenue funds were also marshaled into the project in the form of FDOE staff time, travel, printing, and related expenses. In fact, the middle and high school extension project was funded half by state general revenue and half by Title I School Improvement funds.

Successful Schools Pilot Project

Evaluation Design Considerations

The first initiative of the Successful Schools project was the publication of a summary of research findings in three areas: (a) database factors related to successful schools; (b) staff and parent questionnaires; and (c) on-site visits to selected schools. By design, the pilot project was aimed at identifying and exploring factors associated with higher poverty, higher performing schools from multiple perspectives. The Steering Committee felt that triangulation was an important tenet in this exploratory venture. One data source might suggest the existence of factors related to school success; two data sources might suggest its general location; three simultaneous data sources might fix it firmly in place. Another major consideration was confirmation by contrast. It also was felt that properties exhibited by successful schools would be lacking in unsuccessful schools and vice versa. Accordingly, part of the plan was to identify attributes of successful schools and clarify these attributes by examining their presence (or absence) in low-performing schools.

The initial pilot project used information from literature on effective schools as a means of organization. The correlates of effective schools were

especially prominent in the staff surveys that were modified and adapted from surveys developed in Connecticut and California. From the start, those involved in the Successful Schools project were committed to using correlates as organizational stepping stones toward identifying factors that make some high-poverty schools successful. They were *not*, however, bound by a particular number of correlates, and the Steering Committee entertained the contingency that correlates might even be abandoned if entirely new ones were discovered.

Another planned feature of the Successful Schools Pilot Project design was the formal involvement of multiple stakeholders. Three primary partners were identified in this pursuit: the FDOE, district Chapter 1 personnel, and regional technical assistance centers. It was agreed that the FDOE would conduct database and other related research tasks; district Chapter I personnel would develop and field test surveys, on-site protocols, and lead school visit teams; and the regional Technical Assistance Centers would assist with literature reviews, gather supporting information, and review draft products.

Database Analysis

Using information from the 1992-93 school year, the database analysis focused on individual elementary schools, as opposed to students, as the unit of analysis. By using a database composed of 1,458 units (schools) versus one million units (students), at least two major advantages were gained: (a) the ability to focus on the unit of intended change, and (b) the elimination of statistically significant but inconsequential findings. The main emphasis of the database analysis was the impact of poverty on student achievement in Florida schools. While this study tended to replicate several contemporary examinations of poverty, none had been completed specifically for the state of Florida. The Successful Schools Steering Committee felt that this targeted information would help drive home lessons on poverty learned by others and thereby to make the findings more relevant to those in charge of school improvement at state and district levels.

The database analysis design was analogous to an inverted pyramid with three distinct horizontal sections. The top of the pyramid comprised the entire population of 1,458 elementary schools; the middle band consisted of the 368 schools with the highest concentrations of children from low-income families; the bottom layer was a purposeful sample of the 29 highest and the 29 lowest achieving schools with at least 75% of students in poverty.

Student achievement variables examined included school-level aggregates of reading, writing, and math. Variables associated with a school's learning environment included promotion rate, attendance rate, and out-of-school suspension rate. As a corollary of poverty rate, other student characteristics, such as proportion of minority students, mobility rate, and percent of LEP students were also examined. Finally, school inputs such as enrollment size,

class size, support staff, regular and at-risk expenditures, teacher experience, and teacher salaries were also included as database variables.

The choice of analysis technique, long debated among Steering Committee members, was later heralded by external reviewers as being innovative and most appropriate given the many limitations of the available data. The data were declared ordinal, with no further attempt at smoothing or transformation. Non-parametric median tests were used to examine the distribution of variables among low-, medium-, and high-poverty schools.[3] This required a special Chi-square analysis, wherein expected proportions were set at one-half above and one-half below state medians. Each test assumed independence between a variable and the poverty status of schools. The discovery of a significant difference among low-, medium-, and high-poverty schools on a particular variable was then immediately translated into an estimate of practical significance in terms of small, medium, or large effect sizes according to procedures described by Cohen (1988).

Survey Design and Field-Testing

Another important component of the Successful Schools Pilot Project was the development and field testing of survey instruments intended to supplement the database research. Using information supplied by regional Technical Assistance Centers, a subgroup of the Steering Committee initially turned to current literature on effective schools to locate promising survey instruments used elsewhere in the country. The subgroup selected a survey developed by the San Diego County Office of Education (1989), that targeted seven correlates of effective schools. Team members reviewed, revised, and, in many cases, recast survey items to fit the target audience of staff working in Florida's higher poverty schools.

The field-test version of the staff survey consisted of 117 items for teachers, principals, and paraprofessionals. After a trial administration to more than 800 staff members in 16 schools, each chosen to broadly represent both high- and low-achieving high-poverty schools, the survey was reduced to 74 items for future use. The staff survey was analyzed for both reliability and validity. The overall reliability was established at .98 (Cronbach's Alpha) with subscale reliabilities ranging from .84 to .93. The particular type of validity of greatest interest to the project was predictive validity, that is, the extent to which staff survey responses were correlated with achievement. Overall, the correlation of survey responses to achievement was estimated at .50, which is classified as having a large effect size. The overall correlation can be further described as one in which survey responses account for about 25% of the variability observed

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[3] Per Kennedy, Jung, and Orland (1986), elementary schools were divided into quartiles based on the percent of students eligible for Free or Reduced Priced Lunch, such that low-poverty schools included 353 schools with zero to 29% poverty, medium-poverty schools included 737 schools between 30% and 64% and high-poverty schools included 368 schools with 65% or more poverty.

in school-level achievement. This was considered a highly satisfactory indicator of predictive validity.

A comparable version of the survey was adapted for parents, focusing primarily on home-school relations through 23 items. The parent survey was printed in three languages: English, Spanish, and Haitian Creole. Reliability of the parent survey was estimated at .92. However, the predictive validity of this survey, unlike the one for school staff members, was not borne out by the field-test results. In general, parents were generous in their opinions about both high- and low-performing schools.

On-Site Visits

On-site observations at a limited number of Chapter 1 schools were also used to supplement the database research. The original purpose of the visits was to confirm and expand on data collected through staff surveys. For the pilot project, sites were deliberately chosen to represent some of the highest and the lowest achieving high-poverty schools in the state. Teams were assigned one of each type of school without advance information to distinguish high- from low-performing schools.

Prior to visitation, procedures and observational records were developed to lend uniformity to the process. On-site teams were originally composed of four staff members, none of whom were from the district where the school was located. Under the leadership of a district staff member, each team spent one full day interviewing the principal, classroom teachers, support staff, and parents. The teams also collected resource documents, took photographs, and made general observations about the physical conditions of the schools. At the end of each school visit, the observation team met to prepare a debriefing paper for later analysis.

During the course of on-site visits, over 200 school personnel were interviewed and over 250 pages of transcribed notes were taken for later examination. In the original design of the pilot project, the site visit component was added almost as an afterthought. However, by the time Steering Committee members had completed the 16 scheduled visits, enthusiasm for the process had escalated. Team members continually marveled at the stark contrast between high- and low-achieving schools and the fact that lasting impressions were created immediately upon entering the school.

Summary of Findings, Lessons Learned, and Spin-off Products

Database Analysis. Findings on the impact of poverty on Chapter 1 schools clearly showed that schools with high concentrations of students from low-income families are likely to be low-achieving schools that have lower rates of promotion and higher rates of suspension. High-poverty schools typically served considerably more minority students and experienced more student turnover than did medium- or low-poverty schools. Surprisingly, however, high-

poverty schools (at least in Florida) had *more* money to spend on students than low-poverty schools in the same district. High-poverty schools typically have more than their share of first-year teachers and fewer experienced teachers, but they also tended to have considerably more support personnel.

Analysis of the conditions associated with higher achievement pointed to few factors that can be easily altered. The relative concentration of poor students, even among high-poverty schools, emerged as the strongest predictor— the more students from low-income families, the lower the school's achievement level. The fact that higher levels of federal expenditures were not associated with higher achievement raised questions about the effective use of extra resources available through Chapter 1 schoolwide projects. The positive relationship between more support staff and higher reading achievement was encouraging, but not defined well enough to suggest next-step actions.

The greatest encouragement stemmed from findings on successful high-poverty schools, which showed that, despite the tremendous odds against them, some high-poverty schools actually have higher levels of achievement than either state averages or many other low-poverty schools. Twenty-nine of the highest achieving schools were compared with an equal number of the lowest achieving schools—all of which were high-poverty. While achievement differences were dramatic, the two groups of schools were not distinguishable in a number of important areas: promotion, attendance, LEP, mobility, class size, regular program expenditures, or teachers with advanced degrees.

The data available from the 1992-93 school year and the analysis procedures employed two years ago could not discern many distinguishing factors between higher- versus lower-achieving schools, all of which served large numbers of children from low-income families. Accordingly, the database research phase was judged to be of limited value in delineating factors that led to a school's success. Improvements in the type of data collected at the school level and in analysis methodologies since the publication of the pilot project report are such that another comprehensive research project is planned for the near future.

However, the value of the research activities should not be underestimated. For example, it was learned that database research is critical to understanding differences between higher and lower performing schools for a specific state or district where reform is expected, but somewhat limited in terms of identifying factors leading to success. This is because poverty concentration is such a potent influence that it overshadows most other rival factors, such as mobility, attendance, LEP and class size that are commonly maintained in a school-level database. Poverty will always be one of the first reasons given for low student achievement, the premise being that the odds are insurmountable. However, one of the most important findings of the database research was that a number of counterexamples—successful high-poverty schools—do exist.

Two spin-off projects that have proven invaluable in supporting school improvement for Title I and non-Title I schools are a direct result of the database research phase of the pilot project.   The first was the development of Florida's *Vital Signs* project, which provide one-page executive summaries of critical data needed for school improvement planning and yearly monitoring. This provided a solution to the problem of information overload experienced by school-based personnel whose school reports often exceeded 50 pages of data. While the array of variables and level of disaggregation in the school reports were sometimes useful, potential users were often intimidated by the sheer volume of data. FDOE staff who had worked on the pilot project developed a prototype report based on the *Vital Signs*[4] (Ligon, 1993), wherein schools are provided with brief summaries of key outcome, process, and input data. The Florida version of *Vital Signs* was refined and endorsed by the Chapter 1 Evaluation Advisory Panel. Reports were initially generated only for Chapter 1 schoolwide projects but are now produced annually for *all* schools in Florida.

The second spin-off project produced in light of the database research was the development of a system for matching higher-performing schools with lower-performing schools, both of which share common demographic features of interest to school-based personnel or technical assistance providers. This service was initiated by the specific request of Advisory Panel members. Later, the service was expanded and made available to school or technical assistance providers who wanted to find higher achieving schools with demographics similar to schools that needed improvement or wanted to improve. Matches often were based on poverty, mobility, and minority characteristics—often a specific minority, such as percentage of African-Americans or Hispanics.

Staff and Parent Surveys. This research concentrated on a relatively small number of high-poverty schools (16) to field-test survey instruments based on effective school correlates. Based on instrumentation adapted from San Diego, the following seven correlates were included: Clear School Mission; Frequent Monitoring; Safe and Orderly Learning Environment; High Expectations; Opportunity to Learn and Time on Task; Instructional Leadership; and Home-School-Community Relations.

Despite the small number of schools involved, the results were instructive. They showed that an adapted paper-and-pencil survey could be structured so that it was adequately reliable for more extensive use. Also, the staff survey detected differences between higher- versus lower-achieving schools in a way that yielded results with both statistical and practical significance. Most importantly, the results of the field-test survey offered encouragement that school improvement planning could be enhanced by using feedback from a school's most valuable resource—its staff.

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[4] In addition to the above citation, *Education Vital Signs* is also published by *The American School Board Journal* and *The Executive Educator.*

There were three parts of the staff survey that provided the greatest contrast between groups of higher- and lower-achieving schools. Nine items grouped into the subscale of "Safe and Orderly Learning Environment" had the highest correlation with student achievement, provided the sharpest contrast between higher and lower achieving schools, and had the largest effect size of all the correlates. Two items were found to be the most strongly related to achievement: (a) staff members are treated respectfully by students; and (b) vandalism or destruction of school property by students is not a problem.

Eleven items within the "Instructional Leadership" subscale had a moderate correlation with achievement and resulted in a substantial, but smaller effect size for differences between higher and lower achieving schools. The two items most strongly related to achievement were: (a) the principal is highly visible, making frequent informal contact with students and teachers; and (b) the principal is accessible to discuss matters dealing with instruction.

The "High Expectations" subscale also contained eleven items and had a moderate correlation with achievement. The effect size for differences between higher and lower achieving schools was also substantial, but slightly smaller. The two items most strongly related to achievement were: (a) there is a positive school spirit; and (b) students try to succeed in their classes.

Results from the parent survey were quite different. While the instrument itself proved reliable, there was little distinction between the responses of parents whose children attended higher- versus lower-achieving schools; both groups were very positive. Also, many parents did not respond or answered "Don't Know" to many of the survey items, leaving some doubt as to the preliminary results. On the other hand, the only question that clearly distinguished between higher and lower achieving schools had to do with discipline: "I am aware of a written discipline policy."

Written comments from parents provided another dimension to the survey results. While they were generally positive, parent recommendations called for improved safety and better student discipline, especially at lower-achieving schools.

As a result of developing and field testing, the Successful Schools Staff Survey has become a standard service available through the FDOE for Title I and non-Title I schools. Three years after the survey was developed, it continues to be used extensively. At present, it has been administered to over 9,000 school-based personnel in over 200 schools. A free scoring and reporting service was established at the FDOE and remains available for Florida schools continuing to use the staff survey. The parent survey, however, was not further supported by the state and has not been widely used in its original form. The parent survey subsequently was discontinued mainly due to overwhelming logistical problems (e.g., huge potential volume, multiple languages), as well as lack of usable research information.

On-Site Observations and Interviews. The final phase of the Successful Schools Pilot Project culminated with site visits at the same 16 schools where staff and parent surveys were administered. Some of the major differences between higher and lower-achieving schools described in the summaries written by on-site teams include:

- Discipline is described in a positive way for higher achieving schools more often than for lower-achieving schools.
- The principal's leadership is discussed in a positive way more often for higher-achieving schools.
- Staff development activities are discussed in high-achieving schools, but not in low-achieving schools.
- "Change" is discussed four times as often in low-achieving schools.
- High-achieving schools are frequently described as having a unified staff.

While all participating team members strongly endorsed the concept of site visits, the activities changed substantially over time. Analysis of the early extensive interview notes led to the identification of only a few distinguishing features between higher and lower achieving schools—primarily subtle differences in leadership types and focus of the school's mission. Rather than interview staff and parents using questions similar to those contained in the survey instruments, later on-site visits concentrated on following up on issues such as the strategic use of federal funds, effective programs to ensure school safety and discipline, and support staff utilization. To identify truly successful schools, it was learned that the greatest value of on-site visits is to verify that a particular school is worthy of recognition and can serve as a positive technical assistance partner for lower-achieving schools with similar student demographics, and to collect observational data that could not otherwise be extracted from survey data.

As a spin-off of developing on-site visit protocols, gathering information, and refining observation techniques during the pilot project phase, additional Successful Schools projects based on the pilot design were initiated for Title I elementary schools and for middle and high schools without regard to Title I status. The Successful Schools Pilot Project Summary report later received the Outstanding Publication Award from the American Educational Research Association for 1993-94.

A Closer Look at Successful, High-Poverty Elementary Schools

The second Successful Schools project produced a publication containing a collection of short descriptions of 20 higher achieving, high-poverty schools that were visited during the 1994-95 school year with a cross-site analysis of observations made by the visiting teams. The Steering Committee

formed for the pilot project also provided leadership for this second product. While the pilot project had virtually no special funding, the second phase was funded through a Chapter 1 Program Improvement grant.

At the same time that the pilot project report was being disseminated, the state's accountability component was about to be implemented. The FDOE identified some of the lowest performing (or "critically low") schools in the state for more intensive improvement efforts and also identified successful schools and programs for linkage with those in need of improvement.

According to state accountability definitions, critically low-performing elementary schools were those that exhibited aggregate student performance below a minimum threshold in terms of the percentage of students scoring in the proficient range in reading, math, and writing for two consecutive years. For reading and math, the proficient range was defined as scores above the 50th national percentile in reading comprehension and math concepts/applications on district-administered, norm-referenced tests at the fourth grade level. Proficiency in writing was defined as a score of 3 and above on a scale of 0 to 6 on the statewide performance writing assessment (*Florida Writes!*) also administered in the fourth grade. The latter assessment required "on-demand" compositions developed during a 45-minute administration of one of two randomly assigned prompts. Compositions are collected and scored according to preestablished rubrics by a minimum of two independent, trained teachers. For elementary schools, the minimum threshold criteria for critically low performance was less than 33% scoring in the proficient range on all three subject area assessments for two consecutive years. This meant six aggregate data points below 33% scoring proficient.

The Title I program found itself in a high-profile position. By virtue of serving the highest poverty schools in the state, the Title I program would be the likely heir to the majority of those schools that would be identified as critically low-performing. Thus, the program would either be strategically positioned to play a major leadership role in state reform or become the scapegoat for low-performing schools. Title I leadership chose to pursue the leadership option partly because of the Successful Schools program. Staff had acquired the knowledge, skills, and database access necessary to forecast school performance as it would be judged statewide. Thus, the schools most likely to be identified as critically low-performing could be examined in advance. Also, Title I had been first to develop a strategy and acquire experience in identifying successful schools from the most likely target group for intensive improvement efforts. Such schools would have an immediate need for positive examples and technical assistance partners from demographically similar, but higher performing schools. Accordingly, there was considerable impetus and encouragement to expand the pilot project and identify and document the accomplishments of additional successful, high-poverty schools—especially Title I schools.

Having completed the pilot project, many lessons learned could be applied to the evaluation design component of the next project. First, the main contribution of the student database was seen as identifying potential schools that would qualify as both high-poverty and high-achieving. The database could also be used to feature important *Vital Signs*—process, outcome, and student characteristic indicators that would be of interest to readers in search of schools similar to their own. Second, project staff had to reconcile themselves to the fact that successful high-poverty schools would be ones with modestly high performance. There were very few, if any, stellar-performing schools; however, a number of schools (about 100) that had recently posted performance considerably above their demographically similar peers. Also, once the criteria for identifying critically low-performing schools were revealed, it became easier to ensure that successful schools would not have any current achievement indicators below state standards.

During the pilot project phase, the definition of high poverty used for selecting schools for site visits was set at 75% or more of student eligibility for Free or Reduced Priced Lunch in order to correspond with previous Chapter 1 requirements for schoolwide projects. However, in accordance with the new Title I requirements, the criterion was changed to 60% or more for free or reduced priced lunch. This was an important change because previous research findings indicated a steady decline in achievement associated with increasing poverty, not a plateau effect. The change in poverty criterion introduced the possibility that exemplars would be chosen more from schools that served the marginally poor than from among schools that served almost all children from low-income families.

From previous experience, it was known that the initial selection criteria for successful schools was needed to generate a pool of candidates somewhat larger than the target number. There were always circumstances that precluded certain schools from participating, such as loss of the Title I program, change in grade configuration, or substantial change in school demographics.

In pilot project visits to successful schools, team members were responsible for describing unique features of the school, identifying factors leading to success, and explaining why the school had been able to promote higher achievement. This placed an undue burden on team members because their description might be based on what was immediately observable on one particular day versus being part of the daily operations of the school. An alternative approach to school descriptions was proposed that allowed the principal and faculty to assume responsibility for describing the best features of the school. This approach was appropriate because the administration and faculty had a greater knowledge base about their schools and most successful schools visited already had descriptions that were used for home-school communications or similar outreach purposes. The seven correlates of effective schools previously used in the staff survey were offered as guidelines and

organizational topics to the school personnel. There were, however, no specific requirements.

As the on-site observational protocols were being reviewed, detailed interview forms previously used were discarded in favor of a simplified set of prompts with a limited number of questions. In addition, the procedures for conducting team summaries were changed to include a set of rating scales to be filled out by each observer and then negotiated into a single consensus opinion.

Contracted Services

With the infusion of Chapter 1/Title I Program Improvement moneys to help in visiting 20 schools and conducting a more thorough cross-site analysis, a request for proposal was developed by the Steering Committee and circulated to prospective bidders, including private contractors and universities in the state. This was a necessary step given the amount of money to be paid out (approximately $68,000) and the detailed scope of work that was expected.

The Steering Committee subsequently developed a procedure and criteria for evaluating proposals and recommended that the contract be awarded to Evaluation Systems Design, Inc. (ESDI), a private consultant firm with a long history of successful projects. At the next scheduled meeting of the Steering Committee and the full Advisory Panel, the contractor met with both groups, and the second major Successful Schools project began in earnest.

Selection of Candidate Schools

The first initiative of the Successful Schools Continuation Project was to select candidate schools for the on-site visits. The criteria required that candidate schools had to have at least 60% of their students eligible for Free or Reduced Priced Lunch and none of their most recent (1994-95) achievement data could be below standard cutoffs for critically low-performing schools. However, since there were no specifications about the previous year's performance (1993-94), candidate schools could include both consistently high achievers and schools that had shown considerable improvement in the previous year. To further rank schools, the Steering Committee developed a formula consisting of ten cells that could be added together to create a final index value. The first six cells called for the difference between a school's aggregate performance in reading, math, and writing (percent scoring proficient) and the state's minimum criteria (33%) for both years. The next three cells took into account improvement by looking at the difference between the 1994 and 1995 data. The last cell in the school ranking index gave bonus points for schools with the highest levels of poverty by allotting the difference between the percent of students eligible for free or reduced priced lunch and the initial eligibility criteria (60%). In general, the Successful Schools Index, as the formula was referred to by Steering Committee members, gave 60% weight to high performance, 30%

weight to performance improvement, and 10% weight to higher levels of poverty.

The performance index described above was used to rank order each school that passed the initial screening criteria (poverty above 60% and recent test scores above state minimums). Twelve independent reviewers were asked to nominate 20 of the 100 listed candidate schools on the following criteria: (a) high performance; (b) high percentage poverty; (c) most improved schools; (d) geographical representation across the state; (e) urban, rural, or suburban settings; (f) high percentage minority students; (g) high percentage of LEP students; and (h) high migrant composition. A list of potential schools was then compiled based on the number of nominations received.

Final selection was limited to schools that had the largest number of nominations. For each candidate school, the appropriate Title I coordinator and/or Advisory Panel member was contacted and asked for an endorsement. In a few instances, valid objections or problems were raised, and the nominated school was removed from further consideration. Among the reasons cited for not endorsing a candidate school were lack of representation (i.e., school was losing its Title I status or was one of the lowest poverty schools receiving services), substantive change in school configuration or mission (i.e., loss of administrative leadership that led to nomination or becoming a magnet school), or existence of a better choice on the list of qualified schools. Whenever there was any hesitation, negotiations with district personnel continued until a satisfactory alternative was chosen or a school was dropped from the list. This process reflected the Steering Committee's belief that district endorsement was a crucial ingredient for the credibility of Successful Schools.

On-Site Visit Procedure and Protocols

Once selected for visitation, the school's principal was contacted to determine successful practices and programs contributing to its success as a Title I school. Principals were asked to create a short description of the successful practices and programs in the school. As a method to assist the organization of the principals' descriptions, a list of effective school correlates was provided.

On-site visitation teams were composed of three team members, one of whom acted as team leader. The team leader was in charge of any preliminary contact with school personnel, including verifying schedules, asking for information before the visit, and arranging for meetings with the other team members. Team leaders were always district personnel to minimize the appearance of a monitoring visit, which was usually led by FDOE personnel. The visits were for one full day, usually beginning with the arrival of school buses, the assembly of students into their classes, and the beginning of the instructional day.

The external contractor (ESDI) prepared the site visit data collection forms that was used during on-site staff interviews and by the observation teams at the close of their visits. The form consisted of a five-point Leikert scale applied to the same correlate statements that were in the initial letter sent to each school. One requirement of the final team meeting before exiting was to arrive at a consensus rating for the entire visit.

Cross-Site Analysis

One of the best features of the on-site visits was the evaluation of findings and observations across the successful schools that were visited. The analysis was organized according to practices leading to success and barriers to success gleaned from personal observation and the written comments of the on-site teams. Practices leading to success were loosely organized around the seven correlates mentioned earlier; a section on global factors (school climate) also was added. The text of the cross-site analysis began with an admonition against cause-and-effect relationships.

As a result of the second Successful Schools product, it was shown that many of Florida's high-poverty schools were successful in providing students with quality educational programs that resulted in academic success. Primary factors that promoted success were a committed faculty, facilitative instructional leadership, structured instructional programs, effective discipline programs that stressed personal responsibility and non-violent problem solving, strong parent and family involvement, an overall sense of school community pride, and expectations for all children to learn at a high level of achievement.

Training and Dissemination

The final published document described above was distributed at a statewide, Title I technical assistance conference. This debut was strategically chosen by the Steering Committee as an appropriate setting for maximum exposure and effect. Copies were placed in each of the 500-plus registration packets and made available in all requested quantities. At the same conference, an explanatory presentation was developed with special attention given to modeling the collaborative process used in producing the document. District, FDOE, and contracted staff participated in the presentation, which was repeated twice for the convenience of the participants.

Aside from its initial presentation at the statewide technical assistance conference, the publication has been used in a wide variety of training settings, many of which used staff from some of the featured schools as resources for helping lower achieving schools. Several follow-up workshops have catered directly to Title I schools that eventually appeared on the state's list of critically low-achieving schools; others have been directed at schools that are in danger of being so identified.

A Closer Look at Successful Middle and High Schools

Following the evaluation of higher performing, higher poverty elementary schools, a request to repeat the project for middle and high schools was made almost immediately. The impetus came from state-, regional-, and district-level technical assistance providers and from low- and marginal-performing schools to identify positive examples of schools that defied the odds associated with high performance in poverty-laden settings.

The initiative for the middle and high school extension projects initially was spearheaded by the state-supported Office of School Improvement, which had the major responsibility for implementing school reform in general and for helping low-achieving schools in particular. Later, Title I was called upon as a funding partner and a source of expertise and experience to help replicate the project quickly. The elementary project appeared in the spring of 1996; the middle and high school versions were forecast for the beginning of the next school year. Title I contributed financial resources and staff expertise because its program was quickly expanding into middle and high schools, and the venture offered another opportunity for state leadership in school reform.

The same external contractor was chosen for the extension projects and immediately began to work with a group of state-level staff in identifying potential schools, arranging logistics, and coordinating project activities. Criteria for selecting candidate schools were modified only slightly to reflect the different poverty characteristics of middle and high schools and to impose slightly higher performance standards. After examining statewide data, poverty criteria was set at a minimum of 50% poverty for middle schools and 30% poverty for high schools. In addition to requiring that candidate schools not be on the state's list of critically low-performing schools and that all of the most recent (1995) data in reading, writing, and math be above minimum standards, it was also stipulated that at least one subject area be above state median performance figures according to their *Vital Signs* report.

Given the limited amount of time remaining in the school year and the desire to include both middle and high schools, the decision was made to visit approximately 30 schools. Once again, schools were chosen by nomination and were further screened to verify the district's endorsement of their candidacy as successful schools.

Neither the instruments nor the procedures were changed substantially for the on-site visits to middle and high schools. In fact, it was the availability of a proven methodology and protocols that helped make the visits possible in the short amount of time available. As before, the contractor was charged with producing a cross-site analysis. However, a different approach was used this time. Team leaders were invited to a central site for a one-day discussion of key findings, commonalities, and lessons learned. In that context, the only major change to the project—that there should be two separate documents, not a

combined study of middle and high schools—was recommended and later adopted.

Observations About Successful High-Poverty Schools

The purpose of this final section is to summarize observations across elementary, middle, and high schools. Clearly, differences existed at each instructional level, but there were as many or more similarities across instructional levels. Using the same organizational structure that was used in all three cross-site analyses, the following appear to be common features of Florida's Successful Schools project.

Safe and Orderly Learning Environment

- Schools are clean and neat, regardless of the age and physical condition of the facility.
- Discipline and/or safety problems are dealt with immediately.
- Preventive discipline is a "way of life" for school staff.
- The central concern is for student well-being, safety, and academic engagement.
- Visitors feel at ease around students and teachers.
- All school staff (administrators, faculty, paraprofessionals, other support personnel) are involved in monitoring and maintaining student discipline.
- Rules for student conduct and consequences for breaking those rules are known by students, parents, and school staff members.
- Conflict resolution strategies are in place in the schools.
- Compared to their less successful counterparts, successful schools lack serious behavior problems. Staff try to catch misbehavior before it becomes a problem and redirect the energy.

Leadership

- Principals demonstrate shared decision-making, involving staff, parents, and community members.
- Principals are clearly instructional leaders, some strongly charismatic.
- Principals are deeply committed to firm and fair discipline.
- Principals maintain an "open door" policy and are accessible and responsive to the school and the community.
- Principals are knowledgeable about research related to improved instruction, student performance, and behavior.
- Principals clearly care about the physical plant to which they are assigned; they are resourceful in maintaining and upgrading the school campus whenever possible.

- Principals are attuned to district/school-board policies, procedures, and requirements, and draw heavily on resources that are available.

High Expectations

- Principals have high expectations for themselves, the school faculty, and all students.
- Schools have active student recognition programs.
- There is a strong unifying force pulling together administration, teachers, and students.
- Teachers at the schools give freely of their time and energy to meet the needs of the students.
- All school staff take responsibility for student performance and share in acknowledging/rewarding students who do their best.

Clear School Mission

- The school mission is clear, simply stated, and widely displayed.
- The school mission is understood and "bought into" by faculty, students, parents, community members, and other major stakeholders.
- The school mission is supported by the curriculum and instructional activities.
- School Advisory Councils are involved as an integral part of the ongoing planning process for educational improvement.

Instructional Programs

- Instructional programs are diverse, relevant, engaging, and risk-taking.
- Teachers work across grade levels, subject areas, and departments to promote and reinforce student learning from the beginning to the end of the grade span covered.
- Technology plays an important role in student learning; teachers and students are aggressive in acquiring computer-related skills.
- Test preparation strategies are organized and extensive, but do not dominate instructional activities.

Frequent Monitoring

- Achievement, attendance, and behavior are frequently monitored.
- Teachers use multiple methods of documenting student progress.
- Item analysis or similar strategies are used to detect and correct specific skill deficiencies as measured by testing programs.

- Staff evaluate the impact of their school improvement efforts using data on student achievement to document what happens, help set goals, and refine planning efforts.
- Counseling programs are strong, employing formal and informal interactions between counselor(s) and teaching staff.
- School personnel systematically examine the success and failure of their instructional methods, abandoning programs that do not work with little resistance.

Staff Development

- Teachers are eager for learning experiences, are encouraged to participate, and have a voice in training options.
- Teachers share with one another as professionals in a collegial atmosphere.

Home-School-Community Relations

- Schools support and encourage strong community involvement in all aspects of school operations, especially in the instructional program.
- Schools frequently provide positive news items to local papers and local radio or television stations.
- School personnel contact parents regarding positive as well as negative academic achievement.
- Some schools provide special resource rooms for parents and community.
- School members actively seek business and other community partnerships.

Opportunity to Learn and Time on Task

- All school staff as well as students, parents, and community members are serious about learning.
- Numerous opportunities are planned for students to learn before school, after school, over weekends, and during the summer.
- Classroom time is precious. Classes start promptly. Interruptions are kept to a minimum, and, when they occur, must be of a critical or emergency nature.

Global Factors

In addition to the specific practices listed above, site visit team members identified some overall or global factors in many of the successful schools:

- School staff are friendly, enthusiastic, and welcoming.

- Schools provide a family atmosphere where everyone is pulling in the same direction; teachers and students take pride in being a part of the school.
- Schools have a stable faculty willing to work on problems.
- Schools are well-kept and students are polite and welcoming.
- School personnel do not fear change or breaking with tradition if it promises a better school.

Barriers to School Improvement

As part of the interview process school staff were asked to identify barriers that either they or other schools might encounter in working toward school improvement. The most frequently listed barriers were typically reversals of factors leading to successful schools:

- Lack of clear vision.
- Lack of supportive leadership.
- Lack of good school/community communication.
- Lack of ownership in new programs.
- Failure to share ideas.
- Failure to value individuals.
- Lack of teacher training.
- More competition and less cooperation among staff.
- Lack of district support.
- Lack of parental support.
- Lack of cooperation between principal and staff.
- Lack of good morale.
- Lack of dedication to students and willingness to change.
- Low student expectations.
- Lack of outreach to parents and community.
- Lack of academic focus.
- Lack of buy-in from entire staff.
- Lack of safe and secure environment in which to learn.
- Lack of consistent, integrated curriculum.
- Lack of family-like school atmosphere.
- Tolerance of misbehavior.
- Lack of shared decision-making.
- Lack of technology or know-how of technology.
- Increased mobility of students and staff.
- Lack of materials and resources.
- Large school/class size.
- Lack of interest in student success.
- Lack of willingness to assume risks.

- Status of the school as a dumping ground for staff unwanted elsewhere in the system.
- Lack of role models to set the tone of high expectations and seriousness in learning from principals, assistant principals, and teachers.
- Change without evaluating the impact of the change.

Conclusion

Recent experience with school improvement and Title I in Florida has proven that reform efforts are strengthened by applied research and school recognition. Since most low-performing schools end up being high-poverty schools, it is imperative to identify counter-examples—high-poverty schools that actually do well academically. Such schools can serve as models for their lower achieving, but demographically similar counterparts. They can also become technical assistance partners in school reform. As well, the experience of conducting collaborative research by state and district personnel and identifying successful schools leads to new insights about what works in the most challenging settings. The quest to identify successful schools is an ideal platform for joining federal, state, and local resource efforts for the common good.

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Reading Achievement, Reading Instruction, and Title I Evaluation

Richard L. Venezky

Although the idea of continuous school improvement may seem commonsensical, it is, nonetheless, foreign to most current educational thinking. In industry it is well known that it is inefficient to develop a process that yields products without simultaneously yielding information for improvement of its production process. Change in education, in contrast, navigates from quiescence to turbulence and back again to quiescence. When external pressures are light, schools rarely change. Self-examination and progress monitoring are usually not institutionalized. Therefore, the push for improvement is seldom internally generated. However, when schools' operations or products find disfavor with school boards, politicians, business leaders, or other influential citizens, change is required, although any resulting alterations usually occur more on the surface than in deep structures (Sieber, 1964).

Beginning in the late 19th century with Joseph Meyer Rice's school surveys (Rice, 1893) and continuing through the school surveys of the 1920s (Caswell, 1929) up to the present time, an outside-in approach to school improvement has developed. Although proponents of this approach seldom deny the central importance of instruction for student learning, their focus is frequently on the context of instruction and not on instruction itself. Whether the focus is input-output functions (e.g., Summers & Wolfe, 1977), effective schools (Purkey & Smith, 1985) or social organization (e.g., Bidwell & Kasarda, 1980), the basic approach is the same. Proponents of these approaches assume that if the organizational structure is sound, the teachers are properly trained, and the appropriate resources are available, good instruction will necessarily follow.

The problem with such approaches is that schools are loosely coupled systems (Weick, 1976), and therefore the relationships between school inputs, such as academic leadership or instructional time, and student learning are blurred. Among the loose couplings of the system, those between school, district, and state-level variables, and what teachers do in their classrooms are especially slack (Cohen, 1995). Even two teachers in the same school, teaching at the same

grade level and using the same materials and methods within the same time blocks, may be providing distinctly different types of instruction and achieving significantly different results.

What happens with most outside-in approaches is that changes instituted on various levels outside the classroom and outside of the direct interaction of teacher and student are diluted or deflected before they reach the point where instruction occurs. Furthermore, if effective instruction is not well defined, the cause of any observed change in schooling outputs will be difficult to determine. That is, if only instructional outputs are assessed (e.g., student achievement), the causal mechanisms that led to particular outputs will not be understood. We seldom reread evaluations of schooling from last year or last decade because they rarely contain any information on why a particular approach worked or failed to work.

This paper is a first attempt to define a model of reading achievement that can serve simultaneously as an instructional plan for meeting high national standards and an evaluation blueprint for Title I programs. As ambitious as these goals may seem, they are tied to a common knowledge base—that of classroom instruction and its in-school and out-of-school supports. What is proposed here is an inside-out approach where (a) effective reading instruction is defined, drawing upon both the research literature in cognitive psychology and the instructional wisdom of the past 50 years; and (b) the support system required to sustain such instruction is specified. This model places classroom instruction at the center of school improvement, with concentric circles surrounding it, each representing different removes from the student/classroom component. The importance of teacher preparation, materials, academic leadership, coordination across school personnel, family support, and even community support are all acknowledged in this model, but always in relation to their effect upon instruction. This model for Title I school reading programs will provide a strategy for analyzing the effectiveness of Title I programs and, at the same time, for providing a model for continuous progress for these same schools. The motto, "If it ain't broke, don't fix it" is bankrupt. Its replacement is, "If it ain't broke, we can still find a way to make it a little better and perhaps even to reduce the cost of producing it."

By necessity, the implied unit of analysis is the individual student, not the class or school. Nevertheless, the model recognizes practical limitations on individual attention within a classroom. Teacher time is a limited resource, as are materials and a variety of other critical factors for learning. Effective use of these resources is a primary goal, instead of the more lofty but less practicable optimization.

This paper will first discuss the general issue of literacy and, in particular, reading instruction. The issue of instruction-based reform will then be examined, and finally, a model for instructional indicators for reading in Title I schools (as well as in all other schools) will be proposed and elaborated.

Literacy, Society, and School Reform

In Sinclair Lewis' *Main Street*, the superintendent of schools of Gopher Prairie is asked about school reform:

> 'Tell me, Mr. Mott: Have you tried any experiments with any of the new educational systems? The modern kindergarten methods or the Gary system?' 'Oh. Those. Most of these would-be reformers are simply notoriety-seekers. I believe in manual training, but Latin and mathematics will always be the backbone of sound Americanism, no matter what these faddists advocate—heaven knows what they do want—knitting, I suppose, and classes in wiggling the ears.' (pp. 47)

Since the time of *Main Street* in the 1920s, American schooling has undergone a variety of reforms, both large and small. In these convolutions, Latin's role has been reduced to a bit part and a variety of new subjects have appeared, such as driver's education. Yet the perceived need for school reform has remained. Today, school reform is again the leitmotif of a large part of the educational literature and a regular fixture in the popular press.

School-level reform is pursued through site-based management and a rash of name-brand experiments (e.g., *Re:Learn*), while individual curricular areas are also promoting their own reforms. The National Council of Teachers of Mathematics has led a curricular reform effort that has now reached every major curricular area except the language arts (National Council of Teachers of Mathematics, 1989; Rutherford & Ahlgren, 1990). More general proposals for reform, like those of the Carnegie Council on Adolescent Development (1989), have focused on whole sectors of the school system (e.g., middle schools).

Curiously absent from the current reform literature is any serious proposal to reform literacy instruction in the schools. Although most of the national curriculum standards have called for a greater emphasis on clear expression, both oral and written, in their areas of interest, the reading community has remained mired in stale, jejune arguments over the relative merits of phonics and whole language. Schools accept or reject reading instruction based not on rational analysis or reliable research, but upon diatribe and emotional appeal. Attempts by Feitelson (1988) and Chall (1983), among others, to elevate this debate above politicization and name calling have had little impact on the school community or on the teacher training colleges.

What Is Literacy?

Central to any discussion of reading and writing in elementary and secondary schools is the definition of literacy. Since the UNESCO reports in the 1950s (Gray, 1956; UNESCO, 1957), a definition of literacy based upon social demands for reading and writing has been favored in the United States. The most recent surveys of adult literacy, for example, have used definitions similar to the following: "[Literacy is] using printed and written information to function in

society, to achieve one's goals, and to develop one's knowledge and potential" (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993). Although this approach to defining literacy has found broad acceptance (e.g., Venezky, Wagner, & Ciliberti, 1990), it is difficult to convert to practical assessment. One problem is that it locates literacy in a set of acts, the success of which are dependent upon individual requirements. Without knowing what an individual's goals are, it will be difficult to determine that person's literacy level. Further, it defines the level of ability required for literacy as dependent upon unspecified levels of competence in different areas of personal interaction—home, work, community. An individual who cleverly manages to gain assistance in reading and writing tasks might then be considered literate, even though his or her literacy skills are far lower than those of someone who received no help in such tasks.

Similarly, one who lives a Waldenesque life without interaction with banks and lawyers, who works at manual labor, and who chooses not to participate in civic affairs could also be considered literate, even without the minimum skills required by those who vote, read the newspaper daily, keep a checking account, and aspire to management-level employment.

Finally, this definition does not differentiate literacy from reading and writing, nor these skills from each other. National literacy surveys, although claiming to be assessments of literacy, have primarily been surveys of reading ability, with limited testing of writing. Further, reading and writing are skills, or complexes of skills; literacy implies something beyond these disparate components.

Drawing on work done in literary criticism (e.g., Davidson, 1986), literacy might better be defined as "active, autonomous engagement with print" (Venezky, 1993). This definition shifts the locus of literacy from social navigation to personal interactions with print itself. It also carries strong implications for how one applies reading and writing ability. Active, autonomous engagement implies that one is not simply a passive absorber of print, accepting the surface meaning of messages as they are received, but rather is a selector of both messages and interpretations. Autonomous reading implies questioning what is read. Who wrote it and why? What do they want me to believe?

Someone who is literate in the traditional sense can read an advertisement or a newspaper editorial but may not be able to perceive the bias built into each. The autonomous reader, on the other hand, can question whether the advertisement presents the entire story and whether the editorial writer is objective. Furthermore, active, autonomous engagement with print implies an ability to generate messages—not just bank deposit slips and brief telephone messages, but accurate directions, accounts of events in one's life, opinions about social and political issues, and feelings. Without these abilities, literacy is limited and asymmetrical; a person receives but does not produce messages.

Defining literacy by its most passive characteristics has an historical basis. In Sweden in the 18th century, for example, national laws required the

reading of specified religious passages as a prerequisite for obtaining a marriage license (Johansson, 1981). High levels of literacy are reported for Sweden during this period based upon the church-administered reading tests. Aside from a concern with the validity of the reading assessments used, the information we have about this situation suggests that "reading" at the time meant only the correct pronunciation of specified print. Understanding was not assessed, and if it was, we can assume from other information about this period that independent interpretations were not encouraged. At best, the reader was expected to read and understand the prayers and stories according to received interpretation. Furthermore, writing was not required. We might refer to the abilities assessed as limited literacy or quasi-literacy, but certainly not full literacy according to the definition proposed here.

Literacy, then, is not a static ability that can be measured by a cognitive test alone. It requires active demonstration—the use of writing to communicate ideas, observations, and directions in everyday situations and the independent interpretation of print. There is clearly a possibility within this definition of confounding intelligence and breadth of knowledge with literacy. Persons who have a broad understanding of science, politics, and geography, for example, might be better at making an independent evaluation of a proposal to build high-voltage electrical lines through their town than someone who has limited knowledge of these areas. Knowledge cannot be easily separated from understanding. Certain basic levels of reading and writing are required before a person can become self-sustaining in acquiring information from print, but beyond these basics, breadth of knowledge and ability to apply it will play increasingly larger roles in distinguishing the literacy levels of individuals.

Literacy and Class

A.B. Gutherie, Jr. described his father's reading of *The Last of the Mohicans* (1989) to him as follows:

> Occasionally he would halt, turn to me, and
> say something like, 'What a weapon, that
> killdeer, eh, son? And Hawkeye certainly
> knows how to use it. He never misses!'
> These comments, I'm sure, were meant to
> awaken my interest. (p. v.)

Gutherie's father was engaging in a literate act, intended to further an interest in reading in his child. This is one of the many uses of literacy that distinguish social positions. Belonging to the middle class today prescribes a variety of different behaviors, e.g., certain amounts of self-restraint, appropriate dress and speech manners, and an interest in civic government. But it also prescribes a wide range of literate behaviors such as reading stories to one's children and assisting them with their homework; possessing books; receiving and reading newspapers and magazines; writing thank-you notes, invitations, and

the like; and occasionally volunteering for jobs that require literacy such as a poll watcher, church or synagogue board member, or garden club officer.

We react with surprise to those who appear to be middle class but whose oral reading is halting or whose handwriting is barely legible. These are signs to us of limited literacy, and, except where physical disability is the obvious cause, we tend not to socialize with people who function at these levels. Nor would we knowingly choose a doctor or a lawyer or a teacher with limited literacy skills or expect to find people in these professions who have low literacy skills. Adult functioning in an industrialized society requires constant application of literacy, both to negotiate everyday work, civic, and personal needs, and to maintain social status. Low literacy skills might be hidden by some members of the middle class, but the psychological toll that these people suffer to maintain their disguise is probably high.

Children are expected, as they grow older, to engage in literate acts in their personal and social lives. Middle-class children are expected to read novels and other types of books and are often given such materials on birthdays and other gift-giving occasions. By the age of 13 many children are expected to write occasional letters, phone messages, and notes; fill out forms; and read portions of the newspaper, even if these are restricted to the comics and the movie, TV, or sports schedules. Some children at this age keep a diary, subscribe to magazines, and do further reading and writing as part of hobbies (e.g., stamp collecting), religious organization activities, or clubs (e.g., Girl Scouts or Boy Scouts).

Although literacy is less a marker of social position at age 13 than it is at age 30, it nevertheless is a skill that stratifies youth. Part of this chasm, however, is an unfortunate result of school stratification, or tracking, based on or resulting from reading ability. Poor readers are often placed together and generally receive less challenging assignments and less content area information (Barr & Dreeben, 1983). As they progress through school, they fall behind not only in language arts but also in most other subjects.

A Brief History of School Literacy

Over the past 300 years, the language arts program in U.S. elementary schools has evolved from the hornbooks[1] and religious primers of Colonial times to the literature-based programs of today (Venezky, 1990). Through the middle of the 18th century, children were viewed as miniature, inchoate adults, prone to mischief. Literacy was seen as a way of avoiding the clutches of the devil and consequently was oriented almost exclusively toward religious ends. Cotton Mather spoke for the entire New England clergy at the beginning of the 18th

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[1] The hornbook was a thin strip of wood, a few inches wide and 4-5 inches long, holding a single sheet of paper on which was printed the alphabet, syllables, and the Lord's Prayer. The primer was a prayer book, to which was affixed the alphabet, a syllabarium (ab, eb, ib, ob, etc.), and simple spelling exercises composed of word lists graded by number of syllables.

century when he declared that, "The children should learn to read the Holy Scriptures; and this as early as may be" (1973, p. 28).

By the middle of the 18th century the social attitude toward children had begun to shift toward recognition of childhood as a separate stage in human development. Now children were viewed as natural beings. Under the influence of Rousseau and Pestalozzi, whose writings circulated in North America at the beginning of the 19th century, children came to be viewed as empty slates onto which facts and ideas needed to be written. The dour, Calvinistic content of the hornbook and primer slowly gave way to more child-centered materials and later to object lessons. Reading and writing were often taught in separate schools and spelling and reading were combined, at least until the latter part of the 19th century. Higher levels of scholarship, imparted in the grammar schools, included grammar and rhetoric, along with mathematics and geography.

Although in the early Colonial period reading was an avenue to salvation, toward the end of the 18th century reading served primarily to impart nationalism, morality, and good character. School readers grew in size and sophistication throughout the 19th century, moving from classical and British authors to American writers. In the lower grades, fairy tales, folklore, and other forms of children's literature were popular. Children as innocent beings came to dominate the educational view of the child after the 1830s (Calvert, 1992). With industrialization and the gradual drift of Protestantism from morality to materialism, the goals of reading programs also changed.

De Charms and Moeller (1962) traced achievement imagery, affiliation imagery, and moral teaching in American readers during the period 1800 to 1960 and found that moral teaching dropped steadily until 1950, with the largest drops occurring between 1850-1870 and 1910-1930. In contrast, achievement motivation rose steadily until 1890 and then fell symmetrically. Affiliation imagery dominated the readers from the decade before the end of the 19th century to the end of the sampling period (1960). These changes are interpreted by the authors as a reflection of the shift in American culture from a Protestant emphasis on thrift, hard work, and competitiveness to a social ethic that located creativity in group activity. In contrast to the lonely frontiersman conquering nature through his own strength and craftiness, the post-frontier American strove for group acceptance and applied science to solve most problems of need.

The end of the 19th century was a period of transition for both the country and for language arts programs. Concurrent with the closing of the frontier, America reached unprecedented levels of economic prosperity and military might. Illiteracy declined, affecting only a small percentage of the population, and the proportion of the school-age population continuing their education through secondary school rose dramatically. Reading programs by 1900 had already switched from an emphasis on oral reading to an emphasis on silent reading. "Good literature" characterized the contents of readers, particularly past the third grade, and the goal of reading was now seen as cultivating proper taste in literature. Upper-grade readers once contained famous

speeches and essays mixed with narrative fiction; the modern reader presents mainly narrative fiction, with occasional biography and a few expository selections.[2] Since the 1900s, methods of teaching reading, along with reading materials, have changed, but the basic goal has remained constant: to impart to children a knowledge and appreciation of "good literature."

Social Construction of Knowledge

For more than a century and a half, school teaching in the United States has been dominated by a simplistic model of development that derived from the writings of Rousseau and the practical experiments of Pestalozzi. These theorists postulated the following: The child begins life with a mind akin to an empty slate and with minimal mental capacities. His or her interests, furthermore, gravitate toward play and toward the visible objects of the immediate environment—animals, trees, flowers, and the like. Mental faculties have a natural order of development, beginning with perception and continuing through memory, imagination, judgment, and reasoning. Education is to mirror this natural order of development, thus beginning with activities that appeal to the senses.

The primary implication of these beliefs for schooling has been a linear curriculum, sequenced from simple objects to abstract ideas, wherein each step must be mastered before the next encountered. The fostering of logical reasoning and moral judgments is generally withheld until the foundation of labels, facts, social conventions, and basic skills is mastered. As the child gains in capacity, more and more knowledge can be poured in, like salt into a salt shaker. Hands-on experiences are tolerated, particularly at the primary level, but more for release of excessive energy than for learning.

Thorndike added an element of science to this enterprise, particularly through mental tests and through attention to the frequency with which different elements in the child's environment occurred. Watson and Skinner shifted the classroom spotlight to rewards and punishments. However, the regimen of easy-to-hard, concrete-to-abstract remained a prominent feature of the educational landscape. Even Freudian psychology was easily absorbed by this paradigm, creating only a slightly more complex view of what might be hidden in the inner reaches of the child's mind. Among the major American writers on education in

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[2] Twenty-five years ago, the average adult claimed to read for about one hour and 46 minutes each day (Sharon, 1973-74); however, most of this reading was of newspapers and magazines. Only 5% of the 5,067 adults surveyed read general fiction. Robinson (1977), based on data collected in the middle 1960s, reported that total non-newspaper reading each day was 14 minutes for employed men, 10 minutes for employed women, and 17 minutes for unemployed housewives. Book reading was reported to be five, four, and seven minutes per day for these same three groups, respectively. More recent reports have found a decline in newspaper reading and a shift toward reading more specialty, trade, and professional magazines (Barnhurst & Wartella, 1991; Library of Congress, 1984; Robinson & Jeffres, 1979). Although we lack current survey data for time spent reading, trends over the past 30 years indicate that: (a) people spend the majority of their reading time with newspapers and magazines; and (b) a relatively small percentage of the population reads general fiction.

the last 100 years, only Dewey stands out as opposing the fundamental tenets of Rousseau/Pestalozzi, but Dewey either wrote too much or too little to make a difference.

Among the European educators, Piaget has provided the best-constructed alternative to the dominant American mode (Wadsworth, 1978). But Piaget's popularity among American academics has never been matched by an equal enthusiasm at the school level. Perhaps the implications of Piaget's work have been too difficult to translate into a curriculum that could satisfy the American teacher's view of a controlled classroom populated by children with rather fixed capacities for learning. Nevertheless, until Vygotsky's work was translated into English, no serious challenge existed to the concrete-to-abstract, pour-in-the-knowledge philosophy. Now, however, one of Vygotsky's central tenets of school learning—the social construction of knowledge—has begun to dominate the reform literature (Vygotsky, 1962, 1978; Wertsch, 1991).

The social construction of knowledge, in its simplest form, is a recognition that knowledge is constructed by each individual, generally through interactions with others. Through verbal interactions, through doing, and especially through assistance from more knowledgeable peers and elders, we build our own understandings of the world around us. Tutoring or "scaffolding" takes on a special meaning in this theory because some understandings, although not obtainable by the student alone, may be acquired with assistance and then through practice internalized or "owned." The "distance" between what a person can do alone and what that same person can do with assistance is called by Vygotsky the zone of proximal development (ZPD). Ideally, teaching should focus on ideas and concepts that are within the ZPD for a student.

Vygotsky was not the first to suggest that knowledge is constructed by each individual. For example, the Home and Colonial Infant and Juvenile School Society of London, established in 1836, stated among its principles: "Education consists, not in the amount which you can put into the mind from without, but in the amount which it can gain from its own development and exercise from within" (Sheldon, 1911, pp. 119). Vygotsky's contribution was in building an educational theory that was part of a broader developmental view and which, in contrast to Piaget, minimized inherent limitations to learning. The incorporation of these views into modern curriculum reform can be seen in elementary science more so than in other school subjects (e.g., Moll, 1990). In part this results from the compatibility of Vygotsky's views with those of educators and curriculum developers like Bruner (1966) and Case & Bereiter (1984).

Current Problems in School Literacy

From the above exposition of literacy in the context of culture, philosophy of learning, and the history of school literacy programs, we can identify at least two problems with typical current reading program designs. The first problem with most elementary reading programs is that they spend too much time on narrative fiction and too little time on teaching students to read other

types of materials—expository texts, graphs, charts, diagrams, etc. In the primary schools in the United States, 1 ½ to 2 ½ hours per day are spent in language arts, most of which is structured around narrative fiction. But by middle school, students must spend four to five periods each day reading expository texts and only one period a day reading literature. Mathematics, social studies, and science usually require textbooks, as do foreign languages. Other subject areas such as health, home economics, or career exploration may also have readings, although more often drawn from pamphlets than from textbooks. The famous "fourth-grade slump" noticed in American schools may be one result of this bias in the primary reading curriculum (Chall, Jacobs, & Baldwin, 1990). Confronted by an enormous increase in expository reading in the fourth grade, many students who appear to be successful readers of fiction cannot read with the same facility from their content area textbooks. The lack of congruity between the literature-based reading curriculum and the reading needs of the content areas or of adulthood have often been pointed out, but elementary schools have shown little interest in moving toward a more eclectic content for reading instruction (Venezky, 1982).

The second dilemma, presented by the social construction of knowledge paradigm and many other efforts to focus on higher level thinking skills, is that a knowledge base is required for almost any form of reasoning to take place. The lower level skills that knowledge construction and reasoning require must be sufficiently automated in order for mental capacity to be available for other subtasks. Studies of comprehension of middle school science texts show an interaction between background knowledge level and comprehension of texts that are structured with low coherence. (McNamara, et al., 1996). Students who have limited background knowledge gain little of the deep meaning from such texts, in contrast to those with high background knowledge, who gain much more from these texts. In other words, high background-knowledge students (a) gain more from less coherent texts than low-background knowledge students, and (b) gain more from low coherence texts than high coherence texts. The variable at work here is depth of processing. Both groups must struggle to understand the less coherent texts. Those with high background knowledge succeed; those with low background knowledge do not. Those who succeed, because of the extra processing required, tend to make more connections across ideas within the text and more linkages between background knowledge and text propositions, and therefore gain more from the reading (presumably they also retain the material longer, but this was not assessed). These same students breeze through highly coherent texts and, therefore, do not make the same types of connections.

Knowledge, Strategies, and Fluency

Reading and writing ability, whether for narrative fiction, expository texts, correspondence, or everyday documents, depends upon background knowledge, literacy strategies, and fluency. In the discussion that follows, I apply this scheme to reading, with occasional notes on how it also applies to writing. The general thesis proposed is that reading is an interactive process driven by the reader's goal, the text to be read, and the reader's abilities with

regard to the text and reading goal. One critical variable that emerges from the goal/text/ability framework is depth of processing, mentioned above in relation to reading science texts.

Knowledge

Understanding or writing texts and documents requires varying amounts of background knowledge and experience both about the content and the form of the texts. For example, the more one knows about kangaroos, the easier it will be to understand or to write articles about these animals. Similarly, the more one reads advertisements, the easier advertisements become to read and to write. This transfer occurs because document-specific knowledge is acquired. For example, advertisements use a large number of abbreviations and tend to have a fixed order for presenting information; experienced advertisement readers and writers therefore build up a recognition vocabulary for abbreviations and syntax used in ads. Readers of nutrition charts on food packages acquire a recognition vocabulary for words like niacin and cholesterol, as well as a familiarity with unit designators: serving, grams, percentage, etc.

The relationship of knowledge about gasoline engine operation to the comprehension or writing of gasoline motor repair manuals is obvious, but the equally important relationship of knowledge of everyday events and relationships to general reading comprehension and writing is less so. The difficulties new immigrants have with what appear to native-born adults to be clear and simple passages often reveal the importance of this type of knowledge. For example, a mail-order catalogue contains the following information on returning purchases: "To return an item, first call our Customer Service Department for a return authorization number. Mark your package with the return authorization number and insure it." For these instructions to make sense, one must understand that the ordinary procedure for returning items to a company is by U.S. mail, or a package delivery service like the United Parcel Service (U.P.S.). It helps to know, furthermore, that the package should be insured for the amount of the original purchase and that these delivery services provide insurance (for a price); that is, one does not need to call an insurance company to insure a package sent through the U.S. mail or by U.P.S. Since no special return address is given, one should assume that the appropriate address for the package is the general address for the company that sells the product and that this address conforms to a standard format: name of company, street address or post office box number, city, state, and zip code. For many students who lack literacy skills, and especially those who immigrated from less technologically advanced countries, the absence of certain types of general knowledge complicates literacy acquisition.

Although the exact arrangement of knowledge in human memory is unknown, current cognitive theory assumes that long-term memory is associative (Schacter, 1993). Associative theories of memory conjecture that two objects or ideas that share some feature will be linked in such a way that one can be easily retrieved in memory from another. Schema theory extends this idea to larger

domains of relationships. For example, everything an individual knows about voting—registration procedure, ballot, candidates, etc.—is assumed to be closely linked in a "voting schema" in memory so that information needed in reading an article about voting can be easily retrieved and applied. Information organized in schema is more efficiently processed than random facts or lists of facts. We assume this especially for vocabulary learning; that is, new vocabulary is more easily learned if it derives from the same schema (Freebody & Anderson, 1983). What the student learns in such a situation is not only separate words but also relationships that build concepts about a topic.

Strategies

Strategies are the attack plans that readers and writers develop for particular types of texts under particular goals. A grade-school student scanning advertisements for a puppy to buy might first search each advertisement for the type of dog desired. If this is found, he or she might then read the price and location. Similarly, the reader of a dictionary entry might scan first for part of speech or usage labels and only then read the relevant definitions. Although readers might differ in their preferences for particular strategies, most texts have a limited number of strategies that are efficient for particular goals. Someone reading a word processing user's manual for information on how to set margins will need to use the table of contents or index to locate where the information on this topic is given, scan the designated pages for the relevant paragraphs, and then attempt to understand the procedures described.

Part of any general attack strategy is a recovery plan—what to do if the general plan does not work. For recovery plans to be useful, however, the reader must recognize that a particular reading strategy is not working. Studies of good and poor readers at the elementary level show that good readers recognize a higher percentage of their breakdowns in understanding than do poor readers (Weber, 1968). A good reader may substitute a plausible word for what actually occurs on the page, but will most often correct the error if the substitution leads to an implausible situation later in the sentence or text. The poorer reader, struggling to recognize a minimal amount of the text, may not detect the mistake at all.

Metacognitive strategies move beyond basic skills, which generally can be applied without overt control by the reader, to strategies that require conscious decisions. The competent reader monitors understanding, recognizing when basic strategies are not working, and shifts to new strategies or terminates reading when the reading goal is not being reached. Metacognition can also come into play as the advanced application of basic skills. A multisyllabic word might first be approached through automatic processes, but if these don't yield a satisfactory result, the reader might pause and reconsider the situation, trying a different parsing strategy for the word or reading further in the text to see if context can provide any clues to the words identity. The competent reader has a bag of strategies for such reading problems and knows how and when to deploy them.

For the writer, strategies are slightly more difficult to define. Some, such as those for planning, drafting, and rewriting, are familiar to most instructors of writing and can be found in almost any writing handbook (e.g., Fowler & Aaron, 1989). More difficult to find are strategies for specific writing tasks such as writing directions for travel, describing scenes or processes, or explaining why someone should vote for a particular candidate.

Fluency

Fluency can be defined as the ease with which a text or document can be read with understanding appropriate for a given task or the ease with which sentences and paragraphs are written. For oral reading, fluency is marked by correct rendering of the orthography into sound, proper phrasing and intonation, and appropriate reading speed. For these characteristics to occur, the reader must be able to recognize words rapidly, retrieve from memory their pronunciations (or convert the printed forms into sound through letter-sound relationships), recognize syntactic phrases and clauses, and at the same time integrate recent recognition into meaningful structures (Stanovich, 1991). These abilities, in turn, require maintenance of an appropriate eye-voice span, guidance of the eyes to focal areas, and continual exchange between working memory and long-term memory. For silent reading, similar abilities are required, but without oral production. Fluency, then, represents the abilities that most often become automated in the experienced reader, that is, the lower-level abilities that can, with sufficient practice, be executed without conscious control. In terms of traditional basic skills, fluency depends upon the size of recognition vocabulary, speed of recognition, decoding and morphological analysis, and other skills that relate to the immediate processing of letters and words.

For writing, fluency is a function both of manual ability in producing letters and words and cognitive ability in recalling appropriate spellings and punctuation and in generating (or tracking) coherent discourse. Critical to writing fluency is a familiarity with the conventions of written discourse: appropriate phrasing for requests and explanations, standard openings and closings for letters, appropriate formats for lists, addresses, and so on.

Blurred Boundaries

The components that make up a literacy learning system—knowledge, strategies, and fluency—do not admit sharp boundaries. More advanced processing skills spill over from fluency to strategies, and some aspects of fluency appear to draw upon various types of knowledge. For the latter, we are reasonably clear in allocating to fluency whatever information is needed to facilitate automatic recognition of words, phrases, punctuation, and standard text components like margins, as well as to generate spellings and the like in writing. On the other hand, information about the structure and use of application forms, tables, or charts is included in the knowledge category because, like general world knowledge, it must be consciously applied in reading and writing tasks. Basic skills and the information they require are part of fluency; higher level

skills are usually strategies, and the information they require often derives from what is called knowledge.

Steps Toward an Instructional Model

Given these three critical components of literacy, we can now define an ideal model for the organization of reading instruction, a model that incorporates continuous improvement and defines its own evaluation.

Organization of Instruction

At the beginning of the school year, and whenever students transfer into a school, information is gathered to make appropriate student placements into an instructional level and to set achievement goals. Placement might derive from written information passed on by the previous teacher, an informal reading inventory, or, in a few cases, from extensive diagnostic testing. Placement and goal setting should occur in conjunction with one another in answering the question, "What progress is expected/needed for this student?" This type of goal-setting with high expectations is especially important for Title I students. As Allington (1994) points out, "warehousing" efforts were more common in the early years of Title I than were attempts to accelerate students who were behind. However, if the purpose of Title I is to enable low-achieving students to catch up and keep up, then accelerating goals must often be set. If the student is two years behind in reading, than more than a year's progress is required.

Instruction begins on the appropriate level, student progress is monitored, and changes in instruction are made if necessary. Ideally, both the teacher and another staff member (reading specialist, Title I coordinator, or principal) periodically review student progress as a team and discuss what should be done next.

At the same time that in-school instruction begins, parents should be informed of the goals for the year, the instructional program, and what role parents are expected to play in supporting the program. Similarly, if special services are available for the student (e.g., ESL, Title I), coordination of these with the classroom teacher should be established so each knows what the other is doing. This requires allocating time for joint planning, a step often ignored in Title I schools (Tancock, 1995).

At the end of the year, a schoolwide review needs to be made of all students, and individual student progress toward instructional goals should be assessed. Analysis of the program as a whole should be based on what worked and what did not, and changes, if required, planned accordingly for the next year.

This basic instructional cycle is critical for all schools, but especially so for Title I schools. Each stage needs to be implemented overtly, with information recorded and communicated to all involved. Diagnosis, placement, monitoring, review, and program evaluation must all become part of the routine of the school, just as the bells, the lunch period, and the class picnic are now. Indicators for each of these processes will be discussed below.

Content of Instruction

Orientation toward instruction represents the most crucial and the most controversial part of the plan presented here. But without specification of appropriate instruction for bringing students living in poverty up to national standards in reading, this plan will not be distinguishable from all the plans that have failed in the past. Whether or not this plan will lead directly to student success may not be as important as its design for self-checking. By being so specific, and suggesting close monitoring of the indicators derived from the instructional plan, there is the possibility that a better plan will emerge over time.

In spite of the paradigm wars in reading (Kamil, 1995), much is known about how children, in general, acquire reading ability and what can be done to foster this set of skills. The key components of these understandings, sketched below, should be used to structure literacy programs in all schools, including Title I schools.

- To prepare children for reading instruction, two types of readiness skills are required. One centers on what is often called emergent literacy and includes familiarity with items, conventions, and orientations, including books, stories, direction of print, and the functions of literacy. The other centers on phonological awareness, or the ability to manipulate individual speech sounds. For assisting children in acquiring these skills, it is not sufficient simply to read to them. Along with hearing stories, children must be engaged with print, engaging in activities such as identifying individual letters, giving letter sounds, producing a rhyme, or guessing what comes next in a story (Meyer, Wardrop, Stahl, & Linn, 1995; Whitehurst, et al., 1994).

- Children must be taught basic decoding skills in parallel with effective strategies for obtaining meaning from print. The strategies must lead to flexible reading approaches, adapted to the task and text.

- Where critical background knowledge for reading is missing, it needs to be taught.

- Reading materials must be at an appropriate level of challenge for vocabulary and comprehension growth to occur (Carver, 1995). Children given only simple texts will show little growth in general reading ability.

- Students with lower abilities often require extensive scaffolding and encouragement to move forward.

- All students need extensive reading experiences outside of school, including during the summer, to consolidate learning and to continue reading growth.

From these postulates, which should not be viewed as exhaustive, a variety of indicators can be extracted. For example, the desired difficulty level of reading materials for each quarter of the primary grades can be specified to achieve an average rate of progress. Actual materials being read by students at these various checkpoints could then be examined. Similarly, the mix of genres used to teach reading could be examined. Most important is the actual instruction which children receive. Does it include strategies for obtaining meaning from texts? Does it include a sufficient amount of decoding? Is scaffolding used to ensure that children having difficulties are being supported? Is an after-school/home/summer reading program in place?

From the general model sketched earlier, a similar feedback system can also be developed for assessing instruction. The types of information gathered would include: (a) Was initial placement data sufficient for projecting learning trajectories and special help needs? (b) Were yearly goals recorded for all students? (c) Was time allocated for coordination between classroom teachers and special services personnel? and (d) Are yearly reviews of student progress and instructional programs part of the standard operating procedure?

Finally, all monitoring systems should include test scores. Testing, whether state-wide or district-based, should allow comparisons to national norms. Programs such as "Success for All" appear successful when the only comparisons made are to other high poverty schools, many making only half-hearted efforts to teach reading. However, comparisons to national norms show far less successful outcomes (Venezky, 1994). Greater student success compared to other high-poverty schools may be a step forward, but students and teachers must be held to high standards and assessed based on whether or not students are reaching these standards. The indicators sketched above relate mostly to the process of instruction. The ultimate test is whether or not the process, when in place, leads to the desired outcome.

Conclusion

For Title I schools, basic skill instruction in reading has often been attacked as meaningless and stultifying, yet analyses of the federal government's *Prospects* survey data yielded no support for replacing teacher-led basic-skills instruction with more student-centered, advanced skills approaches (Wong, Hedges, Bowman, & D'Agostino, 1996). Other reviews of schooling for children living in poverty suggest not dropping basic skills instruction, but balancing it from the earliest stages of instruction with more complex types of learning (e.g., Knapp, Shields, & Turnbull, 1992).

This paper proposes a set of indicators to assess reading programs based upon both general instructional variables and variables specific to reading instruction. By monitoring these variables, schools would be sensitized to critical

elements for reaching high standards in reading. In addition, new knowledge about the relationship of process variables to achievement outcomes would be generated, thus leading to further improved models. All of this is predicated upon the assumption that high standards in reading can be achieved only if schools develop quality programs for all of their students, rather than assuming that special services will "clean up the wreckage" after schools fail to educate some who enter their doors.

The best strategy for school reform has at its core a continuous improvement model that allows schools to build better instructional programs year by year. Built into this notion is an improvement orientation: schools would accept review and improvement of their instructional programs as an ongoing responsibility as opposed to a crisis to be handled every so many years as a result of external pressures. Title I would then become a school support program that assists schools in building local problem capacity.

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English-Language Learners and Title I Schoolwide Programs

Diane August

The purpose of this paper is to describe key provisions of the Title I law that govern schoolwide programs[1] and to provide recommendations for policy, practice, and research that will enable English-language learners[2] to fully participate in these schoolwide programs. This paper is based in part on a previous report on English-language learners and Title I prepared by the author and her colleagues and published by the National Clearinghouse for Bilingual Education in November, 1995[3].

Under the former Title I law, schools with 75% of students in poverty could apply to use Chapter 1 (now Title I) funds for schoolwide projects rather than for supplemental instruction targeted to individual children. Current law enables many more Title I schools to develop schoolwide programs (about 12,000 more according to a U.S. Department of Education estimate) by lowering the minimum poverty level at which a school can become a schoolwide program from 75% to 60% children in poverty in the 1995-96 school year, and to 50% in subsequent years. Schoolwide projects provide a vehicle for much-needed reform in that regular classroom instruction rather than supplemental and pull-out instruction becomes the focus for improving student outcomes. Thirty minutes per day of supplemental instruction (characteristic of many Title I programs under the former law) is probably not enough instructional time when the regular school program is deficient. Moreover, in schools with high

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[1] Section 1114, Schoolwide Programs, of Title I of the Improving America's Schools Act, which amended and reauthorized the Elementary and Secondary Education Act of 1965.

[2] In most cases the term English-language learners is used in this paper rather than the term limited-English proficient (LEP) students. The former is a positive term whereas the latter assigns a negative label. The term "limited English proficient" is used when the Title I law is cited since this is the term the law uses.

[3] See August, D., Hakuta, K., Olguin, F., & Pompa, D. (1995). *LEP students and Title I: A guidebook for educators.* Stanford, CA and Washington, DC: National Clearinghouse for Bilingual Education.

concentrations of poverty, schoolwide programs make sense because more children in the school are likely to benefit. This is because English-language learners are disproportionately concentrated in these high-poverty schools.

However, for schoolwide programs to be effective, school staff must attend to the special needs and strengths of English-language learners. According to one study of four urban school districts in 1992 (Fix & Zimmerman, 1993), "interviews with staff and administrators did not provide evidence that important curricular or other innovations designed to meet the needs of LEP children had been systematically introduced in their Chapter 1 programs." (p. 73)

Legal Requirements and Implications
for English-language Learners

The major issues for English-language learners focus on: (a) the inclusion of individuals with expertise and interest in English-language learners in planning and carrying out programs; (b) the use of schoolwide and instructional strategies in programs that will enable English-language learners to meet high standards; (c) the appropriate assessment of English-language learners for instructional and accountability purposes; and (d) ensuring that two provisions—the Special Rule (exemption of schoolwide programs from statutory or regulatory provisions of other programs) and use of funds (specifically the "supplement, not supplant" provision)—do not weaken instructional programming. These issues are discussed in the following sections.

Inclusion

The law requires that the plan for a schoolwide program be developed through the collaborative efforts of the community to be served and individuals who will carry out such a plan, including teachers, principals, and other staff. Where appropriate, pupil services personnel, parents, and (if the plan relates to a secondary school) students assist with the planning. In schoolwide programs targeting English-language learners, it is important that individuals who have expertise and interest in the education of these students and have historically worked with such children be given the opportunity to participate in the development of the school plan. Such individuals include school personnel, parents, community members, and secondary school English-language learners (where applicable).

Programming

The law requires that schoolwide programs include the following components: (a) a comprehensive assessment of the school based on the performance of children in relation to state content and student performance standards; (b) schoolwide reform strategies; (c) instruction by highly qualified staff; (d) professional development; (e) strategies to increase parental involvement; (f) plans for assisting preschool children in the transition from

early childhood programs to local elementary school programs; (g) measures to include teachers in decisions regarding the use of assessment; and (h) activities to ensure that students who experience difficulty mastering any of the standards are provided with effective, timely assistance.

Effective schools and classrooms for English-language learners share many of the features of effective schools for any group of students, but place more emphasis on some of these features.[4] In addition, there are certain attributes of effective schooling and assessment above and beyond those necessary for all students that are important for English-language learners. The following sections elaborate on many of these requirements and provide recommendations to help ensure that English-language learners are fully served by schoolwide programs.

Comprehensive Assessment School assessments should consider the needs and strengths of all children. Because many English-language learners cannot take the same assessments as their fluent English-speaking peers, modifications in assessments and their procedures are necessary to fully include these children in a needs assessment. Disaggregation by language proficiency status is also important in determining how this subset of students is performing. These issues are discussed in a subsequent section on assessment.

Schoolwide Reform Strategies. Schools that are responsive to the needs of English-language learners must be developed. Although many attributes of effective schools are important for all students, they are particularly important for English-language learners from ethnically and linguistically diverse backgrounds and for whom less is expected because of their limited English proficiency. Three attributes of effective school communities that are important for English-language learners include: (a) the school community actively challenges bigotry, prejudice, and discrimination (Nieto, 1992); (b) the school community holds high expectations of all students (Carter & Chatfield, 1986; Garcia, 1991; Lucas, Henze, & Donato, 1990); and (c) academic support services and extracurricular activities are designed to serve and include English-language learners (Lucas, 1993). Another important attribute of an effective school is articulation and coordination within and between schools (Short, 1991a; Minicucci & Olsen, 1992; Slavin & Yampolosky, 1992). This includes a smooth transition between levels of language development classes (i.e., transition between content-based English as a Second Language [ESL] and sheltered instruction) and coordination and articulation between the ESL or bilingual program and the rest of the school. In addition, it calls for coordination between levels of schooling, including grades and schools (e.g., preschool and elementary

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[4] August, D. L., & Pease-Alvarez, C. (1996). *Attributes of effective programs and Classrooms Serving English Language Learners.* Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

schools). To accomplish this there must be collaboration between all school personnel and a coordinated district policy regarding English-language learners.

There are also features beyond those necessary for all students that are important for English-language learners, e.g., teachers use of a variety of strategies to ensure that English-language learners grasp the subject matter. In some cases, this entails instruction in the students' native language. If students are instructed in English, teachers must provide a framework and context for instruction so the students understand and can participate in classroom discourse and activities (Short, 1991b; Carrel & Eisterhold, 1987). Providing learners with appropriate background information, helping students establish connections between their knowledge and the subject matter they are studying, and using objects and pictures associated with particular subject areas all enhance student comprehension. Creating opportunities for extended dialogue is also believed to enhance learning and comprehension (Tikunoff et al., 1991; Garcia, 1990, Gersten, 1996, Saunders, O'Brien, Lennon, & McLean1996; Goldenberg, 1991).

Guiding English-language learners through the educational pipeline requires ongoing support, especially in middle and high schools where students are making decisions about their future. Under Section 114, a schoolwide program may include counseling and mentoring services and college and career awareness and preparation, such as college and career guidance, enhancement of employability skills, and job placement services. To help English-language learners gain access to these services, schools should: (a) ensure that academic support services such as counseling and mentoring are designed to include and serve these students through, for example, the use of bilingual counselors and mentors; (b) present workshops in the native languages of these students or in a format that they can understand that makes them aware of the secondary and postsecondary coursework and other requirements for specific careers; and (c) provide mentors from the business community who speak the languages of English-language learners or are from the same language-minority background.

Instruction by Highly Professional Staff and Professional Development. Staff in schools that successfully educate English-language learners have specialized knowledge that relates to the special circumstances, experiences, and backgrounds of their students (Faltis & Merino, 1992; Milk, Mercado, & Sapiens, 1992). This includes knowledge of first and second language acquisition and second language methodology. Moreover, teachers who teach in a language other than English should be proficient in that language.

In schools that successfully educate English-language learners, professional development is explicitly designed to help all teachers and school personnel better address the needs of language minority students (Carter & Chatfield, 1986; Minicucci & Olsen, 1992; Berman et al., 1992; Tikunoff et al., 1991). This includes instruction in how to achieve meaningful and appropriate parental involvement (Violand-Sanchez, Sutton, & Ware, 1991).

Strategies to Increase Parental Involvement. Some strategies to increase involvement in schoolwide program development have already been mentioned in the previous section on inclusion. For the families of all children, there is a wide range of parent/community activities. However, for the families of English-language learners, the activities and information that link parents and the community with the schools should be linguistically and culturally accessible (Delgado-Gaitan, 1991; Carter & Chatfield, 1986; Garcia, 1990). For example, the law states that plans for schoolwide programs must be made available to the local educational agency, parents, and the public, and the information contained in such a plan must be translated (to the extent feasible) into any language that a significant percentage of the parents of participating children in the school speak as their primary language. Strategies for communicating plans to language minority parents who are not proficient in English are varied. The possibilities go well beyond making translations of the entire plan available in the non-English languages. For example, versions of the plan might be prepared in English, but in a manner so as to avoid jargon and language that is not easily accessible to non-native speakers of English. The plan could then be made available to the language minority communities at large (such an exercise may also help communicate the plan to English speakers who are unfamiliar with education jargon). Similarly, an executive summary containing the menu of key issues could also be prepared in English and translated into the school's main languages. For the least common languages in the school, representatives of those language minority communities could be contacted to seek their help in disseminating the issues to their community.

Another requirement of the law is that schools must provide individual student assessment results, including an interpretation of these results, to parents. Whenever possible, schools might enlist the help of staff and community members to interpret or translate information about students' performance into the native languages of non- and limited-English proficient parents and to answer parents' questions about their children's progress. This could be accomplished through small, informal sessions between parents, staff, and community members as well as through phone calls and home visits.

Some experts (Moll, Amanti, Neff, & Gonzalez, 1992) maintain that parent involvement is enhanced when teachers make use of students' families and communities as important instructional resources. Drawing on this principle, teachers and researchers can interview parents and other community members to identify information and skills, or "funds of knowledge," and incorporate this information into their curriculum, in some cases by using parents and community members themselves as classroom resources.

Activities to Ensure Effective, Timely Assistance. This presupposes both effective assessment and monitoring of English-language learners (to be discussed in the next section) as well as schoolwide strategies to ensure that timely assistance is available. Providing timely assistance to these students,

especially at the middle-grade and secondary-school levels, poses several challenges to educators including how to accommodate older students with limited English proficiency and limited prior schooling and how to deal with late enrollment (due to transiency and immigration). In response to these challenges, some districts have developed newcomer centers for newly arrived immigrant students. A number of models and programs currently exist, each providing intensive English language instruction and helping students understand and cope with a culture that is frequently very different from their own. Anecdotal evidence suggests these programs are successful (Chang, 1990; Friedlander, 1991).

Assessment

Assessment is important for determining both the needs of students and their progress. Assessment is also important for school and district accountability purposes. As previously mentioned, the law requires that a schoolwide program include a comprehensive assessment of the school based on the performance of children in relation to state content and student performance standards. The law further requires states to develop or adopt a set of high quality yearly assessments, including assessments in at least reading or language arts and math, to be used as the primary means of determining the yearly performance of each district and school in enabling all children to meet the state's student performance standards.[5]

The assessments are to provide for: the participation of all students; reasonable adaptations and accommodations for students with diverse learning needs; and the inclusion of LEP students who will be assessed in a language and form most likely to yield accurate and reliable information on what they know and can do in order to determine their mastery of skills in subjects other than English.

Modifications in Assessments and Assessment Procedures

Although English-language learners should be assessed to determine mastery of the same standards (and assessed as often as their fluent English-speaking peers), assessments might be modified to learn how much they know and can do.

A recent survey of statewide assessment programs (Rivera, 1995) shows there are many methods to modify the assessment practices to include English-language learners. Because of the diversity within this student population, no single method will succeed in including all English-language learners. Therefore, a variety of approaches is recommended. One practice is to provide assessments in the student's native language. In this survey, four states (Arizona, Hawaii,

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[5] If states are using transitional assessments, they must devise a procedure for identifying LEAs and schools for improvement. The procedure must rely on accurate information about the academic progress of each LEA and school.

New Mexico, and New York) reported providing psychometrically equivalent assessments in languages other than English. In addition, some states such as California and Texas reported piloting statewide assessment programs in languages other than English. In general, experts in assessment believe that this practice is appropriate for the group of English-language learners who are better able to demonstrate content knowledge in their native language, such as those who receive instruction through the medium of their native language or who receive English-only instruction but have been recently educated in their home country and are thus able to demonstrate content knowledge more ably in their native language. The native language assessments would parallel content assessments and performance standards in English.

In addition to assessment in the native language, the survey of state practices also showed a variety of modifications for English-language learners: 20 states allowed extra time; 18 states provided small group administration; 18 states allowed flexible scheduling, such as dividing administration of an assessment into shorter sessions; 14 offered simplified directions; and 13 allowed the use of dictionaries. Additionally, New York state allowed the use of glossaries that did not explain the word or concept to maintain the validity of the assessment.

Other modifications might entail providing audio-taped instructions in the native language, allowing students to respond in either their native language or in English using audio tapes, providing additional clarifying information at the end of the test booklet or throughout the test (i.e., synonyms for difficult words or phrases), and decreasing the English language demands of the assessment. In all instances, however, it is important to ensure that assessments are equivalent in content and rigor to those used to measure the progress of fluent English speakers. It is not imperative that these assessments be the same as those given to fluent English speakers. However, to gauge the progress of English-language learners, the assessments must remain comparable over time.

Finally, it is recommended that creativity be exercised to collect additional information on the performance of English-language learners, particularly those for whom the modifications are still not sufficient to provide for accurate measures of their abilities within the assessment system. This might include portfolio assessments, teacher ratings, and assessments that recruit the assistance of bilingual liaisons such as aides and community representatives.

Inclusion of English-language learners in assessment practices clearly offers an opportunity for collaboration between the state assessment director and the directors of Title I, special education, and bilingual education programs. For example, in addition to the opportunity to align Title I and state assessment goals around state content and performance standards, there are new and strict accountability provisions for schoolwide and districtwide programs under Title VII, such that funding is terminated in programs that do not make progress

toward meeting state performance standards. As such, appropriate assessments for English-language learners will be crucial.

Local districts and schools should request assistance from their state educational agencies since the law requires states to identify in their state plan languages other than English that are present in the Title I population as well as the languages for which yearly student assessments are necessary but unavailable. The law further requires states to make every effort to develop such assessments. States might consider borrowing (from other states or entities such as large school districts with substantial numbers of English-language learners) content area assessments in languages other than English if such assessments conform with their own content standards. This process might also involve cooperative efforts among two or more states or the development of multistate item banks, and should include persons knowledgeable about the assessment of English-language learners and the systems serving them. The newly formed Comprehensive Technical Assistance Centers will be a source of help in locating and developing assessments in languages other than English. Finally, the Office of Bilingual Education and Minority Languages Affairs of the U.S. Department of Education is required to assist states that request such assistance and identify appropriate assessment measures in languages other than English that are present in their Title I student populations.

Disaggregation of Data

The law requires that the plan provide for the collection of data on the achievement and assessment results of students disaggregated by gender, race/ethnicity, or limited English proficiency status, or their status as migrant students, students with disabilities as compared to other students, and economically disadvantaged students as compared to students who are not economically disadvantaged. Therefore, as required by law, student assessment results should be disaggregated by English-language learner status. As previously mentioned, further disaggregation by economic status whenever possible would help prevent misattribution of potential differences between English-language learners and their English proficient peers that are related to socioeconomic factors rather than English proficiency status per se.

Although the law clearly states that assessment results should be disaggregated for English proficiency status, this requirement does not apply to transitional assessments. Thus disaggregated data on English-language learners are technically not required until the final assessments become available. However, the law requires that in the "transitional" period, the state devise a procedure for identifying local educational agencies and schools in need of improvement and that such identification be based on accurate information about the academic progress of each district and school. The school improvement sections, in turn, require an annual review to determine whether districts and schools are making adequate progress. Adequate progress by law is defined as

continuous and substantial yearly improvement of each district and school sufficient to achieve the goal of all children, particularly economically disadvantaged and LEP children, meeting the state's proficient and advanced levels of performance.

Thus, the intent of the law is that during the transitional period, the state and districts obtain accurate information about the academic progress of districts and schools and about the progress of English-language learners and children in poverty within these districts and schools. To the extent that English-language learners have historically been at great risk of failing in school, separate reporting of the outcomes for these students, even in the transitional period, would most convincingly demonstrate whether there is local and school improvement and whether this improvement incorporates these students. Careful monitoring of differences between English-language learners and fluent English-speaking students, trends in progress by subject, and socioeconomic factors (rather than English proficiency status per se) that appear to affect performance contribute valuable information for making instructional decisions.

Because many states already collect and report statewide assessment data disaggregated by English-language learner status, it would be appropriate for these states to study in detail those aspects of state assessments where these students demonstrate significant divergence from monolingual English student populations in the same school district, as well as where the performance of English-language learners approximates the performance of their monolingual English peers.

An important issue of concern is the number of English-language learners necessary for student achievement data disaggregated by English-language learner status to be statistically sound. The soundness the calculation of a statistic depends primarily on the purpose of the analysis. There are two distinct purposes for calculating disaggregated results for these students:

- To describe the performance of the particular group of English-language learners in a school, district, or state at a given time of testing.
- To assess whether the English-language learners in the school, district, or state are making adequate yearly progress toward meeting performance standards.

To serve the first purpose, describing the performance of a particular group of English-language learners, statistical soundness does not depend upon the sample size. The only source of variation is the measurement error of the particular test being used. Thus, even in cases where disaggregation would result in a small cell size, the central tendency and measure of variability can be reported in a statistically sound manner for a disaggregated group of English-language learners.

In reporting data at the school level when the number of English-language learners is extremely small, caution becomes necessary for reasons other than statistical soundness—that is, the confidentiality of the individual students may be violated in reporting the data publicly. When this potential arises (in cases where N<5, for example), one alternative might be to report data from these students at a higher level of aggregation, such as combining similar schools or targeting schools at the district level.

To serve the second purpose of generalizing beyond the particular sample, such as through a comparison of a sample of third graders during the current year with a sample of third graders from the previous year, the statistical soundness of the comparison depends upon the sample, size, and measurement error of the test. Each year's group is considered a "sample" of a larger population. The difference between the groups is considered to be a sample of a population of differences between two independent samples. In this case, statistical soundness is indeed threatened by small sample sizes in making inferences about school progress.

There is no golden rule as to what an adequate number should be in attaining statistical soundness because the number would depend on the variability in the data, the expected magnitude of the year-to-year progress to be made, and the desired ability of the statistical tool to pick up on year-to-year progress (known as statistical power). For example, a district, through consultation with a statistical expert, might decide on an initial minimum sample size for the ability to detect a medium-size improvement at a power level of .90, given assumptions about variability in the sampling statistic. For schools that exceed that number, data would be reported in a disaggregated manner at the school level. For schools that are below that number, data might be pooled with other schools with similar characteristics until where the number is exceeded.

The initial sample size should be continuously reviewed and modified in light of new data. For example, estimates and assumptions about the sampling statistic will become more accurate over time, and expectations about the magnitude of the year-to-year progress to be made may also be modified with experience. Issues of statistical power should be continuously monitored and analyzed over time in order to improve the statistical soundness of the reported data. In sum:

- For descriptive purposes on the performance of English-language learners, data should be calculated at the school, district, and state levels regardless of the number of English-language learners, except in cases where the confidentiality of students might be violated.
- For purposes of making inferences about annual progress in achievement, English-language learner data should be monitored and analyzed so that over time, statistically powerful

comparisons can be made to enable inferences about English-language learners.

Exemption from Statutory or Regulatory Provisions

In the development of schoolwide programs, a local educational agency may combine funds from different programs to upgrade the entire educational program in a school. In addition to schoolwide program funds, a school may use federal funds under any program administered by the Secretary of the U.S. Department of Education, except programs under the Individuals with Disabilities Act. This provision, or Special Rule, is intended to allow schools to develop and implement creative schoolwide programs that address the educational needs of all children.

Schoolwide programs may request that the Secretary exempt certain statutory or regulatory provisions of the other programs combined with the Title I schoolwide program only if the intent and purposes of the other programs are met. In addition, provisions in other programs or statutory schemes relating to health, safety, civil rights, gender equity, student and parental participation and involvement, services to private school children, maintenance of effort, or comparability of services may not be exempted.

It is important to note that the Special Rule does not allow the wholesale exemption of programs; rather, it is concerned with the possible exemption of only those provisions that prevent the combining of funds and/or support schoolwide programming in some way. It is not intended to exempt any provisions that would, in any manner, undermine the intent and purposes of the other programs. Thus, a schoolwide program that wants to combine its Title I program with its Title VII bilingual education program could not seek to exempt any programmatic provisions, such as the evaluation provisions, that would undermine efforts to meet the educational needs of English-language learners.

In short, the Special Rule is intended to allow schoolwide projects to combine funds from non-competitive formula and discretionary-grant programs to better serve the educational needs of all children. The Special Rule is not intended to eliminate a schoolwide program's obligation to satisfy all provisions of other programs that meet the educational needs of all children.

Use of Funds for Schoolwide Programs

Provisions under both schoolwide and targeted assistance programs require that Title I funds supplement rather than supplant funds for services that are required by other laws (e.g., Title VI of the Civil Rights Act, the Equal Educational Opportunities Act, and state bilingual laws). Thus the level of services necessary to meet federal or state requirements must be provided from non-Title I sources. However, effective programming for English-language learners will be enhanced if Title I funds are used to coordinate and supplement those services and provide other direct services to English-language learners. An

example of the effective use of Title I funds would be to pay the salaries of instructional staff who work with students having academic difficulties, including English-language learners. These staff members would work closely with the ESL/bilingual teachers and regular classroom teachers.

Recommendations for Research and Development

This paper has described provisions for Title I schoolwide programs and has offered recommendations for policy and practice that would enhance the inclusion of English-language learners in such programs. The paper now turns briefly to a research and development agenda that is necessary to ensure that English-language learners are effectively served by schoolwide programs.[6] The two key areas for research include assessment and instructional practice.

Assessment

Given that limited English proficiency influences student performance on assessments in English, alternative assessments and procedures are needed for English-language learners. Although recommendations have been made to incorporate English-language learners in assessments of subject matter knowledge, research is needed to determine the validity and reliability of these modifications. If, for example, the assessments are in the students' native language, are they equivalent to the English language assessments? How do modifications in administration, such as spending extra time, small-group administration, reading directions aloud, and use of dictionaries and glossaries, help tap subject matter knowledge and skills? Research is also needed to develop and field-test other modifications that have been suggested but rarely attempted. For example, one modification—decreasing the English language load of test items and instructions (Abedi, Lord, & Plummer, 1995)—yielded only modest positive (but nonsignificant) effects in favor of the modified items for students at lower levels of English proficiency. Further work is needed in this area, especially work that examines semantic as well as syntactic modifications.

Another issue that warrants attention is how to improve the scoring of open-ended and performance-based assessments given in English to English-language learners. There is evidence that scorers pay attention to syntactic or vocabulary errors rather than to the accuracy and depth of the response. Research is needed to determine how best to prepare scorers to score these assessments more accurately. The Council of Chief State School Officers in collaboration with the National Center for Educational Statistics is undertaking one such

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[6] For a comprehensive review of research on the schooling of English-language learners and recommendations for research needed to improve the schooling of English-language learners, please see a forthcoming report of the National Academy of Sciences entitled *Improving Schooling for English-Language Learners: A Research Agenda* (to be published in early 1997).

study. A rubric has been developed and will be field-tested and evaluated to help scorers assess English-language learner performance assessments.

Research is also needed to determine when English-language learners are ready to take English-only assessments, and additionally, what assessment modifications are most appropriate for those that do not take the standard English assessment (August & McArthur, 1996). Many experts on the education of English-language learners feel that states should set a limit on how long English-language learners can be waived from taking the same performance assessments in English as their English-speaking peers. Currently, many states determine whether to include English-language learners in the standard English assessment based on the number of years they have attended an English-speaking school. This method may be problematic, however, because it does not take into account the fact that individual students vary greatly in their rate of English acquisition. Even if the method was based on the average number of years necessary to learn adequate English for the assessment, it would inappropriately exclude a large number of fast learners of English as well as a large number of students who need more time to acquire English. A more promising approach that needs to be further studied may be the use of an assessment of English proficiency that measures all four domains as part of a triage system to determine whether to offer unmodified English assessment, modified English assessment, or a waiver from assessment.

Educational Practice

In the past, much education research on this population focused on the amount and duration of native (non-English) instruction and its effectiveness compared with English-only instruction (Danoff, 1978; Baker & de Kanter, 1981; Rossel & Ross, 1986; Willig, 1985; Rossel & Baker, 1996; Ramirez, Yeun, Ramey, & Pasta, 1991). The outcome variable of interest was usually the acquisition of proficiency and knowledge of subject matter knowledge in English. More recently, researchers have become increasingly concerned with pinpointing schooling practices and environments that further English-language learners' subject matter knowledge and skills aligned with high educational standards. Although research has uncovered a wide range of attributes related to effectiveness, much of this research has been conducted within the nominated schools design. Although rich in description, these studies generally do not report student achievement data and thus link interventions to student outcomes. Other studies have looked at changes in student outcomes as a result of an intervention (thus providing student outcome data), but many of these studies do not include comparison or control groups, making it difficult to determine whether the intervention produced the positive outcomes. There are only a limited number of quasi-experimental case studies—and very few of these focus on non-Spanish speaking English-language learners.

strategies, such as teaching methods and curricular modifications. This research should attend to interactions between effective practice and student characteristics. For example, among English-language learners, do attributes of effective schooling vary by students' linguistic proficiency, cultural or national-origin group, levels of prior schooling, or socioeconomic status? What programming is best given variations in community resources and goals? In terms of methodology, studies are needed that combine qualitative and more positivistic research. As recommended by a recent National Research Council report on *Assessing Evaluation Studies* (Meyer & Fienberg, 1992):

> Determining effective programs requires at least three tasks. First, an attempt must be made to identify features of programs that may be important. This first task is usually best achieved in exploratory or qualitative studies by comparing existing programs. The second task is to develop competing theories leading to sharply distinct proposals for programs. The third task is to create these new programs to specifications and assess their effectiveness in several tightly controlled and conclusive comparative studies (p. 105).

Summary

There is an urgent need to make use of our current knowledge base to design and implement effective schoolwide programs for English-language learners as well to conduct research. English-language learners constitute a particularly high-risk group. A recent Congressionally-mandated study indicates that these students are particularly likely to attend high-poverty schools, receive lower grades, be judged by their teachers as possessing lower academic abilities, and score below their classmates on standardized tests of reading and mathematics (Moss & Puma, 1995). The dimensions of the problem are enormous in this country with the number of school-age children who are speakers of other languages increasing from 3.8 million to 5.2 million (from 8% to 12% of all school-age children) between 1979 and 1989 (McArthur, 1993). By fully including English-language learners in Title I programs, we will help these children achieve high standards and realize there full potential.

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Meeting Student Diversity Needs in Poor, Rural Schools: Ideal Practices and Political Realities

Barbara L. McCombs and Bill Bansberg

Poor, rural students whose circumstances place them at risk of educational failure—and who have unique needs due to living in rural communities—may now be offered the promise of more inclusive and equitable education through the provisions of the Improving America's Schools Act (IASA) of 1994. These provisions will allow many students who are eligible to receive Title I compensatory services to receive more coherent services through the institution of schoolwide programs.

Schoolwide programs aim to include Title I students in regular classrooms rather than placing them in stigmatizing "pull-out" programs that often emphasize remedial skills and have lower expectations and standards of performance than those demanded of regular education students (e.g., August, Hakuta, Olguin, & Pompa, 1995; Educational Excellence Network, 1994; U.S. Department of Education, 1992, 1993, 1996). IASA directly addresses these issues by specifying that Title I programs (formerly Chapter 1) are no longer remedial but should be refocused so that their targets include *all* students and their goal is achievement of higher standards by all students. Schoolwide programs are one key delivery system for effecting these value-added strategies, particularly in rural schools.

It may be too soon to tell whether the promise of this new legislation will become a reality. However, now is the time to reflect on historical and current realities that may either attenuate or enhance the promise of the new Title I legislation. The purpose of this chapter is to focus this reflection on the particular promises—the ideals—and the realities of establishing Title I schoolwide programs for children in poor, rural schools. We will first examine the context of student and teacher learning needs in poor, rural schools, the historical goals of Title I programs in this context, and the actualities of the implementation of Title I in poor, rural schools. We will also discuss what is needed to improve Title I program implementation in poor, rural schools, given our knowledge of proven

practices and political realities in these contexts. Finally, we will conclude with a number of recommendations for practice, policy, and research.

The Context of Student and Teacher Learning Needs in Poor, Rural Schools

While no two rural schools are alike, these schools do share similar characteristics, the foremost being, paradoxically, diversity. Diversity of student and teacher learning needs are a function of the surrounding community, geographic location, and general economic conditions. Despite—and partially as a result of—this diversity, however, another common issue emerges when examining the contexts of poor, rural schools: isolation, both physical and political. The physical isolation of rural settings results in a lack of quality staff and specialized resources that may be needed to adequately serve specific types of diversity needs (e.g., migrancy and mobility, language minority needs and strengths, differences in family and cultural values, and priority placed on formal education). Political isolation results in the lack of political voice and power, both of which are necessary to obtain student services that define ideal Title I programs.

Conversely, poor, rural schools often have advantages that balance these difficulties. Rural communities have rich cultural and community resources that can encourage student learning and enhance the feeling of belonging to a meaningful group. The small size of rural schools often leads to more personalized approaches that connect students to their teachers and the learning experience. Finally, rural Title I students reflect the surrounding community more closely than in suburban or urban districts, in which Title I students may come primarily from particular neighborhoods or ethnic groups. Poor, rural schools tend to have more students in poverty "across the board." Thus, leveraging these outside resources is increased. These strengths can offset the lack of staff and material resources in rural schools. These characteristics must be considered to better understand the way Title I programs have historically been implemented in poor, rural schools.

Historical Goals and Realities in the Implementation of Title I Programs in Poor, Rural Schools

Prior to the IASA, Title I programs were typically pull-out in structure and remedial in orientation (e.g., Levine, 1996). No special services were defined for student populations most often served in poor, rural schools: migrant students and students with limited English proficiency (LEP). Although previous programs were theoretically designed to provide specialized, targeted assistance, many of the Title I teachers lacked the language skills needed to adequately assess LEP students' entering knowledge and skills, often resulting in a "dumbing down" of the program and a remedial focus that afforded little respect to the cultural and language backgrounds of many of the students (Rangel & Bansberg, 1996). Consequently, while Title I/Chapter 1 funds might historically have been intended

for ethnic and language minority students, as well as those from European-American and English-speaking areas, most resources and attention were focused on the needs of poor, white, English-speaking students.

The practice of evaluating program success by looking at grade-level achievement often meant that those students most in need of services continued to be inadequately served. LEP and nonwhite students might make significant gains, but given their starting points at below grade level, most never caught up with their age and grade-level peers. These programmatic weaknesses were exacerbated by their denial of resources by school and community members (Rangel & Bansberg, 1996; Levine, 1996).

Historically, Title I programs in many poor, rural schools qualified only for small amounts of targeted assistance (R. Rangel, Personal Communication, September 21, 1996). Although most schools qualified for some assistance, the programs were limited because allocations were determined by the percentage of students living in poverty based on the most recent census data. With small amounts of funds, providing specialized services for culturally or linguistically diverse students was limited. Typically, rural schools were able to use funds to reach more of their Title I-qualified students than would have been possible in large urban districts, where levels of funding, while numerically greater, were not proportionately sufficient to address the needs of all students who qualified. For example, a rural district might be able to serve those students who scored below the 50th percentile in reading or math, whereas the greater actual number of Title I students in an urban district would restrict services to only the lowest percentile-ranking students.

A third historical reality in the Title I programs in poor rural schools was that many Title I teachers were hired through intermediate service agencies and were shared across several schools. Although aides were expected to deliver the majority of services, they typically lacked the training needed to deliver those services, including specialized pedagogical knowledge on the best practices for reaching diverse students. Again, migrant, mobile, and LEP students—those most in need of services—did not receive programs sensitive to their culture and life circumstances.

Programmatic and Political Questions

The following sections address general issues that must be considered when designing Title I programs in rural areas.

Programmatic Questions

Calculating the number of rural areas based on census data (counties) that qualify for schoolwide project eligibility should be the first issue addressed. Those schools that do not qualify under federal regulations, requiring 50% of a school's students to be living in poverty, may have the opportunity to apply for waivers if their states have obtained approval for a waiver system. However, because Title I

funds are earmarked for areas of concentrated poverty and students most in need, rural schools may have difficulty obtaining waivers based on their particular circumstances. Those schools that cannot qualify must provide Title I services through traditional targeted assistance programs.

Those schools that are eligible to institute schoolwide projects must provide appropriate staff in order to be effective for the diverse students served in poor, rural schools. Schools must institute specialized training for staff to provide customized compensatory services in regular classroom settings. Schools must also obtain specialists for LEP, migrant, and other special-needs students, either through hiring specialized personnel or using technology and distance-learning strategies.

While technology may offer a partial solution to the problem of qualified staff, its benefits may be offset by decreasing the capacity-building potential of having specialists on site. Peer mentoring is an effective way to develop innovative teaching and learning strategies as well as new teaching philosophies (e.g., resiliency vs. deficit perspectives).

The simple realities of low salaries and the isolated contexts of poor, rural schools make recruiting and obtaining qualified teachers difficult. Given these economic, geographic, and human constraints, building capacity in existing staff is essential.

Political Issues

Very little research has been directed specifically at rural schools when identifying successful Title I programs and practices. Existing research focuses on the implementation of Title I in general rather than on special language and migrant needs. Research has done little to broaden awareness among Title I educators and policymakers of the special needs of poor, rural schools and the diverse student population they serve. Kirst, Koppich, & Kelly (1992) acknowledged that a comprehensive health readiness strategy is particularly critical in rural areas. August et al. (1995) project that 67% of LEP students nationwide are eligible for Title I, but for these programs to be successful staff must attend to the special needs and strengths of LEP students. In 1992, it was recognized that there would be a shift in the distribution of eligible Title I students to rural states such as Arizona, Utah, Wyoming, New Mexico, and Colorado (U.S. Department of Education, 1992). When the promises of and policies governing the new IASA schoolwide programs were being established the need for adequate research to illuminate the types of special services or needs of students in poor, rural schools became more acute.

For example, August et al. (1995) have pointed out, the new legislation depends on school and program outcomes that measure adequacy in meeting academic standards; yet there is little or no work on appropriate assessments for those standards for LEP students. This lack has directed a portion of the work at

the Mid-continent Regional Educational Laboratory (Rangel & Bansberg, 1996) toward the development of a "snapshot assessment" approach in English and Spanish. This promising strategy allows classroom teachers to assess LEP and migrant students' knowledge and ability in critical content areas and then appropriately place students at the correct levels in the curriculum.

According to the 1993 U.S. Department of Education report on "Reinventing Chapter 1," state offices usually conduct annual on-site monitoring of program effectiveness in their largest districts. Smaller rural districts, on the other hand, may have monitoring visits once every 4 to 5 years. Monitoring, which is primarily to ensure compliance with regulations, was not targeted to assess the achievement of all students. The previous Chapter 1 legislation limited Chapter 1 programs in their ability to serve LEP and migrant students, but mobility, poverty, and language barriers experienced by these students made them the most needy and most difficult to reach because the vast majority of these students were located in rural schools (U.S. Department of Education, 1993). Weak accountability for assessing the quality of services and performance of LEP and migrant students was also noted.

One reason for evaluating and enhancing the effectiveness of current schoolwide programs for diverse students in poor, rural schools is the ability to monitor and assess systems that are being put into place for the new IASA schoolwide Title I programs. It is critical that baseline data as well as data regarding individual student progress be collected and disaggregated for different student populations in both rural and urban settings, particularly for LEP and migrant students. Disaggregation of data regarding student programs should be immediately part of program accountability and must not be delayed until the required disaggregation in the year 2000. Without regular disaggregation of data, it will be impossible to assess whether the program is working for those students most in need during the next several years—and know this in time to correct the system and avoid having more students "fall through the cracks."

In addition to the need for a better monitoring and assessment system for evaluating the effectiveness of schoolwide programs in poor, rural schools, new and intensive professional development models are needed to offer rural teachers the knowledge base and skills to address the needs of the diverse students they serve. With the resource shortages in rural schools, innovative strategies will be needed to help build the capacity of regular teachers without bringing specialists into the school on an ongoing basis. Similarly, issues linked to adequate services to Title I students in poor, rural schools include being able to leverage resources from parents and community members who are a part of the school community. That is, it is critical to the success of schoolwide programs in poor, rural schools that effective parent and community involvement strategies be used to enhance the resource-base resident in these populations.

Beyond these resource and qualification issues, a number of issues surrounding successful Title I schoolwide programs in poor, rural schools focus on political will and political realities. Levine (1996), for example, points to a number of leadership issues that can lead to the discontinuance of successful programs. These issues include denial of program need for certain students, failure to replace key personnel using Title I funds for other purposes (e.g., buying computers), and failure to give voice to disenfranchised groups due to race/ethnicity mismatches between top administrators and students in need of services. Ideological mismatches (e.g., over pull-out vs. inclusion models), inappropriate decisions about expansion that dilute resources for students most in need, insufficient staff development, narrow assessments of program needs and outcomes, and inability to deal with top administrators who do not have a commitment to improving the achievement of *all* students are reasons Levine (1996) cites as most serious in attenuating program success. Finally, there is a pervasive idea among many educators that students in Title I are "remedial" and that the funds are designed to provide remedial program activities. This misunderstanding that Title I money is not for raising achievement on academic standards persists in spite of the focus of the new Title I legislation.

Although these issues are also experienced to some degree in poor, urban areas, we believe that poor, rural schools—because of their particular contextual and population characteristics—have unique needs and strengths that need to be addressed in schoolwide programs. Furthermore, given the program and political issues, the degree and nature of language, cultural, and mobility issues faced by students in poor, rural schools warrant consideration of what a basic schoolwide model should look like to ensure effective learning and achievement of Title I students.

The good news is that evidence is beginning to accumulate on what constitutes successful Title I schoolwide programs and instructional practices that address diversity issues, as well as how these practices might be adapted or expanded in poor, rural schools. To provide hope in the context of program and political realities to be faced, we turn next to a few examples that address diversity and rural issues.

Examples of Successful Schoolwide Programs in Poor, Rural Schools

The following examples are adapted from the U.S. Department of Education's collection of case studies on successful programs (Pechman & Fiester, 1994). The first two examples represent program components needed to address diversity; the final three examples are particularly relevant to the issues of Title I students in poor, rural schools.

Example 1: Hazelwood Elementary School, Louisville, Kentucky. This inner-city school has an enrollment of approximately 630 students in preK-5, of which 52% are White and the remaining 48% are African-American with the exception of three Vietnamese students. Ninety-three percent of the students are

eligible for free or reduced lunches. Their schoolwide project began in 1991-92. Its goal was to incorporate state and district school restructuring goals, high standards, and reform initiatives that upgrade the academic program in core disciplines. The schoolwide program includes site-based management and authentic assessments, increased teacher accountability for all students, a strong professional development program, and innovative parent involvement strategies through an in-house parent/teacher resource center. Other key features include: a preschool literature immersion program for early language problems; thematic units to integrate core subjects and problem-solving skills; research-based literacy instruction approaches; reduced class size; expanded science and Reading Recovery programs; an ungraded primary setting; elimination of pull-out programs; parenting classes; adult education classes; peer mediation; and an intergenerational literacy program. Evidence of success includes: Title I students' improvement on standardized tests, particularly on reading, drastic drops in discipline referrals; higher student engagement and confidence in learning; increased parent participation; teacher requests for transfers into the school; little or no staff turnover in two years; and parents' choice of Hazelwood over other area elementary schools.

Example 2: Hollinger Elementary School, Tucson, Arizona. This preK-5 school is located on the southwest side of Tucson and enrolls about 770 students, of which more than 92% are Mexican-American. About half of these students speak Spanish fluently and speak English with limited proficiency; the rest of the students are fully bilingual. Student mobility rates average almost 70%, and virtually all students receive free or reduced lunches. Most of the staff are bilingual and about three-fourths are Hispanic. The Title I schoolwide project is based on a year-round calendar with an extended-day schedule. There is a two-way bilingual program, weekly staff development sessions, an anthropological approach to home visits that generates interdisciplinary and multicultural units, and a full-service family support center. A number of programs have been implemented to boost academic achievement and resolve social and economic problems that interfere with schooling and learning. These efforts include a preschool program and additional teachers who provide in-class help for low achieving students during reading and language arts instruction. Cultural heritage is recognized as a resource for enrichment, and the academic program is closely aligned with the cultural goals, values, and needs of the surrounding community. Teachers are encouraged to act as ethnographic researchers and are given the freedom to identify and implement new curricula and teaching strategies based on their research. Evidence of success includes rises in students' scores on nationally standardized tests of an average of six Normal Curve Equivalents (NCE) for students in grades 4 and 6 in core subjects. Student attendance has improved and the promotion rate is 100%. Faculty turnover has been eliminated, morale is high, and parent and community involvement is also high. The optimism and leadership of the principal is credited for high staff morale.

Example 3: Ganado Primary School, Ganado, Arizona. This school is located in Navajoland and enrolls about 450 students in grades K-2, of which 98% are Navajo. Fifty-eight percent of incoming students have limited English proficiency, and 23% speak neither English nor Navajo fluently. Student transience is at a rate of 20%, and 85% of the students qualify for free or reduced lunches. Although the school implemented a schoolwide project in 1985, the project was updated in 1990 to strengthen the quality of the school's academic program. Key features of the Title I program at this school are its holistic approach to education through a school-within-a-school format, intensive staff development, and parent involvement. The curriculum integrates the Navajo language and culture within disciplines and promotes literacy and language development. The child-centered curriculum also integrates reading, writing, and problem solving. In addition, Title I, special education, and English as a Second Language (ESL) programs are fully integrated into the classrooms. The separate schools within the school operate as "families" of 130 to 40 students and nine teachers. In the three school units, Title I teachers and aides serve all children, and Title I funds have enabled smaller classes and greater individual attention to children. All regular teachers are certified to teach ESL or bilingual classes. Teaming contributes to teacher inquiry groups and the development of a culture of learning and caring. Parents assist in classrooms and attend weekly parent education classes. Evidence of success includes gains in overall achievement, a 36% drop in absences among "at-risk" students, an increase in daily attendance to 94%, a doubling of at-home reading levels, and recognition in the form of numerous state and national awards for the school's initiatives.

Example 4: Snively Elementary School, Winter Haven, Florida. Located in a small rural town in Central Florida, this school has an enrollment of about 400 students that climbs to 500 when migrant families join the community. The student population is equally divided between White and Hispanic children, except for 1% of the population that is African-American. One-third of the students move across state lines at least once during the year and 95% of the students receive free or reduced lunches. About 20% of the students have limited English proficiency; many have very recently immigrated from Mexico. The primary focus of the schoolwide program, which began in 1989, is the "community school" concept, which includes adult education, community health services and recreational facilities, home visits, and rewards for parent volunteers. The academic part of the program emphasizes interdisciplinary, thematic instruction using a curriculum written by teachers; alternative assessments; extended school year; and reduced class size in all grades. Staff work to create an educational climate of acceptance and understanding in which individual talent can be discovered and developed in all students. Thematic curricula address issues around personally relevant topics such as "Mexico" and "Native Americans," and opportunities are provided for students to apply their learning to real-life situations. Faculty, parents, and community members were involved in program planning at the onset of the schoolwide program and their involvement continues.

The program features a strong English as a Second Language component with one full-time teacher and three paraprofessionals. All regular teachers have ESL training. Evidence of success includes the fact that more than half of the students now score above the 50th percentile on nationally standardized tests; prior to program implementation, the school was ranked lowest in the district. Students in grades 2 to 6 show an average NCE gain of 9.9 in reading compared with an average 4.7 NCE gain for other Title I programs in the district.

Example 5: Blythe Avenue Elementary School, Cleveland, Tennessee. This school, located in a rural area 30 miles northeast of Chattanooga, is housed in a 50-year-old building and enrolls approximately 250 students in grades K-6. Eighty-seven percent are White, 12% are African-American, and 1% are American Indian or Hispanic. Between 40% and 50% of the students move in and out of the district during the year as parents seek jobs and affordable housing. All students live below the poverty line; 93% of the students receive free or reduced lunches. A key focus of the school's Title I schoolwide program, begun in 1989-90, is participatory decision making that includes teachers, administrators, parents, and community members. A full-time school-community coordinator serves as a critical link to student homes, acting as an advocate and helping parents learn advocacy skills. Dynamic leadership is credited with helping the school break the cycle of low achievement by concentrating on promoting early achievement, increasing parent involvement, smart uses of community resources, and improving staff morale. The project includes a readiness class for helping students transition from kindergarten to first grade, a whole language approach to reading, the IBM Writing to Read and Writing to Write programs, and a districtwide Discipline-Based Arts Program in which students learn art throughout the curriculum. Evidence of program success includes an increase in student attendance from 88% to 95%, in spite of the large number of transient students. Although it is the poorest school in the district, Blythe Avenue Elementary School's program success has attracted about 15 students from other zones as well as several teachers from the most affluent schools in the district. Parent involvement has tripled and students showed a 4% to 14% gain on the nationally standardized achievement test.

These examples provide several excellent models of program components and features present in successful Title I schoolwide programs that address specific diversity needs faced in poor, rural schools. They provide a good starting point for constructing an overall conceptual framework that can provide a comprehensive model for recommendations in practice, research, and policy that need to be understood if the new IASA is to achieve its promise for schoolwide programs in poor, rural schools.

Ideal Practices and Political Realities:
A Recommended Conceptual Framework

Complex systems that serve particular human needs can best be thought of as social systems or "living systems." Such systems are, by their nature, unpredictable; they can, however, be understood in terms of principles that define human needs, cognitive and motivational processes, and variability of behavior. Unlike mechanical, nonliving systems, a focus on concepts of interconnectedness, self-renewal, and interdependence is needed when one component of the system is "tinkered" with, all others are impacted as a result. This view is a more global, nonlinear, and dynamic view of learning and change (Banathy, 1995, 1997). In a phrase, living systems conform to basic psychological and sociological principles that define individuals and their interactions with others; thus we are better able to understand complex living systems by understanding psychological and sociological principles. A set of particularly relevant principles for guiding the design of schoolwide Title I programs for poor, rural schools are described in the following section.

The Learner-Centered Psychological Principles

Beginning in 1990, the American Psychological Association (APA) appointed a special Task Force on Psychology in Education, the purpose of which was twofold; (a) to determine ways in which the psychological knowledge base related to learning, motivation, and individual differences could contribute directly to improvements in the quality of student achievement; and (b) to provide guidance for the design of educational systems that would best support individual student learning and achievement. The aim of one project of this Task Force was to integrate research and theory from psychology, education, and related disciplines concerned with education and the process of schooling to provide a general framework for school redesign and reform. The result was a document that specified 12 fundamental principles about learners and learning that identified factors influencing learning for all learners.

The principles outlined in this document provide an organized knowledge base that supports a learner-centered perspective or model. No one principle can be treated in isolation if maximum learning is to occur for each student. The principles are categorized into domains that cover basic factors that cannot be ignored in understanding individual learners and the learning process as they provide the foundation for sound teaching practices. The domains of factors describe those areas that have been identified in the research as having an impact on learning. These domains include factors related to the intellectual aspects of learning (cognitive and metacognitive factors); motivational influences on learning (affective factors); individual differences in intellectual, social, emotional, and physical development areas (developmental factors); influences of the individual's own self-assessments as well as the assessments of others on learning (personal and social factors); and differences in family backgrounds,

cultures, and other experiences that influence learning (individual difference factors). The individual principles and their explanations are contained in Table 1. The definitions of these domains are summarized in Table 2.

The 12 principles, apply to all learners, young and old. Each of us approaches learning situations with fundamental human qualities in common. At the same time, however, each learner brings to learning situations unique ways of learning that are based on heredity and prior learning experiences as well as special characteristics, such as interests, talents, and intellectual or physical capabilities. These common characteristics allow us to define a general model of effective schooling. These unique characteristics, in turn, determine the adaptations that schools must make to ensure that Title I schoolwide programs in schools and classrooms are designed to meet the learning and motivational needs of all learners.

The 12 principles also provide a systemic framework that can guide decisions about the content, environment, and opportunities for learning, for the student in the classroom and beyond, as well as help define a dynamic learning context that is continuously improving (Lambert & McCombs, in press; McCombs & Whisler, 1997). Of even greater importance, the principles both confirm and validate the knowledge and experience of our best teachers by providing research justification for their practices. Furthermore, more responsive and comprehensive program services can be designed if teachers understand how the knowledge base on learning and learners can be used in program design by further considering what constitutes best practices for diverse Title I students across the personal, technical, and organizational domains of educational systems.

Systemically Defining Program Needs
Within Living System Domains

To further our comprehension of living systems as they apply to the design of effective Title I schoolwide programs, it is also important to appreciate how people within the system perceive the larger context, i.e., the personal, technical, and organizational contexts that define the system. A model of systemic change of the educational system based on the information above (Figure 1) is helpful for looking at the nature of social systems and the elements that must be addressed to design systems that are responsive to the needs of the learners and promote learning (adapted from Burger, 1995). These elements (e.g., programs, practices, policies) are defined by and aligned with foundational beliefs, assumptions, and a philosophy that describes and may guide system functioning. That is, fundamental beliefs and assumptions exist concerning the primary processes of learning and motivation and how they operate differentially for individual learners in the system. From these core beliefs and assumptions, principles are defined. We have argued that these principles should be research-based (e.g., the *Learner-Centered Psychological Principles*) so that the philosophy that emerges from the principles may be informed by objective

findings rather than subjective opinions. This leads to the valuing of inquiry, collaboration, and ongoing assessment in support of system improvement. From principles and a philosophy, the purpose of the system is defined and educational elements are specified—the processes, policies, practices, programs, and procedures—all of which are thus aligned and consistent with the principles and philosophy.

Also important to systemic design is the consideration of the differential needs of all learners at all levels of the system. Specifically, as shown in Figure 2, systemic design in education must be concerned with students, teachers, support staff, administrators, parents, and community members and all levels of the system—classroom, school, district, and community. Design of effective and comprehensive Title I programs to meet the needs of diverse students in poor, rural schools need to simultaneously take into account system functions and structures and their interrelationships, while carefully aligning the basic principles, philosophy, and purpose that provide the foundation for the system.

The Domains of Educational Systems Change

Three fundamental domains of the educational system must be addressed for Title I schoolwide programs to foster the creation of cultures of caring, learning, change, and collaboration. These domains can be used as a tool for organizing recommended, learner-centered approaches to schoolwide program design.

- *Personal:* The personal domain of educational systems design is concerned with supporting the personal, motivational, and interpersonal needs of those who serve and/or are served by the system (e.g., teachers, administrators, students, parents).
- *Technical:* The technical domain is that domain of the educational system that is concerned with specifying the content standards, curriculum structures, instructional approaches, and assessment strategies that best promote learning and achievement of all students.
- *Organizational:* The organizational domain of the system is concerned with providing the organizational and management structures and policies that support the personal and technical domains and, ultimately, motivation, learning, and achievement for all students.

Thus, to bring about and sustain effective Title I programs and practices (i.e., to create comprehensive schoolwide programs that build a culture committed to ongoing learning and change as well as caring and collaboration), continual, and simultaneous attention to all three domains—the organizational, personal, and technical—is needed. Specific recommendations by system domain for Title I schoolwide programs in poor, rural schools are described in the following sections.

Effective Practices in the Personal Domain

Of relevance to the design of effective personal domain practices in Title I schoolwide programs for poor, rural schools is research in 15 schools conducted by the Center for School Restructuring. In this research, Kruse, Seashore-Louis, & Bryk (1994) found that attention to the personal domain—to the human resources in the system—was more critical to the development of a sense of professional community or culture than structural conditions. They report:

> This finding adds weight to the argument that the structural elements of restructuring have received too much emphasis in many reform proposals, while the need to improve the culture, climate and interpersonal relationships in schools have received too little attention (Kruse, Seashore-Louis, & Bryk, 1994, p. 6).

To develop new cultures that are caring, engaged in learning and change, and collaborative—centered on a shared vision that includes a commitment to having *all* students learn at high levels and function at their potential—Hargreaves (1995) points out that a key component is the "willful" involvement of all influenced by the changes. Therefore, it is essential that strategies consistent with the shared vision and respectful of the diversity of expertise that are available—in even the most critical and skeptical examples—be employed. This focuses on the central importance of building personal relationships as an initial support system for sustaining change. These personal needs, however, must be supported organizationally and "collaborative cultures," which value both individual and shared learning, must be established (Hargreaves, 1995). Change becomes learning, learning becomes intrinsically motivating and valued, and the negative associations of change as aversive can be transformed into the view that "change is learning, and learning is fun."

In keeping with this vision, a goal of many reform efforts is to create and sustain self-governing learning communities (Meier, 1995). Such communities require, at their heart, a new school culture—a culture dedicated to continuous learning and improvement. The purpose of such a culture is to better prepare students with the mental, moral, and social standards required for maximum productivity and personal development to meet the challenges of our complex and changing world. The culture must strive to develop the potential of *all* learners, while respecting the diversity of their talents, interests, and capabilities. It is a culture dedicated to helping all students understand and utilize important knowledge and skills while at the same time nurturing their unique skills and abilities. This culture needs to be developed and sustained if Title I schoolwide programs are to be effective for all students in poor, rural schools.

How do cultures dedicated to these goals develop? From what we know from the research on successful schools (i.e., schools that are reaching the goal of high achievement for all students), schools implementing successful Title I schoolwide programs have created a culture that values continuous improvement

and learning as an ongoing goal for teachers, parents, administrators, and community members (e.g., Anderson, 1993; Baum, Renzulli, & Hebert, 1994; Bennett & O'Brien, 1994; Boyd & Hord, 1994; Kruse, Seashore-Louis, & Bryk, 1994; Hargreaves, 1995; Meier, 1995). Such a culture develops by sharing a common purpose or goal, by being dedicated to continuous improvement and lifelong learning rather than to maintaining the status quo, and by having a sense of shared responsibility for reaching this goal among all participants of the system. There are shared norms and values with a collective focus on learners and learning at the core of the culture. Furthermore, the development of the culture emerges in a process involving reflective dialogue and collaboration (Kruse et al., 1994; McCombs, in press).

For diverse Title I students in poor, rural schools—particularly those with limited English proficiency or who have experienced high levels of mobility that have put them behind academically—strategies in the personal domain that are most needed are those that can meet motivational and personal needs for demonstrating competency and belonging. Teachers will need to be sensitive to cultural and language issues as well as negative self-concepts and beliefs with which students may enter school (e.g., believing they can't learn or won't fit in, teachers and peers won't like them, or a fear of not understanding English or the culture). Providing positive, effective climates that genuinely respect and value the diversity of students and help students value the diversity of their peers is also vital to establishing an environment where students feel safe and motivated to learn. As August et al. (1995) have argued, the school culture in schoolwide programs that are effective for LEP students is one that values students of all languages and cultures, works to challenge prejudice and discrimination, incorporates a shared vision and common goal for all students, and holds all students accountable for challenging academic standards.

Effective Practices in the Technical Domain

To meet the diverse learning needs of Title I students in poor, rural schools, it is particularly important to attend to language and cultural issues. August et al. (1995) report that the most successful programs are those that design an instructional program based on school and community contextual factors and goals that ensure the program is meaningful and relevant to students, parents, and the community. Furthermore, a smooth transition is needed between levels of language development classes and coordination and articulation between the bilingual program and the rest of the school. Particular attention needs to be paid to professional development that helps teachers relate to students' family and cultural circumstances, experiences, strengths, and backgrounds, including knowledge of first- and second-language acquisition and second-language methodology. Instruction needs to be presented using ESL strategies or language that can be understood by LEP students. Cooperative learning in untracked classes is also recommended (August et al., 1995).

In our own work in helping teachers adopt more learner-centered practices (McCombs, in press; McCombs & Whisler, 1997), we have found that it is important to help teachers become more aware of and reflect on basic beliefs and assumptions about learners, learning, and teaching. Through a self-assessment and reflection process, teachers can tailor learning experiences and tasks to students' unique diversity, including their strengths and special talents. By helping teachers confront negative beliefs and insensitive practices for diverse Title I students, they can learn to set high expectations, provide for connections to meaningful prior learning in culturally sensitive ways, and engage in ongoing action research to explore the effectiveness of their teaching practices on student motivation and achievement for each student. By so doing, they can become advocates for disaggregating both classroom and standardized achievement data on a regular basis to ensure that the special needs of language different, migrant, and other Title I students are being met in schoolwide programs.

In response to the current concern that teachers be adequately prepared to teach an increasingly diverse student population, Delattre (1995) argues that teachers must be prepared to understand learning and individual differences and, in particular, to understand cultural diversity. From a study of teacher preparation experiences that support teachers in working with students of diverse backgrounds, Reimer and Lapp (1995) found that there were four elements that increased student teachers' ability to shift their perspectives toward cultural awareness and intercultural sensitivity: (a) an infusion approach that promotes social and structural equality and cultural pluralism that respects cultural differences throughout the curriculum, both in coursework and field experiences; (b) actively engaging student teachers in culturally diverse classroom settings while they are studying multiculturalism in their college courses; (c) encouraging a broad variety of perspectives by faculty and students; and (d) supporting students to reflect on their experiences and own cultural backgrounds and make connections with these experiences. A variety of approaches was needed to shift student teachers' ideas, as was the openness and cultural sensitivity of the classroom teacher with whom student teachers had their field experiences.

To encourage teachers to become more culturally sensitive, Ladson-Billings (1995) recommends preservice and/or inservice opportunities to observe models, to re-examine and rethink their practices, and to develop the ethic of caring and personal accountability. One very important dimension in encouraging cultural sensitivity is teachers' conceptions of themselves and others, including beliefs that (a) all students are capable of academic success; (b) pedagogy is an art that is always in the process of becoming; (c) they are members of a learning community; and (d) learning is a lifelong commitment. It is also important that preservice and inservice programs promote the maintenance of positive student relationships, the ongoing connectedness with students, the development of a community of learners, and the encouragement of collaborative and responsible learning. In addition, professional development programs should foster the view

of knowledge as dynamic and personally constructed, promote a passion for knowledge and learning, and encourage an appreciation of multiple forms of assessment.

In terms of practical implications for all learners, there are three general principles that must be addressed by staff development. First, learners are motivated by situations and activities that (a) challenge them to be personally and actively involved in their own learning and (b) allow them personal choice and control matched to their abilities and learning task requirements. Second, learners' motivation is enhanced if they perceive that learning tasks (a) directly or indirectly relate to personal needs, interests, and goals and (b) are of appropriate difficulty levels such that they can accomplish them successfully. Finally, learners' natural motivation to learn is elicited in safe, trusting, and supportive environments characterized by (a) quality relationships with caring persons who see their unique potential; (b) instructional supports that are tailored to their unique learning needs; and (c) opportunities for them to take risks without fear of failure.

These principles also apply to how Title I teachers design learning environments for their own students. In addition, these basic principles underscore the importance of the following teacher roles for effectively dealing with Title I students:

- Assessing and understanding students' unique needs, interests, and goals.
- Helping students define personal goals and see how they relate to school learning goals.
- Relating learning content and activities to students' personal needs, culture, interests, and goals, and helping students define these relative to learning goals.
- Structuring learning goals and activities such that each student can accomplish his or her own goals and experience success.
- Challenging students to invest effort and energy in taking personal responsibility and being actively involved in learning activities.
- Providing students with opportunities to exercise personal control and choice over carefully selected task variables such as type of learning activity, level of mastery, amount of effort, or type of reward.
- Creating a safe, trusting, and supportive climate by demonstrating real interest, caring, and concern for each student.
- Attending to classroom goal structures and goal orientations such that noncompetitive structures and learning goals are emphasized over competitive structures and old paradigm educational goals (e.g., letter grades), while recognizing situations where competition is appropriate.

- Highlighting the value of student accomplishment, the value of students' unique skills and abilities, and the value of the learning process and learning task.
- Rewarding students' accomplishments and encouraging them to reward themselves and develop pride in their accomplishments.

This examination of the implications of changing to a learner-centered approach to schooling has led to a recognition that educational systems designed from a research-based set of principles that focus on both learners and learning as well as on basic principles of psychological functioning—which are translated into a core philosophy and culture—are more successful. We have also realized that change is more likely to occur when educators and others are assisted in self-assessing and reflecting on their basic beliefs and assumptions, and in engaging in critical inquiry on issues identified in the research on learners and learning. These are essential aspects of the change process. It is also critical that teachers become aware of and respect students' views as well as the backgrounds that influence their views (e.g., culture, gender, race, family experiences, etc.) and understand their impact on motivation, learning, and achievement as we have emphasized throughout this paper. Our work with the Learner-Centered Battery is focused on developing and validating these tools (McCombs & Stiller, 1995).

In rural schools, in particular, teachers must be able to access resources outside the school—resources such as the expertise of teachers in other schools who are dealing with similar students and learning issues, or parent and community expertise that can enhance classroom learning experiences. For teachers in poor, rural schools to be able to access other teachers through technology such as distance learning and the Internet is one promising approach for building capacity in the areas of specialization that are needed to better serve students with diverse languages and cultures. A high priority, therefore, in ensuring the success of Title I schoolwide programs in poor, rural schools is to address service provision, integration, and culture building through the use of innovative technologies that focus on professional development. To further support professional development approaches that help existing rural school teachers acquire the specialized skills for effectively working with migrant, culture and language minority, and other special Title I students—and thereby provide an umbrella for meeting students' personal and technical needs, involving parents effectively in school activities, and securing community resources and support—components in the organizational domain must be present.

Effective Practices in the Organizational Domain. A number of researchers interested in organizational and systemic change have ideas that are relevant to the design of effective Title I schoolwide programs. For example, Boyd and Hord (1994) discuss the role of both teachers and school principals in bringing about systems change, specifically by creating schools as learning communities. Building on Senge's (1990) definition, learning communities are seen as organizations (or cultures) in which people are continually expanding their

capacity to create what they desire, new and expansive patterns of thinking are nurtured, and there is the freedom to be creative and continually learn how to learn together. Consistent with this definition, a learning organization has at its heart a shift of mind to seeing people in the system as connected to each other and to the world. People begin to see that they create their reality and that they can change it. A particularly important shift is required in the leadership roles of teachers and school principals. They must see that learning and change are two sides of the same coin.

From Boyd and Hord's (1994) research, the leadership functions most conducive to change are (a) reducing isolation; (b) increasing staff capacity; (c) providing a caring, productive environment; and (d) promoting increased quality. These functions are fulfilled by modeling; coaching; attending to detail; observing ceremonies, rituals, and traditions; and telling stories that identify heroes and heroines who support the school's mission. When these functions are fulfilled, norms change and a new culture develops. Furthermore, Reitzug and Burrello (1995) report that one of the most important things principals can do is facilitate teachers' reflective practice by asking challenging questions, providing constructive feedback from their own observations, challenging program regularities, and enhancing resource supports. Additionally, teachers need to be supported and encouraged to take increased responsibility for their own learning and professional development. For teachers to assume these leadership roles, they must see themselves as leaders.

Chen and Addi (1995) discuss the importance of empowering teachers to be more involved in decision making and school management. For this to occur, school administrators must engage in leadership activities, restructuring activities, e.g., by establishing new organizational structures that encourage teachers to improve educational outcomes. They must also influence the thoughts and actions of teachers through transformational activities and personal vision.

Of particular importance for Title I students in poor, rural schools are practices that engage parents and community members in activities that support their children's learning and development (August et. al, 1995). Special attention to opportunities for parents to be involved in parent education, advocacy, and school governance is also recommended in programs that successfully educate LEP, migrant, American Indian, and other diverse students. Furthermore, August et al. argue that organizational strategies need to include academic support services such as counseling and mentoring and, most importantly, implement them with bilingual counselors and mentors. This is where the special strengths of the rural community can be brought into schoolwide programs, thereby leveraging personal and financial resources.

Finally, as the five examples of successful schoolwide programs for diverse and/or rural students demonstrate (Pechman & Fiester, 1994), organizational practices, structures, and policies that contribute to meeting diverse

student needs include: setting up the school as a community center that provides adult and parent education, intergenerational learning opportunities, social services and health care, and space for joint planning meetings among stakeholders representing diverse groups; shared decision making policies and structures as well as a strong professional development component that provides ESL or other specialized training to all teachers; policies that align standards with cultural goals, values, and needs of the surrounding community; and child- or learner-centered practices and policies that provide diverse ways of learning or structures (e.g., extended school year or schedules that accommodate migrant needs, "schools-within-a-school") that meet academic, social, emotional, and physical needs of students and their families.

An Integrated Look at Improving Title I Programs in Poor, Rural Schools

In describing the broad context of student needs and strengths in poor, rural schools, we have seen that these needs are sufficiently unique to warrant examining what should be present in Title I schoolwide programs for them to effectively address learning and achievement needs of *all* students. We have examined some of the practical and political realities that could hinder as well as enhance the effective implementation of these components in poor, rural schools. We looked at some examples of effective Title I schoolwide programs for similar types of students and contexts and have seen that it is possible to implement necessary components such as innovative parent and community involvement practices, strong professional development programs, research-based thematic and interdisciplinary curricula with a problem-solving orientation, multicultural units that respect and value students' differing cultures, and strong literacy and language development programs. Finally, we have presented a systemic and comprehensive conceptual framework for thinking about the learner-centered principles and system domains (personal, technical, organizational) that must be considered in making recommendations for how best to realize the promise of Title I schoolwide programs in poor, rural schools.

We now turn to a discussion of practices that integrate what is needed across the personal, technical, and organizational domains of the educational system to ensure that schoolwide programs in the context of poor, rural schools will lead to higher and sustained levels of achievement for all students.

Integration of Best Practices

Both critics and advocates of public education do agree on one thing: the educational system must change to meet the needs of an increasingly diverse and seemingly less well educated or prepared group of young people so that they may do well in and meet the more complex needs of the 21st century. For this to occur, visionaries argue that the current system cannot be restructured; but rather must be transformed. What does this mean? In a literal sense, transformation is a shift in thinking, perception, or behavior and results in a fundamentally different way of

being. A transformation of our educational system means a rethinking of the basic purposes of schooling, the creation of a new vision, and the development of a new culture that will sustain these changes in purpose and vision. In the case of education for disadvantaged and/or poor children in rural schools, this mission, we assert, must revolve around motivation, learning, and academic achievement for *all* learners. The concept of Title I schoolwide programs under the IASA promises to enact this mission.

For some, the transformation in thinking that must occur can also be called a revolution. Such is the case with Garmston and Wellman (1995), who propose that schools serving diverse students must be adaptive as well as create adaptivity in order to be successful. They believe adaptivity is created by:

- Basing decisions on the questions of "Who are we?" and "What is our purpose?"— filtered through agreed-upon core values, such as a respect for human differences and respect and caring for others.
- Shifting decision-making authority to the people most influenced by the decision.
- Restructuring the day and year to increase the time teachers have to act collegially with one another.
- Setting outcomes and standards that signal a passion for excellence and attention to qualities that are based on real-world needs.
- Supporting faculty members in collaboratively setting and working toward self-defined goals.

As we saw in the review of effective practices in the personal, technical, and organizational domains of schoolwide programs, there is an overarching concern with creating learner-centered models that can positively address student diversity issues. The resulting school practices and cultures are those that respect and value diverse student, family, and community groups and focus on their strengths in an atmosphere of caring, learning, and collaboration. We noted that foremost to the success of Title I schoolwide programs in poor, rural schools— given issues around adequate staff to meet diverse language and mobility needs of students—are school cultures that support teachers in a professional development process. This process must help teachers better address the diverse needs of students in poor, rural schools, and must equip them with the specialized language and cultural knowledge and skills to understand and adapt to individual differences. Effective professional development also requires concrete opportunities for reflection, dialogue, collaboration, and networking with fellow professionals as well as with administrators, parents, and community members. Little (1993), for example, proposes that

> the most promising forms of professional development engage
> teachers in the pursuit of genuine questions, problems, and

curiosities, over time, in ways that leave a mark on perspectives, policy, and practice. They communicate a view of teachers not only as classroom experts, but also as productive members of a broader professional community and as persons embarked on a career that may span 30 years or more. (p. 133)

She spells out six principles for professional development (Little, 1993, p. 133):

- Professional development offers meaningful intellectual, social, and emotional engagement with ideas, with materials, and with colleagues both in and out of teaching.
- Professional development takes explicit account of the contexts of teaching and the experience of teachers.
- Professional development offers support for informed dissent.
- Professional development places classroom practice in the larger contexts of school practice and the educational careers of children.
- Professional development prepares teachers (as well as students and their parents) to employ the techniques and perspectives of inquiry.
- The governance of professional development ensures bureaucratic restraint and a balance between the interests of individuals and the interests of institutions.

Little also argues that bringing about such change will involve "political will," since she believes we have sufficient knowledge to move forward and apply this knowledge in the service of quality education for all students, regardless of their cultures, socioeconomic levels, or language proficiencies.

Similarly, Fullan (1995) proposes a professional development framework that addresses three components: moral purpose, the culture of the school, and the linking of preservice and inservice teacher education. With respect to moral purpose, professional development is "learning how to make a difference through learning how to bring about ongoing improvements" (p. 255). To accomplish the purpose of continuous learning requires personal vision-building, inquiry, mastery, and collaboration. In building a culture that supports professional development, he believes that it is necessary for teachers to have a personal commitment to learn individually and together, to have a questioning attitude, and to be willing to take risks. When a professional community develops, it must be dedicated to discourse and be structurally and culturally embedded in the regular work experiences of teachers, with collaboration and experimentation that develops trust and an attitude of continual learning and improvement. Beyond this, we have argued that for meeting diverse Title I student needs in poor, rural schools, it is also important that professional development practices include parents and community members from each culture (migrant, American Indian,

Mexican American, and other stakeholder groups) to provide expertise to staff in joint planning and monitoring of program effectiveness.

As Weinstein has maintained about the value of extending the *Learner-Centered Psychological Principles* to teachers' professional development, the *Principles* provide a foundation for guiding this learning process and point to the importance of seeing both learning and motivation to learn as inherently natural processes *for all learners* when supported by cultures of collaboration and caring. Weinstein (in press) states:

> Critical to promotion of a positive expectancy climate was the creation of consistent, stimulating, and supportive conditions for school staff to question their expectations for students, not only in addressing beliefs about ability but also in examining teaching practices and policies. Perceived obstacles were translated into opportunities, as teachers collaboratively reframed their work with students, other teachers, and the administration [*and, we would add, parents and community members*] (p. 37).

In conclusion, schoolwide Title I programs that enhance motivation, learning, and achievement for all students must be based on an understanding of the "psychology of learning and change" as well as an appreciation of personal needs and individual perceptions that enhance or inhibit motivation, learning, and change. The particular emphasis we have recommended for Title I teachers in poor, rural schools is placing a high priority on professional development that prepares them to: (a) create positive learning contexts; (b) examine personal changes in their own thinking; (c) understand student diversity, particularly differences in culture and language; (d) enhance students' motivation, learning, and academic achievement; (e) effectively engage parents and community members; and (f) build on the student, family, and community strengths that are available. As such, this emphasis has the promise of integrating effective personal, technical, and organizational domain practices within a learner-centered framework, thus serving as an "umbrella" for maximizing effective use of limited Title I resources.

Attention to Political Realities

For a major focus to be placed on professional development with funding available for Title I schoolwide programs in poor, rural schools, attention must be given to getting support from school, district, and state administrators. Beyond the support teachers get from administrators, however, it is also essential to understand the importance of gaining support from parents and the community for inclusive practices at the classroom and schools levels. For teachers to get this support and advocacy, they must first recognize that successful schoolwide programs require a commitment to working closely with parents and community members, welcoming them into school, and inviting their participation in meaningful ways. Teachers should identify in-service training opportunities that

help them better understand the important roles that parents and community play in the effective education of students as well as how to obtain their involvement and advocacy for particular features needed in their Title I schoolwide programs for the learning success of all students.

To engender advocacy for any innovation requires education. That is, people are unlikely to support anything new or different unless they understand the difference such a change might make and/or why it is needed. Thus, involving parents and community members from all the diverse populations within the community in the planing of schoolwide programs is the first step toward gaining their support. Next, parents and the community members need to be provided with information about the impact of Title I schoolwide practices on student motivation, learning, and achievement as well as descriptions of what inclusive classrooms and schools look like.

Finally, it is important to note the significant and unique role parents and community members can play in responding to dissent from other parents and the community. Those who vocalize concern and opposition to change are often more open to information and explanations from "one of their own" than from school staff who may be regarded as the "them" in the "we versus them." Furthermore, as noted in a book about how the differences in world views, philosophies, and values can underlie conflict between the public and educators regarding educational change, Gaddy, Hall, and Marzano (1996) state,

> The roots of any successful response to criticisms of educational materials and programs can be found in the school's ongoing efforts toward developing a strong sense of community among parents, teachers, administrators, community members, and students. A vital community with an established network of working relationships has laid groundwork to successfully deal with controversies should they arise. (p. 213)

Perhaps the best advise Gaddy, Hall, & Marzano (1996) offer is that teachers and administrators spend time getting to know parents and community members in one-to-one sessions that build trust and mutual respect. We recommend that teachers and administrators invest in parent and community involvement in ways that build trust and mutual respect. All groups need to be involved in planning so that all categorical groups are represented and have the opportunity to learn and understand each others' perspectives as well as be involved more directly with teachers and administrators to ensure that the needs of all students will be met. Once partnerships are established and voice is legitimized, ownership and commitment follow and the job of community building becomes a reality. Viable change comes about from this larger community of educators, parents, and the public. In the case of Title I schoolwide programs in poor, rural schools, support is particularly needed for true integration and implementation of practices for migrant, LEP, or diverse cultural groups (e.g.,

American Indians), for obtaining resources needed from state and federal agencies, and for addressing "political will" issues that include more equitable funding allocations for poor, rural schools. Helping parents and community members learn to be advocates for their children's needs is also needed.

Conclusions and Recommendations

This final section summarizes major schoolwide program components that are needed in poor, rural schools. We focus on the role of professional development to maximize the impact of recommended Title I practices with limited funds as well as provide an umbrella for integrating these practices within a learner-centered framework across personal, technical, and organizational domains of the system.

Summary of Practice Recommendations

Specifically, from a personal perspective, there needs to be a sense of community that is built into a culture of learning, caring, and collaboration; quality personal relationships and constructive dialogue; an openness to improvement and continual monitoring and disaggregation of achievement data by diverse groups, including migrant and culture and language different students; a commitment to building trust and to valuing and respecting all groups; supportive and empowering leadership; and processes for socializing new members into the culture.

In the technical area, it is important to provide all members of the community with the knowledge and skills necessary to take risks, learning new knowledge and skills as needed, and taking responsibility for their own professional development, continuous improvement, and lifelong learning. For teachers, a strong professional development program is needed that equips all teachers in poor, rural schools with the language and cultural knowledge and skills to adequately meet the needs of all students they serve. Students need challenging academic standards, strong language literacy programs, curricula that is personally relevant in terms of cultural and personal interests and backgrounds, alternative assessments that capitalize on diverse knowledge and skills, and instructional methods that match individual student needs and strengths.

From the organizational perspective there must be practices that allow for and support schoolwide programs that facilitate the achievement of challenging standards by *all* students; strategies for building a strong community of support and understanding of the special needs and cultures of the diverse students served among administrators, teachers, parents, and other community members; structures that provide time to meet and talk; physical proximity for team planning and collaboration; communication structures such as regular meetings or electronic mail system; and joint planning sessions among all stakeholders as well as shared decision-making strategies.

Summary of Policy Recommendations

In the area of policy, there is a need to attend to those policies that address:

- Valuing diversity in instruction, assessment, and curriculum practices.
- Training of existing and professional development teachers to ensure that teachers have the knowledge and skills needed to meet diverse student needs.
- Teachers hiring for special cases when specialists must be brought in.
- Providing adequate resources including technology, particularly for teacher networking and accessing needed expertise and resources, thereby reducing isolation.
- Using the planning process in schoolwide programs to involve key stakeholders (parents, community members, administrators, teachers, and students as appropriate) to create ownership and commitment to advocacy for special needs students (and potentially offset instability due to leadership changes).
- Applying evaluation processes and standards that are broad-based and match comprehensive goals, including motivational as well as academic evaluation outcomes and standards.
- Disaggregating data immediately to ascertain achievement levels of all diverse students as program components are implemented.
- Setting standards that ensure both the attainment of basic skills and challenging standards at the same level as other students as well as the development of diverse strengths.

Summary of Research Recommendations

Reviewing what we know and what remains to be learned to improve the effectiveness of the new Title I schoolwide programs in poor, rural schools, we see the need to refine what is known about best practices for specific diversity issues faced by students and teachers in poor, rural schools. Research is also needed to extend and refine prior research to answer questions pertaining to students from diverse cultures, language, lifestyles, and mobility patterns such as migrancy. Finally, research is needed to help clarify specific strategies, resources needed, assessment models, and professional development experiences that can enhance learning, motivation, and achievement of all Title I students in poor, rural schools. This research needs to be broadly shared among key decision makers (i.e., teachers, administrators, parents, community members, policymakers).

In conclusion it is vital that we value the diversity of students in poor, rural schools in order to develop and sustain the diversity of skills, talents, and other strengths needed to enrich the larger society. To do this, we must help

educators transform their thinking about the value represented by diverse learners and the fundamental mission of schools to educate*all* students.

We must begin this process by self-examination and reflection. Do we really want *all* students— students from every language and culture that are represented in our schools—to achieve high standards? In a sense, rural schools are the test of our values and commitment. The question remains: Will we pass the test?

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Figure 1

ELEMENTS OF
SOCIAL SYSTEMS

POLICIES

PROCESSES   PRACTICES

PRINCIPLES   PROGRAMS

PURPOSE   PROCEDURES

ENVIRONMENT   ENVIRONMENT

BELIEFS
ASSUMPTIONS
PHILOSOPHY
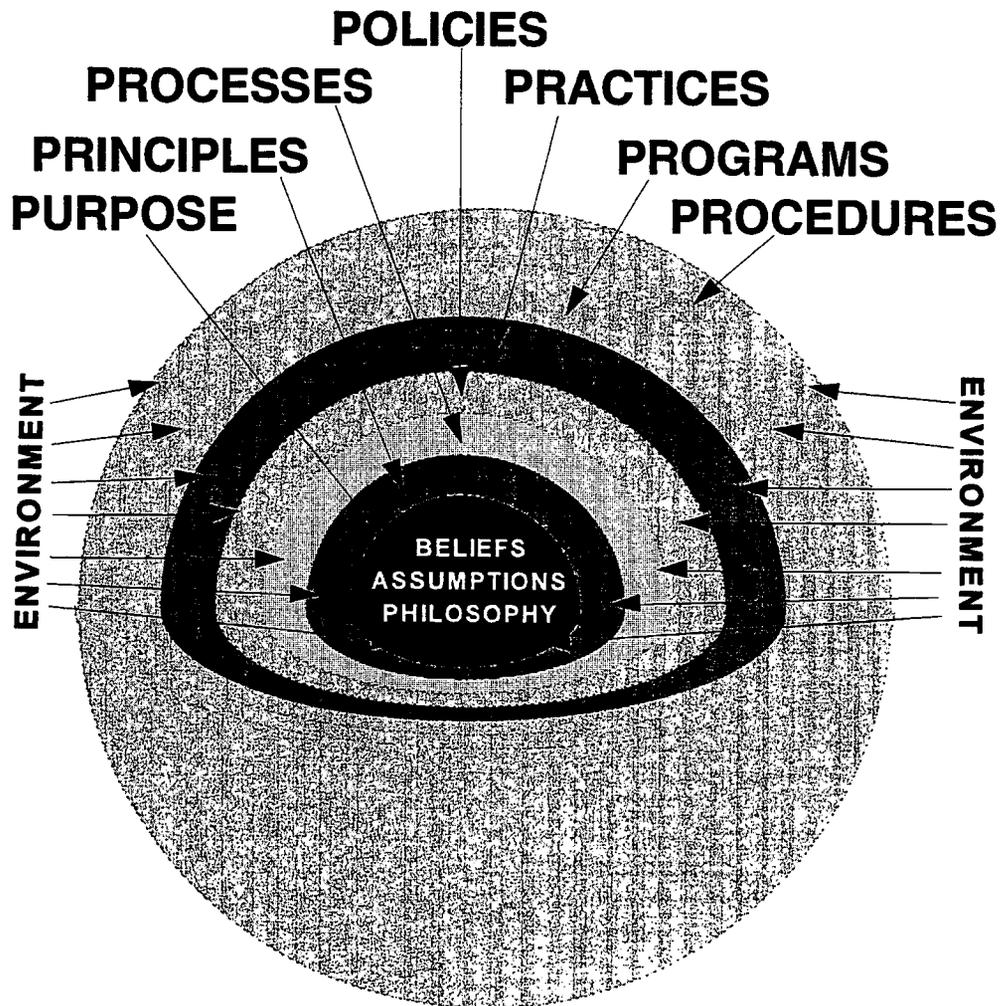
**CONSTITUENCIES: STUDENTS, TEACHERS, PARENTS,
ADMINISTRATORS, BUSINESS AND COMMUNITY MEMBERS**

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Figure 2
SYSTEM LEVELS

ORGANIZATIONAL

TECHNICAL

PERSONAL

DISTRICT

COMMUNITY

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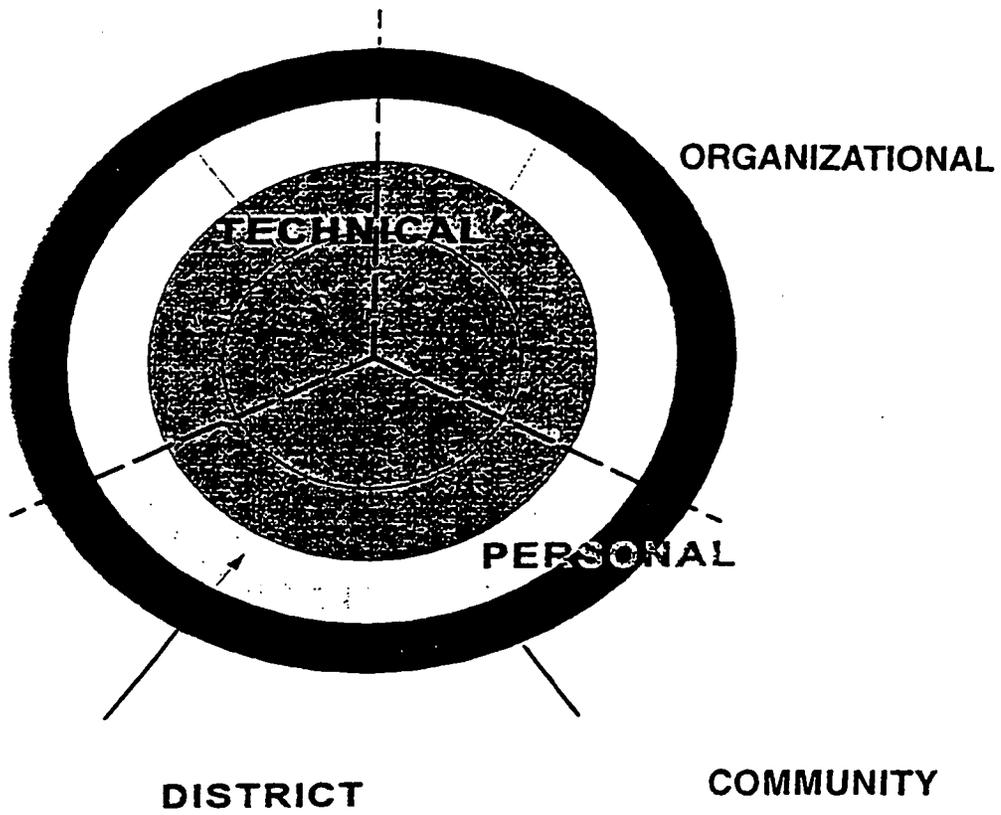
Table 1

The Learner-Centered Psychological Principles

METACOGNITIVE AND COGNITIVE FACTORS

Principle 1: **The nature of the learning process.** Learning is a natural process of pursuing personally meaningful goals, and it is active, volitional, and internally mediated; it is a process of discovering and constructing meaning from information and experience, filtered through the learner's unique perceptions, thoughts, and feelings.

Principle 2: **Goals of the learning process.** The learner seeks to create meaningful, coherent representations of knowledge regardless of the quantity and quality of data available.

Principle 3: **The construction of knowledge.** The learner links new information with existing and future-oriented knowledge in uniquely meaningful ways.

Principle 4: **Higher-order thinking.** Higher-order strategies for "thinking about thinking" -- for overseeing and monitoring mental operations -- facilitate creative and critical thinking and the development of expertise.

AFFECTIVE FACTORS

Principle 5: **Motivational influences on learning.** The depth and breadth of information processed, and what and how much is learned and remembered, are influenced by: (a) self-awareness and beliefs about personal control, competence, and ability; (b) clarity and saliency of personal values, interests, and goals; (c) personal expectations for success or failure; (d) affect, emotion, and general states of mind; and (e) the resulting motivation to learn.

Principle 6: **Intrinsic motivation to learn.** Individuals are naturally curious and enjoy learning, but intense negative cognitions and emotions (e.g., feeling insecure, worrying about failure, being self-conscious or shy, and fearing corporal punishment, ridicule, or stigmatizing labels) thwart this enthusiasm.

Principle 7: **Characteristics of motivation-enhancing learning tasks.** Curiosity, creativity, and higher-order thinking are stimulated by relevant, authentic learning tasks of optimal difficulty and novelty for each student.

DEVELOPMENTAL FACTORS

Principle 8: **Developmental constraints and opportunities.** Individuals progress through stages of physical, intellectual, emotional, and social development that are a function of unique genetic and environmental factors.

PERSONAL AND SOCIAL FACTORS

Principle 9: **Social and cultural diversity.** Learning is facilitated by social interactions and communication with others in flexible, diverse (in age, culture, family background, etc.), and adaptive instructional settings.

Principle 10: **Social acceptance, self-esteem, and learning.** Learning and self-esteem are heightened when individuals are in respectful and caring relationships with others who see their potential, genuinely appreciate their unique talents, and accept them as individuals.

INDIVIDUAL DIFFERENCES

Principle 11: **Individual differences in learning.** Although basic principles of learning, motivation, and effective instruction apply to all learners (regardless of ethnicity, race, gender, physical ability, religion, or socioeconomic status), learners have different capabilities and preferences for learning mode and strategies. These differences are a function of environment (what is learned and communicated in different cultures or other social groups) and heredity (what occurs naturally as a function of genes).

Principle 12: **Cognitive filters.** Personal beliefs, thoughts, and understandings results from prior learning and interpretations become the individual's basis for constructing reality and interpreting life experiences.

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Table 2
Domains of Learner-Centered Principles

COGNITIVE AND METACOGNITIVE

These four principles describe how a learner thinks and remembers. They describe factors involved in the construction of meaning from information and experiences. They also explain how the mind works to create sensible and organized views of the world, and to fit new information into the structure of what is already known. They conclude that thinking and directing one's own learning is a natural and active process and, even when subconscious, occurs all the time and with all people. What is learned, remembered, and thought about, however, is unique to each individual.

AFFECTIVE

These three principles describe how beliefs, emotions, and motivation influence the way in which people perceive learning situations, how much people learn, and the effort they are willing to invest in learning. Our emotional state of mind, our beliefs about personal competence, our expectations about success, and our personal interests and goals all influence how motivated we are to learn. Although motivation to learn is natural under conditions and about things we perceive to be personally relevant and meaningful, motivation may need to be stimulated in situations that require us to learn what seems uninteresting or irrelevant to us.

DEVELOPMENTAL

This principle recognizes capacities for learning that are known to develop or emerge over time. It is based on research documenting the changes in human capacities and capabilities over the lifespan. It informs us about the identifiable progressions of physical, intellectual, emotional, and social areas of development that are influenced by unique genetic or environmental factors. These progressions vary both across and within individuals, and thus cannot be overgeneralized for any one individual or group of individuals because of the risk of limiting opportunities for

learning. The important generalization in this domain is that we learn best when material is appropriate to our developmental level and presented in an enjoyable, interesting, and challenging way.

PERSONAL AND SOCIAL

These two principles describe the role that others play in the learning process, as well as the way people learn in groups. These principles reflect the research that shows that we learn from each other and can help each other learn through the sharing of our individual perspectives. If learners participate in respectful and caring relationships with others who see their potential, genuinely appreciate their unique talents, and accept them as individuals -- both learning and feelings of self-esteem are enhanced. Positive student-teacher relationships define the cornerstone of an effective learning environment -- one that promotes both learning and positive self-development.

INDIVIDUAL DIFFERENCES

These two principles describe how individuals' unique backgrounds and capabilities influence learning. These principles help explain why individuals learn different things, at different times, and in different ways. Although the same basic principles of learning, thinking, feeling, relating to others, and development apply to all of us -- what we learn and how this learning is communicated differs in different environments (e.g., cultural or social groups) and as a function of heredity. From our environment and heredity, we create unique thoughts, beliefs, and understandings of ourselves and our world. Appreciating these differences and understanding how they may show up in learning situations is essential to creating effective learning environments for all students.

Epilogue: A Summary of Recommendations

Margaret C. Wang and Kenneth K. Wong

The current literature on the impact of Title I on students in schools serving a high concentration of students from high-poverty homes has been mixed. On the one hand, preliminary findings from the *Prospectus* survey suggest that at-risk students in schoolwide projects as a group perform better than their peers in the more traditionally organized services, e.g., pull-out (U.S. Department of Education, 1993). On the other hand, nationwide evaluations suggest that schoolwide projects have continually encountered difficulties in student needs assessment, program evaluation, and most important of all, producing significant sustained academic improvement in inner-city schools (Millsap, Turnbull, Moss, Brigham, Gamse, & Marks, 1992; Stringfield, Billig, & Davis, 1991). In light of these findings, the goal of this publication is to bring critical attention to schoolwide project schools and strategic reexaminations of policies and research activities affecting learning in high-poverty schools. We hope that the preceding papers have effectively furthered dialogue regarding the implementation of the legislative mandates and the spirit of the legislative intent of the Title I program.

The overall goal of the conference was to generate new ideas on how to use opportunities provided by the new Title I legislation and on what is known to work from research and practice to improve the quality of Title I programs on an ongoing basis. Specifically, the conference aimed to address the following objectives:

- To examine the knowledge base on Title I implementation, particularly the implications of schoolwide projects.
- To provide the opportunity for researchers, policymakers, and practitioners at federal, state, district, and school levels to reconceptualize the challenge of scaling up, service coordination, and instructional practices, and to engage in focused discussions to chart the next step in Title I service delivery.

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- To more widely disseminate information from both the knowledge base and the next-step recommendations to a wider audience, particularly policymakers and educational leaders whose leadership is central to effective implementation of Title I mandates in the service of children and youth in economically and educationally disadvantaged circumstances.

To stimulate the dialogue, the conference was structured so that discussion would follow informative plenary sessions. Participants of the conference were broken into small workgroups where ideas and policy recommendations were generated. Workgroups consisted of researchers, teachers, and administrators from urban and rural schools, community representatives, and policy leaders at the federal, state, and district levels. Each group was asked to consider one of the following specific issues: (a) improving teaching and learning in Title I schools; (b) building school-community relations; (c) program coordination and instructional inclusion; and (d) scaling up reform.

This summary presents a number of suggestions and recommendations generated from deliberations at the conference. None of the recommendations were voted on formally by the full set of conferees, and there were disagreements on some matters. Therefore, we cannot presume here to represent the views of all conference participants. However, this epilogue reflects the tenor and some specifics of the conference proceedings, considering all voices—authors of the commissioned papers, the organizers, and the conference participants.

Areas of Consensus

Throughout the conference, several areas of consensus emerged among the participants. First and foremost, conferees agreed that while there is a substantial research base and practical know-how on effective implementation of innovative strategies and practices, this knowledge has not been used to its full potential. During the plenary presentations and workgroup discussions, participants examined the implementation and outcomes of a wide range of innovative models and programs in Title I service delivery, resulting in shared learning and networking. It became evident, however, that there remains a pressing need for information on successful strategies to be synthesized in usable forms for widespread and systematic dissemination.

The group called upon the academy to play a central role in advancing research-based reform. Because faculty at universities and colleges generate and have access to much of the knowledge base, they are therefore in strategic positions to become more actively engaged in informing policymaking and in meeting the training and technical assistance needs of schools and districts for implementing Title I program mandates.

A second consensus to emerge among the conferees was the notion that widespread, successful implementation of Title I mandates attention to developing concrete strategies for overcoming the known barriers to effective implementation. Several barriers consistently mentioned throughout the conference included: the lack of time for planning and reflection by school staff; contentious school-community relations; "one-shot" and inflexible professional development; skeptical or pessimistic attitudes on the part of educators, policymakers, and the public concerning the prospects for achieving the vision of high standards for student outcomes in schools with a high concentration of students from disadvantaged backgrounds; and inadequate coordination across agencies that serve Title I-eligible students at federal, state, and local levels.

In addressing these barriers, the importance of collaboration became clear. Leaders and planners need to ensure that the change process is a collaborative one and that all collaborators "buy into" the plans developed. Shared buy-in means that schools must collaborate with parents and community, administrators with teachers, and districts with states. It is equally essential that the various offices in and agencies affiliated with the U.S. Department of Education collaborate with each other and other key players in Title I implementation.

A continuum of professional development for education professionals is also an integral step toward overcoming known barriers to effective implementation. Standards-based reform, such as the Title I schoolwide project provision, requires coordinated delivery of services by interdisciplinary teams of professionals in systematic and sustained ways and mandates parallel program developments and reform at the university level. Universities and colleges are called on to align their curricula for preparing education and related service professionals with innovative practices in the field. From preservice education to continuing education and inservice training, professional development should be constructed as a continuum of cross-disciplinary learning.

Finally, the conferees agreed that assessment and evaluation must stem from the belief that all students can learn. The ultimate performance indicator of a school's capacity for implementing standard's based reforms is its ability to raise academic achievement for every students. While other benchmarks of implementation success, such as levels of collaboration or opportunity to learn standards, were discussed as important indicators, ultimately educational stakeholders in this nation must be held accountable for maintaining high standards for student outcomes. Accountability for achievement requires the development of comprehensive, specific standards and goals for all students which help inform both self-assessment on the part of field-based professionals and outside evaluation of program effectiveness.

Recommendations

Ideas emerging from the conference that might characterize desirable changes—whether rapid or gradual—are discussed below. Specific barriers to

improvement and next-step strategies developed by the conference workgroups are discussed under the four comprehensive themes: (a) improved teaching and learning; (b) school-community relations; (c) program coordination and inclusion; and (d) scaling up reform.

I. Improved Teaching and Learning in Title I Schoolwide Project Schools

Criteria for identifying effective teachers emerged from group discussions and examples of teaching excellence shared among the conferees. The group viewed an effective teacher as one who is innovative, has knowledge of effective practices, has high expectations, utilizes resources well, understands the end goals of education, is respectful of all members of the learning community, and whose students demonstrate a high level of achievement. Finding ways to facilitate the development of these and other areas of professional proficiency among greater numbers of teachers was the focus of the group's deliberations.

Barriers to Improvement

Several barriers to improved teaching and learning in Title I schoolwide project schools were identified. They include:

Attitudinal barriers. Low teacher expectations were noted as one of the most debilitating attitudinal barriers to student success. Further, the demeaning labeling that often accompanies students in Title I pull-out programs, and/or that is accorded to entire schools with high concentrations of Title I-eligible students, often results in a "blaming the victim" explanation for poor performance.

Ecological barriers. Among the most problematic barriers cited by the conferees were high mobility among student populations and limited opportunities and enthusiasm for parent involvement.

Organizational and implementation barriers. These included: a lack of quality professional development programs for teachers and administrators; lack of staff time for planning and reflection; bureaucratic stumbling blocks to innovative reforms (e.g. block scheduling, extended day/year plans); lack of materials, technical resources, and expertise; and large class size.

Next-Step Strategies for Improvement

Five categories of strategies emerged from the workgroup on improved teaching and learning. They include:

Implementation of knowledge-based school reform with sensitivity to ecological and sociological contexts. Teaching practice needs to be continuously reexamined to ensure its basis in research-driven pedagogy and standards, while simultaneously maintaining a nurturing perspective that builds on human diversity. It is essential that educators have an appreciation of student diversity and a belief in the potential for learning success of each individual student. Mutual respect

among all members of the learning community, including students and parents, is as central to student success as a working knowledge of principles of effective teaching.

The critical knowledge base for effective teaching includes both specific topics and "meta-issues." Topics mentioned included teacher knowledge of pedagogy and subject area content, effective strategies for responding to differences in learning styles, effective utilization of paraprofessionals, and a wide range of pedagogical and management expertise. Teachers also need to have familiarity with broader issues such as alignment of the curriculum to local, state, and national standards; linking instruction and assessment to authentic learning; second language acquisition; inclusive approaches to serving all students; coordination of school-linked services; family and community involvement; and other emerging policy and implementation concerns.

Provision of sustained professional development that meets the needs of individual staffs and sites. Professional development is necessary for all groups of educators, including teachers, administrators, related service providers, and teacher educators and other university faculty. Institutions must examine their internal ecologies to determine which aspects of their cultures support or contravene reform efforts; a prevailing attitude of openness to change on the part of all participants is essential for professional development to be effective. Conversely, transformation requires a respect for all individuals who are part of the learning community on the part of the institution, manifested concretely through a site-based collaborative planning and implementation process.

Effective professional development was defined by the workgroup as comprehensive, sustained, and flexible in its delivery. Flexibility in delivery includes allowing for diversity of both methods and resources. Methods include peer observation, mentoring, and sustained training and technical assistance focusing on program implementation; the resources of expertise include peers, master teachers, staff development specialists, university faculties, and researchers and program developers from regional educational laboratories, national research centers, and the private sector.

Finally, professional development should focus on concrete gaps in knowledge, demystify faulty beliefs about the learning potential of diverse student populations, and reflect best practices. The effectiveness of professional development programs needs to be evaluated, both in terms of the professional knowledge base and, ultimately, in terms of improved student learning as a result of improved practice.

Forging broad-based reform efforts involving stakeholders at all levels. Sustained improvements require the active involvement of stakeholder groups at each level. Systemic reform requires that: (a) teachers engage in self-inquiry and reflective practice; (b) school and district administrators work collaboratively with teachers in determining reform priorities and provide resources and time for

professional development to support effective program implementation; (c) higher education institutions establish and maintain strong connections to K-12 schools by aligning curriculum reform at the university level to the standards-based reform needs of the schools and the professional development needs of education and related service professionals; and (d) federal and state departments of education provide support to local schools through establishing and refining policies that facilitate implementing standards-based reform. The U.S. Department of Education, in particular, plays a key role in supporting inquiry, program development, and the dissemination and utilization of research-based innovations. The regional educational laboratory program, for example, funded by the Office of Educational Research and Improvement of the U.S. Department of Education, has the capacity to develop and deliver useful and usable models of effective, knowledge-based reform to field-based professionals, schools, and agencies.

Recruitment of the best and the brightest to the teaching profession. Given the "graying" of the teaching profession and the projected increase in the student population as we move into the next millennium, there is an urgency to establish recruitment strategies and an incentive system in efforts to improve teaching and learning in schools. Finding ways to encourage highly motivated and well-trained individuals to enter the field of education is a priority. All stakeholders in the teaching profession need to play a role in attracting the best and the brightest among college and graduate students and those interested in career changes to the teaching profession. Creating positive working conditions and prospects for professional satisfaction in the schools is therefore another concrete next-step strategy to increase recruitment of quality future educators and improve teaching and learning.

Building a knowledge base on the implementation of innovative programs that work. There is a major gap between what we know about what works and how to implement what we know in integrated ways to improve current practice. School staff urgently need knowledge-based information on program implementation and efforts. A crucial next-step task is to ensure that information about what has been found to be feasible and effective by local schools in their implementation efforts is available in forms that are usable and useful for replication and/or adaptation for meeting site-specific improvement needs, and that that information is widely disseminated.

II. Building Strong School-Community Relations

Positive school-community relations are integral to student success and are measured by their ability to raise the achievement of every student. Effective school-community relations are created through meaningful and coordinated parent and community roles that foster children's academic development, cogent implementation of best practices, ongoing evaluation, and policy decisions which are codesigned and evaluated by all partners.

Barriers to Improvement

Three barriers to building strong school-community relations were identified by the workgroup, including:

Need for collaboration. Strong school-community partnerships are built on the early and ongoing involvement of all stakeholders from planning and design stages through implementation and evaluation. This necessity is often discounted, especially the need to include parents. Collaboration requires that parents be included "at the table" and that meaningful family-community roles in support of children's development and schooling success remain key design considerations.

Insufficient professional development. Educators and related service providers need training in the creation and implementation of meaningful partnerships with each other and with parents and the community. It is crucial that professionals develop sharpened understandings and broadened concepts of parent and community involvement in achieving student success.

Need for evaluation. There is very little information on the effectiveness of positive school-community relations. Systematic documentation, ongoing assessment of programs, and the development of instruments and methods for examining the impact of parent and community involvement are key tasks for building a procedural knowledge base on successful implementation of systemic educational reforms. There is a need to develop indicators that measure the quality of multi-level participation by families and the community in coordinated approaches to support the healthy development and learning success of each student.

Next-Step Strategies for Improvement

Five categories of strategies emerged from the deliberations from the workgroup on building strong school-community relations. They include:

Systemic and ongoing review and dissemination of the research base on what works in forging school-community connections to bring knowledge-based approaches to bear in Title I implementation. Researchers are called on to conduct systematic reviews of the research base on best practices in forging school-community partnerships, especially successful partnerships in Title I schoolwide project schools. There is an urgent need to document successful strategies for establishing parent and community involvement programs and to disseminate such information in forms that are useful and usable by school staffs and community members. Regional educational laboratories are federal resources that are strategically organized for developing and disseminating "idea books" describing the planning and implementation of research-based, innovative school-community partnerships that work. Such resource books should include names and contact information of demonstrably effective programs and need to be made widely accessible to schools, districts, and state agencies.

Replication and scaling-up of successful strategies for school-community relations that meet site-specific needs. Local schools and districts have the responsibility for implementing successful research and practice concerning parent involvement, community input, and integrated services that have been shown to be effective in improving the academic achievement of every student. Education and related service professionals are called on to utilize knowledge-based approaches for widespread involvement of families and the community in building partnerships with schools in coordinated ways to ensure student achievement.

Development of training for pre- and inservice education professionals concerning the implementation of designs for meaningful partnerships among parents, communities, and schools. Pre-service education and professional development programs for education and related service professionals should include development of expertise in building positive school-community relations. Providing adequate support for children and youth who are in circumstances that place them at risk is particularly challenging, and understanding their unique needs to ensure schooling success and developing the expertise required to effectively address those needs are central curricular topics for all professionals working with children and youth. This professional development emphasis is of particular importance for those implementing partnership projects in Title I schools.

Development of effective evaluation indicators that are aligned with designs for strong school-community partnerships. Assessment of the effect of school-community relations on student achievement requires accounting for and reflecting the various implementation strategies utilized at diverse sites. Evaluation design must include indicators to allow for multilevel parental participation and conceive of a range of measurements for both quantity and quality of involvement. Assessments currently in use in districts should be sampled to determine the most effective indicators of successful school-community partnerships in the service of schooling success of children and youth.

Establishment of mechanisms for involving school staff, parents, and the community in policy development and implementation. Educators need to take an active role in policy development and in finding ways to involve parents and the community in this process. All collaborating partners have a responsibility to play an active role in the development of policy concerning design, outcomes, and indicators of effective school-community relations. This widespread involvement is especially important for effective implementation of this aspect of the legislative mandates of Title I.

III. Program Coordination and Inclusion

Program coordination and an inclusive approach to service delivery are central concepts for effective delivery of Title I services. The group concluded that there is substantial research-based knowledge on effective inclusion practices and that adequate policy provisions exist in the Title I legislation to allow for the kinds

of flexibility required for school-based implementation of inclusion practices. Effective dissemination and widespread implementation are the current critical needs.

Barriers to Improvement

The group identified two barriers to effective program coordination and inclusion: attitudinal barriers, and organizational barriers.

Attitudinal barriers. Attitudes and mindsets of service providers concerning the difficult prospect of "being able to make a difference" are major implementation barriers to inclusion. There is a lack of a belief in the potential for healthy development and learning success of children and youth whose circumstances place them at risk that has become the cloak for low expectations and apathy. The lack of trust and the prevalence of territorial concerns among service providing agencies further contribute to difficulty in implementing inclusion strategies.

Organizational barriers. The way schools and related services are organized has contributed to deep-seated structural barriers to coordination and efficient delivery of educational and related services. These barriers include: organizational structures that perpetuate disjointed, categorical approaches to service delivery; inflexibility and uncoordinated deployment of resources and professional expertise; inadequate time for planning among professional staff; lack of sustained, quality professional development for developing expertise and knowledge of the research base in areas of emerging needs among professional staff; inadequate professional preparation at the preservice level; the need for realignment and communication about policy, curriculum standards, and implementation accountability across local, state, and federal levels; and the difficulty in meeting the challenge of moving beyond anecdotal evidence of effective inclusion and program coordination.

Next-Step Strategies for Improvement

Five categories of strategies emerged from the workgroup on program coordination and inclusion. They include:

Leadership and collaboration are crucial for ensuring the success of inclusion efforts. Leadership concerning program coordination requires a balance of planning for the overall needs of districts and states while simultaneously including maximum flexibility in order to meet the implementation needs of specific local sites. Policymakers and Title I services providers need to collaboratively develop blueprints for implementation that involve the active participation of families and the community. Coordinated efforts are required to ensure the participation of all stakeholders in the planning and implementation of Title I services.

Institution of sustained professional development on developing expertise and implementation supports that are critical to successful inclusion efforts in Title I schools. Strategic dissemination of knowledge concerning what works in efforts toward inclusion, implementation of successful strategies, and accountability is a central element of successful implementation. However, dissemination of effective strategies through "one-shot" training that is removed from the ongoing school context is not sufficient to sustain maximum utilization. Effective professional development to advance inclusion efforts, like professional development for all aspects of reform, is lasting, sustainable, and adapted to the implementation needs of individual sites, especially the needs of Title I schools and districts.

A high degree of implementation of Title I mandates requires a focused plan for strategic dissemination of knowledge-based information and targeted transition strategies for progressive implementation advances. Critical areas for knowledge-based professional development for effective Title I implementation include cultural diversity, limited-English proficient (LEP) learners, second language acquisition, and student mobility. Improving the capacity for Title I service providers for achieving student success requires methods for incorporating information about the unique cultural and language backgrounds of the diverse student population in Title I programs as a way of building on the strengths of the individual students.

Movement beyond anecdotal evidence concerning inclusion and program coordination to concrete demonstrations of the effectiveness of inclusion for student achievement. The measurement of success for inclusion as a reform strategy requires the development of standards-based, comprehensive learning plans with goals which reflect what is learned, not what is taught, as indicators, and the use of these plans as a means of accountability. A database that empirically demonstrates that programs which appear successful are actually succeeding in raising student achievement and fostering healthy development of students is sorely lacking. It is imperative to include *all* students in the database for establishing program accountability: students in LEP programs, for example, are often excluded as a group in assessments of programs. In addition to accountability for the progress of each student, it is recommended that achievement data should be disaggregated to identify key influence factors on the success of students with diverse needs in order to develop a database on effective school responses to student diversity.

IV. Scaling Up Reform

Successful scaling-up of reform efforts, according to the conferees, includes the following elements: dissemination of knowledge-based information on what works that is targeted to a broad spectrum of stakeholders of reform; provision of sustained technical assistance and implementation support, including assistance in establishing infrastructure and "people" support mechanisms; an

emphasis on implementation of improved teaching and learning and accountability; and expectation that change will be systemic and quickly implemented.

Scaling-up efforts for effective implementation of Title I are based on a vision which includes effective teaching, full inclusion, and meaningful parental roles. Key characteristics of scaling up systemic reform include taking into consideration the needs of all students; designing reform through site-based, collaborative processes which are supported by districts, states, and the federal government (e.g., systemic provision of knowledge-based information on effective practices, providing resources and expertise, forging coordination and collaborative planning, and monitoring and accountability); establishing the "buy-in" of all stakeholders; and, ultimately, demonstrating the capacity for effective implementation of the legislative mandates of Title I through high standards of achievement for all students.

Barriers to Improvement

While all of the barriers noted by the other groups also impact the process of scaling up strategies for reform, there are three major barriers that especially influence scaling up. The first is the rate of change, which often remains slow due to conflicting or confusing policy mandates or implementation requirements across state and federal levels and lack of widespread access to the knowledge base, causing the failure of many reform strategies to gain momentum. The lack of coordinated assistance and support across state and federal levels also prevents widespread implementation and replication of successful strategies. Finally, the lack of public knowledge and buy-in concerning school reform slows the process of change and remains a major barrier to scaled-up implementation of effective strategies.

Next-Step Strategies for Improvement

Five categories of strategies emerged from the deliberations from the workgroup on scaling up reform. They include:

Collection and synthesis of knowledge-based information in useable and accessible forms. In order to effectively scale up educational reform, stakeholders must make informed decisions. The group called for the gathering of (a) profiles of successful Title I school reform programs nationally, (b) effective implementation characteristics, and (c) practical measures of student outcomes. Leadership and support for this aspect of the next-step reform efforts to advance the effectiveness of Title I services is viewed as critical and is an appropriate role of the U.S. Department of Education. The National Center for Education Statistics (NCES), the national research and development centers, and the regional educational laboratories have the institutional capability and responsibility for stepped-up efforts in providing useful and usable forms of such knowledge-based syntheses for all stakeholders of reform.

Development of design and implementation guidelines for effective Title I programs, including systemic and targeted professional development as a part of a comprehensive marketing plan for effective utilization of knowledge-based models of effective practices. Local schools are the marketing targets for knowledge-based models of innovation. Individual schools need information on program implementation requirements and effects in order to make informed decisions in serving their own site-specific, unique needs and to meet the expectation for site-based change and local control.

In addition to the need to develop a comprehensive plan for effective "marketing" of the improved models of implementation and accountability for student success, an important next-step task is the development of policy and implementation guidelines by state agencies and local schools that are aligned with the legislative intent of Title I and the improvement needs of the local sites. This next-step development task must be at the core of reform efforts in general and Title I implementation in particular.

Provision of sustained site-based professional development and technical assistance supported by state and federal agencies. Systemic reforms such as Title I schoolwide projects require sustained and targeted support for professional development and site-based technical assistance. State and federal departments of education need to develop the capacity for providing such strategic supports to ensure timely and effective implementation. This capacity-building role is a strategic priority in ensuring that guidelines for effective implementation of Title I and other federal and state-supported initiatives are adequate, and systemic evaluation and accountability for student outcomes are enforced.

An increase in public dialogue and engagement in the reform process at national and local levels. Scaling up of reform efforts cannot be successful without broad-based involvement of reform stakeholders and the public. Forging a coordinated and aggressive dialogue for public "buy-in" is an imperative step in harnessing resources and expertise in the scaling-up process. Targeted information dissemination and mobilizing public support and assistance in the reform process are key strategies for increasing buy-in, active involvement, and broad-based ownership.

Concluding Remarks

Through an intensive two days of working together, the conferees were able to share their respective perspectives and experience working on Title I and related school improvement efforts, and they were informed on the design and findings from a wide range of innovative models and approaches to the delivery of Title I services. Conferees discussed the causes of some of the seemingly insurmountable barriers to improvement and strategies for overcoming them.

In addressing these barriers, the centrality of collaboration was emphasized—ensuring that changes, be they professional development at a school

or district level reorganization, or federal accountability system initiatives—are codesigned and shared by all partners. Another must, which was viewed as the singularly most important reform agenda, is that assessment and evaluation must stem from the belief that all students can learn and that schools must be held accountable to a high standard of achievement for every student.

Finally, there was a strong consensus that regularly scheduled regional and national working conferences for shared learning and networking among Title I service providers is critical to achieving a high degree of implementation of the Title I mandates. Opportunity to learn standards needs to be applied to professional development of Title I service providers as well as the students they serve.

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