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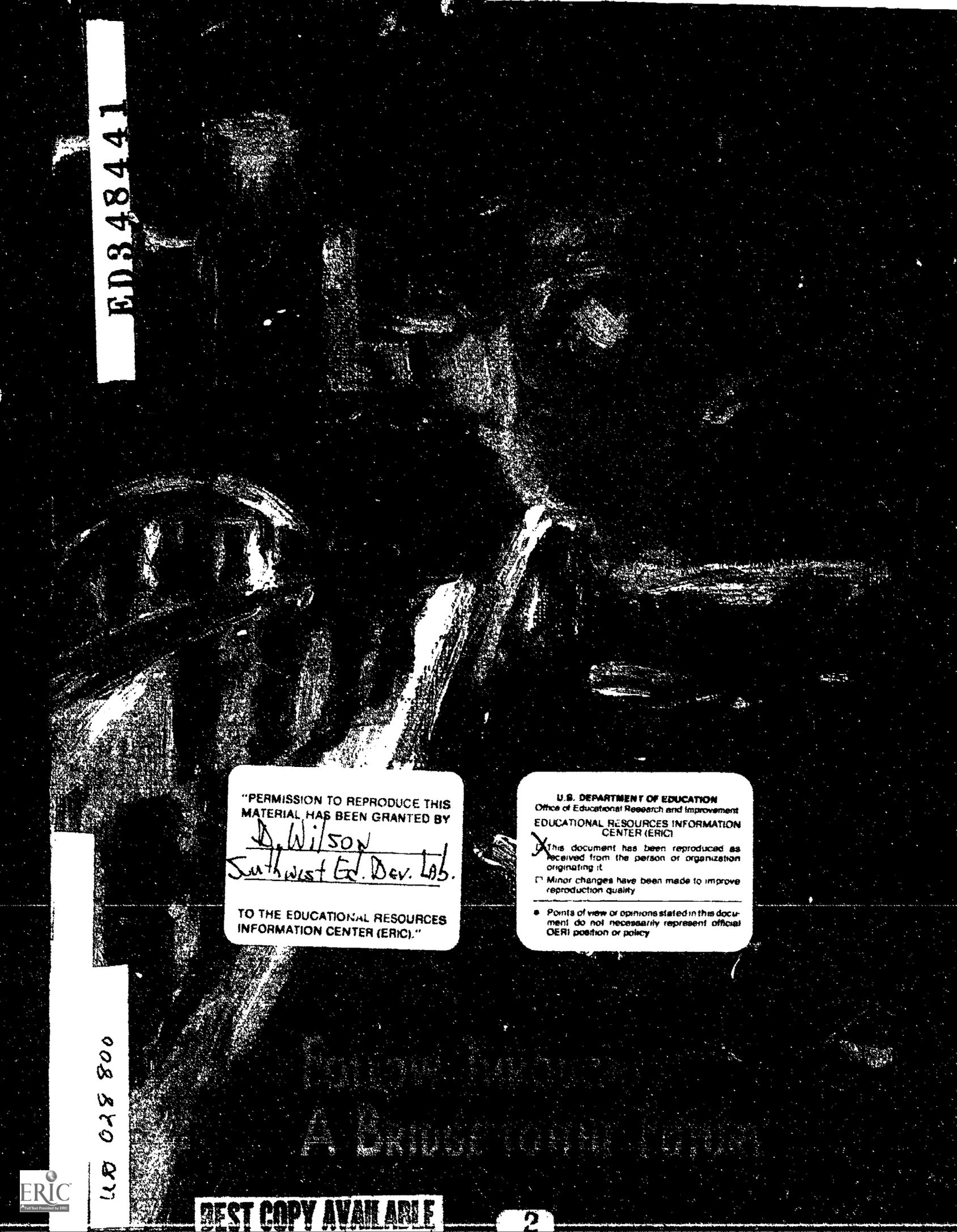
ABSTRACT

This publication presents approaches to early childhood education conceived in universities and other educational institutions and implemented in schools under the Follow Through Program, a national school improvement effort offering low-income children comprehensive educational and social services. The following papers are provided: "Foreword: A Bridge for All To Cross Over"; "Catching the Spirit of an Era: A Glance Back at Follow Through's Beginnings"; "Reaching Home: Follow Through's Cultural Linguistic Approach Builds a Legacy of Inner City Family Empowerment"; "Classic Piagetian Theory: The University of Georgia at Athens Maps Developmental Courses of Learning"; "The SEDL (Southwest Educational Development Lab) Language Development Approach: Strengthening the Language of the Child"; "As Boulder's Education Seismograph, INREAL (Inter-Reactive Learning) Combines Proven Practices for Bilingual/Bicultural Success"; "Direct Instruction Model Pragmatics Strengthen the Teacher-Learner Bond with Every Step"; "The Interdependent Learning Model: Teaching and Learning from the Games Children Play"; "IRI's (Illinois Renewal Institute's) Cooperative Learning Model/Project Extend Converts the 'Me' Classrooms of Today into the 'We' Classrooms of Tomorrow"; "High/Scope: Foundation for a Lifetime of Learning"; "Adaptive Learning Environments Model Adjusts the School to the Child and the Training to the Teacher"; "The Effective Schools Approach: Building Blocks to the Future--One Child at a Time"; "COGNET (Cognitive Enrichment Network): Mediating the Learning Network"; "Bank Street's Developmental-Interaction Approach: Fostering Respect for Each Child's Potential"; "The TEEM Fit: Tucson Early Education Model Individualizes Children's Learning"; "The Washington Research Institute School Effectiveness Follow Through Model: Research-Based Classroom Practices for Effective Teaching"; "The Environment as Textbook: Creative Curriculum Follow Through Model Promotes Active Learning and Supportive Classroom Settings to Nurture Children"; "Follow Through Model Key Features" (in tabular form); and "Effectiveness: Follow Through's Bottom Line." Included are a 60-item annotated bibliography of selected reading material and a folder of 15 brief descriptions of Follow Through models. (RLC)



Developed through

SEDL Follow Through Project

Betty J. Mace-Matluck, Project Director

Southwest Educational Development Laboratory
211 E. 7th Street
Austin, Texas 78701

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Follow Through: A Bridge to the Future

THE FOLLOW THROUGH PROGRAM IS a national school improvement initiative that has offered comprehensive educational and social services to children from low-income families since 1968. Initially in research settings, but primarily in school classrooms and communities, the program is a federally funded effort to extend and enhance the academic, social, familial, and health gains made by children who were previously enrolled in Head Start or similar preschool programs. The program *follows* such children from kindergarten *through* at least the third grade.

THE GOAL OF FOLLOW THROUGH IS to develop, apply, and disseminate knowledge about the various educational practices that can assist low-income children in reaching their full potentials. Because education has consistently proven an extraordinarily effective means for children from poor families to escape poverty, the Follow Through Program is particularly interested in studying, publicizing, and replicating the best ways of educating them.

TO ACHIEVE ITS GOAL, THE FOLLOW THROUGH PROGRAM OPERATES under a *planned variation* strategy. A number of different approaches to early childhood education conceived in universities and other educational agencies and institutions have been implemented in selected local schools. The creators of these approaches and models are called *sponsors*; the local projects are referred to as *sites*. Ultimately, all who are involved with the Follow Through Program are charged with improving the school and lifetime performance of children.

CONTRIBUTING WRITERS

Rosalind Alexander-Kasparik, Southwest Educational Development Laboratory

Betty J. Mace-Matluck, Cris Garza & Maria Torres, Language Development Approach (LDA)

Doug Carnine, Siegfried Engelmann & Judith Hurle, Direct Instruction Model (DI)

Diane Trister Dodge, Creative Curriculum Model (CCM)

Robert L. Egbert & Marijane E. England, University of Nebraska, Lincoln

Richard Feldman & Elizabeth Gilkeson, Developmental-Interaction Approach (DIA)

Harold Freeman, Jr., Interdependent Learning Model (ILM)

Katherine Greenberg, Cognitive Enrichment Network (COGNET)

Horace C. Hewn, University of Georgia at Athens Mathemagenic Activities Program (UGA)

Elizabeth Hoeblein & Mathew Morrison, Inter-Reactive Learning Model (INREAL)

Gary Johnson, School Effectiveness Model (SEM)

Beth Swartz, Cooperative Learning Model /Project Extend (CLM)

Naomi Millender, Cultural Linguistic Approach (CLA)

Alice S. Paul, Tucson Early Education Model (TEEM)

Eugene A. Ramp & Don Dorsey, Effective Schools Approach (ESA)

Margaret Wang & Jeff McLaughlin, Adaptive Learning Environments Model (ALEM)

Charles R. Wallgren, High/Scope Curriculum Model (High/Scope)

Cover painting by **Kari Kaplan**, Kaplan Illustrations, Austin, Texas
Design templates by **Laura Alexander**, Alexander Design, Austin, Texas
Production assistance by **Diane Paciocco**, Alexis Grafix, Austin, Texas

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WASHINGTON, D. C. 20202

Dear Colleague:

For some 25 years now, Follow Through has provided first-class models that show how to best serve low-income children during their first years in school. Building on preschool services provided to the children through Head Start and similar programs, Follow Through has moved the children successfully through the third grade.

Many of the Follow Through models are well known and used widely throughout the country. However, I believe that with the adoption of the national goals for education, and the role that Follow Through can play in achieving them, this sourcebook will introduce the models to those who are unaware of them. It will also serve as a helpful reminder of Follow Through's promise for those who have already heard of the program and its approaches.

In describing these models of early childhood education, the authors of *Follow Through: A Bridge to the Future* have done two things. First, they have provided valuable descriptive data about each of the approaches, as all sourcebooks should. But, in addition, they have included anecdotal and vignette material that conveys the flavor of each model. This will allow educators to see beyond the abstract and envision how each model will fit in a particular school. Education, after all, is not simply a day-long, mechanical process—it is an ongoing human one. This book portrays Follow Through in that light.

I am pleased with this work, and I congratulate those who contributed to it. I also heartily congratulate the many dedicated persons who have developed these models and put them into practice everyday in schools throughout the nation. I am certain you will find this book to be informative, useful, and interesting.

Sincerely,

Mary Jean LeTendre

Mary Jean LeTendre
Director
Compensatory Education Programs

CONTENTS

5

Foreword: A Bridge Built For All To Cross Over

When a handful of the nation's most experienced and committed early childhood educators gathered at Southwest Educational Development Laboratory (SEDL) during the last week of July, 1990 in Austin, Texas, they hoped to plan more than just another "to-be-shelved" academic treatise. Buoyed and agitated by national education goals that emphasized school preparedness, they saw this meeting and the task of preparing a book directly from National Follow Through's sources as a long-awaited opportunity. As administrators of Follow Through programs scattered nationwide, the educators could boast a steady trickle of grass-roots successes in diverse communities. Throughout National Follow Through's quarter-century of existence, these Follow Through project sponsors had witnessed some of their innovations—like teacher assistants in the classroom—become widely accepted school standards. But too many of their strategies for educating children in poverty had been ignored or discarded—only to be rediscovered and promoted to cutting-edge esteem a decade later.

Some of the Follow Through sponsors who came to Austin to outline the sourcebook were 20-year veterans; others had less than three years in the program to their credit. But all held a common belief: *Follow Through has consistently provided a reliable bridge to success for many youngsters who might have otherwise fallen prey to poverty, bigotry, and a myriad of ever-present social ills. Yet this same human bridge of hope remains one of the country's best kept educational secrets.*

The planners felt it imperative to get the word out. Follow Through can offer research-based, practice-proven ways to counter the educational disadvantage that constantly threatens to overtake America's future. And, since Follow Through has transformed itself from a multifaceted experimental set of blueprints for early childhood education to a bridge strong and expansive enough for all children to cross over, 1992 seems the perfect target year to spread the Program's wealth of accumulated wisdom.

With moods mirrored by the summer heat outside, the planning group envisioned a short, highly readable volume that drew on Follow Through's 25-year effort to fashion a footbridge to the future of early childhood education. The planners wanted the sourcebook to detail Follow Through's significance to Head Start, Even Start, the early childhood education community, Chapter 1 and migrant, and bilingual education. But the spirit of the Follow Through story, they decided, should be as hopeful and positive as the innumerable success stories each of them could readily recall. The invitation to cross over, they cautioned, had to reflect the trust of communities of families who count on Follow Through to make life better for their children.

The book must be a proud offering with respect for the humanity of Follow Through children, parents, educators, and policymakers. But most of all, the sourcebook had to reflect the value and potential of every child. In short, the planners saw this book as a way to make Follow Through *the* tangible, viable source for early childhood education norms in the years to come. As one educator in the group summarized the hopes of those gathered: "Anyone who picks up this book should want to run with it, rather than put it down. They'll see that here are programs that are successful with young children—very poor young children—and that these are strategies they can pick up and use."

Charting the way

Charged with finding and documenting the essence of the various Follow Through philosophies, approaches, and systematic delivery systems that continue to mean the difference between fulfilled lives and those that are cut short, two SEDL staff members traveled to a school site from each Follow Through model's roster. We interviewed the model sponsors—who in many cases were the model creators—and asked them to think of Follow Through as a canvas that had been

painted over the years, complete with experiments, restarts, corrections, and layers of fresh, bright ideas. We talked at length with administrators, teachers, and parents on-site who were all genuinely eager to share their recipes for success. If we began with trepidation at the broad and daunting task of chronicling some 25 years of committed struggle, we returned home sure of the hope and caring that marked every person in every Follow Through school we visited. Hugs became the sign of peaceable passage, and we were hugged by hundreds.

One reason for our good fortune was of course the path along which we were guided. It proved to be the route to both source and solution that we realized the planners had intended for us to chart. It was the bridge blueprint from which they hoped we would hang the stuff of the book. Since half the challenge involves gaining entry into communities and winning their commitment to give the program a chance, we should not have been surprised to find long-standing exemplary practices that have been tried and honed, have worked, but have too slowly seeped into schools outside Follow Through programs. We marveled at room arrangements that made reality of the most promising classroom management philosophies; home-school-community connections advocated by the most noted and eloquent educational theoreticians that had been in place for two decades or more; and a long, steady roll of students who had grown out of the ghetto and into careers as pragmatic engineers, socially conscious scientists, politically active artists, responsible journalists, and encouraging educators. They were remembered by teachers and parents in every Follow Through site as ordinary students from typical families living in working poor communities who had made it, had crossed over, despite the odds against them.

As we charted the way to the bridge and beyond, we also recognized the school leaders who continue to take chances, to grow, and to invest their considerable strength as education professionals in helping the children cross over on Follow Through's promise. We saw school administrators who had begun their education careers as the parents of Follow Through students, who had been shored up by Follow Through's emphasis on parent involvement, who had earned advanced academic degrees—one course at a time—and now understood the importance and potency of their power as educators and change agents in the schools. We watched them look with determination beyond the blighted streets outside the school windows at whole children who trudged happily to school. We saw children so engaged in the process of learning that they barely realized we were present as witnesses. We saw teachers and administrators—parents and community activists all—taking their roles as student advocates seriously. We saw the bridge that is Follow Through maintained as a shared joy and a shared challenge that earned the support of everyone who approached it with a tenacious belief in tomorrow. And we realized the importance of sharing their silvery wisdom—their insights to the future—with everyone we could ask, entice, or coerce into reading all about it.

Without exception the bridge exists. It's being built, added to, and maintained every day in every Follow Through school. The next step is to take the proven practices beyond the fewer than 100 funded sites and into each of America's kindergarten through third grade classes—and through high school. Educators who are committed to the school success of young children should learn by heart the way that this sourcebook charts.

A graduate student just beginning her career as a teacher may have summarized Follow Through's legacy best when she probed each face around a table of caring classroom professionals and articulated the truth she observed there. "It's difficult for anyone to say exactly what the future of Follow Through will be; but is there a future without Follow Through?" As the group silently processed her words, the answer crossing their faces was clearly unanimous. That answer is the source of every page that follows in this book.

Catching the Spirit of an Era

A glance back at Follow Through's beginnings

by Robert L. Egbert, Marijane E. England & Rosalind Alexander-Kasparik

The launching of the Head Start program was typical of the spirit of the era. . . . Those eager to find effective ways of improving the life chances of the poor felt that special preschool programs for deprived children would give them a head start, compensate for the vocabulary skills that middle-class children learned at home, and enable them to function more effectively as they moved through the public schools.

— from Rivlin and Timpane's *Planned Variation in Education*

By all accounts, the 1950s and '60s were decades of turmoil and promise. The 1954 Supreme Court decision in *Brown v. Board of Education* gave the Civil Rights Movement a popular legitimacy that it had not previously enjoyed. Certainly no one dreamed that the granddaughter of Mr. Brown would have to file suit again in 1990. When John F. Kennedy was elected president in 1960, his request, "Ask not what your country can do for you; ask what you can do for your country" articulated the idealism and egalitarianism of many. That idealism survived Kennedy's assassination and became the can-do cry of the War on Poverty led by President Lyndon Johnson as a domestic counterpart to the then developing international "conflict" in Vietnam. Declared on March 16, 1964, the domestic War on Poverty ushered in a number of new programs, including Head Start in 1965, and two years later, Follow Through. Head Start has continued to thrive. But Follow Through—though a highly viable, research-based strategy for early childhood education innovations—has almost disappeared as a federally funded program despite the fact that its instructional models and adoptive school sites continue to experience successes not shared by the majority of the nation's schools.

Those of us who were there when Follow Though was first conceived as a needed bridge to help poor children and their families cross the often unfriendly waters to prosperous adulthood have learned much in retrospect. Perhaps our hard-earned lessons can inform and prepare contemporary early childhood education program creators in the present era of educational reform and innovation.

Conceptional confusions threatened a Head Start of chaos

Virtually from the beginning Head Start was plagued by two conceptual confusions that became part of Follow Through's heritage. The first confusion lay in a definition's vagueness: *Was Head Start a community action program or a child development program?* The answer was rightly both depending upon who was consulted. The authors of the Economic Opportunity Act and the federal and local community action program administrators perceived it as the former; Head Start's designers defined it as the latter. That is, the program was planned and conducted by a combination of early childhood educators and health care professionals who, in 1965, were much more concerned with the child than they were with the community in which the child lived. They therefore focused the program on the developing child, and Follow Through, logically, followed their lead.

This confusion as to which was to be the primary focus—the child or the community—became evident when the Office of Economic Opportunity (OEO) insisted that local community action programs have a sign-off on Follow Through projects and that all Follow Through projects have policy advisory committees. These committees were expected to make important decisions in Follow Through projects, and some districts felt threat-

ened enough to refuse Follow Through funding because their school boards didn't want poor parents making such decisions. Thus the first confusion in Head Start's operating definition spawned related concerns that carried over to Follow Through.

The second misunderstanding that caused confusion for Head Start was also later inherited by Follow Through. Ironically, it too centered around a lack of agreement on focus: *Was Head Start to be a child development program or an early academic program?* Again the intent of the designers was clear: Head Start was to be a broadly conceived service program concerned with the child's physical health and abilities, emotional and social development, self-confidence and future learning efforts, and capacity to relate to others, while providing parallel opportunities for the family. Although Head Start was created with these goals, it continues in the minds of many to be a program intended primarily to advance children through early measures of academic progress. As Rivlin and Timpane note, the "head start" many educational idealists envisioned had to do with early acquisition of "vocabulary" and "middle-class" skills. And, it was partly this chaos-inducing multidirectionalism about the broad purposes of Head Start that resulted in the study that led to Follow Through being initiated.

The decision to follow through

The decision to request a Follow Through program resulted largely from a single report that was based on kindergarten data from four New York City schools. The authors of the report concluded that gains made by children on achievement measures in the first summer of Head Start disappeared during the ensuing school year. When they first reported their study findings at the annual meeting of the American Psychological Association in 1966, authors Wolff and Stein created considerable consternation among Head Start's many supporters. Burgeoning Head Start enrollment, early success indicators, and consultant predictions and reports all pointed to expanding and extending the program. Wolff and Stein's study flew in the face of all that. So, two months later, a commanding general in the War on Poverty, Sargent Shriver, responded to both the enthusiasm and the confounding report. "The readiness and receptivity they (the children) had gained in Head Start," he stated, "has been crushed by the broken promises of the first grade." To rectify the situation, Shriver called for a program to follow-up on Head Start children through the early elementary grades. In his State of the Union Message and again in his message on Children and Youth in the winter of 1967, President Johnson built on Shriver's response with a formal request for a Follow Through program. "Head Start occupies only part of a child's day and ends all too soon," the President argued. "He often returns home to conditions which breed despair. If these forces are not to engulf the child and wipe out the gains of Head Start, more is required." With these directives, Follow Through was begun to preserve and build on the gains that children made in Head Start. It's a mandate the program has consistently tried to retain.

Day 1: To "aid in the continuing development of children to their full potential," Congress authorizes Follow Through

Head Start and Follow Through were authorized to receive funds in 1967 under amendments to the Economic Opportunity Act of 1964. Paragraphs one and two of EOA—PL-88-452, Section 222—articulated the structure of what was to act as a bridge to early childhood education for a quarter century and counting:

> (1) A program to be known as "Project Head Start" focused upon children who have not reached the age of compulsory school attendance which (A) will provide comprehensive health, nutritional, education, social, and other services as the director finds will aid the children to attain their full

potential and (B) will provide for direct participation of parents of such children in development, conduct, and overall program direction at the local level. (2) A program to be known as "Follow Through" focused primarily upon children in kindergarten or elementary school who were previously enrolled in Head Start or similar programs and designed to provide comprehensive services and parent participation activities as described in paragraph (1), which the director finds will aid in the continuing development of children to their full potential.

President Johnson signed a Delegation of Authority for Follow Through on June 26, 1967 that authorized the Department of Health, Education, and Welfare (the E within DHEW subsequently became the U. S. Department of Education) to administer the Follow Through pilot program. By prearrangement, approximately 100 school districts were then invited to apply for 30 pilot project grants. The projects were intended to develop an experimental base for the large scale Follow Through effort anticipated for the 1968-69 school year.

Day 2: Budget reductions

In mid-October of 1967, it appeared that Follow Through would not be funded as anticipated at the $120 million mark. Later, it was announced that the most the program could expect for FY 1969 was $15 million. Since its creation, Follow Through's federal funding agencies had conceived of the program as a major operational effort corresponding to the size and magnitude of Project Head Start. In the first days of 1968, the realization that Follow Through would not have such operational funds produced haste and confusion. DHEW, OEO, and the U.S. Office of Education jointly decided that Follow Through should be a program to produce information about how to work more effectively with children from low-income families. The change from a full-scale service program to an experimental program was thought of as a temporary expediency. Virtually overnight, the shape of Follow Through had to be changed—along with the expectations of various, quite diverse constituent groups.

Model sponsor and model adopter strategy promotes uniformity

In order to provide a structure for projects and for consistency across them, Richard Snyder, a director of Follow Through's Research and Evaluation Section, conceived a *program model/program sponsor* strategy. This strategy required that each project site select from a set of pre-developed, pre-determined sponsored approaches or models. From there, each site would work with the program sponsor to implement, and further develop, the early childhood education approach or model at the school site. This arrangement of local projects working with program sponsors that they selected from an approved Follow Through list became known as "planned variation."

The next hurdle involved the innovative approaches funded by the National Follow Through Program. Despite the growing interest in early childhood education, and despite the extensive publicity given various new programs and theories, none were fully prepared to move into the primary grades with a completely developed, radically different approach to working with young children that the War on Poverty and the spirit of the era called for. A number of approaches seemed sufficiently well developed, however, with a secure institutional base to justify inclusion in Follow Through. Still, it was clear that Follow Through would have to support each model's continued program development at the same time sponsors worked on implementation strategies and helped communities begin Follow Through projects.

Because it quickly became obvious that certain sets of approaches or early childhood instructional models were derived from common theoretical bases, some time and thought were given to

forming consortia. But differences in program design as well as how the groups intended to train staff, disseminate best practice, and gauge their success resulted in each sponsoring institution remaining separate.

Follow Through's administration didn't view planned variation with its sponsor/site configuration as a classic experiment because it simply didn't meet the requirements of a conventional experiment. Communities were not randomly chosen and assigned to different sponsors. Nor were the school or the child randomly assigned to Follow Through. In the mid-1960s, researchers and program developers were reporting remarkable success with new approaches to working with children. It seemed likely that these approaches that had worked so well in controlled experiments would also succeed in Follow Through. So, as Follow Through's director then stated, the Follow Through contribution would be a research and development program in which there would be deliberate variation of program approach. He also envisioned deliberate variation in contrast to the sort of customization that normally occurs in a local community when it develops its own program.

The description of the sponsor's role that emerged in the early years of Follow Through was that (a) the sponsor had developed a promising approach to working with young children, (b) the approach had a theoretical basis, (c) the sponsor was willing to work with a number of communities in implementing the approach, (d) the sponsor had a supportive institutional base, and (e) the sponsor accepted mutual accountability with the local project for the program's implementation and success.

Program sponsors that became associated with Follow Through in 1968 and in succeeding years were in varying stages of program development. They ranged from the Bank Street College of Education approach, that had been developed and tested over a period of several decades, to a number of programs that were still in an early development phase and had scarcely been tried at all with school-aged children. However, each approach had been noted in the professional literature and several had received publicity in the popular press as exciting, highly successful approaches to working with young children. Few, if any, had programs ready to be installed and evaluated, but all had a well-described theoretical base, a partial program with a good notion of what a full program might be, good leadership, and strong institutional support.

Although the proposed program was Follow Through's primary focus in considering a potential sponsor, also of great importance was the sponsor's ability to work effectively with a set of local communities in the adaptation and implementation of the program. In order to be effective in transmitting a complex educational program, the Follow Through sponsor had to devise a delivery system which would both ensure that the program's intent was properly implemented and that adequate feedback for modification was encouraged. Thus, most sponsors proposed a central staff, prestart-up training, and continuous training and feedback. Some prescribed a specific, continuing liaison between sponsor and project site. Others placed greater emphasis on summer workshops and individualized training techniques. But a reasonable generalization about the founding Follow Through sponsors is that although their programs were not as fully developed as research reports and the popular press implied, their developmental capacity and willingness to tackle the tough process of implementation were promising.

Selecting sites, adding sponsors, controlling expansion, retrenching

From approximately 225 school districts nominated jointly by state educational agencies and economic opportunity offices, 51 new communities, in addition to the 40 1967-68 pilot projects, were invited to participate in Follow Through's Planned Variation program. Preference was given to com-

munities with high concentrations of poverty. In successive years, approximately 88 additional communities were brought into the program, and at its funding peak in 1970, Follow Through sponsors and projects were funded at the $70.3 million level. Wary of management problems that were inevitable with Follow Through's expansion, national program administrators worked to contain Follow Through's growth. By the early 1970s, the administration had established new priorities and sought ways of reducing ongoing programs to secure support for its priority projects. Beginning in 1973, attempts were made to reduce Follow Through funding and phase out the program.

The call to phase out was likely strengthened by the criticism, controversy, and fall out from the single misconception that may have splintered the idealistic spirit of the '60s more completely than any of Follow Through's previous confusions, miscommunications, and mid-stream shifts in direction and perspective. Some, though not all, of the evaluators of the national program maintained that if Follow Through was an experiment—however various in scope—then the most successful approach must be determined and replicated above, or instead of, other early childhood education models. Their reasoning, accompanied by narrow testing presumptions pitted experimenter against experimenter and curtailed the sharing, experimentation, and innovation that had theretofore propelled the effort forward.

Follow Through's troublesome dilemma—the Planned Variation Experiment—creates winners and losers in "horse race" evaluation

> *It must be reemphasized that the "planned variation" design of the Follow Through program by no means approximates . . . a controlled experiment. Hence, it will be particularly important that we obtain measures, not only of the educational and developmental accomplishments of the children and their families, but also of the process which each community has succeeded in putting into effect. The types of information needed for these assessments . . . are essential for future Program guidance.*
>
> -- National Follow Through Budget Justification Memorandum, Feb. 19, 1968.

The absence of the randomness factor that legitimizes experiments was understood and accepted by all Follow Through participants from the start. It was based on the following reasoning: Assigning students randomly would have required a degree of inter-school and inter-district coordination and transportation that was politically impossible in 1968, especially given the constraints within which Follow Through operated. The evaluation of the National Follow Through Program, its models, their implementation, and effectiveness has been the subject of numerous reports and critiques. The most commonly noted evaluation problem—the non-experimental aspects of the planned variation program—was recognized early enough for special accommodations in the evaluation process to be anticipated and placed, as evidenced in the memo excerpt above. In March of 1968, DHEW and OEO staff similarly agreed that the two stages of program development should also be respected in the evaluation process. Adequate time for model implementation, they insisted, was necessary before student outcomes could be accurately determined. Three organizations later submitted proposals to conduct Follow Through's evaluation, and the task was given to Stanford Research Institute, a well-established organization whose proposal contained the most discussion of issues and problems. Although most of the publicity surrounding the Follow Through evaluation concentrates on child outcomes as measured by off-the-shelf tests of achievement and non-achievement, program administrators made serious attempts to provide context to the child outcome measures and to extend and improve them. As a key post in the War on Poverty, Follow Through

was vitally interested in institutional changes that affected schools and families as well as individual children. Although primary attention was always given in evaluation efforts to the school achievement gains of Follow Through children, Follow Through's programmatic evaluators geared their efforts to document various kinds of institutional change that would logically accompany the achievement gains. But the evaluations that were most cited and thus deemed more critical noted that Follow Though models that emphasized basic skills produced better results on standardized tests. But no type of model was cited as more successful than any other in raising scores on cognitive conceptual tests.

Perhaps of more fundamental importance was the fact that none of the evaluation efforts concentrated specifically on the achievement of *poor* children as a group with distinct needs. For all their concentration on individual achievement gains, none of the evaluations then undertaken produced convincing evidence that Follow Through in itself was an effective approach for raising the achievement scores of economically disadvantaged children in particular. In short, none of the evaluators addressed the dilemma Follow Through faced at its funding peak. It was the dilemma of a program too large, too complex, and too far-reaching to "evaluate" with a single, simple design and set of measures. Yet, the times demanded that such an evaluation be attempted. Differences in evaluative points hardly produced winners and losers in the face of this larger issue, save as an argument for further, more comprehensive studies of Follow Through's effectiveness.

Eventually, to offset the results of the "horse race," individual models did conduct follow-up studies on their graduates which provided a mosaic of useful information on grade-level retention, special education assignment, attendance or dropout, and school achievement of selected former Follow Through students. The follow-up study findings *do* suggest that systematically planned and conducted longitudinal studies could capture the intent of the original War on Poverty chroniclers. Ultimately, no national follow-up study was undertaken because, some sponsors argued, analysis based on data gathered at the end of the third grade would be inconclusive at best and could lead to misleading conclusions.

Follow Through's legacy of resilience

As Rivlin and Timpane note, Head Start and Follow Through were "launched" in the late 1960s with "high hopes . . . and somewhat conflicting objectives." Both programs were founded on the belief that children in poverty could lead successful, happy lives if they had early and continuing education and support services. Although changes in perspective, politics, and practice have tempered the hue of that bright belief, it persists—as do both Follow Through and Head Start. Both programs have much to teach early childhood educators. Given Follow Through's legacy of promise, confusions, shadowed hope, and tenacity, the program has at least as much to teach as its slightly older sibling program.

In 1992, Follow Through celebrates 25 years of "developing children to their full potential." The models are leaner, the competitions for an opportunity to meet the challenge fiercer, and the former warriors against poverty are seasoned realists. These Follow Through educators have survival skills to share that may help those who now seek to save a growing nation of children who have been declared at risk of failing. They are children in danger of never making it to, or across, the bridge to success that has been and still is Follow Through.

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* *Robert L. Egbert is a former National Follow Through director. He and Marijane E. England are at The University of Nebraska, Lincoln.*

Follow Through

Sponsored Models

and Sites

Early childhood education with a common purpose from uncommon, independent means

The underlying assumption was always that we could find a number of effective ways of educating low income children and their families . . . When we talk about effective schools, we talk about schools that have vision, a Follow Through vision, if you will. We share the notion that the school can become a locus of advocacy for children.

—Richard Feldman, Follow Through Director, Bank Street College

From the start, Follow Through sponsors worked at the cutting edge of education in developing their models. Put simply, to sponsor and present a Follow Through model to the educators of largely poor, minority children, model sponsors were required to articulate their planned educational approach, foundation, and/or innovation, and to be able to make it work in the school building, the classroom, and at home. In addition, the sponsors were required to provide blueprints for involving parents in the education of their children, and a structure for staff training and development for those who would implement the model on-site. A means of connecting students and their families with needed health care and other human support services is also an essential element that Follow Through sponsors have been charged with addressing since the program's inception. And finally, each sponsor must document their model's impact on the lives of the children it serves, their families, and ultimately their communities.

These common purposes upon which the Follow Through sponsors are encouraged to found their efforts have provided a resilient springboard for implementing an array of early childhood education programs that represent a national spectrum of thought. Over the years, the sponsors held onto the distinctive features in their models as strengths, but revised, reevaluated, and refurbished their original notions with new research, new methods, and new approaches. Occasionally, new sponsors joined Follow Through and provided alternative perspectives enriched by the wisdom of the veteran sponsors. Through frequent communication and collaboration, sponsors and school staff retain impressive differences in their education approaches while combining efforts to solve the problems that are common to all sponsors.

Now, at 25, Follow Through is a mature collection of 15 early education approaches making a difference in the lives of children, families, communities, and educators from coast to coast. Grown up, tried, and proven, these models provide early childhood education with several proven options that not only work but work well. Here's how.

Reaching Home: Follow Through's Cultural Linguistic Approach builds a legacy of inner city family empowerment

I like to think we're following ancient African teachings in that education is a process of drawing out what is already there and organizing it to meet the need at hand.

— Naomi Millender, Cultural Linguistic Approach Follow Through Director

Travel to Chicago's South Side, down Lakeshore Drive, to the corner of 42nd Street and St. Lawrence. There, in Fuller School's well-maintained, red brick building, sealed from the harsh climate and the harsher man-made elements that detract from learning, is the home of Follow Through's Cultural Linguistic Approach (CLA) demonstration site. Although urban varieties of poverty, illiteracy, and homelessness are too close for complacency, they can do little to dampen Fuller's bright interior, papered with children's work and peopled with caring parents and educators. These parents and teachers, contrary to popular myth, don't move out of this inner city community upon moving up, nor are they likely to remove their children from the CLA Follow Through Program even if the family must relocate. The empowering process that many of them attribute to Follow Through's presence at Fuller nurtures a sense of school ownership that few are prepared to relinquish in the name of social status or upward mobility. In choosing to stay, these community members continue building the school's strong, nurturing, close-knit family of children, parents, and teachers who are intent upon achieving an unparalleled standard of excellence even though—or perhaps, because—their school stands in the heart of what many Chicagoans feel is the "roughest part" of the city's ghetto.

Indeed, this African American community's conviction may demonstrate that the best road forward is paved with cultural traditions that have sustained minorities for centuries. "CLA specializes in educating children who come from excluded ethnic groups," explains model director Naomi Millender. "It's important to understand that not just the child is a product of that exclusion, but the child's parents, grandparents, and entire extended family. Since these children more than others receive very negative press in the mainstream, we try to show them pictures and images of themselves doing powerful, positive, respectful and important things in life."

While no one at Fuller School ignores the reality that poverty can and does create vicious and often cyclic disadvantage, Millender and her colleagues *do* argue that such social woes needn't also paralyze an entire community. "In our approach we don't penalize children for who they are or where they came from," says Millender. "Since all people have a culture, every child comes to school with values, behaviors, and attitudes that can be used in a positive way in the classroom. CLA simply draws on that culture as the basis for acquisition of skills," she explains.

It might be easier for critics of the ethnocentric philosophies on which the Cultural Linguistic Approach is founded to dismiss the model if its students had not consistently and continually done so well. Although the practices in the Follow Through demonstration site have spilled over into the control group of students, Follow Through students at Fuller, who enter kindergarten with below average grade-level skills as measured by the Iowa Test of Basic Skills, dramatically exceed the City and National averages by third grade. In a word, CLA's method of teaching to the educational needs of traditionally-excluded minorities is working, and its results cannot be ignored. More than 80 percent of the students who leave Follow Through in Fuller's third grade enter school leadership positions. "Their parents and teachers tell us that they're on student councils, winning writing contests, or they're tops in city-wide this, and community-wide that," says Millender. When a local foundation selected nine promising middle

school students to sponsor through college if the students retained their high averages, all nine of the selected students had gone through one of the CLA Follow Through schools. "They were all our kids," Millender proudly reports.

The lifeline: Culturally appropriate instruction and curriculum

> *The Cultural Linguistic Approach enhances the self-esteem of children because it is an oral language program that builds on the patterns of thought and the educational gains already achieved in the home language. Children learn through exposure and discovery; problem-solving; and the life, history, and experiences of their cultural group and those of other excluded minorities.*
>
> — Nancy L. Arnez, CLA Co-founder, Howard University

The Cultural Linguistic Approach was founded by Dr. Grace Holt, Mrs. Clara Holton, and Dr. Nancy Arnez at Northeastern Illinois University's Center for Inner City Studies in 1969. In the 1970s, the Cultural Linguistic Approach staff created a teaching/learning paradigm commonly referred to by the acronym USISPU. The paradigm and all curriculum materials which extend and explain USISPU and CLA were developed in the mid-1970s by CLA Follow Through staff after the founders had gone on to other careers. The approach taps students' oral and experiential backgrounds to advance their language and academic strengths. Verbal achievement is further ensured by teacher use of culturally familiar notions with which the child can identify. As a teaching paradigm, USISPU insists that teachers use innovative methods of getting each child to associate something in his or her culture with whatever new concept is being conveyed in the lesson. "If a teacher introduced, for example, the image of a meadow," explains 20-year CLA Follow Through veteran consultant Berlina Baker, "the class might wrestle with the term's meaning until a student can associate it with a more familiar image or set of images, and comment, 'Oh, okay, a meadow is like a vacant lot with grass on it.' Then the concept becomes clear to the entire class."

In the 1980s, a CLA curriculum team devised and made mandatory a "culturally responsive classroom environment" to motivate, nurture, and teach the children in CLA classrooms. The environment calls for interactive bulletin boards that not only display culturally specific facts but inspire discovery. The environment is typically rich with analyses, materials, and insights that the children have helped to create. 22-year veteran master teacher and Follow Through site trainer Bettye Turner adds, "The environment should have working and learning centers that children can't wait to enter, bright and colorful pictures that teach children, and anything that parent, teacher, student, and teaching assistant can devise that will help the children develop good self concepts."

Consultant Berlina Baker draws from a still deeper font: "The emotional climate in CLA classrooms is that of a family. We view each other as younger and older sister and brother peers," she says. "Parent, teacher, and student are all working in one accord." Such cooperative living enhances self-esteem which the model was created to induce.

At its most prolific point, CLA Follow Through sites could be found in 12 schools in three cities, impacting some 1,200 students annually. Most of the sites ultimately became self-sponsored projects once they had customized the approach to their own communities. With federal budget cuts, several eventually lost Follow Through funding, but the model enjoys a range of impact beyond that of Follow Through sponsorship due in part to its ethnocentric focus. "The Alternative Schools Network and the Black Independent School movements in the 1970s and the 1990s have discovered us and rediscovered us," reports Millender. She also recalls that Afrocentric education advocates like Asa Hilliard routinely attended the model's early

workshops, and reports that the Afrocentric curriculum materials compiled by CLA are constantly requested by school districts investigating the incorporation of ethnocentric teaching methods in the nation's increasingly diverse classrooms. "We're constantly sold-out of our manuals," Millender notes, adding that the Cultural Linguistic Approach is the longest-lived, -tested, and most comprehensive compilation of Afrocentric curriculum materials across the basic subject areas that is available to early childhood educators today.

Although African American culture is central to Fuller, given the community's make-up, the Cultural Linguistic Approach was formulated to improve the academic achievement of children from any distinct, excluded culture—be it ethnic or class-based. The approach is designed to be just as easily adaptable to Hispanic, Native American, and Southern White Migrant American cultures as it is to the highly publicized Afrocentric cultural base in place at Fuller School. "Our first parent groups in Topeka, Kansas were, for that city, some of the first instances of parents and teachers from different racial groups working together for the children's sake," recalls Millender. "Blacks, Hispanics, Native Americans, and Appalachian whites who lived in different sections of town, met as parents and teacher aides and supported each other as such." Like her colleagues and the model's founders, Millender attributes CLA's flexibility to one of its primary outcomes—increased student and parental self-esteem.

CLA language and curriculum consultant Baker summarizes the model goal: "We're intent upon instilling this *I can* idea in the children. That's what all the images, and manuals, and field trips, and bulletin boards are for. It's also what the emphasis on culture hopes to drive home. Children in the program must see and feel that they can do whatever they put their minds to, and each child must be able to take that message off the wall and put it into his heart."

A family of parents form an inner city haven—and a powerbase for school reform

Follow Through has proven a good way to break the cycle of disadvantage. It's provided innovative equalization of opportunity through schooling for almost 22 years in this city, and the Chicago Board of Education has finally noticed that fact. Why, the whole notion of community people moving up through the system as volunteer parents in the classroom, teacher assistants, parent coordinators, and finally to the top of the city's educational hierarchy originated with Follow Through.

— Bettye Turner, CLA Master Teacher

Not only has CLA been able to bring young, inner city parents back into the educational fold, it has had decided impact on the educational governance of the city of Chicago. All six designated parent positions on Fuller's local school council—the city's new reform-mandated educational governing body—are held by Follow Through parents. Each of these parents was trained as a leader in the Follow Through program and continues to work with the school. With Chicago Public School reform in the national educational limelight, the road to power and choice through governance is, in Chicago's case, inextricably bound to the impact of Follow Through on inner city parent leaders who, more often than not, also became community leaders. "I'm always amazed at the parents' evolution in our program," says Millender. "Given a receptive environment, they simply thrive."

All Fuller parents, indoctrinated in CLA's parent involvement component, receive orientation in the classroom and annually attend a retreat. On any given day there are 25 to 30 parents in the Follow Through and non-Follow Through classrooms working with students as parent volunteers, peer tutors, and teacher assistants. When CLA administrators attend development workshops, they routinely ask two or three parents and one teacher to join them. "Not only do the teachers

offer workshops," notes parent volunteer Mary Dawson, "the parents lead workshops for other parents" and professional organizations on CLA's parent involvement component. Some parents receive a small stipend for their training of other parents, but it is not at all unusual for an individual parent to log 600 to 800 volunteer hours per year at Fuller. "I can envision a day when there are 50, 60, or 100 parents a day in the school, paid or unpaid," predicts alderman candidate and local school Parent Advisory Committee (PAC) president, Ron Sistrunk. "It's phenomenal to have that many parents involved and believing in school leadership that they want to continue." He credits Fuller's "open arms" for his own involvement and claims that the nurturing association encourages him and other parents to develop themselves as professionals. "And when you empower yourself, the first benefactor is going to be your child," he says. "Everybody blossoms; everybody grows. When you want to feel good about education, you come to a school like Fuller. This Follow Through model gives parents a sense of ownership and belonging as it empowers them."

As a Follow Through parent volunteer and later PAC Chair at Price School (a former CLA Follow Through School), Sistrunk is the new executive director of the Chicago City-wide Coalition for School Reform. He looks forward to the day when CLA Follow Through is federated city-wide in Chicago, because, he says, "it's one of very few programs that will work for every school in the city system."

CLA's success with parents is intertwined with its staff development philosophy in a manner one parent described as "a partnership with the teacher and the school staff." Teachers and paraprofessionals are trained to incorporate various learning styles into the prescribed culturally and linguistically appropriate curriculum materials provided by the model sponsor. Classroom management also relies upon the model's teaching of functional ethnicity and associations that provide the model's instructional foundation. Teachers are evaluated four times per year during which the CLA trainer completes a model implementation checklist to ensure that the goals of CLA are being realized in each classroom.

To that end, CLA Follow Through simultaneously reinforces its commitment to culture-based staff development and parent power by hiring parents as staff members whenever possible, and by helping them to secure GEDs with the aid of private foundation funds. Once the parents have graduate equivalency, CLA has arranged for five designated scholarships at Chicago State University. If parents are hired as teachers, they may choose to go to Northeastern Illinois University for additional training and course credits with foundation funds.

Sisters' keepers; brothers' reapers

> *When we say the family approach, we mean if you're a junior high school student, don't forget where you came from. Go down and read to the kindergarten. Children's role models don't have to be out of books or out-of-reach celebrities. They can be down the hall, right at hand.*
>
> — Bettye Turner, Master Teacher, CLA

Like so many current Fuller parents and teachers, Rev. Joseph Brown, Sr. built his home in this neighborhood and watched it change from the bustling center of black Chicago and childhood home of Pulitzer Prize-winning poet Gwendolyn Brooks to an all but forgotten inner city under siege. For decades as a community resident and leader, Rev. Brown watched his wife, Alma, fight for Follow Through at Fuller School. In 1987, Rev. Brown passed the school often and finally felt compelled to re-enter as a volunteer in whatever capacity was needed. He noticed the children had no music teacher. So he played the piano for the elementary grades and worked in the CLA Resource Room for a few years until there was money to hire a music teacher. He then filled other needed roles at the school, not the

least of which was that of an important, positive, and accessible male role model for the school's young black males. "It seems that seeing a male image around often helps them get themselves together," notes Rev. Brown. "I see better self-discipline and witness whole attitude changes. If my being here can be that affirmative, I'll gladly keep coming," he says. But Bettye Turner sees more in the Reverend's continued presence at the school than its effect on discipline: "Rev. Brown just walked in on his own," she recalls. "We didn't need to send for him. He's proof positive of the parent and community ownership Follow Through has fostered in this community for years."

At Fuller School, second and third generations of parents and teachers who were born and raised in the community and remain actively involved in CLA Follow Through are the rule rather than the exception. If their children *do* move out of the district while enrolled in Follow Through grades, they nevertheless choose to continue attending Fuller School. By the same token, many graduates of Follow Through who are now parents choose to enroll their children in magnet schools or academies, when they can, because the high standards are like those at Fuller. That reality taps into a CLA philosophical tenet that reinforces the ancient cultural norm that each individual is part of a greater whole—that human beings must be able to live for one another in order to survive. Because parents and students are 100 percent involved in and retain ownership of the CLA, assisting parents is a principal portion of the CLA's mission. The symbiosis has inspired a number of innovations that directly benefit parents and their children. For example, last year Millender, Baker, and CLA innovators began sponsoring a daily parent literacy and "life skills attainment" program at Fuller with funds from the Borg-Warner Foundation, Inc. The program is augmented by a monthly parent-edited newsletter, an annual parent retreat, and bi-weekly inservices to increase parental skills in working with students in the classroom and at home. More highly trained parents give their own workshops to new parents on computer literacy, sewing, and parenting skills. The value of the parent literacy program in particular and other efforts by parents to help themselves by helping each other, can also be much more individualistic and personal than the recitation of lists of benefits to the group. "At around 7:30 this morning," recounts Millender, "the CLA intervention teacher, Judith Riggins, who's working with the literacy program brought in a parent. I'd seen this particular young mother in the building, but I had no idea she couldn't read. Our intervention teacher asked the parent to demonstrate what she'd learned thus far in the program, and the parent shyly opened her Sullivan pre-reader and started struggling through one word at a time."

What reinforces CLA's commitment to culture and language, according to the model director, is again more method than result. "The parent had the option of working with the intervention teacher before school hours because that teacher had been trained to understand and respond to the fact that this parent needed anonymity to make the start and stick with the literacy program. The teacher knew it was important to go the extra mile so that this parent could be brought into the fold and helped to believe that she too could learn."

Master teacher and site trainer Bettye Turner recalls that Fuller's parents helped one homeless child's single mother find a place for the family to live. One parent copied a list from the public library of agencies that were available to help. Other parents helped the mother write first one letter, and then another until the social service bureaucracy responded. "They sat her down and said 'Look, girl, you're not aggressive enough, don't take *no* for an answer,' " recalls parent volunteer Mary Dawson. "They taught her how to address and mail the letter, and then how to be persistent in following through." CLA's administrators say the parent room, complete with parent-donated kitchen appliances and a sewing machine, functions

as a resource and information center for parents who have come to rely on the support of concerned peers. "People from the community know they can come in here and get whatever they need, or some help with it," explains Baker. "We don't have a staff member devoted to social service problems, since the district has made itself officially responsible for those concerns, but we work at making the resources available and the procedures known."

As Patricia Carpenter, an experienced parent classroom volunteer who admits to having entered the Fuller family with the worst attitude imaginable, says, "I found out that being part of what's going on makes a difference. The kids draw me pictures, tell me they love me when I come in, speak to me, and hold my hand—and that's rewarding! I have three daughters at Fuller who feel that because I'm here, they're improving. So I'm doing more here than just volunteering. Besides, my children tell me everyday, 'Mama, I want to graduate from this school,' and I'm too glad they've made up their minds that that's what they want, to do anything but stand behind them."

A praise stick for every classroom, an "I can" can on every desk

I know I can, I know I must, I know I will.
If it is to be, it is up to me.

—Fuller CLA Follow Through motto

CLA's innovators have always championed increased self-esteem to offset the alienation and bad press afforded children, families, and communities from racial and ethnic minority groups. So Millender and Baker are particularly proud of the infiltration of Africa-inspired praise sticks in Fuller's Follow Through classrooms. Introduced as a way of harnessing the children's superior facility for language, the colorfully painted sticks of unusually shaped wood branches are working to eliminate negative verbal fights between children while fostering the poetic lyricism endemic to African American culture. "Some people call it shooting the dozens," explains Baker of the generations-old rhyming tradition in black communities around the world. "We found that while our children generally like each other, they have a tendency to tease. The children said clever things about one another that were more often than not negative in tone if not in content. Our challenge was to get them to say clever things in praise and support of one another, to get them to see themselves as very special." The praise sticks are placed on a central surface in the classroom. Teachers praise the students for noteworthy accomplishments by placing the sticks over their heads and publicly announcing the fact, in rhyme. Thus praised, the student may then choose to hold the stick over another student's head and offer praise in a like manner.

Also in keeping with the CLA family motto at Fuller, Baker and Millender introduced painted cans filled with esteem-building cards of tangible and intangible possibilities from which students may draw at their leisure. The only requirement is that the student find a way to do whatever the card says is possible. Again, brightly colored and inviting, the "I can" cans complement CLA's philosophical emphasis on the power of creativity. As Turner explains, "We train the parents to encourage their children, to tell them 'Don't say you can't. You know you can do this, so try. Do the very best that you can.' "

CLA teachers are also routinely reminded to remove limiting notions from their own dialogues with the children. Explains Millender: "Immediately after new teachers in a recent workshop at the University said they could do anything they set their minds to, I asked them, 'How many of you can leave here right now and fly down to the South Side?' There was not one raised hand. They didn't think, well maybe I could catch a helicopter and get there. We work constantly to remove such traces of limiting thought from CLA's Follow Through classrooms."

Classic Piagetian Theory: The University of Georgia at Athens maps developmental courses of learning

The goal of our program is for each Follow Through child to experience optimal success based on individual potential. Follow Through needs to touch Head Start, it needs to touch Chapter 1 and say, "Here, take what we've learned; do with it." Ours is a powerful network that's working for young children. We're setting the groundwork for them to become formal thinkers in middle school and beyond.

— Horace "Cy" Hawn, Director, University of Georgia at Athens Follow Through Project

Three principles based on Jean Piaget's educational philosophy guide the University of Georgia at Athens' Mathemagenic Activities Program (synonymously known as the UGA and MAP): 1) schools should match the level of classroom stimuli and instruction to the child's developmental level; 2) active learning is an essential component in early childhood education; and 3) personal self-regulation by children is the only truly developmental style of learning that nurtures their independence.

As Piaget noted, young children reach for learning when what they already know is inadequate to match the stimuli in their environment. This desired "mismatch" has for years provided the catalyst for the UGA/MAP program, which seeks to address each child's individual level of thought. The crux is, and has always been, knowing exactly at which level the child is presently functioning. To assist teachers in that assessment, the creators of the UGA/MAP model developed the Cognitive Development Assessment Instrument. Data obtained through use of the instrument supplement and reinforce standardized test data, student daily work records, and teacher observations. The mismatch theory contends that children can quite literally reach up and grasp new concepts by doing something they have never done before. "And that," says Follow Through Director Dr. Horace "Cy" Hawn, "is one of the most exciting things to watch in the UGA/MAP classroom."

Physical, mental, and manipulative activity in the classroom also undergirds the cognitive mismatch. Thus in UGA/MAP classrooms, says Dr. Hawn, you'll find any number of manipulable objects and learning centers. Entering a UGA/MAP classroom, one notices immediately the flexible room arrangement with a variety of interest centers stocked with learning tools of various sorts —children's books, math and science manipulatives, building blocks, and social studies learning aids like globes and maps. Some children are working in small groups exploring math concepts with sets of plastic counters, others are engrossed in the books they found and have begun to explore in an area prominently labeled *Reading Corner*. Still others, gathered in a small group around a teacher, are engaged in a discussion about a story they've just read together. And the last group is thoughtfully examining materials in other centers as they decide which they'll select to work with individually in any part of the room they choose.

But particularly noticeable in a UGA/MAP Follow Through classroom is the children's confidence in selecting the materials or activity with which they intend to work. "I'm not talking about a child retiring to a corner with his blocks or his book," says Dr. Hawn. "Children in the program select the person they want to study with and leave their seats at will to begin or complete a project they've begun."

The Piagetian principles are the heart of the UGA/MAP model. In conjunction with strong, classic parent involvement and staff development programs, they form a consistent route for children in UGA/MAP school sites in Mississippi, South Carolina, and Idaho to achieve at faster and more substantial rates than their non-Follow Through peers.

The UGA/MAP Parent Initiative

The current literature suggests that parents make a difference in their children's schooling. If you look at the number of sites that have emphasized parents, none has done more to fill up that literature than Follow Through.

—Horace "Cy" Hawn

UGA's commitment to parents aims to stimulate their interest in their children's education and to promote communication between parents, children, and the school. The model's parent program rests on a founding trilogy of involvement strategies: parent volunteers working in the classroom as tutors and teaching assistants; home-based education offered to both students and parents; and a strong parent presence in school policymaking.

Communities are of course made up of both adults and children, and while UGA's site at the 28th Street School in Gulfport, Mississippi schedules parent meetings every other Wednesday, some of the meetings are held in centrally located community buildings. Likewise, the parent coordinator schedules frequent home visits and keeps sets of home educational materials for parents to pick up.

The school's children see the neighborhood's commitment to their educational success through scores of encouraging visits and supportive acts. The Mayor of Gulfport, for example, came in to read to the children one afternoon. A Mississippi State Representative, a dentist, a bus driver, and the newspaper editor followed suit, but they were preceded by a janitor, a school board member, the school superintendent, and the PTA president. The children wrote letters to thank the adult readers for their time, and the adults in turn asked 28th Street School Follow Through Coordinator Barbara Thomas to schedule them for more readings. "They enjoy being role models," Principal Carolyn Rushing noted of the community leaders and parents.

Key to the UGA/MAP home-based education strategy is a parent coordinator whose job is to build UGA's prescribed reciprocal link between home and school. The coordinator provides for parent education at school so that, according to Dr. Hawn, "parents know what they can make of themselves with the help of the school." UGA/MAP's efforts to involve parents in policymaking are also structured to ensure that parents are empowered by possibility. "Parent empowerment in education is a piece of honesty that I think all schools must have," notes Dr. Hawn. "We communicate continually with the parents because only with good communications can parents know what's going on and contribute knowledgeably to the political structure of their schools and communities."

As a result of its commitment, UGA/MAP directly influenced the creation of Policy Advisory Committees in Gulfport's schools through its work with parents at each site. The district-level Policy Advisory Committee in Pocatello, Idaho is also founded on the UGA/MAP Follow Through parent involvement component.

Piagetian staff development

Ours is a highly individualized staff development program. With new teachers, we devote all staff development time to making sure they become adept UGA/MAP Follow Through teachers as soon as possible. But it's not a process that happens in a hurry. We're asking them to instruct in ways they haven't been taught in most teacher training institutions.

—Horace "Cy" Hawn

Because UGA/MAP sponsors don't pretend to know the exact needs of communities when they introduce the model, the sponsors prefer to train trainers from the community to work on-site with teachers. "We look for a resource teacher who is good at communicating who's aware of what we're trying to do, and is sold on the developmental notions of the model," says Dr. Hawn. "That way

we don't come in and say we're going to tell teachers we've never met what to do. They tell us what they want instead."

UGA's approach to staff development has been credited with improving the entire educational system as it enhances single classrooms and schools. Because the developmentally appropriate model relies heavily on student initiation of learning within a stimulating environment, teaching is actually more demanding on the staff. Once teachers acquire the ability to work with various developmental levels in the same class, most feel the techniques work too well to abandon. Many UGA/MAP Follow Through teachers, notes Dr. Hawn, "continue being Follow Through teachers wherever they go."

Staff development within the model is so thorough that becoming a strong and mature UGA/MAP Follow Through teacher usually requires two to three years. It follows that UGA/MAP has also won a reputation for training Follow Through teachers and administrators who move up and on to leadership positions in their school districts. The principal at Gulfport's 28th Street School is, for instance, a former Follow Through teacher. The school's local site coordinator was a Follow Through teacher for 10 years before she assumed her current role. And it is not at all unusual to find numbers of Follow Through parents and former teaching assistants who have naturally assumed the role of teacher once they have learned the UGA/MAP model.

Follow-up: Developing health care that takes care

Gulfport is home to a U.S. Navy base, but little other industry or commerce sustains the town of approximately 40,000. In the area served by Follow Through, double-digit unemployment and poverty are consequently more the norm than the exception. Many families whose children attend the 28th Street School live in adjacent housing projects and have little money for preventive or responsive health care. Although the UGA/MAP model provides indirectly for dental, health, nutrition, and social and psychological services, its requirement for a school nurse, whose salary is paid for with Follow Through funds, is a particularly crucial aspect for the Gulfport site. "A child cannot learn if he isn't healthy," explains Hawn. "Unless there is a nurse in the building, a sick child in the classroom means the teacher must deny the rest of the children in order to take care of the child who is ill." The Follow Through nurse also coordinates with community agencies to ensure that children with eyesight or hearing problems receive the care and corrective services they need. And, adds UGA/MAP Follow Through assistant director, Dr. Eleanor Todd, "the nurse has more time to follow up requests to agencies than a classroom teacher. We can alert the parent to the need and alert the agency that this child needs something. But if we don't have someone who continues to be concerned, who continues to follow up, then the need doesn't get met."

The SEDL Language Development Approach: Strengthening the language of the child

Our goal is to create a rich language environment where children can grow by using language—their language—as a tool for learning. We've designed our approach to serve children and their families who are non-native or non-standard English speakers: children who bring a wide variety of linguistic, ethnic, and cultural differences to schools that are often not prepared for them. Because these students are still expected to coexist and achieve in a multicultural and diverse society, we see their language as one of their strengths.

— Betty Mace-Matluck, Director, SEDL Language Development Approach to Follow Through

The rationale behind the Southwest Educational Development Laboratory (SEDL) Language Development Approach (LDA) is that language forms the core for both the strengths and the weaknesses of students. By design, the Approach creates a learning environment that promotes the growth of all who enter. While ascribing to the notion that language *is* thought, the LDA operates under the assumption that language is key to communication, as well as a carrier and expresser of culture. Working through and with English-as-a-second-language (ESL) and bilingual instruction programs, the Approach meets students where they live and helps them make the most of the language they use. SEDL's LDA bilingual mode is specifically designed for children with Spanish language backgrounds, while its ESL design assists limited English proficient students whose home language or dialect is not that of the school.

The Language Development Approach works to maximize the potential of all children in its Follow Through classrooms, while enhancing the ability of schools to meet the needs of language minority students from predominantly low income areas. Its major long-range goal is to provide students with developmentally appropriate curriculum and practices that build student skills, concepts values, attitudes, habits, and feelings needed to compete educationally in the classroom, and ultimately, in the adult world.

Twenty-year LDA Follow Through coordinator Cris Garza recalls, "SEDL became a forerunner in bilingual education when it developed some of the nation's first bilingual curriculum materials in the mid-1960s." SEDL adapted the curriculum to meet the needs of the field sites that were using the materials in their bilingual education programs. At that time, the non-profit educational corporation was able to provide the only bilingual curriculum then available in early childhood language development. Over the years, research has shown that many of the strategies used by SEDL's LDA are just plain good teaching strategies. Now mainstream teachers are beginning to use ESL/Bilingual strategies in the regular classroom.

While the SEDL LDA does not attempt to dictate district policy on the type of bilingual or ESL instruction children receive in sites that adopt the Approach, it does offer educators a philosophy that fosters individualized learning experiences. Research shows that children acquire language best through meaningful experiences, so the SEDL LDA built in provisions for integrating the language of the child into content areas traditionally disassociated from the study of English. Math and science lessons, for example, may be held in the language the child brings to the classroom or in English. "The strategy is that there's always a language objective as well as a content objective, and the teachers are trained to be aware of that as they design their lessons or their learning center activities," explains SEDL LDA Director Betty Mace-Matluck. "We teach teachers to be as aware of what the language requirements are as they are of the essential element of the curriculum to be learned. As a result, we're prepared to meet students wherever they are when they come to school and build from there," explains Mace-Matluck. "We

work on building the English vocabulary and structures they'll need to succeed in the fourth grade, but the main issue is to continue helping them develop their language—whether it is in Spanish, English—with an eye to what they'll need in the future."

Classroom management: Creating a place where kids can live and work

Conducive learning environments don't just happen by chance. Careful planning and management by instructional staff are essential if children are to grasp academic concepts while they are learning to speak the English they'll need. The creation of learning centers or small areas with specifically designated purposes is key to LDA's ideal, culturally sensitive, and language-rich environment. Follow Through teachers are trained and provided a reference guide—*Classroom Strategies*—to ensure effective use of the various centers and seating arrangements advocated by the LDA.

For example, SEDL Follow Through classrooms are equipped with moveable furniture—tables and chairs as opposed to fixed desks. An area of each room large enough to accommodate all of the children in the class is designated. The model encourages small groups of three-to-five children to work together, sharing tasks. They're encouraged—indeed expected—to talk to each other, referring to the materials on the table, offering information, discussing solutions, defending their choices, reaching consensus, learning cooperatively. Students may be paired over worksheets, talking back and forth, deciding on the best solution and committing it to the paper that lies between them. Bookcases also function as room dividers that border learning centers like the Reading Corner with its variety of books for individual reading. In the science center, a group of children may work on a task with weights and a scale. Their challenge is to explore which objects weigh more or less, using comparative adjectives such as "this is heavier than that" as they grasp the concept. A tape recorder and/or a language master with earphones are set up in another learning center complete with activity sheets to guide the students. Student work is proudly displayed on walls, ceilings, and bulletin boards.

"We set up the room in such a way that there are ample opportunities for student interaction with the teacher but also with other children," explains SEDL LDA Director Mace-Matluck. "When you walk into an LDA room, you're going to hear children's language, you'll see it on the walls, and realize that it reflects the interests of the children because interest stimulates conversation."

Developing linguistically flexible, creative, and sensitive staff

> *Teachers line up and ask to be involved in the Follow Through program because they appreciate the ongoing support that it offers. It's not just the money, but the staff development that teachers clamor for. The training becomes a you're-really-special affiliation. And when teachers want to work with a group of children who are on the lowest socio-economic and highest at-risk rungs, they need a climbing strategy that's easy to carry, but sure.*
>
> — Betty Mace-Matluck

To meet the objectives of the LDA, teachers are trained to make the most of three hallmark features: 1) creation of a learning environment that encourages children to develop and learn at their own rates through language; 2) use of research-based language learning and language teaching strategies; and 3) selection and use of relevant, interesting materials.

Under the LDA, the teacher is essentially a manager of the language learning experience. She is never a drill leader or a simple presenter of materials. The teacher's responsibility is to ensure sufficient exposure and opportunity for language development in the classroom. Follow

Through professionals strive to be sure the student receives and internalizes concepts. Because the development of thought processes is essential to learning, and coping in today's society goes hand-in-hand with language acquisition, LDA teachers are trained to create ways of communicating new concepts that can be understood and learned in *any* language. The same training applies to teaching analysis and problem solving.

LDA teachers are also trained to use language in a way that challenges students to go beyond their current understanding. To do this, Garza, Mace-Matluck, and the LDA staff at SEDL train educators to speak more slowly and enunciate clearly to allow students much-needed processing time. The Approach also teaches the importance of using repetitive vocabulary, less slang, and fewer idioms. The LDA trains teachers in concrete ways to get real messages across by using an abundance of visuals such as graphs, gestures, and pictorials. "We train our teachers to use language in a very creative way, to make sure that the real message gets across," claims Mace-Matluck. "We don't worry about the accuracy of the language that the child produces. Mismatches between the child's creation and the adult form will be corrected as the child grows in the second language."

Adds Garza: "We want the children to take risks in using English. We don't intimidate the child by saying, 'No, you don't say it that way, you say it this way,' because we want them to really express themselves, whether it's right or wrong in terms of grammar use, so that they're able to take risks even in writing. We want them to write any way they want to, any way they can."

But visual, aural, and tactile reminders are but a few ideas in a grab bag of language supports teachers may use to tap into diverse student understandings. LDA teachers are also trained to be sensitive to the child's culture while working with a variety of language experience activities and learning centers. "We look at the whole child's academic, cognitive, and affective needs, bringing familiar things to the child from his or her culture," notes Mace-Matluck. "A number of programs are comprehensive in some way, but SEDL's LDA specifically incorporates culture and language."

Continuous staff development from a consistent group of trainers is key to the Approach. An initial needs-sensing phase determines where the teachers are and where they want to be. From there, the LDA trainers customize resources for the teachers at each site. Thus the Approach allows for a variety of staff development delivery methods. "Typically, a professional is available on-site who is responsible for the day-to-day assistance of the teachers," explains Mace-Matluck. But the initial training of on-site trainers in Approach strategies is but a small part of the LDA's responsibility to staff on-site: "One of the roles of the sponsor is to continually infuse new and proven ideas from research into the model and its ongoing staff development," she maintains. "For example, a few years ago, the whole notion of cooperative learning came back into practice. While we have always advocated interactive groups in our Follow Through Approach in order to build the rich language environment that's so essential, we have as sponsors realized that cooperative learning is a very good strategy that research bears out for language minority children in particular. So we've incorporated that strategy into our teacher training. Likewise, whole language has come back on the scene, and again it fits beautifully with the notion of developing the language across the curriculum in writing, speaking, and reading."

SEDL's LDA boasts the usual impressive array of on-site paraprofessionals who have become school teachers, principals, and counselors. For example, the institution routinely relies on the educational acumen of Alan Morgan, a SEDL Board Member and current state Commissioner of Education in New Mexico, who was also once a Follow Through teacher. Mace-Matluck and Garza note that the effectiveness of their staff development is also integral to the success of the model.

Explains Mace-Matluck, "We try to look not only at the children's academic progress, but also growth of teachers and how they perceive their development."

Helping schools to work with families

We're finding out with Follow Through how to get parents into the school and just how good for everyone that can be.

— Polo Carrillo, LDA Site Parent Involvement Coordinator, Benavides, Texas

The custodian greets you and is polite to you because he's part of the school and not isolated from it. People welcome you to the school, and the signs in the building and on their faces are positive. In the classroom, the number of adults reflects the amount of parent involvement that's going on and their expressions say they're pleased with what the school has to give them. Everyone is ready to talk to you about the kids' growth and achievement: Parents stop you in the hallway and ask, "Are you going to visit so-and-so because that's where my child is." There's a lot of pride that feels very much like family.

— Cris Garza, SEDL LDA Coordinator

Like its student instruction and staff development philosophies, which draw on the notions of Jean Piaget and L.S. Vygotsky, the SEDL LDA parent involvement program is also best described as developmental. "In many cases, parents need to learn something about the school before they can really become involved in their children's educations," reports Mace-Matluck. "Immigrant parents and even parents with their first school-aged child don't know a whole lot about how schools work now." To build parental knowledge of the school culture, the SEDL Approach includes a school orientation program to help parents become familiar with the culture of the school: its rules, programs, curriculum, and the education their children are receiving. The program offers tours of the school site, providing the parents with an opportunity to visit and observe their children's classrooms. "Invariably, parents get interested in the school culture," says Mace-Matluck, "and sooner or later some emerge as well-prepared and willing co-decisionmakers, ready to offer their skills, talents, and time. At that point they become partners with the school."

Parent workshops are routinely sponsored at LDA sites in addition to the home activities program. Both encourage parents to make objects and gather materials for use in student learning. Parents explore various instructional uses for materials commonly found in any home. They're taught how to encourage study habits and help their children to acquire and use language—whether the parent speaks English proficiently or not. "Parents like to take things home to work with their kids, so we offer workshops in which they make games—one for the teacher and one to take home," notes Garza. "We find that once the parents take these games home or they tell a particular story using puppets, they feel very comfortable coming into the classroom, playing that particular game, or reading with groups of kids."

To make the most of such parent interest and confidence, Classroom and Instructional Volunteer Programs add two additional tiers to LDA parent involvement options. As Classroom Volunteers, parents are trained to do non-instructional tasks for the school, while remaining involved in the instruction of their children. As Instructional Volunteers, parents are trained to assist teachers and students with tasks in the classroom. Some LDA sites also have established Parent Rooms, and all have Parent Advisory Committees whose role is to make decisions and plan for school program improvement. "Being part of the school day is valuable in developing parents as partners," adds Mace-Matluck, "because as parents become familiar with the school, they send a message to children that school is important."

Typically, LDA sites employ a parent involvement coordinator or someone who works with school staff and with the community to involve parents in school life in a variety of ways. Parents who become Instructional Volunteers have had some experience with the school and contribute to the classroom by acting as an extension of the teacher. "The parent might be assigned to oversee the children's progress in a learning center for example—to make sure the children have what they need and guide those who need help," explains Garza.

During her two decades of training parents and teachers to effectively use the SEDL Language Development Approach, Garza reports that parents ask one question consistently and often: "How can I help my child if they're learning English and I don't speak English well?" One tip she has repeatedly shared with parents is to have students practice the two languages together. "I tell parents to have the children read the stories aloud in English and then have the children paraphrase the story or ask questions about it in Spanish. This, we tell them, increases the level of learning." Since some Follow Through parents in LDA sites are not fully literate, they also have the opportunity to learn from their children at home. Mace-Matluck adds that parents are also encouraged to help their children in the language the parent feels competent using. Children can learn a lot of math concepts, she points out, by accompanying their Spanish-speaking parent to the grocery store. "We advise parents they don't have to be English-speaking to help their children learn at school or to stimulate learning at home," she says, "because children acquire knowledge—and language—through experience."

Community involvement: Benavides' Thanksgiving in June; Tulare's turnaround

Central to the success of SEDL's 24-year-old Language Development Approach is its unfailing commitment to the community schools it adopts. Whether working with African American communities in Philadelphia, with Cajun communities in Louisiana, or Asian American communities in California, the LDA's innovators note that community involvement almost always accompanies parental interest in the program. As Mace-Matluck explains, "Follow Through becomes so intricately intertwined with the community that the culture of that community comes into the school and is recognized. The kids learn directly from and with each other, and as a consequence, culturally different groups of parents often became closer. The kids 'mesh,' and before long you see the parents getting along, slowly breaking down the barriers, and bridging the differences with understanding."

The community enthusiasm of Benavides—a small town of laborers and farmers in south Texas that is home to 2,000 souls and one elementary school—is particularly inspiring. That school's claim to fame is not only that more than three-quarters of the parents at the school are actively involved in their children's education, but that the school district elected to reciprocate and honor the parents. After being in Follow Through one year, the mayor declared the first city-wide Follow Through Day replete with a formal proclamation and dinner. Entertainers were hired, but the sense of community took on an added dimension when uniformed members of the police force and other public servants dropped by to reinforce their support of the school and its staff. It's a celebration that the district and the city intend to repeat each year.

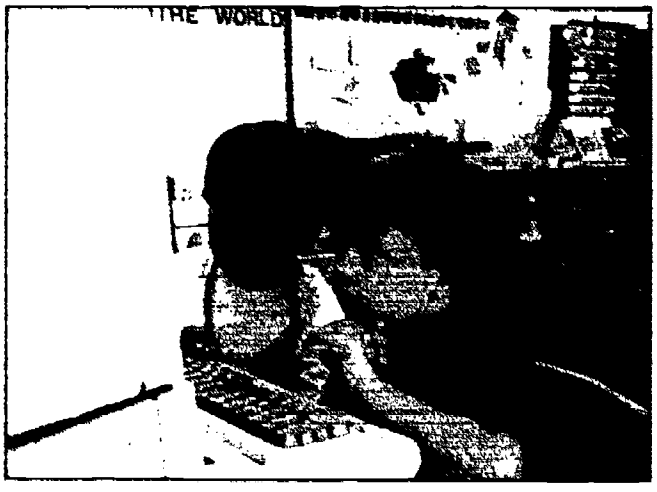
Since success so often builds upon itself, Benavides' increased community pride in its school attracted the attention of state policymakers and educators. "Because of Follow Through," reports Benavides superintendent Dr. Ramón Tanguma, "our school received the Governor's Award for Excellence in Education. The positive publicity associated with this award had a cyclical effect that continues to make

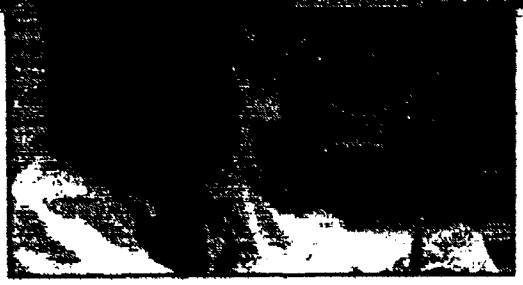
Follow Through children, happy children."

According to Benavides LDA on-site parent involvement coordinator, Polo Carrillo, parents have become so interested in the training, field trips, and the sharing that results from computer and parenting training that they've decided to link their Title VII program with Follow Through so that they'll have a place to put all the parents and community members who are clamoring to volunteer in the school. To be fair, Carrillo alphabetically schedules each of the parents on his ever-growing list of volunteers for at least two days in the classroom. Although a small stipend is offered some of the parents for their work in Follow Through classrooms, Carrillo reports many of the parents have told him they're glad to volunteer without the remittance. Since Benavides is a rural school, parents may use the money for transportation to the school or to hire babysitters for their children who are not yet in school.

Reports from Tanguma and Carrillo are reinforced by those of parents like classroom volunteer Beatrice Benavides. "I work with my son, Juan, at home using the joint homework assignments the teachers give me," she explains. "In coming to the school and into the classroom to help, I could see for myself where he was having trouble. So when we got home, we turned the TV off and worked on school problems. I felt good because I was able to be there for my child, and that made him feel good too."

From all indicators, the community's efforts and those of individual parents are paying off in the three-year-old Benavides LDA site in much the same way it has transformed the reputation of LDA's Lincoln School site in Tulare, California. As a continuous SEDL LDA site for nearly 24 years, the Tulare school has served as a Follow Through Resource Center and received a national educational stamp of approval through Joint Dissemination Review Panel (JDRP) certification, as have a number of other former SEDL LDA sites. But Garza, who was at Tulare when the LDA was being initiated into the school and community, has seen the town turn around and take another look at the school. "Lincoln School had a bad reputation in Tulare," she recalls. "When Lincoln's students enrolled in other schools, they'd hear 'Here come the Lincoln kids' with dread in the voices. There's still a little of that because you can't completely remove prejudice, but now teachers want to get the Follow Through students from Lincoln because they've found our Approach *enables* students. So Tulare's kids aren't just poor kids with problems anymore. They're poor kids who achieve."





As Boulder's education seismograph, INREAL combines proven practices for bilingual/bicultural success

Kids lead the way at INREAL. Adults watch, listen, and guide. The idea is that children learn more effectively when school is experienced, when learning is tangible and immediately meaningful to them.

— Elizabeth "Tikki" Heublein,
INREAL Director

At the Inter-Reactive Learning (INREAL) Follow Through model in Boulder, Colorado, conversation and communication define success in school and success in life. The model combines the best contemporary practice in early childhood education known to researchers with a healthy dose of common sense and respect for all learners—be they at home, at school, or in the world's increasingly bilingual/bicultural communities. It's a mix that balances the needs of the individual with those of the community that has been adopted by some 500 sites in 30 states and seven foreign countries during INREAL's 15 years of existence. INREAL's process—like the great slabs of sandstone which jut skyward from Boulder's mountains in testimony to the forces of change—is a phenomenon worth observing with the next century's cultural diversity in mind.

Distinctive to the INREAL model is its plan to implement research-based instructional practices shown to improve the school performance of low income bilingual and bicultural students and their families. As a Follow Through model, INREAL is currently funded and implemented at one sponsored site: Lafayette Elementary just outside Boulder, Colorado. A second dissemination site, University Hill Elementary (nicknamed Uni-Hill), is located in Boulder near the University of Colorado, home of INREAL director Elizabeth Heublein's national Outreach Education Center.

The Colorado sites are two of five in the area with large Southeast Asian immigrant and low-income Hispanic enrollments. "We based the model on what happens naturally in the best kind of language learning environment for children," Heublein recalls. "Supporting first language development to be able to support second language development is just common sense, so we concentrated on what happens between the child and the primary caretaker to create the best language learning milieu."

Heublein sees INREAL's goal as "distilling what naturally happens in the human learning environment" and infusing that essential element into an educational system committed to restructuring. From its inception, the model focused on serving the whole child—complete with cultural, familial, socioeconomic, and health concerns. "We're trying to look at serving children in a less segregated fashion," says Heublein. "We're looking at Follow Through as a whole school rather than a school within a school. We know that the premises on which Follow Through is built affect the system as a whole, and so we have to look at it as a system-wide process." INREAL's commitment to family and community empowerment feeds the current emphasis in Boulder on the soon-to-be-established community-supported Family Resource Centers. The model's demonstration school in Boulder's University Hill is the only existing Follow Through school with three teacher/facilitators instead of a principal, and where the two founding tenets of restructuring—site-based management and shared decision-making—are already in full flower.

Gauging student growth

We're interested in looking at self-esteem—perceived confidence as a learner—in both Spanish and English speaking students. We look at global self-esteem and social self-esteem in terms of acceptance, and we look at academic confidence and self-esteem in terms of how children perceive themselves as learners.

— Diane Coulter, INREAL Evaluator

Begun in 1974 by Dr. Rita Weiss, INREAL's language-based model is founded on the notion that language and communication are the form and the intent of education and learning. Conversation is the primary instructional mode upon which effective problem solving and creativity, intrinsic motivation and self-evaluated success, learner-initiated activity, cooperative learning, and increased academic learning time all hinge. In keeping with national trends toward performance-based assessment, INREAL began training teachers on portfolio evaluation at Uni-Hill School in the spring of 1991. But INREAL finds itself in the role of the nation's education seismograph in forecasting and looking beyond the trend's limitations: "We aim for child, parent, and teacher involvement in the portfolio assessment," says Heublein. "It's not just the teacher who gets to decide how well the student is performing, it's the whole family."

Flowing upstream in the mainstream: Jeff and Sarah's story

INREAL's commitment to supporting the educational growth of the whole child is central to the model's other distinction. The Boulder school system recently committed to increased regular classroom mainstreaming of children with severe and/or multiple handicaps. Since a portion of their student population at Lafayette and Uni-Hill are exceptional students with a variety of physical and mental disabilities, INREAL's innovators have taken the notion of mainstreaming to heart in the classroom. Students, rather than teachers, provide the additional support needed by students with handicaps. The classes here are 100 percent integrated. Given resource teachers and classroom teachers who focus on student strengths rather than weaknesses, accompanied by peer sensitivity and support, students with even multiple disabilities thrive in the regular classroom.

"Sarah's story may help you see what we're trying to do here," explains INREAL coordinator Mathew Morrison. "During intermission at a concert she was attending with her family, Sarah wound up standing with Jeff, an autistic classmate. Jeff's parents needed to leave the auditorium for a few minutes, and Sarah very naturally offered, 'Oh, that's OK, I'll hang out with him.' When some older kids passed by and asked 'Hey, who's your stupid looking date?' and made fun of her, Sarah answered 'He's not stupid looking, and I like him the way he is.' So the benefits of mainstreaming go both ways. Jeff learns to feel he can function among his 'normal' peers, and then there's the benefit for kids like Sarah who learn to accept exceptional kids on their terms."

Cataloging cultural diversity: The Uni-Hill School Press

> *Kid-to-kid learning is very much the norm as is the thrust toward multicultural understanding. There is great appreciation for individual and cultural differences here.*
>
> — Elizabeth "Tikki" Heublein, INREAL Director

Since its creation as an alternative school in 1976, University Hill has had some 19 languages represented in the student body each year. In a unique publishing program, students from diverse cultures and backgrounds routinely write, illustrate, bind, catalogue, and share their perceptions of the world through print. The children's stories assume book form at the hands of a group of collaborators, including the student author, two same-grade-level friends, and a parent volunteer. Once bound, the books are afforded the status of any *magnum opus* in the school's library. "In the early days of the Middle East Gulf crisis," recalls research assistant and staff developer Betty Becker, "the librarian went through the student-produced books and selected two written by former Uni-Hill students from Saudi Arabia and Iran. We could tap the produced materials to help students understand what was happening and

place it in a human perspective—through the eyes of other young authors."

Self-reflection is the best evaluation

We want the kids to become more self-evaluative—to know it's OK to examine their own work without waiting for external direction or approval. Our staff development with the teachers is similarly self-reflective. Just like the students, teachers come to feel more ownership in their efforts so that they don't need outside validation.

— Mathew Morrison, INREAL
Follow Through Coordinator

When a field worker documents student behavior for INREAL case studies, the commonsensical bent of the model pervades. Rather than a superficial overlay of behaviors, the documentation is instead a detailed, in-depth synthesis of how this child works through a day. "We have learned that identifying groups of children as being 'at risk' is a risky business at best," claims Morrison. "All children are at risk if a school's program is imposed upon them without taking advantage of their strengths and interests."

By the same token, with a satchel full of charts and forms designed for the teachers to look at themselves through video analysis, INREAL trainers have found they can quietly change the way teachers interact with children. There are no doctrines, no judgmental evaluations, just an opportunity for the teachers to see their work objectively, interactively, and to learn from self-reflection rather than by mandate or external directives.

The INREAL Training Evaluation Model (ITEM) Communication Analysis that describes the where, why, and what of a child's learning environment is particularly instructive, according to INREAL coordinator Morrison, because the model creators instilled a solid philosophy of strengths-based education on all levels. "We try to meet people—teachers—where they are to build on what they're doing and share it with other teachers. We work to improve communication," he says. The INREAL Classroom Observation Scale adopted from the National Association for the Education of Young Children Performance Standard is a similarly non-judgmental, evaluative tool.

"No, I am not the principal. We are."

Shared decision-making is a new component at INREAL that speaks to parents as both involved and open. Ours is a very ingratiating environment that is by its nature comprehensive. Nothing is done in isolation. Everything has an effect and relationship to everything else. We're concerned with everybody in the family—in school, out of school, during school hours, after school hours.

— Mathew Morrison, INREAL
Follow Through Coordinator

Key to the restructuring effort at Uni-Hill School is its implementation of site-based management and shared decision-making. Due to the school's long tradition of Follow Through parent involvement, three teachers now facilitate Uni-Hill's day-to-day operations in accordance with the consensus of faculty, staff, and parents. Committees of teachers research such issues as dropout prevention and return to the rest of the Uni-Hill family with recommendations that the three teacher/facilitators may then work to put in place. INREAL Follow Through also maintains a tri-level advisory hierarchy—a parent advisory committee, a local advisory board, and a state and national advisory board—to reinforce its connectedness with a variety of educational philosophies and interests. "With partnership comes ownership," advises Heublein. "The community needs to have participated in planning and implementation to have ownership of a school project. Without that kind of commitment, of community support, the model can be little more than an ineffective clone.

What's best for the kids in any community evolves from community concern. INREAL's role is to support the community as it evolves because we feel replication without support is nonsense."

"The site-based management and shared decision-making policies work for Uni-Hill," adds Uni-Hill teacher/Leadership Team member Joann Trujillo Hays. "With Bank Street's early influence and now INREAL's, we have a history of collaboration and involvement. Some parents say they'd be more comfortable if there were someone in charge. We keep saying, 'No, I am not the principal.' We want everyone affected by the decisions to help make them."

Parent power!

To INREAL's innovators, support for children and families is a crucial component of their Follow Through model. "The children know that we are starting from where they are and who they and their families are as people," says Heublein. "Parents feel that not only are they welcome in the school, but that they have the power to influence decisions for their children."

INREAL's parent questionnaire is thus a telling document. It gauges a parent's sense of awareness and control of their children's education more than it seeks to sample perceptions. According to one parent, Mohammad S. Salim, the parent seminars designed to sensitize him to the impact of conversational form and intent on children's learning processes, provided a wealth of additional material. Writes Salim: "Richness of communication was what I found to be the essence of the INREAL strategies. It made the conversation delightful, easy and effective—rich IN a very REAL sense. . . . The videotape at the end outlined the training approach that the staff uses with the participants—getting into our space, letting us voice our immediate concerns, elaborating on our gestures and words, and gently leading the energy of the group."

INREAL's administrators hope to gather data on a national trend to involve parents in student academic learning at home. Says Heublein, "We'll involve parents in our scoring of student creativity this year, because we think it will help them to help their children make the connection between creativity and problem solving."

As in most early childhood programs that aim to serve the whole child, INREAL also welcomes and encourages parents in the classroom as volunteers and paraprofessionals. "Although there is a parent room," says Morrison, "it hardly ever gets used because the parents are always in the classes." And not just K-3 classes. Morrison routinely collaborates with Lafayette's Chapter 1 coordinator and community liaisons to locate parents who have dropped out of school and who now have children in the Follow Through program. "They were trying to earn their GEDs, and together we found scholarship sources to Front Range Community College so that those parents could earn their diplomas. We don't have reams of data on this," he adds, "all we have is people with changed lives."

Cross-cultural preventive cures for "never enough money"

After the nutritionist has done her work, I'll sometimes go into the classroom and review with the kids. They've internalized the need for exercising at least three times a week, and eating heart healthy foods. It's really amazing what a little preventive education can do. They all hold up their snacks—carrots and apples instead of Twinkies—and I know that Ann's work has made a lasting impression.

— Jeannie Jacobson, INREAL Staff Developer

INREAL again takes a research-based tack when it comes to social and health care services by prescribing in-school time for both a nurse and a social worker. On staff for the past ten years, INREAL's Follow Through nurse at Lafayette, Ann Bailey-Britton, makes home visits and intervenes with the usual medical/dental/optical exam-

inations, but the bulk of her time in the school is spent in wellness instruction for the students and their families. The site's teachers assist in the health care workers' integration of nutrition and health basics in the classroom curriculum and multicultural awareness. The nurse, for example, respects and works with the Southeast Asian Hmong people's belief in animist medicine and dental care.

"I work ten hours a week," says Kathleen Larson, the social worker at INREAL's Lafayette School site, "and that's not enough time to do what I feel my job is. So I see the children in small groups on my own time to do stress management, relaxation, self-esteem building exercises, and socialization skills. Then I help teachers with conflict resolutions between children, and I do parenting workshops for Follow Through families." She also says the reality of dysfunctions for the majority of the Follow Through students can be traced directly to "not enough money": "The kids haven't gotten enough of what they need when they need it and now it's showing. They have trouble processing what's missing, so much of my work centers on helping them feel good about themselves—affirmative in whatever they're doing."

INREAL's Follow Through staff compensate for the lack of time, money, and care in any and every way they can, and there are triumphs. "We took Sam to have his glasses fitted last week," recalls INREAL Parent Coordinator Jeanna Dolezal. "He put them on, said 'I can see!' and tried to read all the street signs and impress me with how far he could see all the way home to the school."

Coming soon: Family Resource Schools

Perhaps the most comprehensive prevention plan yet espoused by INREAL is the recently approved Boulder Family Resource School pilot. With planning sanctioned by the Boulder City Council and advocated by INREAL Follow Through and a number of other community, state, and national educational programs, the Family Resource School pilot becomes one of the first attempts in the nation to align the city, the schools, and the community into a partnership committed to serving the entire family as a unit. Clearly reminiscent of Follow Through's comprehensive focus, the Family Resource Schools reflect a national trend toward combining prevention programs and those that build on family strengths—to be proactive rather than reactive to social and educational problems. Explains INREAL staff developer Jeannie Jacobson, "It's taking local people, and local school sites, and developing ways for family needs to be met, locally, in one spot. Follow Through is ideally placed in public schools to help with such restructuring. The dream behind the Family Resource Schools is to serve all people from birth to death in a given community. Older people come in to take continuing education courses, and the modeling is there for the younger people to see that we're never finished with learning."

Direct Instruction Model pragmatics strengthen the teacher-learner bond with every step

If we do a good job of teaching, children will do a good job of learning. We don't blame the children, blame their background, blame their homes, or anything outside the classroom. If the child is present, we should be able to teach him how to progress in school.

— Siegfried Engelmann, Founder,
Follow Through Direct Instruction Model

At Waltersville Elementary School in the Father Pennick section of Bridgeport, Connecticut, newspaper fires burn behind the broken window-panes of a brick housing project built across the street from the school little more than a generation ago. It's winter, and school children trudge across the street to ring the school door bell and gain access to one of far too few safe havens near their poverty-stricken inner city home. Many of Waltersville's kindergarten students are intimately acquainted with the expectant calm of neighborhoods riddled by frequent and inexplicable homicides. Some, according to Judith Hurle, director of the district's early childhood programs, have seen their parents murdered. Even the youngest of the students know the difference between a bullet and a penny candy before they know how to talk. They understand that their parents must meet before three o'clock in the afternoon and be finished with their business before five or risk being yet the next random victim of violence. In an area of New England that's situated literally in the shadow of the Ivy League, where many of the nation's most gifted graduates pursue their post-secondary education at the nation's most elite, airy private halls of privilege and wealth, impoverished could-be geniuses of largely African and Hispanic descent begin their educational careers in underfunded public schools like Waltersville, with iron bars on the front door.

The present is bleak, yes, but hope has never been absent from Waltersville. And, with the introduction of the Direct Instruction Model in this schoolwide Chapter 1 school, the community is intent on proving the power of optimism to bring change. For the past three years, Waltersville has quietly gone about its business of catching up enough to glimpse a different kind of future for its children—thanks to the presence and quick results promised and produced by the Direct Instruction Model. Sponsored by the University of Oregon's Doug Carnine and engineered by Professor Siegfried Engelmann, for nearly two decades the Direct Instruction Model of Follow Through has demonstrated that children in poverty can excel and compete with their middle-class peers in language, reading, and math and feel good about themselves in the process.

The model's philosophy is based on the belief that "a child who fails is a child who has not been taught," and that to succeed a child must master the academic basics. To do this, Direct Instruction builds upon the skills each child brings to school. The model is designed to impart instruction and produce measurable improvement in the rate of learning using a much shorter timeline than is traditionally attempted. The results are that teachers expect and get a wealth of responses from their students; teaching and learning procedures are adjusted to individual rates of progress; and Science Research Association (SRA) curriculum materials ensure complete coverage of basic academic subject matter.

By the end of their tenure in the Direct Instruction Follow Through program, children surpass national achievement test averages. They like school and learning, and are confident, tenacious individuals with a discernably higher level of self-esteem. They also communicate easily in the English language, in part because their parents have been trained by the model to support what the children gather from their time in school.

Professor Engelmann, who insists he had been

unable to find an effective, functioning system that truly advocated for children, sees his model as a pragmatist's remedy. "There is no magic," he warns. "We have designed the Direct Instruction Model so that we can teach more during a given period of time. The extent to which we do that is the extent to which we accelerate the performance of kids who are behind in school." To realize the model's purpose, Engelmann and Carnine prohibit Direct Instruction Follow Through sites from using programs that pull students out of the classroom and away from its all-important teacher-student interface. Classroom schedules may not be violated, and the model's administrators in Oregon take total responsibility for training staff at the schools who have committed to implementing the Direct Instruction Follow Through model.

The Oregon-based researchers promise only what they've managed to achieve in previous school sites: When Follow Through students were asked to internalize new academic material, the speed at which they learned equaled that of students labeled gifted and talented. "There was no rate of difference in performance," reports Engelmann. In a similar instance, three years ago Waltersville School was the lowest functioning school in the Bridgeport district, according to Judith Hurle. Now, "at least grades one and two are holding up at the district average," she says with excited optimism. Adds Engelmann: "It's amazing to just look at what these Follow Through students can do—how attentive they are, how they learn, what they know. They'll knock your socks off."

Step 1: Develop responsive staff

One of Hurle's objectives in selecting Waltersville as the Direct Instruction site in her district was to work with existing staff at the school. "I wasn't going to put in the *creme de la creme* of teachers because that can't be a criteria if we want to make a difference at other schools in a large district like ours," she explains. Like any good administrator, Hurle was attracted to the Direct Instruction Model's built-in requirements for a full-time supervisor for every 10 to 15 classrooms, who is trained to spend 75 percent of his or her time in the classroom working with teachers and paraprofessionals. The model promotes increased teaching time by recommending that each teacher instruct small groups of between six and twelve students in academic subjects for at least two hours of every day. Teachers present scripted lessons, but are also taught to efficiently and effectively praise and reinforce individual student responses while providing corrective feedback. The model's inservice training employs role-playing, mandates continual assessment of teacher progress, and builds high expectations of students by teachers.

"All the details of Direct Instruction teaching presentation—the pacing, the pausing, the correcting mistakes, and getting through lessons within the prescribed time frame—is where we put most of our emphasis," notes Engelmann. "Teachers must learn procedures for reinforcing the children, getting them on task, and increasing their achievement. They must know the intricacies of analyzing programs, diagnosing mistakes, and fixing instruction so that it fits the child."

For a new teacher at a new Direct Instruction site, model training can require 11 months in the classroom to achieve what Engelmann and Carnine see as minimal competence. But given time and experience, the teachers overwhelmingly agree that the training is well worth the time investment. Researchers have observed that teachers may express an initially negative reaction to the intensive, structured, in-class training prescribed by the Direct Instruction Model. But, after the first-year initiation, most teachers find these characteristics to be some of the best features of the model. Virtually without exception, the teachers are astonished at the speed with which students progress through the program and master new academic skills.

Step 2: Involve parents

For a school that interacts with a number of parents who are intimidated by school events because of their own past inability to succeed in school, simply getting the parent inside the door for longer than it takes to deliver a child is a feat in itself. That well-documented parental tendency alone makes the Direct Instruction initiative of parent activism and empowerment seem all the more vital and Waltersville's accomplishment all the more encouraging.

Indeed, the Direct Instruction Model lends itself to an informed parent population because the model is designed in such a way that parents can be advised at any time of their child's status and the goal of the instruction being offered by the program. They quickly come to expect such responsiveness from the program and, ultimately, from those whose decisions impact their own lives. "We've applied for a national award," reports Hurle, "to mark our finding that since our students come to school earlier and their parents simultaneously become involved, the parents tend to have higher expectations for their children from the start" and eagerly work for Follow Through's continuance because they see it as inseparable from their own progress.

In short, parents involved with the Direct Instruction Model view school as helpful, not only to their children, but to themselves. When asked, they cite learning about teaching, how to help their children learn to learn at home, and meeting other parents as highlights of the model. Parent paraprofessionals are naturally used in teaching roles at Direct Instruction sites and can earn college credit and degrees from going through the Direct Instruction staff development program and taking additional courses at accredited universities. Consequently, of the 450 parents who worked as paraprofessionals in Direct Instruction school sites in 1988, 120 became certified teachers and 107 received advancements of other types within the school system.

Since 80 percent of the Waltersville School Follow Through Board members have children in the program, Hurle had a viable, existing support structure that she could count on when she began working to implement the Direct Instruction Follow Through program. The school has a designated parent room and a home-school coordinator, but to further encourage parent participation in the school, the Direct Instruction model provides modest stipends for parents who attend six parent workshops. This year the director of Save the Children—a Bridgeport native—conducted parent workshops on assertive discipline, a concern many parents had voiced during monthly Waltersville School parent "coffee hours." Because several of the school's young parents accompany their children to school, it's a natural extension for the parent coordinator to "sit down with the parent, have a cup of coffee, and talk about the thing that's on that parent's mind," explains Vernell Tutt, Home-School Coordinator. "Once we've discussed what kind of workshop they'd like and that would benefit them at home, we develop the topic, get a presenter and then distribute fliers to the parents. That way, we get a lot of parents that come in because they've suggested the topic as something they want to learn about. Through the workshops, the parent group members feel free to bring up their home problems, and now we have parents advising other parents."

Step 3: Believe the adage—A strong learner needs a healthy mind and body

In keeping with the Direct Instruction philosophy of removing hindrances that can stall or prevent a child's learning, Waltersville School has a dental lab in its building with a dental specialist available four to five days a week. A full-time school nurse also works from an office in the school, and administrators are mindful of connecting children's families with needed services. Home-School Coordinator Vernell Tutt intervened, for instance,

on behalf of a homeless Follow Through parent and secured a sought-after place in the city's overcrowded shelters for the family. But Tutt's involvement is more than such dramatic one-shot rescues. She interacts with the Follow Through families daily, maintaining an intricate but strong web of home visits and strong relationships with social service agencies. Her office and expertise shore up children, parents, and families who may fall between bureaucratic cracks.

From all evidence, such comprehensive support, coupled with that of the teacher-student connections reinforced by the instructional design of the Direct Instruction Model have succeeded in producing healthy minds to direct the work of healthy physiques. A study of New York senior high school students who had participated in Direct Instruction Follow Through programs showed that more Follow Through students had graduated from high school and applied to college than those in a control group of peers. The study also found that fewer Follow Through students dropped out of school and that more read at or above grade level than their general population peers.

Step 4: Spread the word

To achieve a successful Direct Instruction school site implementation is a lot like building a flying machine: Every single piece must be well-designed and fitted in place. If any part is out of place, the machine can falter and not fly. So it's not good enough to have some of the pieces in place, or to sort of be moving in the direction of the runway. To succeed you have to be able to soar to your destination.

— Siegfried Engelmann

Direct Instruction Follow Through sites are currently located in Seattle, Washington; Dayton, Ohio; Camden, New Jersey; and Bridgeport. But Engelmann is convinced that what's needed to make early childhood education effective is a Follow Through expansion that takes the model through the 10th grade and provides an adoptable pattern for using and orchestrating the various aspects of funding available through Chapter 1 and other compensatory education programs. "Such a pattern might mirror the kind of dream Chapter 1 has been trying to merchandize for the last couple of years," he suggests. "They need to say, 'This is our school and these are our kids and we're going to teach them well. We're not going to have different programs in the school that create factions and in-fighting. We're going to take all the kids, start them where they belong, and refuse to throw them back into a flawed education system as soon as they reach proficiency in the third grade. We're going to follow our kids all the way through school and be sure that they succeed.' "

The Interdependent Learning Model: Teaching and learning from the games children play

Young children have roles in the world. Through play, we try to help make them comfortable within different social contexts and cultural roles. As they grow, our students demonstrate advanced levels of competence in academics and social interactions as productive, attentive students. They are not robots who sit and look up at the teacher for programming, completely unaware of what's going on. You see, our model is concerned with more than teaching children how to better solve math problems or to read better. It's about making them competent as individuals.

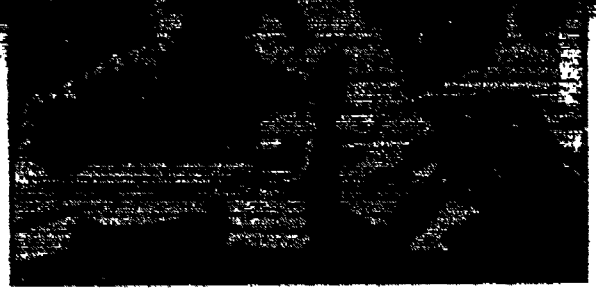
— Harold Freeman, Director,
The Interdependent Learning Model

The Interdependent Learning Model (ILM) uses games and an innovative classroom management system to teach and reinforce children's learning. The model is designed to teach children: to behave interdependently, independently, and cooperatively; to have positive self-concepts, positive attitudes toward learning, and respect for one another; to make rational decisions about their studies; to schedule their time and evaluate their work; and to become competent and skilled in reading, writing, mathematics, and the sciences. Instructional games, the model's creators assert, are highly motivational and adaptable tools used in all cultures to teach values, concepts, and academic as well as social skills. The games described in detail in the model's *"Games Children Play. . ." A Catalog of Over 60 Ready-to-Make Games in Reading, Math, Social Studies, and Science* (preschool-sixth grade) and other curriculum materials function more as examples than specific prescriptions, because, according to Harold Freeman, "The ILM is really a process model, a method of teaching that allows for the incorporation of many kinds of curricula information. We concern ourselves with how that information reaches the children, and the kinds of optimum teaching-learning environments we can establish for them."

Explaining the rules of the game: The model's classroom management system

The process of learning is paramount in ILM classrooms, and the model may be effectively implemented in preschool and the first seven grades. The curriculum and subject content vary according to the level, but the processes remain the same. The various games and forms of play have proven to be perennial favorites for an increasingly wider range of children since Lassar Gotkin first designed the model at New York University in 1967, because the games tap into children's immediate reality, or, in Freeman's terms, "the culture of childhood." Even vulnerable, often confused, peer conscious, prepubescent children love to play the games. Freeman reports that in one school, "The older children come an hour early to play the model's folk and musical games and then go to class."

Logically, ILM Follow Through students should be extremely well disciplined because the children understand that no matter what the game, rules and laws always govern. "Children take the classroom management system seriously," explains Freeman, "and teaching them to be responsible is extremely important." That importance is underscored dramatically by the high numbers of homeless children who attend the model's Whitefoord School demonstration site in Atlanta, Georgia. Understanding the rules of the game at school is sometimes the only securely structured interpersonal relationship these children have on a daily basis. "One of the best things that happens with the model is that children work cooperatively in the classroom," notes Freeman. "Many of these



children are very poor. Unfortunately, there is some chaos and disorganization in their lives. They enjoy coming to school for the various benefits—food, shelter, a supportive staff—but also because everyone plays by the rules in their classes, and that counterbalances the uncertainties in their other environments."

ILM classrooms are pleasant places for the teachers and for the children, and the classroom management system is the key to the model. The system involves a teacher and a paraprofessional working as a team and independently with the children. The room arrangement focuses on interest areas that in turn contain a number of learning centers. The children schedule, evaluate, and keep records of their own work. The classroom management system encourages the formation of small groups of children with different skill levels in a given subject area so that students may learn from and teach their peers. "The kind of learning and living environments we create brings out the best in children," says Freeman. "It lets them be children—learning and having fun. You won't see sullen children at Whitefoord School in Atlanta or at any other ILM site."

Since it teaches children to be responsible for their own learning, to schedule their own activities, and to work effectively in small groups and individually without direct supervision much of the day, the classroom management system frees the teacher and paraprofessional to work with those children who need assistance most. Teachers also have the time to conduct evaluative conferences with each of the children once a week.

Its management strategy also makes the ILM a viable model for the newly rediscovered ungraded classroom concept. "If a child is sufficiently mature and competent in his role as a productive student and has mastered the skills required in kindergarten," asks Freeman, "why must that child attend kindergarten?" Using appropriate Follow Through models in preschools, he asserts, could easily become the catalyst for eliminating some discontinuities in early childhood education. If some of the models were used in preschool and day care programs, the children would have the advantage of studying in the same kinds of learning environments, with well-integrated, sequenced curricula, at least up to the third grade. The path from preschool to the upper grades would be a great deal smoother for those children, and the rate of their learning would probably increase significantly.

User-friendly, conversational reading

The model's child-centered reading program, the Integrated Skills Method, was developed in 1968 by Dr. Ellis Richardson and has been tested and honed continuously since then. Within the program, children may work individually and independently as well as within a group. Perhaps most unique to ILM's reading program is the model's insistence that the children are given their own books and are permitted to keep the books once their lessons are finished. ILM-generated reading texts augment the Atlanta school system's required use of basal readers, but the model's classrooms refer to the basals as a literature source only. As is true of all subjects, the model uses many games to teach and reinforce reading skills. In addition, the ILM conversation games supplement the reading and writing skills learned in the program by teaching the children effective verbal communication skills.

In the aggregate, the model's reading program has managed to ensure that most of the Follow Through children read at or above grade level. External studies have long shown that former Follow Through children in junior high school outperformed matched comparison school children in reading 75 percent of the time. The ILM reading progress feedback system was adopted by the Atlanta Public Schools as a result of its demonstrated effectiveness. Through the system's implementation city-wide, the Follow Through

staff directly impacted the reading programs of literally thousands of Atlanta students.

On the training of teams to teach play...

We train teachers to let the children learn through play, and that's a challenge for many traditional educators who are used to controlling things in the classroom.

—Lucile Neely, ILM Teacher Trainer, Whitefoord Elementary School

Teachers in ILM classrooms are primarily facilitators and role models for positive student behaviors. Proper ILM implementation requires teaching teams of two equals in each classroom: a teacher and an instructional aide. "Neither adult in the classroom is the boss; neither is there to carry out the other's orders," says Freeman, "because that's not a reasonable structure to model for the children. We ask the paraprofessional and teacher to work together cooperatively. We give them the responsibility for managing the children, and that also involves their managing a lot of learning themselves."

New teachers are offered six days of pre-service training. An on-site trainer then provides the teachers with ongoing support as they continue implementing the model with the help of ILM's seven-volume set of game and conversation guides and the reading program materials. The on-site trainer attends two weeks of workshops with the Fordham staff to prepare for the many responsibilities the position entails. He or she is then qualified and expected to conduct classroom observations; monitor model implementations using several sponsor-produced formative assessment instruments; train new teachers; and provide whatever forms of support the teaching teams need to function well. Typically the trainer becomes a problem-solver who concentrates on instruction in the classroom. It's the trainer's job to assist the teaching teams to devise effective plans to bring the children up to speed academically and keep them there. A number of tactics, such as allowing for additional time, individualized instruction in particular subject areas, or sending the child to another classroom for higher level or special instruction may be done at the trainer's discretion.

Currently, the ILM is used at a preschool-through-third-grade elementary school demonstration project in Manhattan, and at a preschool project in the Bronx—both in New York City. There are also two preschool adoption projects in northern New Jersey. At all of the former ILM model sites, the spirit, methods, and materials of Follow Through and of the ILM philosophy persist through former Follow Through trainers and staff who continue to direct and guide the various elementary school programs.

'It's not if you win or lose, but how you play the game...'

Follow Through was established to give people in various poor communities hope. We said, "Look, give us your schools that are failing and we'll turn them around."

— Harold Freeman, ILM Director

A teacher pushes a second-grader in her swing on the Whitefoord School playground. The child laughs, playing gleefully in the wind, as Dr. Blassingame, the school principal of this ILM demonstration school, comments that some of the students here have been abused at home. She recalls that the laughing girl on the swing was one of the school's most difficult cases, but that the child is showing signs of improvement. "She's learned to trust that particular instructional aide," explains Dr. Blassingame, "and that's a very important first step," she adds hopefully.

Whitefoord's enviable track record of helping children deemed unteachable at other schools may account for at least some of Dr. Blassingame's optimism. Atlanta's ILM pupils have consistently earned higher reading, mathematics, and total

scores on the Iowa Test of Basic skills than their non-Follow Through peers. ILM students also tend to maintain their superior reading scores in the upper grades, and have significantly higher attendance rates. But perhaps most important to the child on the swing, ILM students tend to be more open and honest about their feelings and to take greater responsibility for their academic performance.

Teachers and administrators at the Atlanta demonstration project stand by the assessments of the model's positive impact, even though disproportionately high numbers of children diagnosed as slow and problem learners have been placed in Follow Through classrooms. Although such practices make ILM's evaluation comparisons of its success extremely conservative, the model's strategies do indisputably help low achieving students. "Often, those children who are at the greatest risk of failing are put in Follow Through classrooms," explains Freeman, "because our classrooms have more thoroughly trained teachers, a teaching assistant, additional materials, and a system of ongoing support for the teaching teams and children. Despite those advantages, bringing these children up to or above average is a tremendous achievement of which the staff is justifiably proud." Given that Follow Through's mandate has never specifically targeted exceptional students or those with learning disabilities, Whitefoord's accomplishment through the ILM is especially distinctive. "It's part of the model's philosophy that we always need to know where we're going and how we're doing in the classroom," adds Freeman. "If we're not achieving, then we change something. We constantly evaluate what is happening."

Fortunately, Atlanta insists on rewarding its educational winners, and in doing so spreads the word on programs that work. During its tenure in Atlanta, the ILM Follow Through project has been honored with a mayoral proclamation of Follow Through Days in the city. Published materials from the model have also been distributed and used in school districts by educators in 29 states and three foreign countries. But the most meaningful personal honors and recognitions are, as always, one-on-one. The Whitefoord School recently outfitted a parent room on the edge of its inner city campus since their parent involvement and outreach programs have long been popular in the community. In addition to regular parent workshops and parent advisory committee meetings at the school, parents are encouraged to accompany their children on weekend field trips that are exciting for all involved: "We took a trip with the kids to Delta Airlines, then to all the black colleges and universities in Atlanta, and to the Twin Palace downtown," recalls one young mother. "My daughter says we get to see the world with Follow Through, and it seems like we just might."

IRI's Cooperative Learning Model/Project Extend converts the "me" classrooms of today into the "we" schools of tomorrow

A.C. didn't do well in math. He'd never finish his lessons, but we kept working with him. Even though he was in another teacher's class, I'd work with him one-on-one, everyday, until one day he just got it. He ran up to me and said, "Mrs. Mack, look what I did! I can do it. Let me show you how," and all the math problems on his paper were solved. The next day, A.C. saw others having problems and asked, "Mrs. Mack, can I show them? Can I go and help them? I know how." He was so happy when I told him, "Sure you can, A.C.," and he went over and helped one, then another.

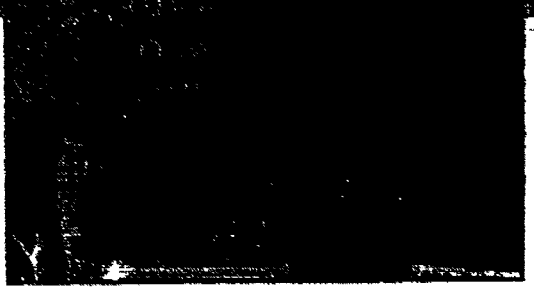
— Annie Mack, Project Extend Teacher, Wilson School, Chicago Heights, Illinois

Although cooperative, small group learning in the classroom has been rediscovered as perhaps the most viable educational approach for low-income and minority group students in recent years, its use in the nation's schools remains, for the most part, incidental and piecemeal. Research shows that class sessions are structured cooperatively only seven to 20 percent of the time, and are competitive and individualistic for the bulk of the class day. As a consequence, the ideal "we're-all-in-this-together" schools of the '90s—in which students, parents, and teachers share every facet of their work together—are actually "we" talk lessons. In short, most of America's schools are still a long way from the comprehensive cooperative educational process envisioned by Roger and David Johnson at the University of Minnesota in the early 1980s.

But Illinois Renewal Institute (IRI) is changing the face and the heart of cooperative instructional practice in the classroom with its innovative approach to early childhood education. Aptly dubbed Project Extend, the Institute's Cooperative Learning Model (CLM) at five Illinois sites is designed to enhance student attendance and parent involvement as it improves students' self-concepts and academic achievements. The model uses research-based cooperative learning, whole language strategies, computer-based instruction, and parental involvement. It's based on the Johnsons' conditional equation that students think they can better reach their goals if, and only if, the other students in the learning group do as well. The desired end result of the model is a sharing climate in the school and the classrooms, in which everyone involved in the educational process works together as a team. Like A.C., students learn the value of sharing their academic triumphs as well as their failures. Cooperative learning strategies that place two or three students together and instruct them to do spelling, science, and math lessons together for a common grade, promote, by their nature, productive interaction between students that will help them to negotiate and work in teams as they grow through adolescence and into adulthood. For the children in Illinois schools, the benefits can be seen more immediately. Even though it was only introduced in 1988 at Wilson School in Chicago Heights, for the past two years Wilson's achievement test scores have topped those of all other schools in the district. Just as A.C. gleefully helped his classmates, after learning how to solve his math problems, Wilson school is eager to show others how to learn cooperatively—one school and the next.

No one learns in isolation

Every person in the building works cooperatively—from the student to the principal. The day I walked into the building I was greeted with a hug from someone I'd never seen before in my life. I'd worked for years in the Chicago Public Schools, and what you have there you have to fight for. I was putting up my bulletin board the first week I was at Wilson, and a teacher asked if she could help. Then I needed a letter or two to complete the board and another teacher brought



me all sorts of things to make the board better. She gave me letters, numbers, borders, a willing pair of hands. I was shocked. So I knew the school was sharing, caring, and loving from the start.

— Marie Brown, Teacher,
Wilson Elementary School

According to IRI educational consultant Beth Swartz, the Institute looks for three assurances in a potential site: excellent school leadership from the principal, unconditional commitment of staff, and unswerving support from the district superintendent. At its Wilson School site just outside Illinois' largest city, the Institute saw a chance to try out the Johnsons' conditional methodology.

The school soon became exemplary even though Dollie Helsel was in her first year as its principal. A consistently dynamic school leader, Helsel won the state's Distinguished Educator Award in 1990 and ran for a city commissioner slot in hopes of helping the town's ethnic factions "work together." Her reputation as one of the state's most competent administrators is further boosted when the Chicago Heights demographic profile in and around Wilson is considered. Located near one of the largest housing projects on the outskirts of this blue-collar, steel town that continues to lose population from its current 35,000, the pupils at Wilson School are likely to be African American, and from low-income or foster families. For Helsel, who wrote the grant application to be sponsored by IRI, negligence is allowing any child to attend Wilson School and slip through the cracks.

Her strong convictions attracted Helsel to CLM/ Project Extend. They have also kept the school leadership focused in the face of its change from a school of committed individuals to a team of students, parents, and teachers with a wealth of successes to share: "With one new boy we had last year, I was seriously beginning to wonder whether cooperative learning worked for everyone," recalls Wilson third grade teacher Karen Cronkite. "He couldn't seem to work with any of the kids, because, as I finally realized, the other students had had to learn to work together. They were sharing pencils, ideas, talking quietly, while this student wanted to take everything for himself. He wanted to write it all by himself. The little boy worked himself into the team very well, but it took a typical student from outside our cooperative environment to make me see, 'This is really working well.' "

Helsel, a former teacher herself, maintains the inservices provided by the Institute are directly responsible for the spread of cooperation on all levels in the building. They are inservices, she says, the local district did not have the money or the resources to offer. "Our teachers did every workshop we could find," she recalls, "but the training never fit in with what we were trying to accomplish. So when we started reading about CLM/ Project Extend it was like a light bulb going off because it drew on our existing strengths and fit our kids. Consultants came to us with customized staff development for Wilson's particular needs, and we went with them to other schools to see and learn. Then it all meshed."

Once trained in the model by IRI, school staff began to care more about each student as an individual on the team, for teachers to share what worked best, and for them to work with slower learners. Teachers in CLM/Project Extend routinely ask about students in other teachers' classes, because when one person fails, the team fails. As one teacher explained of her colleagues, "I count on them caring. I count on everybody doing at least that." Helsel and Swartz are currently working to find funds and training for a site-specific substitute who knows the model and can provide much-needed release time for teachers to process and incorporate their growing knowledge of cooperative learning's possibilities into their lesson plans.

Whole language for whole learning

Unlike many schools that lay claim to whole language processes by doing little more than introducing trade books to class libraries, IRI's Wilson School site develops its students' language skills by immersing them in language in all subject areas. "We've started using word meaning and language experience in cooperative lessons from reading to science," noted one Wilson classroom teacher. "The children are able to build better stories that in turn help them to read better."

Student receptiveness to whole language instruction is due in large part to CLM/Project Extend's whole language staff development. Teacher workshops focus on whole language across the curriculum, developing whole language learning stations to enhance thematic units and co-teaching, and by effectively combining whole language with cooperative learning and computer-based instruction.

As with all aspects of the model, parent cooperation in the whole language effort is not only anticipated but expected. "We can offer parents enough incentives so that they want to come to school and become part of the whole learning process," explains IRI's Beth Swartz. "We had our whole language person do a make-and-take with the Spanish-speaking parents in one school site community, so that they could learn to make books to take home to read to their children. Since the consultant didn't speak Spanish, the parents' cooperation was essential."

Creating a computer comfort zone in school and at home

CLM/Project Extend's emphasis on computer-based instruction also tended to bring team expertise into areas of educational technology that most adults at Wilson think of as gateways to the future. Not only are staff members at the school trained in the mechanics of computer operation, they also videotape software functions and create data bases for instructional software and lesson plans to share with other team members. On-site experts quickly and naturally develop, and they are called on in the cooperative spirit of the model.

Parent workshops are also offered in computer use, and many participants have been so interested and impressed that they purchase computers for their homes. Computer owners or not, the parents consistently demonstrate the need to be comfortable with the electronic and mechanical pencils with which their children are learning.

Getting to the daddies: Parent cooperation = parent involvement

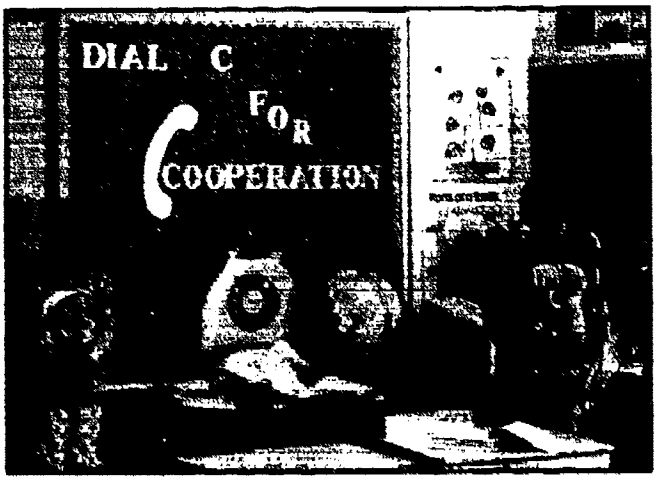
> *Cooperative learning gets the daddies in too. Daddies don't want to get involved in education for some reason. I have one at home, and he considers himself a good parent. But this program in particular got him interested in becoming more of a role model by being there at the school. There are daddies that come to school regularly now. I've never seen so many daddies coming up, going on field trips with the kids. It's phenomenal.*
>
> — Diana Lund, Wilson School Parent

At Wilson, four or five parents came to the first Project Extend parent meeting. Their number grew to twenty, and now the meetings are held in the school gymnasium rather than the library to accommodate all the participants. The change has been so dramatic that district superintendent Rich Felicetti concludes, "Administrators used to have to pull hair to get parents into Wilson School. Now they've got standing room only. Obviously without Follow Through, School District 170 would have suffered a great loss."

Wilson's increased parent involvement is particularly encouraging since schools in the next century may well become the teachers for parents. IRI's parent workshops cover the gamut of concerns from computers to parenting. And interestingly male parents are present at least as often

and contribute as much to the conversations on child rearing and education as their female counterparts. In CLM/ Project Extend, teachers view parents as partners they too can learn from, and students have grown to understand the importance of their families attending the monthly parent meetings. Recalls one teacher, "I always remind my students to tell their parents about the meetings, and I remember one student explaining the next day that his parents couldn't come to a monthly meeting, but that they'd assured him his aunt who works all night would be there. She might have to leave a little early, he said, but the aunt came and stayed the entire evening because that family wanted a representative there."

For low-income parents who remember their own negative experiences at school, the parental commitment at Wilson through CLM/Project Extend is no small accomplishment. One parent who has three children enrolled at Wilson says parents in the neighborhood know better than site and district administrators how easily their children can fail, become discouraged, and drop out of school. They like the team approach in part because the overwhelming odds their children face require counter odds that are just as large, possible, and hopeful. "Cooperative learning carries over into all aspects of our kids' lives—and ours," explains Diana Lund, Wilson parent and temporary teacher at Wilson. "The sharing means there's no more just me in the world anymore. It's we or it's no one. I always thought you have to do your own work. But through cooperative learning, I've found that it's OK to share, and if you don't know, look on." With luck, schools nationwide may learn from what Wilson School is learning how to do. Looking into IRI's CLM/Project Extend through Follow Through reveals at least a different way and at best a model that takes life's world community into each classroom and makes it synonymous with learning.



High/Scope: Foundation for a lifetime of learning

High/Scope is perhaps best known for its trademark plan-do-review learning process, in which young intellects are actively engaged in a carefully planned, tested, and developmentally appropriate setting. Students learn in the dramatic voice, in small groups, and individually through an educational process that builds the problem-solving skills they must apply to keep pace in our rapidly changing world. "Children in High/Scope Follow Through programs aren't in a response mode answering teacher demands," explains High/Scope Follow Through Director, Charles ("Chuck") R. Wallgren. "Instead the children pursue their own interests and ideas. They plan activities with the teacher's help, do them, and then review what they've done with the teacher and their peers to see what worked, what didn't, and how they can make it better."

High/Scope Follow Through also incorporates the active arts—dance, music, and graphic arts—into the model's process. High/Scope has also taken the lead in computer-enhanced learning by suggesting at least three computers for each Follow Through classroom. Since individualization is desired for everyone in the classroom setting, High/Scope provides no scripts for teachers or students. The model's foundation—students drawing on their own experience, discovering through active learning and then sharing by using their own language—remains at High/Scope's core.

Child-based classroom management

The first thing you'll see in a High/Scope classroom is the way the room is organized. There are activity centers, lots of materials, and a computer center. It's designed in such a way that children move throughout the classroom to various areas during the daily routine. You won't find a teacher's desk or a teacher positioned at the front of the classroom. You will find a math workshop, a language workshop, a period for science, fine arts, and social studies. You will not find a quiet classroom, but the noise is constructive rather than disruptive. It's the learning sound of children working together, reading aloud, manipulating objects. . .

— Chuck Wallgren, High/Scope Follow Through Director

As with other developmentally appropriate early education models, cognition or the "getting" of knowledge is emphasized by the High/Scope program while local school districts remain the primary purveyors of curriculum content. In the early 1960s when High/Scope was founded by David Weikart in Ypsilanti, Michigan, the sponsors, site administrators, and teachers began advocating continual assessments of each child's level of development in the classroom. This enables teachers to expediently stock math, science, language, art, building, and computer centers with new, challenging materials as the child's intellect grows and he or she is prepared to work with them. Teachers encourage children to direct their own activities, to make discoveries by actively exploring their surroundings and using appropriate material and equipment, and to share their discoveries with others in the classroom, at home, and in their communities. Says Wallgren "The magic is in our approach of active learning on the part of the child. Youngsters have to construct their own knowledge. We have a distinct philosophy on how that construction can be guided. We provided the teachers with activities to set up in the classroom, software to choose for each level of the child's development, and a way of making sure the children's language comes naturally."

High/Scope distinguishes itself from child-centered and direct instruction philosophies of early childhood education through a unique form of teacher-student interaction termed "key experiences." By introducing, incorporating, and juxtaposing modes of learning (such as action, planning,

evaluating, social interaction, and communication) with time, space and classification relationship areas, and the 3R's, High/Scope teachers support students achieving their learning goals.

Encompassing the future scope

The High/Scope model got its name from a co-director at its first adolescent summer camp nearly 30 years ago. During a brainstorming session with his peers on the fledgling model, one administrator noted that the camp's proposed ideals were lofty but attainable, and the scope of its work, (that is, its mark, aim, outlook, application, effectiveness, space for movement, and activity) reflected similarly high aspirations. The two terms suggested by the director at the session's end—"High Scope"—proved so inextricable in philosophy and practice that a graphic artist later took the liberty of adding the slash mark that usually binds synonyms, and the single term "High/Scope" stuck.

The stage was thus set for an early childhood program that simultaneously concerned itself with the student's future adolescent and adult success. High/Scope devised its model with not only an evaluative eye on the present, but another that constantly asked, "What can we do now to ensure future success?" True to that underlying question, High/Scope's most lasting contribution to early childhood education may well be the influence of its monograph—*Changed Lives: The Effects of the High/Scope Perry School Program on Youths Through Age 19*—on Head Start's federal funding. So impressed was the Reagan Administration with the lasting gains made by High/Scope students long after they had left the High/Scope program, that they opted to place Head Start—Follow Through's precursor program—inside the national safety net, thereby ensuring its continuation in the face of budget cuts. "We've been able to identify changes in adults that are attributable to our work," says Wallgren, "which is the purpose of education."

Spread best practice: Train the trainers

Like other successful, well-known models, High/Scope found long ago that training trainers who then train teachers was a more efficient method of spreading High/Scope theory and practice than direct model sponsor-to-teacher training. Typically, agencies send prospective trainers for seven-week training sessions at High/Scope headquarters or to other locations as funds permit. Once there, the High/Scope sponsors instill the High/Scope learning philosophy and its strategic tenets in the trainers. It's proven a good way to keep the model true to itself and yet adaptable to each site as it spreads across the country. More than 600 High/Scope trainers are presently training teachers in some 4,800 classrooms nationwide. Their efforts nurture the lives of an estimated 100,000 preschool children and their families annually.

High/Scope recommends that the trainers offer one week of preservice training plus 15 days of inservice training to teachers on-site; six of these require release time for the teaching staff. The trainers first present the notion that a teacher's fundamental role is to assist the child's natural process of inquiry; children are not to be treated as understudies, nor are they to be cast in any predetermined role. Rather, they are individuals learning from an early childhood education model that views learning as a social undertaking.

The High/Scope model requires daily planning by teachers in accordance with its process learning philosophy and reliance on careful child observations. "We teach teachers to understand the developmental stage of the child, and to create settings, a classroom climate, small group and individual activities that focus around key concepts in the various subject areas," says Wallgren. To nurture the teachers' ever-evolving supportive role, High/Scope also holds an annual one-week staff development institute for all Follow Through sites to come together and share. "We design the insti-

tute in such a way," says Wallgren, "that kindergarten teachers from all sites are together comparing ideas and experiences, and it's the same for all the other class levels."

Participation from parents and community

Recent studies show that parental preferences have shifted dramatically from the 1950s focus on encouraging obedience in school-age children to a 1990s preference for fostering independence and self-reliance in the youngest of students. Consequently, many parents find the High/Scope model's emphasis on engaging children in the process of active learning and independent problem solving to be an appealing option. High/Scope is committed to bringing the home into the child's scope of learning as an easily accessible and rich enhancement to classroom experiences. As one High/Scope Follow Through Curriculum Assistant noted, "Parents are enjoying the successes of their children and are building better, more positive relationships with the school through parent education workshops. Simply stated, they hear the message that school personnel care about all the needs of children and their families."

But parents, families, and communities who have been touched by High/Scope during the past two and a half decades take away more than an appreciation for Piagetian principles. High/Scope Follow Through is also committed to helping families access needed social services. Wallgren emphasizes, "A model like ours requires classroom furniture that can be arranged into interest areas, a specific daily schedule, and lots of manipulative materials. To work, the model needs commitments from administrators, teachers, and parents alike."

Given limited funds, the comprehensive services mandate that remains a part of Follow Through has become more a liaison function. High/Scope Follow Through sites are required to retain a social services coordinator whose challenge is to make the largely low-income Follow Through families aware of the services available to them, and to teach them to access these services. Again, High/Scope Follow Through's focus is decidedly human: "We had an unusual cold spell and the High/Scope social services coordinator, Glenna, came to my classroom with a box of gloves and caps," recalls Betsy Pratt of the Fort Walton Beach, Florida High/Scope site. "And Glenna asked, 'Who do you have in here that doesn't have these?' Hers is the brand of support for the whole child that a program like High/Scope engenders."

Evidence of effectiveness

Compared to the typical kindergarten-through-third grade curriculum, the High/Scope K-3 Curriculum helps at-risk students improve their school achievement. To demonstrate that point, about 1,024 children a year participated in a 1988-91 study in which High/Scope Follow Through groups of children scored an average of 12 points higher than students in comparison groups.

Given the design difficulties of field research in education, these findings provide remarkably consistent indicators that the High/Scope Follow Through children scored better on achievement measures than they would have in regular classes without the program. However, it's important to note that the evaluation was a partial one in that standardized achievement tests *do not* assess important High/Scope K-3 Curriculum goals, such as improving initiative, social relations, creative writing, artistry, music, movement, and general logical thinking. Consequently, perhaps it is most accurate to conclude that to the extent that achievement tests remain the norm for success in American education, the High/Scope K-3 Curriculum contributes to success in these terms as well.

Adaptive Learning Environments Model adjusts the school to the child and the training to the teacher

One of the best ALEM training sessions I've had was a discussion with a child. I sat down and asked the child what he was working on and why he was doing a particular activity. He told me about the learning center he was working in, what the self-scheduling board was for, and how things generally worked in his classroom. Students in ALEM sites feel they have control over what goes on here. They know what they're going to do next, how the day is laid out, what's happening, and that they have some choice in planning it all. The extent to which students understand this model is, to me, an astounding lesson in itself.

— Jeff McLaughlin, ALEM
Follow Through Coordinator

A brightly bordered pueblo-deco door embellishes the entry to Reynolds Elementary School on Philadelphia's South Side. Its multicolored Native American and Spanish-influenced tiles mirror the cultural diversity sheltered and nurtured by the Adaptive Learning Environments Model (ALEM) classrooms inside the building. Like its nine sister schools in Philadelphia (and several school sites in New Orleans, Minnesota, Iowa, and West Virginia), implementation of the Temple University-based ALEM Follow Through program at Reynolds Elementary has meant the difference between merely existing from day to day and building hopeful, promising futures for thousands of school-age children.

Founded in 1968 to accommodate the abilities, experiences, and socioeconomic backgrounds of a variety of students in a single classroom, ALEM focuses on the fact that different children learn in different ways and at different rates. ALEM classrooms are thus organized to allow a number of activities to be undertaken simultaneously by a number of differently able students—from the mildly learning disabled to the gifted and talented. The adaptive instruction process begins with the teacher diagnosing each child's skill and knowledge level. Although the assessment is ongoing, the diagnosis serves as a basis for each child's Individualized Progress Plans. The Plans consist of two parts: a highly structured prescriptive segment designed to ensure mastery of basic academic skills, and an open-ended exploratory component that encourages creativity. Students make best use of the Plans and the diagnostic-prescriptive monitoring by self-scheduling their own work from prescription sheets on a self-scheduling board. "Teachers usually meet at the beginning of the year to develop a prescription sheet that can be individualized for each student," notes McLaughlin. "Each child's prescription sheet outlines the basic tasks that the child is to complete. When he or she finishes with the prescription sheet activities, the learning centers are available. Or, the learning center may also be a part of the prescription sheet."

McLaughlin is quick to note that the learning centers are not perceived as "extra" work when students finish the "real" work detailed on their prescription sheets. "Different areas of the room are set aside for four or five curriculum areas—typically math, reading, science, and a creative exploratory center," he notes. "In each classroom, there's a self-scheduling board with the learning center names followed by four or five slots under each subject heading. Each student knows to take his or her name tag, put it in the slot, and go to the learning center. If there are already four people at the math center, then the children know they'll have to choose some other activity. The same classroom management structure may take the form of a self-scheduling sheet, but either way, the self-scheduling aspect of the ALEM model is used throughout the school day.

Mainstreaming diversity

Understandably, ALEM Coordinator Jeff McLaughlin refers to the model as "a classroom management approach" to diversified learning. "Ours is a design for a learning environment with set procedures that are geared toward meeting the individual needs of all children within a regular classroom," he explains. To enter any ALEM site is to witness classrooms with regular education students, special education students, and Chapter 1 students sharing the same space and embodying the definition and the spirit of special education mainstreaming. Reynolds' site coordinator Amy Barr, for example, is a trained special educator whose role has become that of a specialist working with students in some 15 regular education classrooms. Students who need a teacher's help turn their brightly painted teacher cups brim up or they place stop signs at the edges of their desks and work spaces. In this way, teachers are freed to work with those students who need help most, without impeding the learning of others in the classroom. As Amy Barr notes: "The children know what's expected of them and they know what to do. In a way, it takes the responsibility of learning and puts it back where it belongs—on the children."

Student control and ownership also free teachers to explore new ways of helping their students learn through new adaptations of curricula, learning center themes, and by diversifying their own involvement with students. It's not unusual, for example, to see a math specialist reading to students in an ALEM classroom. And, although some educators fear that prescriptive learning may limit the child, ALEM's required exploratory learning centers—coupled with the student initiative inherent in self-scheduling—provide built-in safeguards. Adds McLaughlin, "Our model implementation specialist in Philadelphia brainstorms regularly with teachers on-site. They'll pick a topic and find a million places to take it that provide more in-depth applications and higher-level thinking for students."

Customized staff development

Education sometimes gets very vague, but ALEM is specific. You can see it happening. What I see in the children, I see in the teachers. This is a model they feel in control of. When ALEM teachers get together, they talk about exploratory activities and other specifics. The model seems to provide something very tangible and explicable for people to grab onto, to talk and plan about, because the goals and objectives are clear.

— Jeff McLaughlin, ALEM Coordinator

By design, ALEM adapts to any teaching style and curriculum, but the model's staff development orientation rests on an intricate data-based staff development process. Using a Degree of Implementation assessment system that incorporates observation, interviews, and a checklist, twice a year the ALEM sponsors advise teachers on how completely they are implementing the 12 dimensions of the model. The dimensions measure how well teachers arrange space and facilities, create and maintain instructional materials, help develop student self-responsibility, diagnose through testing, establish and communicate classroom rules and procedures, instruct, interactively teach, manage classroom assistants, monitor student development, motivate, prescribe lessons and activities, and keep records of student progress.

Based on the results of that evaluation, individual and small group staff development is planned by the ALEM coordinator at the school site. The ALEM coordinators at each school site work with the individual teachers and provide follow-up technical assistance and/or coaching with each teacher by going over the Degree of Implementation results and deciding which areas need emphasis and which are strengths.

In the first year of ALEM implementation, intensive training and on-site support are absolutely essential. Some change in school

and classroom reorganization is inevitable, and time must be allotted for teachers to work and plan together. Districts engaged in school restructuring efforts have also taken advantage of the fact that ALEM lends itself easily to multi-age grouping, instructional teaming among teachers, and school-based management of resources that in turn become factors to which administrators, teachers, and students readily adapt.

But after the model's initiation period in a school, positive outcomes such as increased student achievement, self-confidence, and self-esteem produce an almost snowball effect in teacher efficacy and enthusiasm. "I try to emphasize that we're coming into the classroom and we're looking at how well a teacher is implementing the model—how well she's adjusting the classroom to the individual needs of her students. Ours is a true staff development model because we aren't just training teachers, sending them into the classroom, and measuring student outcomes to see how well the teachers have translated what they've learned. Instead, we're staying with the teachers throughout to see how well they're implementing the model."

Parent training in the classroom

ALEM provides parents with an overview of the program, but allows the real training to transpire in the classroom. Because students are largely self-scheduling and the strength of the model lies in its seamless classroom management, it's not at all unusual for parents to learn about the program directly from the students in the classroom. ALEM's individual diagnoses, prescription sheets, and emphasis on self-responsibility also enhance parent communication with the child and the teacher. Parents may be either paid or volunteer assistants and contributors in the classroom, but either way they say they enjoy becoming involved with the academic aspects of school life—and are thus extremely supportive of the program.

While ALEM sponsor funds are insufficient to provide social services, they do help families access available services essential to student success in school. For example, in Reynolds' Parent Involvement Committee meeting each month, parents suggest issues they want to deal with. The home-school-community liaison then organizes workshops and presentations on such identified issues as drug use, HIV/AIDS prevention, and parenting skills. "Parents will say they need more information on report cards," explains Reynolds Principal and 1991 Principal of the Year recipient Dr. Verneta Harvey. "The liaison organizes a workshop on understanding the report card, or how parents can best help their children at home with reading or math. We've even begun a men's group called Brother to Brother that actively involves men in the community with male staff at the school to foster role modeling activities for the students." A Pupil Support Team is also in place at Reynolds and other ALEM Philadelphia sites for students who are having difficulty learning because of parental abuse, hunger, or lack of shelter.

Implications for research

Through the common data collection process maintained in the Philadelphia and nationwide ALEM sites, the model's evaluators are able to gauge teacher and student interactions using four instruments: the Student Background and Achievement Questionnaire, the Classroom Processes Observation Schedule, a parent survey, and a teacher attitude survey. "We're trying to look at how using the ALEM affects or is related to how students and teachers interact with each other and what kinds of interactions are taking place in the classroom," explains McLaughlin. "So while we're assessing the degree of implementation of our model, we're also constantly refining and upgrading it. We're looking at how this model can be most efficiently implemented in specific situations."

Through its ongoing evaluative component, ALEM hopes to continue documenting the reasons for its more than two decades of success educating all the diverse students schools today are challenged to serve, including those considered to be difficult to teach and hardest to motivate. School districts also directly benefit from ALEM's systematic process for documenting program implementation and outcomes. It provides site-by-site synopses of student achievement and attitudes, staff perceptions, and parent involvement. Like the Degree of Implementation assessment process, all ALEM assessment instruments are designed as springboards that encourage sites to follow the cycle of implementation, analysis of implementation and program outcomes, program refinement, additional study, and ultimately, responsive adaptations.

The Effective Schools Approach: Building blocks to the future—one child at a time

What's hot and what's not in education today? It's my belief that many of the early childhood education researchers and theorists initially found the effective practices they write about in Follow Through classrooms. In one way or another, Follow Through has contributed much of what people now consider to work well in early childhood education.

— Eugene Ramp, Director, Follow Through Effective Schools Approach,University of Kansas-Lawrence

Grounded in applied behavior analysis, the Follow Through Effective Schools Approach (ESA) headquartered at the University of Kansas at Lawrence, is the product of more than 20 years of research and development in early childhood education. Its philosophy has been implemented in more than 150 schools and impacted thousands of students nationwide. ESA strives to build effective schools at the sites it sponsors by emphasizing basic academic skills acquisition and maximum academic learning time. The model consists of a four-part plan that incorporates structured classroom management, motivation and discipline, family and community involvement in student learning, and evaluation of student achievement into each school site's priorities.

Strong classroom management supports curriculum of the basics

When you enter an ESA kindergarten classroom, you'll see several small groups operating simultaneously. You'll be in the midst of lots of activity with animated teachers overseeing simultaneous reading, math, handwriting, spelling. . . .

— Don Dorsey, ESA Director of Field Services

To maximize academic learning time, ESA's creators recommend that each site have a project director, a staff trainer, and a family coordinator—all of whom the sponsor trains in the workings of the model. ESA also recommends a student/teacher ratio of 15:1 at second and third grade and 10:1 at kindergarten and first grade, if funds permit. This is accomplished by using trained instructional aides in ESA classrooms. The daily schedule at ESA sites provides for maximum learning time during instructional periods supported by back-up activities and staff planning time. Small group instruction is encouraged as is continual monitoring of student progress. "We want the curriculum to test kids when they come in," explains ESA field services director Don Dorsey. "Then we need to provide useful, plentiful, and immediate feedback to the teacher about how well she's succeeding in teaching the child. We start right away in kindergarten with individually-based, developmentally appropriate instruction in the core subjects that continue through all four years of the program."

Although the model does not prescribe a particular curriculum, implementers on-site are trained to create the most favorable environment for learning. To reinforce that training, the model does provide teacher guidelines for selecting curriculum materials. Briefly, the guidelines stress the importance of measurable outcomes, frequent teacher-student interaction, student correction strategies, and built-in flexibility for students who learn at different rates. The guidelines parallel ESA's three-step instructional system that 1) assesses what each child knows upon entering the classroom; 2) determines which social or academic skills a child should be taught; and 3) establishes a long-range plan or behavioral target for

each student. In all cases, the goal is the same for every ESA strategy: *Every child should achieve at least one year of academic growth for every year in school.*

At the Carman School ESA site in Waukegan, Illinois, a phonics primer is initially used in reading, but math study is individualized in that teachers plan instruction for the student who is farthest ahead and work individually with each of the students in the classroom until they reach that point. "For example," explains Carman School Follow Through on-site trainer, Gwen Beckwirth, "if a teacher finishes her 'math with marbles' lesson and assigns seat work to reinforce it, she might draw a line at a given point on each student's worksheet and instruct the children to raise their hands once they reach the line. As each hand is raised, the teacher remediates, draws another line and repeats the process."

ESA's motivational system explores the magic of tokens, the effectiveness of "time out"

Embedded in the day-to-day operation of the ESA model is a motivational system that's used to teach students useful academic and social behavior. The motivational system stresses and reinforces positive behaviors through specific, "descriptive praise" and through the use of small, round. colorful tokens for the youngest children and daily contracts for the second and third graders. After two academic periods liberally sprinkled with descriptive praise for their work, the children exchange their tokens for games, puzzles, and physical activities before they switch to another group of academic lessons. "The students don't know how much the games will cost," explains Carman School ESA trainer Beckwirth, "all they know is that they have to work very hard first to pay for having the most fun later."

Ramp, Dorsey, and the staff at Carman School report that as a result of the motivational system, teachers nat..rally interact more frequently and positively with all the children in the classroom. Some even claim the tokens have a certain magic: "When teachers and children have tokens in their hands or in their aprons, there's something that says 'use them,' " observes Dorsey, adding that ESA's staff view the tokens as reciprocal currency redeemable for student gains. "What we try to do is encourage positive behavior. In the early grades, we often use tokens to be very specific about what we like from the kids academically. When they do well, the tokens are a way to let them know," he says. As the students mature and gain independence, the sponsors fade out the tokens and switch into a point system or to a contract system whereby the child and the teacher negotiate days, weeks, or a certain block of time for the child to complete his or her work.

ESA's creators also opted to introduce motivation and discipline to school sites as two sides of the same praise coin. Students who behave disruptively in the classroom and impede learning for others are asked to leave for a time; they are not verbally chastised by the teacher. When the desired behavior is once again exhibited by the student, the teacher immediately reinforces it with praise. According to Ramp, this "time out from positive reinforcement," a disciplinary pillar of the ESA model, was first honed in Follow Through sites some 25 years ago. Clearly ahead of its time, the behavioral philosophy is now a mainstay strategy in many early childhood classrooms.

Staff development symbiosis

> *We are constantly adapting and adopting ideas from our teachers. Our model really came from our teachers in that it's a direct reflection of the classroom and school environment, and of the people with whom we worked over the years. If we ever really stopped changing and adjusting and constantly looking for ways to improve what we're doing and watching the research literature for new and better ideas or methods, I think Follow Through would die.*
>
> — Eugene Ramp, ESA Executive Director

Staff development from the ESA sponsor's vantage point consists of meeting on-site with teachers, observing in the classroom, and conducting one-on-one coaching. Of these, the observation system is perhaps the most detailed and elaborate. Together teachers and staff trainers are shown how to observe in the same inservice sessions so that they can exchange information and take turns observing one another. Some sites are offered six staff development days, others as many as 10 days, depending upon site needs and funding allowances. The staff development training days may also be off-site at the University of Kansas or elsewhere.

Perhaps most important to staff efficacy, school sites that request ESA implementation have to be committed to real change and be prepared for the inevitable problems that accompany it. Ramp retains a rule of thumb: Before the ESA model may be implemented in any school site, 80 percent of the teaching staff must agree that they want the program and will work with it for the three-year implementation cycle. Over the years, he's documented payoffs from such dedication of staff to the model, combined with the dedication to staff built into the model's philosophy and strategies. At ESA sites such as Carman School, staff are typically the first tapped for promotion in their Illinois system. "We have two program coordinators who are now principals elsewhere in the district and two principals in the district who were formerly teachers at Carman School," reports Principal Isabel Buckner, "and the last Follow Through director just became the superintendent of schools for a nearby school district." The Carman site may also be one of the few that can already boast of a former student returning to begin a career with the Follow Through program. The project's secretary, Sarah Neely, attended Carman School as a student from second to sixth grade. After graduating from high school, Sarah returned to Carman to work with her former second grade teacher and her principal, Mrs. Buckner.

Training parenting professionals for community gain

Of course the emphasis of early childhood education is going to have to be on parenting. Parents today are often younger and less mature than they have been so they're going to have to be trained. We've got to have the kind of involvement that Follow Through fosters so that we can get parents into the school and trained to work with their children.

— Isabel Buckner, Principal, Carman School

The nature of families has changed across class and cultures nationwide. Where there were once large numbers of parents available to volunteer during the day, today's proliferation of single-parent households and double-parent homes in which both parents work has changed the face of parent involvement as it was envisioned by Follow Through 25 years ago. ESA still trains parents for 50 to 80 hours and employs several parents as instructional aides who are technically under the supervision of a teacher. But the model's best response to the changing range of parent involvement in the school day may be one of degree. ESA has steadily augmented the professionalism and power afforded parents in the classroom by allowing them the freedom to teach whatever is assigned as they see fit. In the ESA program, parents are trained along almost identical lines with teachers, and typically, parents are involved in daily meetings among the staff to review each child's progress. If funding at a particular site allows, a large number of parents rotate through the classroom as trained instructional personnel. The Parent Advisory Council that is Follow Through's cross between a PTA and a school board is also active in ESA sites.

The most noticeable ESA difference, however—in light of the single-parent household phenomenon—is in the number of parents who remain at the sites as trained professionals long after their children enter middle and high school. Such com-

mitment may well be the best indicator of Follow Through's impact on the communities it enters. Many of the parents at the Carman School Follow Through site, for instance, have worked with the program since their own children enrolled 15 or 20 years ago. But they have progressed far beyond volunteer status, and they don't necessarily limit their involvement to the policy and operational issues of parent-teacher organization activity. Rather ESA parents with the longest affiliations seem to see their role as one of providing continuity to the program and the school community. ESA's Dorsey recalls Norma Matthews' case: "I was extremely impressed by her teaching skill when I first observed her math class. As we talked, I learned that this Waukegan staffer started as a parent in Follow Through, and put two of her daughters through the program—both of whom later taught within the Follow Through program themselves."

In turn, Matthews recalls beginning her career at Carman as a Follow Through parent volunteer in the same year her daughter entered the school. "I loved working with the kids," she says. "Since we lived in the projects, I knew most of the children and their families and became the first Parent Advisory Council chairperson here. My second year they made me parent trainer, and I moved up and on from there. Since then, I've been a grandmother to two Follow Through students and I'm still here, a grandmother to the rest of my kids in the classroom."

Although Norma's story inspires, it is not unusual at Carman School, where some teaching teams have worked together at the school for a decade or more. "I'm amazed at how well many parents can take our methods and procedures, and mix them together with their own cultural and personal characteristics to make them *pop*, if you will," notes Dorsey. "It makes it easier to get some of the more commonsensical but hard-to-reinforce student behaviors operating in the home."

Community support x student evaluation = enviable success

When ESA's innovators came to Waukegan in 1969 to implement their Follow Through model, they met with almost immediate success. Student achievement gains were dramatic enough to be covered by the local press, and parents in the city's wealthier communities decided they wanted their children to accrue the benefits of this new form of instruction. These affluent citizens approached ESA sponsors after demanding that the school board make available the innovative teaching practices of the Follow Through model, even though high socioeconomic status disqualified their families from the Follow Through program per se. "For the next four years, the Waukegan district paid out of its own pocket for us to train and implement the program in the city's non-poor neighborhood schools," reports ESA's Ramp, debunking the "poverty program" myths that have sometimes limited Follow Through's broader applications.

Such enviable status has won ESA considerable respect throughout its years at Carman School and at other sites. Ramp and Dorsey can remember the day the mayor of Waukegan interceded on ESA's behalf in a funding effort. And, national trends toward direct school and business partnerships notwithstanding, Ramp and Dorsey point to the long-term impact of communities in their Follow Through site programs. Since Carman School serves the subsidized housing in the community and thus enrolls the lowest socioeconomic group in the city, organizing volunteer efforts and business support on behalf of its students is undoubtedly challenging. But, it's a challenge the site's administrators have met successfully for nearly 25 years. First, Buckner and her associates found that taking the meeting to the people was much more effective than having all parent meetings at the school. Once the relationship was established, the Carman School staff helped parents see the

advantages of meeting on the school campus. That became an all important factor when the city opted to tear down much of the subsidized housing near the school, forcing a higher portion of the children to be bussed to the campus. "Now people are so tuned to coming to our building, voter turnout in this area is much higher when the school is a polling place," reports Principal Buckner.

In addition to ongoing fundraising efforts to maintain a classroom materials and enhancements fund, the Carman School community raised money to send students to see a touring play by preparing "pickled pig feet dinners, barbecue dinners, and . . . you name it!" recalls Buckner. One parent who was an entertainer in Kenosha persuaded her boss to contribute the receipts for a weekend toward taking the kids to the play. "That's the kind of support Carman School has been able to engender in the community," concludes Buckner. Adds Dorsey: "I know we're having an impact in that parents and community leaders know the program. They appreciate its value and are willing to go the extra mile for us when needed."

Although Follow Through sites like Carman School have made a definite impact on Waukegan, that community continues to change, so the need persists. "Like families, over the past 25 years the nation's communities have disintegrated as social institutions," says Dorsey. "And yet I feel that our schools and classrooms have remained islands of peace, of learning, of calm, and a place where kids can come and be well-treated and go home feeling good about themselves. We've been able to maintain the integrity of the program and the integrity of the students who participate."

Evaluation: Passing the test of the test

Studies show that ESA students perform at greater than expected growth rates relative to comparison groups—and to national test norms—throughout their four years in the program. For students there is the ESA annual achievement testing program. Continuous program assessment measures performance of in-progress classroom methods that have to do with the progress of kids through a variety of curriculum materials. ESA also uses classroom observations to determine what has improved in a student's achievement and how. Put simply, it's an attempt to associate the outcome with the act or strategy that produced it. The model employs continuous program assessment to determine if the model is being properly implemented.

ESA also uses consumer satisfaction measures —usually surveys and questionnaires—to find out what parents, teachers, school administrators and even students in the classroom think of the program and its effectiveness. Concludes Dorsey, "I think our reliance on data and information to make decisions, to change our own program, and to get in there and work with programs that need help distinguishes us. So does our firm commitment to basic educational skills that keep what the children take from Head Start and expand on it."

COGNET: Mediating the learning network

Six-year-old Darin's behavior problems in the classroom worsened by the day. But instead of looking confused when a counselor asked him if he knew what was causing his problems, Darin replied matter-of-factly, "Yes, self-regulation." The counselor, who was new to Darin's school and therefore not familiar with COGNET, asked "Do you really know what that means?" "Of course," Darin smiled. "It means taking control of your thoughts and actions."

— Katherine Greenberg, Founder and Director, Cognitive Enrichment Network (COGNET) Follow Through Project

Darin, according to COGNET's creator, demonstrated an important first step on the way to becoming an independent learner: He identified the reason for his behavior in a way that shows he understands his role in learning and how to control that process. Children in the COGNET program don't see school as a place to learn skills required for some isolated school task; they see it as a place to learn the skills they'll be able to use daily in school and the world beyond it. The students relax as they discover that success and failure depend most on how they think about and perform tasks. Learning problems thus become opportunities for learning how to learn. Students grow to see the classroom as a laboratory where problems are supposed to occur—and where they can expect to find solutions.

"Our focus is on information *processing*, rather than information *production*," explains Katherine Greenberg, the model's Founder and Director. "COGNET helps children understand their responsibility for learning. We help them to realize that they're not lucky if they "get it" and unlucky if they don't, and we teach parents and teachers how to look at an individual child to see where that child is going next—rather than prescribing and setting limits on what he or she can do and be. Essentially, we're raising the expectations of everyone in the learning network."

By helping students, teachers, and parents to understand how they learn through and from one another, the Cognitive Enrichment Network Follow Through Project promises to make the most that's educationally possible of interactions between children and adults. Greenberg, who also teaches as an Associate Professor in the Special Education Department of the University of Tennessee at Knoxville, uses television viewing among children as a popular example of mediation's importance to learning. Much-maligned as the worst thing since bubble gum and basal readers for school-age children, commercial television calls for someone to interpret, to help a child synthesize what it presents. Without that someone to help children reconcile these new notions that are more often than not beyond their experience, the television medium offers unintelligible reality at best, and misunderstood stimuli at worst.

Through its synthesis-reaching process in the classrooms of schools in White Pine, Knoxville, and Chattanooga, Tennessee; Ronan, Montana's Flathead Indian Reservation; Detroit, Michigan; Seattle, Washington—and, in an impressive array of international schools in Belgium, Holland, and Brazil—COGNET trains teachers and administrators to be that necessary someone, that mediator of reality for children.

Intentional, meaningful, and transcendent knowledge

Since COGNET classrooms are not stages for presenting right answers, what makes the COGNET model unique is that it helps students to reconcile school learning to their real world experience; it teaches children how to learn; and it enables children through the assistance provided by teachers. The model simply helps children to learn in naturally occurring ways by connecting new ideas to the world they already know.

— Katherine Greenberg

COGNET's uniquenesses are based on the mediated learning experience (MLE) theory of Israeli developmental psychologist Reuven Feuerstein. According to Feuerstein, MLE occurs when a teacher, parent, or other caregiver goes beyond the immediate needs of the given situation by focusing the learner's attention on the relationships between specific pieces of information and their meaning. Continued awareness of this transcendent relationship between objects, events, and thoughts assists the learner in developing a new needs system for independent learning. When mediated learning occurs at a high level of quality and quantity, the child learns how to learn and develops the capacity to adapt to new situations. When a child's mediated learning experience is inadequate, the child becomes a passive learner and displays learning problems that can be severe.

Although Feuerstein's MLE theory is well known internationally, educators are still in search of step-by-step applications that are tried and proven. So it's with good cause that Greenberg admits to riding the coattails of the popular theory. Under a Fulbright Research Fellowship, she worked for nine months with Feuerstein to develop the COGNET model's learning-experience-based criteria. Hoping to produce a working primer of the theory for teachers and parents, she condensed Feuerstein's 28 cognitive functions to 10 *Building Blocks of Thinking* that early childhood educators can easily adapt to build effective thinking skills in a classroom of young children. She also adapted Feuerstein's parameters of MLE for COGNET's eight *Tools of Independent Learning* so that teachers and even students can see immediately what may be causing barriers to learning.

"Our approach," Greenberg reiterates, "is based on building what we call COGNET, or a cognitive enrichment network, in the community. We want to establish a network in which parents, teachers, and people involved with children on a daily basis work together to help children become independent and productive learners."

Greenberg notes that Feuerstein's greatest contribution to understanding how children learn may be his articulation of what children need as a prerequisite to thinking. "Educators may talk about being able to think logically or hypothetically," she adds, "but if they don't get down to the nitty gritty of student needs and learning tasks, the best they'll be able to provide is practice that might help some students make a better grade. But those students who don't already know how to learn aren't going to improve overall," she warns.

Building Blocks of Thinking

Skills upon which thought processes are based

Approach to Task - Beginning, doing, and completing an event by gathering information, thinking, and expressing related thoughts or actions.

Precision and Accuracy - Awareness of the need to be exact in understanding and using words and ideas.

Space and Time Concepts - Understanding how things relate in size, shape, distance, time periods between, and/or changes to or from one another.

Thought Integration - Pulling together and using multiple sources of information.

Selective Attention - Choosing relevant information.

Making Comparisons - Examining relationships between events and ideas to determine same and different.

Connecting Events - Associating activities in a meaningful manner.

Working Memory - Entering bits of information from the mental act, retrieving them once stored in the brain, and making connections between them.

Getting the Main Idea - Finding a fundamental common element between related pieces of information.

Problem Identification - Experiencing and defining what is causing a feeling of imbalance.

Buds of development

To help students learn to learn before their educational careers are set in stone, COGNET offers a program overlay that's designed to enhance any curriculum that exists in a given school. The model is also comprehensive in that it touches every facet of a student's life. Building school and community ownership in the program is therefore essential. Greenberg introduces school personnel to the COGNET approach to learning in a 30-hour workshop. Educators are trained in

TOOLS OF INDEPENDENT LEARNING

Needed for the active generation of information rather than its passive receipt

INNER MEANING - Developing intrinsic motivation for learning and remembering.

SELF-REGULATION - Controlling approach to learning through thinking about how you are thinking to determine readiness and speed.

FEELING OF COMPETENCE - Knowing you have the ability to do; (affects motivation to learn).

SELF-DEVELOPMENT - Working toward becoming all you can be.

GOAL-DIRECTED BEHAVIOR - Taking initiative in setting, seeking, and reaching objectives consistently.

SHARING BEHAVIOR - Communicating implicit thoughts explicitly.

FEELING OF CHALLENGE - Awareness of emotion's effects on novel, complex, and difficult tasks and knowing how to deal with that challenge.

AWARENESS OF SELF-CHANGE - Knowing that you change throughout life and learning to expect, nurture, and benefit from that change.

how to establish a classroom environment where process is valued as much as product, where the classroom becomes "a laboratory for learning" rather than a "stage for producing right answers." Teachers also learn how to recognize inefficient use of the10 *Building Blocks of Thinking* and the eight *Tools of Independent Learning* and mediate their efficient use.

The *Building Blocks* and the *Tools* are then taught, emphasized, operationalized, and essentially woven into the fiber of classroom activities as students and teachers go through daily interactions and learning opportunities at school. Teachers implement four mini-lesson plans each day, one for each of four types of learning activity with all focusing on the same Building Block or Tool. Explains Greenberg, "The model's aim is to help children go beyond where they are now, so we try to teach educators how to reach into what Vygotsky calls *The Zone of Proximal Development* —that place where someone needs assistance to continue learning. We show teachers how to gauge a child's learning ability so that they can look at the buds of development, instead of just the fruit."

TECHNET: The computerized connection

Although teachers are encouraged to integrate COGNET into a wide variety of instructional activities they already use, many prefer to adopt new teaching methods such as those used in a component of COGNET called TECHNET. As COGNET's computer-learning component, TECHNET involves specific, empirically researched, computer-based instructional activities. Software is integrated into the curriculum to emphasize both cognitive and basic skill goals and to assist students in operationalizing the Building Blocks and Tools.

When computers are used by small groups of students, a collaborative atmosphere is provided that research suggests reduces low-level errors and creates support for higher level thinking activities. Through a cooperative learning approach, opportunities are plentiful for oral explanations between peers, discussion of what's being learned, personal reinforcement and feedback, as well as peer accountability. Guided by mediators, children interact with each other to connect events and

build and test theories. Frequently, the students discuss the need for specific Building Blocks and Tools in order to engage in successful cooperative learning and computer activities. Teachers are free to select software that blends best with classroom goals. They are taught how to adapt software in ways that enhance learning and balance drill and practice with problem solving activities. COGNET staff maintain a continuously updated list of free and inexpensive software available for teachers in a classroom that is a "laboratory for learning."

For example, one TECHNET exercise, "The Great Space Race," asks the student to build a space ship with an engine composed of several different parts. Once the student puts it together, she tests it to see how much time it required to get into the air using a number of variables she's encouraged to "play" with. The teacher mediates the activity by asking the child to identify which of the Building Blocks and learning Tools were used to do the exercise. First-grade children immediately recognize that they've used *approach to task*, *selective attention*, *working memory*, *self-regulation*, and *sharing behavior*. They rattle the concepts off to let the teacher know they're doing their jobs thoughtfully, and go independently on to the next TECHNET task.

Teacher change

> *The beauty of this program is that it didn't change anything I was teaching. It just made me more aware of the needs of the children I'm responsible for helping, and that's a great tool within itself.*
>
> — Janice Wilder, COGNET teacher/trainer

Since mediation has everything to do with how material is seen, analyzed, processed, and then used, its success in the classroom is perhaps most dependent upon teacher qualities and characteristics. Greenberg, who spent the early part of her career teaching inner-city, "disadvantaged" children in special education classes, insists on an initial 30-hour teacher workshop followed up with ongoing training and a grassroots way of collecting data.

Her experience with COGNET taught Greenberg that winning the support of the teachers is an essential first goal in implementing the model. One COGNET teacher, who is described by the model trainers as a "real success story," grew from putting down the children in her classroom out of sheer frustration at her own inability to reach them, to being the star of a COGNET training videotape. "When we turned the video camera off," recalls COGNET parent trainer Janice Wilder, "this teacher said, 'Turn it back on. I'm not finished praising the students for showing what good learners they are and for working hard at the task.' All that teacher needed," explains Wilder, "was a handle on what to do when a child isn't doing well. COGNET gave her that."

Greenberg and her staff of assessment professionals at the University of Tennessee also found that, before COGNET training, teachers at one school site used a potpourri of child-teacher interaction methods. But after training, the teachers' interaction profiles were characterized by similar strategies which promote higher-level thinking. Rather than short product questions dependent on short answers and recalled information, the teachers quickly came to favor process questions designed to get the student to think about why and how a thing has to be done. The untrained teachers routinely allowed children to "co-opt" or take over another child's opportunity for learning by calling out the answer before the target child could respond correctly. The trained teachers spent more time with kids who give partial or misguided responses, and they trained their classes to respect each child's need to know how to learn by not blurting out answers. The teachers in this school have also learned with COGNET that I.Q. scores and grades don't mean nearly as much to a child's immediate and future academic success as well-developed cog-

nitive processing. Says Greenberg, "We're trying to get the teachers to see that once they know how to help kids learn to learn, then they need to take a look at everything they're doing. We want to empower teachers to see there's a way to teach that does not make a classroom a stage for producing right answers, that classroom activities should be developmentally appropriate."

Parents as primary mediators

We want the children to understand that learning occurs everywhere, and our parent training is the best way we know to accomplish this. Parents help tremendously when they can show children how to process what's going on around them outside of school, especially in the home. Parents also reinforce what teachers are doing in the classroom, and a partnership in the network forms.

— Katherine Greenberg, COGNET Founder

COGNET provides 20 hours of parent training in the model philosophy and curriculum enhancement. Child care is furnished, very few parents drop out of the sessions, and most attend monthly support meetings on the suggestion and encouragement of COGNET sponsors. But the challenge of the program is in building trust and enthusiasm, says parent trainer Janet Wilder: "If you can get a parent to believe you when you say, 'Look, this is really going to work with your child,' they'll try your suggestions. And once they see how well the ideas work, there's no way they're going to stop. No way."

COGNET sponsors agree that the most gratifying aspect of their parent program is that parents take the training and form friendships during the sessions that flourish outside the school's reach. The phenomenon, notes Greenberg, extends the mediated learning network well into the communities in which children live and grow. "We'll have a Parent Teacher Organization meeting," reports Wilder, "and the children work with their parents to write a presentation that addresses the question, 'How does a schoolteacher think?' The exercise thus puts parent and child in a schoolwork partnership effort that can be replicated at home with student homework as well as routine activities like shopping and cooking." COGNET parents report that the training has helped them understand their own children and work with them to accomplish school-related as well as home-related activities. In addition, they believe it changed their understanding of school and their interaction with their children.

Networking through Head Start

COGNET is firmly committed to working with Head Start agencies to provide unified and continuous services for children and their families. The White Pine, Tennessee demonstration site staff, for example, work closely with the Douglas Cherokee Economic Authority's Head Start agency support services staff who serve families in their region.

Fortunately, the collaboration doesn't end there. Although the White Pine COGNET Project has its own designated full-time support services coordinator, building trust in the Southern Appalachian mountains near Knoxville takes a persistent nature and a steady implementor who is investing for the long haul. "When a stranger comes into any community of 1,800 people in this part of the country, she's observed for a year or two before the community grows to trust her," explains Wilder, who is also a Head Start teacher. Having lived in the community all of her life, Wilder supported COGNET Follow Through Social Service Coordinator Betty Burcham until the community learned to trust her. With 75 percent of White Pine's student body being bussed to school, and well over half living below the poverty line, that support proved invaluable. Betty Burchum has many success cases to report as proof. At the same time, Janice Wilder's dual role as Head

Start teacher and COGNET parent trainer equipped her with the credibility she needed to get parents actively involved in both preschool and school programs throughout their children's early childhood years. Such successful collaborations also helped to convince school district officials that the best way to stem the dropout rates they have seen worsen in recent years was through early childhood interventions like Head Start and COGNET's Follow Through.

At every COGNET demonstration site, sponsor staff assist school staff in building close connections with Head Start support service providers and teachers. Head Start staff are encouraged to attend teacher training [illegible] and implement COGNET in center [illegible]. Every effort is made to facilitate unified [illegible] services.

Mediating success

Two years ago, I had the chance to work with a child whom a psychologist had categorized as mentally retarded. From August to November, I worked with the child using the Building Blocks of Thinking. The observing school psychologist had determined that, although additional testing was called for, from his observations, the child was retarded. He didn't intervene in the case again until a meeting was scheduled to place the child in Special Education. By then I'd noticed a significant change in this child's ability to learn, and asked the psychologist to re-test. The second test showed the child was not retarded and could continue in the mainstreamed program.

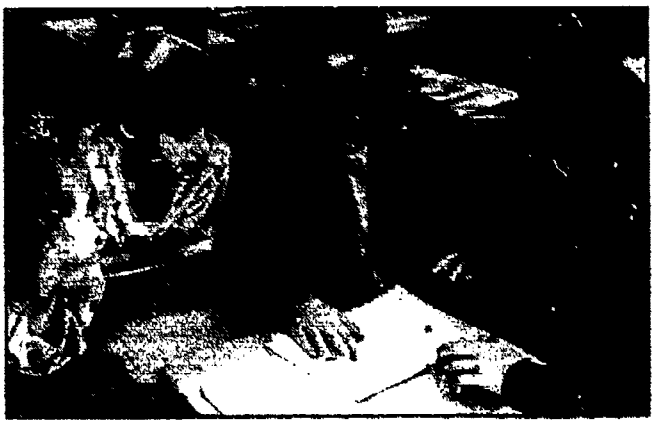
—Janice Wilder, COGNET Trainer

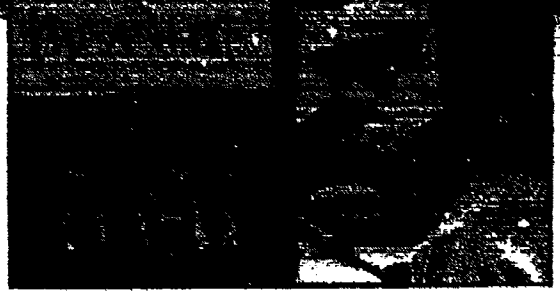
Like so many Follow Through sponsors, COGNET has more than its share of children who have made dramatic changes for the better under its direction. Brenda's story, as recalled by COGNET trainer Janice Wilder, is but another telling case-in-point:

Brenda came from a family that could neither read nor write, and the little girl could barely speak when she enrolled in school. She communicated with gestures and animal-like sounds. I started working with Brenda on COGNET's Building Blocks by concentrating on the first one—approach to task—because younger children need to thoroughly understand that idea first. I refused to accept gestures, and encouraged Brenda to use words.

Brenda made great progress the first year, and we continued stacking onto her knowledge during the second year. When Brenda moved to public school, I made a follow-up visit. Her teacher said Brenda was having a problem remembering her birth date, which surprised me. I asked the teacher if she offered Brenda cues, and she assured me she was. Brenda's birthday happens to be in July, that shares the same initial sound as the beginning letter of my first name, so I recalled that her birthday was July 8. The teacher disagreed, telling me the child's birthday was listed as July 18. I persisted, and when Brenda's file was pulled, it bore out Brenda and me.

Brenda knew when her birthday was. She had learned, and she was so sure—so confident in her learning—that she stuck by her knowledge even when the teacher continuously disagreed with her. Had it not been for the Building Blocks of Thinking and the Tools of Independent Learning, I might never have reached Brenda. They've made me a more effective teacher and the students I work with much more confident learners.





Bank Street's Developmental-Interaction Approach: Fostering respect for each child's potential

Bank Street College was founded on a bend of the Hudson River in New York City in 1916. Although its physical location has since changed, the work of this independent educational research college has remained—by virtue of its founding philosophy—a major port for early childhood education theory and practice. The Bank Street Approach, known as the Developmental-Interaction Approach, rests on two fundamental principles: that education must be appropriate to the child's stage of development, and that children learn best by interaction with others and with their environment. The tradition here has always been to respect each child's potential and to draw on the natural chemistry of teacher, parent, and peer interaction to foster each child's latent strengths. By tapping into the interests and natural initiative of the learner, Bank Street's researchers, teachers, paraprofessionals, and administrators concern themselves primarily with providing a learning environment ripe with ample and tangible opportunities for the child—as an individual—to flourish.

For example, Bank Street's Developmental-Interaction Approach inspired the children, parents, and staff of PS 242 in Brooklyn to build a children's heritage museum to preserve the memory of Weeksville Community, a turn-of-the-century free African American neighborhood unearthed during the building of a public housing development. Bank Street's philosophical approach to education is the cornerstone of one New Haven, Connecticut magnet school's emphasis on integrated curriculum including math and science. It is also a founding principle and instructional strategy that continues to thrive in impoverished rural school sites in Tuskeegee, Alabama and Brattleboro, Vermont.

Since Follow Through's inception, the educators at Bank Street have studied how poor, urban children become more independent in their learning. For decades, Elizabeth Gilkeson and Richard Feldman honed cooperative learning strategies; multi-age grouping; individual, small group, and team-taught instruction; and portfolio compilation to help adjust the classroom to each child's stages of development. The Bank Street approach views the classroom as an "educational workroom" that appeals to all five of a child's senses. For instance, watching and studying the gestation, birth, and growth of rabbits or chicks, transforms them from mere class pets or science projects to experimental opportunities for exciting curriculum. And despite the animals' occasional free rein among the children, Bank Street classrooms are not reduced to unstructured environments. Rather, the animals and plants, the lively discussion, and other projects for learning become interactive, hands-on, active components of a learning process that—unlike an educational product or outcome—is boundless. The crux is that the process is ongoing, changing, and elemental. Reading, math, creative writing, and arts and crafts are organized in centers for the children's investigation as the students learn "in process." According to Bank Street Follow Through Director Richard Feldman, "the focus on children—on whether they can take the work and use it interactively and independently—is still the core" of Bank Street's work.

Life literacy; city survival

> *We are interested in children developing literacy in more than language arts. One becomes literate through a process of exposure, practice, and ultimately use. Being able to communicate in any language—mathematics, science, or life—is the indication of literacy. . . . There's a Bank Street quality in effectively operating classrooms. It's a kind of competence and confidence when the kids approach adults, a sense of comfort and responsiveness that's the unmistakable mark of a child in the process of learning.*
>
> — Richard Feldman, Bank Street Follow Through Director

Two Bank Street emphases are key to the productivity of its Follow Through early educational strategy: 1) social studies and 2) interaction combined with the individual choices that learners of all ages and ilks claim for themselves. In the Bank Street Follow Through model, children become not only good citizens of their communities and the world, but are literally afforded the encouragement and artistic license to continue creating and recreating themselves and their surroundings. "Social studies," notes Feldman, "is a vehicle for integrating subjects so that kids can make meaning of the world. The fact is that understanding starts from studies that are close at hand. The kids walk to neighborhood sites, they take trips, and they involve themselves in ways that portray the community as a classroom."

Children at Bank Street sites work with mixed media in their creations and make use of the entire page—be it painted, printed, or multimedia. The children are encouraged to map their surroundings, to document the city's streets and waterways. Building blocks and tools for building cities are also hallmarks of the Bank Street model. By sawing, drilling, scaling, and nailing together model buildings, homes, shops, restaurants, and communities emerge from variously shaped and sized wooden blocks. The children learn firsthand something of the way the world's cities are built, how neighborhoods work and neighbors coexist, and the importance of every human being to any landscape. In the same vein, Bank Street's researchers note that the concept of community space, so essential to successful community adaptation, is a lesson learned and valued in the classroom. "The children know they have to take care of the materials and tools, and that each doesn't need to have his or her own space in the same way that we used to think was necessary for ownership," reports Feldman. "There's also always a planning process here. It's frequently tied into some social studies event or a field trip," he explains, describing trips to see how the cobbler built his business or how the restaurateur and the retail merchant respect each other's needs. The children learn to work within and harness the power of expression through frequent group meetings in which they share what they've discovered, and how to speak their minds —all of which contributes to their development as productive, competent, successful human beings.

First and foremost, however, the emphasis in Bank Street Follow Through is on meaning. Materials and "skills are tools for meaning and are learned in the framework of utility, rather than as teacher-assigned, unrelated drill and practice," notes Feldman. "We are concerned that children get their ideas out. Rote reading and writing mean little." Arguing with critics who maintain that classroom organization is lost in a setting in which the child is his own authority, Mrs. Gilkeson staunchly maintains that centering a classroom around a teacher accompanied by a desk is a stifling misuse of space for inquisitive young children. "We don't have a teacher's desk," Mrs. Gilkeson explains. "It takes up too much room better used for children's materials. Our intent in having a wealth of materials is not so much for formal instruction but for experimenting with learning how to use materials. Teachers support the children as learners by laying these tools out in interesting ways, so that the children get used to selecting rather than copying ideas or doing what the teacher tells them." Thus, Follow Through children at Banl Street are not only encouraged to learn cooperatively, but to be self-selective in their learning experiences through use of the materials and organization created by the teacher.

Time on task for its own sake is not a concept Bank Street sites employ. The developmental-interaction philosophy coincides positively with the children's natural development: "We find that any student invested in the idea of a task, and having some choice in the activity, will remain with it for a long period of time," reports Feldman. "Our greatest concern is that the external schedule

interrupts children's work, diminishing the value of the work in which they choose to engage. People worry that children will self-select inappropriate tasks. But the habit of sustained investment takes place through work children enjoy." Even when children are interrupted because of the demands of the school schedule, teachers encourage children to return to the work by providing time to see it through to completion.

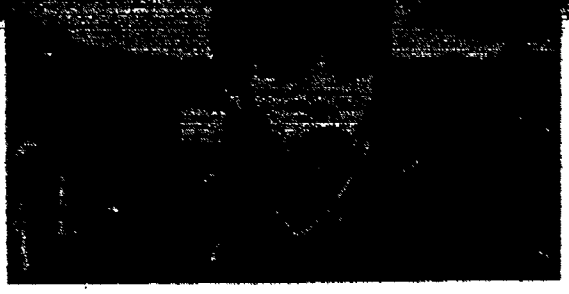
The outcome, as Mrs. Gilkeson explains it, is designed to meet individual needs through an educational process that fits each child well: "There's a sense that these kids know what they want to do, and that they are free to do it. They feel secure in going from task to task," and they sense the fun of learning. Oral language development with complementary gains in reading, writing, and higher order thinking skills are, as one might expect, documented contributions of the program.

Staff development: Ways of working with teachers as learners

When properly implemented, the Bank Street Model requires a Follow Through director for each site (this can be a principal or administrator who is invested in bringing about change), a teacher and one teaching assistant per classroom, one staff developer per eight to 10 classrooms, and a parent coordinator. Continued staff development is key to the program, as teachers become in-class educational researchers and analysts who must not only assess their student's individual progress, but diagnose the cause of achievement problems and seek solutions. "Our most distinctive feature is ongoing staff development in the evolutionary sense of the participants," says Feldman. "For schools to be exciting for children, they have to be exciting for the adults who work within them," and since creative teaching is a natural offshoot of continuing administrative support and professional stimulation, Bank Street's staff development role is both evolutionary and constant. "It is critical that the person who takes responsibility for working with Bank Street Follow Through teachers and paraprofessionals understands," explains Feldman, "that staff developers are advocates for the development of the person first." As a consequence, all Bank Street staff evaluations are designed to encourage instructors to assess and evaluate themselves.

Support for parenting

As the cry for increased involvement of parents in their children's education echoes from the research halls, to the classroom, to the district office and state boards of education, the evolution of the parent room as a visible, interactive feature of the Bank Street sites offers a distinct involvement strategy. At Bank Street, the parent room becomes an extension of home for parents and their children, and ongoing mediation is also offered. Helping professionals and peers are at hand to help parents deal with their child's development. Parents are thus empowered to care for themselves and their children and to ultimately make a difference in the world. Thus, the Bank Street parent coordinator typically works to involve parents through community contact and advocacy of the individual parent and the parent group. As with most reciprocal relationships, parents at Bank Street's sites become supportive of their children's educational process, because Bank Street is more supportive of parenting.



The TEEM Fit: Tucson Early Education Model individualizes children's learning

Follow Through permitted and encouraged us for the first time in the history of public education to look at children in terms of who they are, where they come from, and what they bring from home. Until the 1960s, educators had blamed the child for not "fitting" into the school system. A shoe store is more accommodating in helping us to fit our footwear needs than schools have been in helping to fit the educational needs of our children. You can go into a shoe store and buy different sizes, different styles, and different colors depending on your foot and your preferences. You can buy low heels, stacked heels, rubber soles, whatever. Everyone tries to find a shoe that doesn't pinch—that's comfortable. Yet schools continue to force children into the way of the school. In Follow Through, we are simply trying to give the child a good, comfortable educational fit.

— Alice S. Paul, Director, Tucson Early Education Model

The Tucson Early Education Model (TEEM) at the University of Arizona began in 1965 as a cooperative project founded on the philosophy that formal learning should begin with the strengths and experiences young children bring to the classroom. It was founded by Dr. Marie M. Hughes as a cooperative effort with the Tucson Unified School District (TUSD) focusing on the intellectual development of Mexican American children. This population's lack of success in school was similar to that of other minority children, the rural poor, and the children of unskilled laborers with subsistence incomes. Today, the same characteristics also apply to children who are identified as "at risk."

TEEM's implementation efforts have been equally successful in schools located in black urban areas and an isolated Alaskan village. Since becoming one of the first Follow Through model sponsors in 1968, TEEM has trained school staff to implement its early education model in diverse communities in 17 states. According to TEEM director and University of Arizona education professor, Dr. Alice Paul, four long-range goals for TEEM instruction were set in motion by Dr. Hughes that remain valid: developing language competence, academic and social skills, a motivational base, and an intellectual base in Follow Through students. These goals enhance achievement, strengthen self-esteem, and support the learning process sufficiently to prevent schools from "pinching" those children whose life experiences are not factored into the conventional school culture. In each TEEM site, work toward the goals has been custom-fitted to the children, their parents, teachers, and the culture-rich communities.

As Dr. Paul explains, "Children have to have a strong language base to be able to function linguistically in their own culture and in the larger society. They need to develop thinking and learning-to-learn skills to be able to make decisions, to make plans, and to make choices. To succeed, children have to want to achieve, to have a sense of I can-ness, in addition to the 3R's and the ability to get along with people. With TEEM, we believe that every child has a right to that experience."

Richey's legacy and promise

Named after Thamar Richey, a 1920s teacher and founder of the first Yaqui Indian school in Pascua Village, Arizona, Richey School has grown with TEEM language experience strategies since the inception of Follow Through. 49 percent of the school's students are Yaqui, a refugee tribe from Mexico who gained Native American tribal status only 15 years ago. Thanks to TEEM research, the school understands that Native American Indian communities want their children to learn English—but not at the expense of losing their own language. Multicultural and multilingual education at the school has become firmly entrenched and is continually evolving as a result of that awareness. At a recent student pow wow

parents, teachers, and community leaders watched appreciatively as the children danced in celebration of their cultural legacy. "We use culture as a basis for transition into the larger society," explains Dr. Paul.

Richey's founder began the school with a single room, far from enough funding, and an unfailing sense of commitment. Today, the school's teachers—who are trained in TEEM's unique staff development and instructional process—keep the school centered on the children, championing their diversity and renewing professional commitments to school and community. But the tenure of these educational professionals is perhaps most distinctive. Several of Richey's teachers and administrators have practiced TEEM strategies for more than a decade. Eva Martinez, the model's Follow Through coordinator at Richey, who attended the school as a child, has worked in various Follow Through positions there for over 20 years. Says Paul, "The longevity of our Follow Through teachers and staff is impressive. They are committed to making a difference for their students and the Richey community."

A look at TEEM in action

Several women cut letters from felt cloth and paste them to velcro for classroom use in a Scrabble-like game played with gloves. A baby rests, smiling, in her car seat as the women visit in Spanish, and a couple of Yaqui aides gather resource materials from a busy parent room before returning to their multicultural classrooms.

Five Tohono O'odham second graders explore math concepts with manipulatives for half an hour. They "invent" measurement and abstract *abo* and *abba* patterns. Their language interaction includes discussions of labels, abbreviations, and "commodities." Some children are in a writing center composing their own paragraphs entitled "What I Like About Indians." Pairs of children come and go in accordance with set time periods on a computer. The environment of the classroom is rich with children's contributions as well as labels for numbers, and the days of the week, written in both English and Tohono O'odham.

An aging brick schoolhouse, nestled in the Kentucky coal mountains, is rejuvenated by the community's interest in its children's education. Teachers are refreshingly receptive to new ideas, while children eagerly talk and share their writing, science projects, and endearing hospitality with visitors.

These three scenes are TEEM in action. Under the model's sponsorship grant from the National Follow Through Program, four demonstration school sites in Arizona and Kentucky extend TEEM's vision daily. TEEM trains teachers to use four "process variables" or practices in working with children. The effect of these variables on the children's learning process, the teachers find, provides invaluable data on what kinds of individualized activities and encouragement each child needs to reach his or her potential.

First and perhaps foremost, teachers are trained to individualize instruction. Individualization takes each child's developmental level into account and offers ample time for one-on-one teacher-child interaction. Second, the teacher is trained in modeling behavior that makes the most of young children's natural tendency to imitate. Positive reinforcement (such as verbal praise, attention and the like) informs children of all ages and developmental levels that engaging in the learning process and acquiring skills are naturally rewarding. Says Dr. Paul, "Children need to know that you care, that you notice they're making an effort, and that every small step counts." Third, generalization of curriculum across subject lines confirms a child's notion that all knowledge is relative, interactive, and exciting. And finally, teachers orchestrate the children's acquisition of TEEM goals—language, thinking, motivation and academic/social skills—through student experience plans.

Room and time arrangements are key to the effectiveness of the process variables, and proper implementation of the TEEM model requires low teacher-student ratios, children working in small groups, and stimulating interest centers. But, because the professional response to child-centered educational processes is so closely interwoven in the TEEM Follow Through approach, children who are firmly grounded in the process unavoidably influence their teachers. "The children move forward," explains Dr. Paul. "We've seen children who graduate from Follow Through classrooms and teach the TEEM way to their fourth-grade teachers. Then the teacher tries it, finds it successful, and sometimes moves into using it. The child has led and everyone is better for it."

Parents are their children's first teachers and a community's most powerful change agents

In addition to the Site Director and Training Coordinator required under TEEM sponsorship, a Home-School Liaison is essential for successful implementation of the TEEM open education approach. TEEM integrates community and family members who work with and within the school to help children grow personally, academically, and socially. Parents may volunteer in the classroom, work in the parent room preparing materials for the teachers and children, become active members of site Parent Advisory Committees, and/or join other service groups in the community.

Parent power in education for the past two decades has also increasingly meant that parents must find, provide, and maintain a legislative voice on behalf of their children. Dr. Paul reports that Follow Through has helped the parents in TEEM sites to become more aware of their voting power. "They le n they can make a change by banding together and having a common cause," she says. "As a Follow Through sponsor, we've helped parents become vocal about what should happen to their children. Parents become part of the school and so they maintain that bond until the fourth grade. By then, we've interpreted the community for the school and the school for the community, and parents want to continue to be involved because they've formed a strong partnership that's mutually beneficial."

The Washington Research Institute School Effectiveness Follow Through Model: Research-based classroom practices for effective teaching

The group I'm talking about are the working poor who simply can't afford the child care and health services that they need to make it. If you ask us who we are, we are all middle class to the administrator at the Aid for Dependent Children office or the overworked job counselor at the end of the unemployment line. We always feel that our current situation is temporary, even though we may be here for a generation or more. We cling to our middle-classness because we aren't ready to admit that the people served in Head Start and Follow Through programs are more and more often like ourselves.

— Edward Hansberry, School Effectiveness Model Follow Through Director and Compensatory Education Programs Coordinator, Flint, Michigan

In the 1980s perhaps more than any other decade, much of the American middle class slid slowly into the lower class. Their recent arrival there can be documented no more easily than in midwestern blue collar and steel towns like Flint, Michigan. Head Start and early child care programs grow in size in Flint despite the economic downturn that has created islands of poverty in suburban communities and inner cities alike. To be effective in such a city, an early childhood program must meet the needs of the entire family—indeed the entire community. The Follow Through Program in Flint has long had just such a positive impact on the Manley Elementary School community, and the Washington Research Institute School Effectiveness Model—sponsor for the Flint Follow Through Program—continues to contribute much to Manley's success.

The Washington Research Institute (WRI) developed the School Effectiveness Model (SEM) using six standards which serve as the foundation for the educational approach:

1) research-based classroom practices that enhance achievement of children at risk of school failure;
2) parental participation and involvement in their children's education through home-school program coordination;
3) provision of comprehensive services to low-income students and their families;
4) coordination between Head Start and primary grades program and services;
5) coordination with programs serving students at risk of school failure, including children with limited-English proficiency, children with disabilities, and children who qualify for remedial services under Chapter 1; and
6) model education procedures that can be disseminated to other schools.

In 1988, the WRI School Effectiveness Model received funding for three years to serve as a Follow Through Project Sponsor; and in 1991, the project received new funding for another five-year period. The WRI School Effectiveness Model serves as sponsor to Follow Through demonstration sites in Flint, Michigan; Las Vegas, New Mexico; and Worcester, Massachusetts. Both the Flint and Las Vegas sites have long been involved as Follow Through demonstration projects. Both were reviewed and approved by the Joint Dissemination Review Panel (JDRP), which documented that they exhibited exemplary performance in working with low-income children in the primary grades. The Worcester, Massachusetts site also conducted a successful program for low-income children prior to being funded as an SEM Follow Through demonstration site.

Research-based classroom practices

The overall education program in the SEM is derived directly from research on Teacher Behavior, Teaching Functions, Academic Learning Time, and Peer Mediated Learning. This research base posits that Academic Learning Time—the

amount of time students spend engaged in tasks they can perform at high success rates—results in increased student achievement. Teachers can alter the quality of learning time through interactive instruction using demonstrations, modeling, shaping, structuring and direction of assignments, peer practice, and appropriate corrections. According to WRI's Follow Through Project Director Gary Johnson, well-trained staff who not only are familiar with the model's principles, but also are convinced that the School Effectiveness Model teaching strategies will better student achievement, are key to the model's successful implementation.

"We have a teacher training component that focuses on developing a teacher's ability to instruct through careful presentation of the subject matter," explains Johnson. "The teachers are trained to frequently monitor student performance so that a mastery testing kind of cycle is continuously at work." In the academic subjects that cycle builds a sort of "teach/test/teach/test" rhythm throughout each small group lesson time of 30 to 45 minutes. "Our goal is to change the traditional student-to-teacher interactive pattern of 85 percent listening time on the part of the student, to one of close teacher-student interaction," notes Johnson.

Such active teaching provides ample opportunities for students to participate, respond, and experience success. Teachers are trained to offer feedback on student success in lessons, and correction procedures are also part of teacher training. Teachers learn to continually gauge each student's progress and respond to individual needs based on those ongoing assessments. "What we really want," explains Johnson, "is to get teachers to attend to what students are doing so that all students have an opportunity to learn, and the teacher can check for mastery of the subject matter."

Teachers using the School Effectiveness Model receive support from a local teacher supervisor who monitors, coaches, and models teacher performance in the classroom. A teacher supervisor for every 350 to 400 students is recommended in every School Effectiveness Model site. Because the supervisor's function is as a technical assistant and support person for teachers charged with implementing the model, the supervisor is initially trained by WRI staff. "The idea is that the supervisor is available all day—every day—helping teachers to attend to every student's learning," adds Johnson. "A sponsor representative comes in a certain number of days each year and works in the classrooms, directly with teachers, and with the supervisor. With the School Effectiveness Model, instructional design comes first, and instructional delivery second, as critical components of the model. The two are reinforced by careful monitoring of student performance with the understanding that all students can learn if they are taught carefully."

Direct Instruction became recognized in the 1970s and 1980s as one of the most effective ways to educate low-income young children, and it is one practice clearly identified by the Effective Schools research. "We looked at the school effectiveness literature and every early childhood education model that's based on those premises, and their core is direct instruction," explains Johnson. "We looked for definite academic programs, increasing amounts of instructional time, and making provisions for students to engage in meaningful, relevant activities," he adds. Johnson further maintains that the seeds of Effective Schools research lay in Direct Instruction theory and that some classrooms observed during the earliest Effective Schools research were in fact Direct Instruction Follow Through classrooms.

Components of educational approach

What is novel about current studies of effective teaching is that they have provided a research base that comes from experiments conducted in classrooms with regular teachers teaching regular subject matter. The results have consistently shown that when teachers teach more systemati-

cally, student achievement improves—frequently with gains in students' attitudes toward themselves and school.

— Barak Rosenshine, *Synthesis of Research on Explicit Teaching*

The School Effectiveness Model focuses on fostering developmentally appropriate literacy skills and competencies in classrooms serving students at risk of school failure. The model includes four essential components: instructional material and teacher behaviors; authentic literacy experiences; peer-mediated instruction; and progress monitoring.

Instructional materials and teacher behaviors

To promote high levels of achievement and positive affective outcomes, the SEM employs carefully designed instructional materials published by SRA (Science Research Associates) that encourage active teaching and academic engagement. The instructional program specifies teaching routines, ordering of teaching examples and review items, correction procedures tied to specific error categories, and transition procedures between learning to read and reading to learn. The SEM is designed to expand the range of reading activities across the four grade levels from K-3. The first two levels, which represent a phonics-based approach, focus on learning to read. The next two levels shift emphasis to reading to learn, with special attention to reading and understanding content area material such as science and social studies.

"The way it works," explains Johnson, "is that the students learn background information through reading bona fide science and social studies passages. Then they read selections that have plot, theme, character, and humor woven into the science context. It's a unique aspect of the curriculum that sets us apart from other reading programs that dip into science here and drop a little social studies there."

Since Head Start and Chapter 1 programs coexist at schools like Manley Elementary in Flint, the Follow Through teachers have naturally spread the School Effectiveness Follow Through instructional delivery system throughout the school and across programs. "We started the coordination effort really before the federal government advised us to," explains Flint coordinator Edward Hansberry. "We kept telling teachers we can't keep working in isolation without knowing what's going on in the other programs. We want to keep raising our expectations so that we can keep teaching to more than minimal performance standards."

Authentic literacy experiences

Although it is possible to analyze literacy into a network of component skills, literacy activities in the natural environment are functional and purposeful. Too often schools decontextualize literacy (by means of workbooks and skill sheets) to such an extent that students lose sight of the function of reading and writing activities. The SEM attempts to overcome this problem by employing authentic literacy experiences for home and school. The SEM home reading program and novel study units are two illustrations of authentic literacy experiences. In the home reading program, students read trade books independently or with the help of their parents. Teachers monitor these daily home reading assignments through a home-school reporting mechanism that is coordinated with parents. In the novel studies component, teachers lead their classes in the reading of entire novels, emphasizing concepts of story grammar, vocabulary development, and literature appreciation. In addition, classroom writing activities are integrated with reading assignments and constructed to provide students with meaningful writing experiences such as writing a new ending for a short story or writing to the author of a book.

Peer-mediated teaching

The SEM employs Classwide Peer Tutoring (CWPT) procedures developed by Greenwood, Dequardi, and Hall. This structured peer tutoring approach has been shown effective in producing long-term achievement benefits for low-income children in the areas of reading and spelling. In addition to CWPT, the SEM encourages teachers to employ peer practice approaches, including partner reading and cooperative learning.

Progress monitoring

In the SEM, teachers monitor students' progress using a number of quantitative *(fluency checks, mastery tests, criterion-referenced measures)* and qualitative *(writing samples, daily work samples, and observations)* indices. Through regular monitoring of students' work and achievement levels, SEM teachers obtain information that helps them schedule reteaching and review, or specialized instruction for struggling students.

In addition to the formative evaluation that involves regular monitoring of student work, summative evaluation at SEM sites includes standardized achievement test batteries to measure student performance. "If we can get students—disadvantaged students—up to the national norm as measured through accepted standardized tests by the end of the third grade, then we've reached the model's goal," explains Johnson. "The premise is that from then on, the students have a chance of continued success in the future because they've caught up."

Since both ongoing and annual tests are used by the model to meet its primary goal of bettering student achievement, the greatest success stories in School Effectiveness have to do with dramatically improved student scores on academic achievement tests. "We had a site in Tacoma, Washington that went from 21st to third in their district," recalls Johnson. "The principal attributes that to what they've done with the School Effectiveness Model." Flint's achievement gains are similarly impressive. Dropout rates are lower, high school graduations are higher, and the number of students who apply to college has consistently outpaced the control group of peers throughout Follow Through's tenure in Flint's schools.

Maintaining community schools

> *Follow Through here is very community oriented. Half of our community works in the school, and most of the people who work here attended school here. Most of the people in this Follow Through site have been here all their lives.*
>
> — Arzetta Johnson, Teacher Supervisor, SEM Follow Through Program, Flint

"As the auto industry goes, so goes Flint" is an adage that has become painfully true for the city's residents and school-age children in particular. The Manley Elementary School facility is in use 12 or more hours a day to accommodate the various after-school programs for students, parents, teachers, and community organizations. Rosa Hawkins coordinates the activities of the SEM Parent Involvement Program. She conducts specific outreach in the community by organizing standing-room-only parent classes. The classes are designed to train parents in SEM teaching techniques. Parent training manuals developed by the model sponsors teach parents how to assist in their children's instruction in the classroom and at home.

Some parents have become Follow Through paraprofessionals and then gone on to work for the auto industry in administrative and managerial capacities, recalls Follow Through coordinator Edward Hansberry, but the commitment of the community's parents extends well beyond their livelihood options. When Flint conducted its own longitudinal study of gains made by graduates through the 11th grade, the biggest gain they

could document was in parent involvement. They found that more parents of Follow Through students were still involved with their children in high school than were parents of control group children who weren't in the program. "Right now some former Follow Through parents are active in the Chapter 1 group," adds Parent Coordinator Hawkins. "They say 'Well, my kids are grown, but we can't take your expertise home and sit down.' "

A secretary at Manley Elementary helps with health and dental appointments and services to the children's families in the absence of funding for additional Follow Through staff. "She takes the children to the dentist," reports SEM Project Director Gary Johnson, "she arranges the medical services; and she keeps all the health records, even though she is called 'secretary.' "

Hansberry wonders if even such committed staff will be able to effectively handle the complexities that lie ahead with the influx of the scores of cocaine babies in overburdened communities like Flint. "I've sent three compensatory staffers to a conference on cocaine babies in the schools," he reports. "I don't know if we've understated the problem or if we're ignoring it, but these babies are entering our classrooms right now and we have to be prepared to educate them."

Follow Through funding also makes it possible for local projects to hire parents as paraprofessionals who assist teachers in classrooms. This funding is not sufficient, however, to provide additional incentives, such as opportunities to earn credits toward college degrees, which might have significant impact on parents' lives. Nevertheless, Johnson and the Flint Follow Through staff take the positive view: "I was talking with Mrs. Hawkins, the parent coordinator, and I was feeling down about what had been as compared to what is still possible for Follow Through parents' personal development," recalls Johnson. "She said, 'I just know what would happen without this program. What we have now may not be exactly what you'd like, but I know what it would be like without it.' "

The environment as textbook: Creative Curriculum Follow Through Model promotes active learning and supportive classroom settings to nurture children

We build an environment that says to children, "This is a place designed for you. It's warm, comfortable, and secure. The shelves are low, so you can choose what you want, reach what you need, and return it when you're finished. There are many different kinds of materials and interesting objects that reflect your family and your world. This is a place where you can be yourself. It's a place where you can play, discover, explore, and above all, it's a place you can trust."

— Diane Trister Dodge, Author and President, Teaching Strategies, Inc.

From the time they are born, children learn from the world around them by constantly interacting with people, materials, and their environment. For decades, education researchers have claimed that the more stimulating and supportive the environment, the richer and more complete is a child's learning. National Follow Through's newest addition—The Creative Curriculum model—builds on these research findings using the classroom and outdoor environments as the focus for curriculum planning. The model's environmental approach supports the teacher's creativity through a framework that structures the child's daily program. That framework is flexible enough for teachers to teach in their own spontaneous, unique styles.

Now implemented in Brattleboro, Vermont, the Creative Curriculum Follow Through Model shows teachers how a well-organized and rich environment can promote creativity in children by developing their confidence, curiosity, independence, and social competence. The model emphasizes the importance of designing a developmentally appropriate learning place to challenge children while allowing them to learn at their own pace. The model's creator, Diane Trister Dodge, President of Washington, D.C.-based Teaching Strategies, Inc., believes that "Curriculum should be based on a knowledge of how children learn best." She applies Jean Piaget's theories about how children learn to think, Erik Erikson's stages of socio-emotional development, and her own extensive experience working with teachers to show how well-organized and rich environments can support teachers' goals for children.

"What's unique about the Creative Curriculum is that it's practical and easy to understand," says Dodge. "It explains how teachers can create an environment that supports positive behavior and learning. This isn't a curriculum that existed in theory before it was practiced in the classroom. The Creative Curriculum describes what materials to include in each interest area and why. It explains what children learn in each area by illustrating what's really happening in the art area, for example what it is that the children are gaining from playing with sand and water or manipulatives. And it offers teachers ideas about what they can say and do to facilitate children's learning. It suggests sample words to use and questions to ask, so that teachers have something very specific and concrete to go on as they interact with children, and it helps teachers to communicate what they are doing—and why—to parents."

Using the environment as the setting for learning

By working extensively with teachers, Dodge discovered that she spent much of her time helping them to see how their arrangement of furniture and materials contributed to children's behavior problems. In many classrooms, the physical environment worked against teachers' goals for children. Careful reorganization of the classroom, based on the principles of the Creative Curriculum, led to positive changes in children's behavior. "Room arrangement proved to be an effective strategy for classroom management," explains Dodge. "Children were better able to

make choices, stay involved in their work and to work cooperatively with others. When materials are well organized on shelves, with labels to show that everything has a place in the classroom, children tend to be more respectful of the resources and more willing and able to keep them in order," she recalls.

Once the classroom environment is set up to support child-initiated activities, the Creative Curriculum helps teachers look at the learning potential in each area of the classroom as well as the outdoors. The Creative Curriculum model divides the classroom into several interest areas offering different opportunities for learning. These areas may include blocks, art, a library and writing center, dramatic play, cooking, computers, and others. By stressing interest areas rather than skills, and showing how and what children can learn in each area, the Curriculum encourages teachers to focus their planning on the environment where learning takes place.

Children's natural love of play as a mode of investigation and discovery is also at the theoretical foundation of the Creative Curriculum Model. The model works to ensure that children can explore and create in a well-organized and rich environment. Such play is more meaningful and becomes a vehicle for nurtured enthusiastic lifetime learners. When children balance one large block atop another while building in the block area, for example, they develop muscle coordination. When they participate in pretend play in the dramatic play area, they build their abstract thinking skills and learn to understand and deal with familiar life experiences. When children use a new computer program and respond to its prompts, they learn to follow directions, apply what they know to new situations, and gain an understanding of cause and effect. And virtually all aspects of play through make believe build important abstract or higher-order thinking skills. In short, play—as defined and illustrated in the curriculum—gives teachers a framework for observing and assessing children's work.

Since children are motivated by content that is meaningful to them, the Creative Curriculum encourages teachers to use a thematic approach as a way of organizing children's learning. Selections of themes are based on the interests of teachers and children, and on the specific environment where children live. The interest areas of the classroom become the laboratory for children's learning about the theme. For example, a classroom in a fishing village in Alaska might have a rocking boat with props for catching halibut in the dramatic play area and reconstructions of the harbor and docks built by children in the block area. In a large urban school, children may study their neighborhood by recreating buildings in the block area and writing stories based on interviews they conduct with storekeepers. A thematic approach allows children to think, question, solve problems, and work collaboratively as they explore content that is interesting to them. It also provides a method of teaching skills and subject matter in an integrated way.

When teachers know how to use interest areas as settings for investigation, construction, and dramatization, they help children develop socially *(by involving them in trusting and cooperative relationships)*, emotionally *(by nurturing pride, self-esteem, and self-control)*, cognitively *(by allowing children to try out their own ideas, observe what happens, raise more questions, and express their feelings and understandings)*, and physically *(by helping children develop gross and fine muscle coordination and use all their senses in learning)*.

Teachers new to this approach are often concerned about whether children really will acquire the skills and understandings they need. In fact, children can develop skills and grasp concepts more readily in an environmentally based curriculum. The reason is tri-fold: First, different learning styles of individual children can be readily accommodated in a classroom that has interest areas that offer different types of learning experiences.

Second, teachers can work with children individually and in small groups without distraction while other children engage in independent learning experiences. And third, when teachers carefully plan opportunities for children to work in interest areas, they have time to step back and observe children's progress.

"What's new in the Creative Curriculum is that we now have an exceptionally strong approach to building a rich learning environment and helping children to use it well," Dodge concludes. "We can articulate what a good early childhood classroom looks like and how teachers can provide the kind of support for every child to succeed."

Involving parents and community

Too often schools have separated children from their families and made them put aside who they really are. Children have been encouraged to all but abandon their culture and the things that are important to their families in order to fit into the culture of the school. What Head Start and Follow Through have valued since their inception is the importance of including children's families in all aspects of the program. Rather than making children feel like they have to give up what is of most value to them, we believe that good early childhood programs are built on a respect for cultural diversity.

— Diane Trister Dodge

Establishing and preserving a partnership between school staff and parents is also a basic tenet of the Creative Curriculum. Members of the Family Services Team at the Creative Curriculum Follow Through site in Brattleboro, Vermont coordinate the various community agency services available to families and provide liaison activities between families and the schools. They organize and implement parent programs based on the interests of the parents. Judy Jablon, the sponsor's Project Director, works in conjunction with the Family Services Team to offer workshops for parents about school-related issues. "Early in the year we held a parent workshop about how physical environments convey messages to children. We showed slides illustrating how the classroom environment can be organized to promote trust, independence, initiative, and cooperation. Parents were then divided into small groups led by members of the Family Services Team. The groups considered ways that these same ideas might be applied in the home. Our goal was to connect what happens at home with what happens at school. The parents were very enthusiastic and left ready to try out ideas at home."

A Steering Committee has also been established at the Brattleboro site to guide the project's implementation and ensure collaboration between the various programs providing services to families. Members of the Steering Committee include Follow Through personnel, school administrators, parents, and representatives from community agencies serving families. The Steering Committee meets regularly to review program efforts and transition issues, to discuss what changes and improvements are needed, and to plan for future activities.

Because Dodge believes that Head Start's success and longevity is due in large part to comprehensive support services, she advocates for schools that are community centers—schools that welcome and serve children and their families. "This approach has been validated by research and leading organizations who agree that what's really needed to ensure continuity and success for children is comprehensive health and social services. Issues that families and communities are facing such as violent crime, drug abuse, homelessness, and the growing number of teenage parents makes it even more important that schools work cooperatively with other community organizations in providing the services that children and families need. The current collaborative efforts of the U.S. Departments of Education and Health and Human Services to support good early childhood transitions by extending developmentally appropriate

curriculum and comprehensive services to children and families into the early grades, builds on the practices that have been implemented by Follow Through programs for the past two and a half decades," observes Dodge.

Other parent involvement efforts include offering resources that help parents understand early childhood education and the important role they play in their child's learning. *A Parent's Guide to Early Childhood* was developed specifically for programs using the Creative Curriculum. This booklet simply and clearly explains how children learn from everyday experiences, both at school and at home. It provides a way for teachers to explain to parents the value of a developmentally appropriate curriculum.

Supporting teachers in their work with children and families

> *My classroom just wasn't working, so one day I stayed until seven o'clock and rearranged the environment into interest areas. The children came in the next day and their faces lit up. They could make choices because the room helped them to be independent learners. Their work is so much better. They come to me to show me what they've done, and we all feel a lot happier.*
>
> — Marsha Harris, Creative Curriculum teacher, Washington, D.C.

The goal of staff development is to support teachers by providing ample opportunities for them to meet together to share their views on teaching and learning. "In Brattleboro, teachers already have a solid understanding of the principles of Piaget and Erikson, and for the most part, their children are engaged in developmentally appropriate learning opportunities," Jablon explains. "Our work together is focused on how to adapt the environment and the program to more effectively meet the needs of all children in the classroom, as well as how to welcome families into the program. Teachers find that the Creative Curriculum validates their beliefs about early childhood education and offers them practical suggestions for improving."

Model sponsors offer teachers individualized technical assistance in accordance with their specific areas of concern. Monthly classroom observations and one-on-one dialogue are the preferred methods of training. In Brattleboro, teachers' concerns have ranged from how to rearrange a classroom to promote more positive behavior to implementing a hands-on math program. Jablon believes that teachers are more likely to change when they have identified an issue they want to address in the classroom. She remarks, "During my first visit, a teacher of a mixed-age class of second and third graders was frustrated with her math program. She was accustomed to a teacher-directed approach to instruction, and I introduced her to methods of collaborative learning. We discussed how children could learn math through small group problem-solving experiences. We rearranged her room to facilitate small group work, and I offered her resources to read about collaborative learning. During my second visit, she was ready to think about improving her questioning techniques, so I demonstrated a class discussion using open-ended questions so she could extend her students' thinking."

The Sponsor Project Director meets monthly with the Follow Through team of teachers to address curriculum issues. Similar monthly meetings are held for teacher aides, and all staff members are encouraged to keep journals of student observations, daily classroom struggles, and questions they would like to address. These journals, as well as videotapes of classroom practices, provide the basis for group discussions. "We also keep journals ourselves," claims Dodge, "so that as we are working with teachers and providing training and support, we can also examine our own growth since we are in a sense modeling what we expect from teachers. We continually examine, refine, and change our

approaches as we find new ways to provide support for teachers."

Evaluation that supports children's learning

Children who are rushed into reading and writing too soon so that they'll test well miss important steps in learning and may suffer later on because they lack the foundation they need for using language. Children who are taught to read in preschool may be able to sound out and recognize words, but they may also have little understanding of what they are reading. If they haven't been given time to play, they won't have explored objects enough to know what words like hard, harder, *or* hardest *mean. If they aren't allowed to string beads, button, dress up, cut, paste, pour, and draw, they won't develop the small muscle skills they need for writing.*

— Diane Trister Dodge

The impact of the Creative Curriculum Follow Through model is evaluated through student performance. That performance evaluation includes the completion by teachers of systematic curriculum checklists and the examination of children's work portfolios. Designed by the project's evaluator Dr. Samuel Meisels, these checklists are administered at three points during the program year to help teachers identify students' strengths and weaknesses. The portfolio, a collection of a child's work over time, provides a way for teachers to document each child's progress. It also provides a rich and tangible way to report children's progress to parents.

This system of assessment provides an alternative to standardized tests by serving as more than a mere summary of achievement. Rather than a general snapshot of academic skills at a single point in time, this ongoing evaluation process can have a positive effect on both instructional behavior and student outcomes. It is intended to reflect more closely the actual goals and objectives of the curriculum and the classroom teacher.

Finally, Dodge argues, successful student outcomes are a relative process that must be carefully considered to prevent short-term pronouncements that don't live up to long-term realities. "Children feel successful and develop a love for learning that will sustain them throughout their lives, largely because we're focusing on helping them to develop the skills they'll need in order to make it. We work to ensure that children think for themselves, solve problems, and relate well to others, because these are the skills that will sustain them in tomorrow's world as well as today's."

Follow Through Model Key Features

Follow Through Model
Key Features

Follow Through Model	Contact Person
Adaptive Learning Environments (ALEM)	Dr. Margaret C. Wang, Temple University Center for Research, 9th Floor Ritter Hall Annex, Broad & Cecil B. Moore Avenue, Philadelphia, PA 19122. 215/787-3001
Cognitive Enrichment Network (COGNET)	Dr. Katherine Greenberg, University of Tennessee , Follow Through Program, 321 Claxton Addition, Knoxville, TN 37996-3400, 615/974-0797
Cooperative Learning Model/Project Extend (CLM)	Dr. Jim A. Bellanca, Illinois Renewal Institute, Follow Through Program, 200 East Wood St., Suite 274, Palatine, IL 60067, 708/991-6300
Creative Curriculum Model (CCM)	Dr. Diane Trister Dodge,Teaching Strategies, Inc., 4545 42nd Street, N.W., Suite 306, Washington, D.C. 20016, 202/362-7543
Cultural Linguistic Approach (CLA)	Ms. Naomi E. Millender, Northeastern Illinois University, c/o The Chicago Teachers' Center, 770 N. Halsted Street, Chicago, IL 60622, 312 733-7330
Developmental-Interaction Approach (DIA)	Mr. Richard Feldman, Bank Street College of Education, Follow Through Program, 610 West 112th Street, New York, NY 10023, 212/222-6700
Direct Instruction Model (DI)	Dr. Doug Carnine, University of Oregon, Follow Through Program, 805 Lincoln, Eugene, OR 97401, 503-485-1163
Effective Schools Approach (ESA)	Dr. Eugene A. Rump, The University of Kansas , Educational Systems Associates, 317 Nichols Hall, Lawrence, KS 66045-2969, 913/864-4447
High/Scope Curriculum Model (H/SCM)	Mr. Charles R. Wallgren, High/Scope Educational Research Foundation, Follow Through Program, 600 N. River Street, Ypsilanti, MI 48198-2898, 313-485-2000
Interdependent Learning Model (ILM)	Mr. Harold Freeman, Jr., Fordham University Graduate School of Education, 113 West 60th Street (Room 1003), New York, NY 10023, 212 636-6494
Inter-Reactive Learning Model (INREAL)	Dr. Elizabeth A. Heubleın, University of Colorado, Follow Through Program INREAL, CDSS Campus Box 409, Boulder, CO 80309, 303 492-8727
Language Development Approach (LDA)	Dr. Betty J. Mace-Matluck, Southwest Educational Development Laboratory, Follow Through Program, 211 E. 7th Street, Austin, TX 78701, 512 476 6861
School Effectiveness Model (SEM)	Dr. Gary Johnson, Washington Research Institute, Follow Through Program, 180 Nickerson Street, Suite 103, Seattle, WA 98109, 206 285 9317
Tucson Early Education Model (TEEM)	Dr. Alice S. Paul, University of Arizona, College of Education Room 802, Tucson, AZ 85721, 602 621-1124
University of Georgia Model (UGA)	Dr. Horace C. Fawn, University of Georgia, College of Education 320 E. Aderhold Hall Athens, GA 30602, 404 542-1400

Instructional/Organizational Management

specific staffing requirement	team teaching	individualized instruction	small group instruction	large group instruction	peer and/or cross-age tutoring	cooperative/paired learning	learning centers	adaptive learning	ability grouping (homogeneous)	diagnostic/RX	socially oriented environment	classroom rules and behavior
ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM		ALEM	ALEM	ALEM
COGNET		COGNET	COGNET	COGNET	COGNET	COGNET	COGNET			COGNET	COGNET	COGNET
			CLM	CLM	CLM	CLM	CLM				CLM	CLM
CCM	CCM	CCM	CCM	CCM	CCM	CCM	CCM			CCM	CCM	CCM
CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA		CLA	CLA	CLA	CLA
DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA				DIA	DIA
DI	DI	DI	DI	DI	DI	DI			DI	DI		DI
ESA	ESA	ESA	ESA		ESA					ESA		ESA
H/SCM		H/SCM	H/SCM	H/SCM			H/SCM		H/SCM		H/SCM	H/SCM
ILM	ILM	ILM	ILM		ILM	ILM	ILM			ILM	ILM	ILM
INREAL	INREAL	INREAL	INREAL		INREAL	INREAL	INREAL				INREAL	INREAL
LDA		LDA	LDA	LDA	LDA	LDA	LDA				LDA	LDA
SEM	SEM		SEM	SEM	SEM	SEM	SEM		SEM	SEM		SEM
TEEM		TEEM	TEEM	TEEM	TEEM	TEEM	TEEM				TEEM	TEEM
UGA	UGA	UGA	UGA	UGA		UGA	UGA		UGA		UGA	UGA

Teaching/Learning Strategies

mastery learning	active problem solving	action-oriented process	teacher prescribed	group planned	student planned/ selected/initiated	plan-work-represent-evaluate	learning-to-learn skills/self regulation	peer interaction	child-adult interaction	maximum time on task/ allocation	extrinsic reward system
ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	
	COGNET	COGNET		COGNET	COGNET	COGNET	COGNET	COGNET	COGNET	COGNET	
	CLM	CLM					CLM	CLM	CLM	CLM	
	CCM	CCM	CCM		CCM	CCM	CCM	CCM	CCM	CCM	
CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	
	DIA	DIA		DIA		DIA	DIA	DIA	DIA		
DI	DI		DI				DI	DI	DI	DI	
ESA	ESA	ESA			ESA		ESA	ESA	ESA	ESA	ESA
	H/SCM	H/SCM			H/SCM	H/SCM	H/SCM	H/SCM	H/SCM		
ILM	ILM	ILM		ILM	ILM	ILM	ILM	ILM	ILM	ILM	
	INREAL	INREAL		INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	
	LDA	LDA		LDA	LDA		LDA	LDA	LDA	LDA	
SEM	SEM			SEM	SEM		SEM	SEM	SEM	SEM	
	TEEM			TEEM	TEEM	TEEM	TEEM	TEEM	TEEM		
	UGA	UGA		UGA	UGA		UGA	UGA	UGA	UGA	

Curriculum/Instructional Materials

curriculum framework	prescribed instructional materials	curriculum independent	locally adopted/adapted curriculum	computer assisted instruction
ALEM	ALEM	ALEM	ALEM	ALEM
COGNET		COGNET	COGNET	COGNET
CLM	CLM			CLM
COM			COM	
CLA	CLA		CLA	CLA
DIA	DIA	DIA		
DI	DI			
ESA		ESA		
H/SCM	H/SCM		H/SCM	H/SCM
ILM	ILM		ILM	ILM
INREAL		INREAL	INREAL	INREAL
LDA			LDA	
SEM	SEM		SEM	SEM
TEEM	TEEM		TEEM	
UGA			UGA	

Curriculum Focus

developmentally appropriate/sequenced	oral language development	literacy	bi-literacy	culture-based	holistic language approaches	communication skills	physical dexterity and coordination	3 Rs/ basic skills	academic and social skills	content areas	cognitive education higher order thinking skills
ALEM	ALEM	ALEM		ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM
COGNET	COGNET	COGNET		COGNET	COGNET	COGNET		COGNET	COGNET	COGNET	COGNET
CLM	CLM		CLM		CLM	CLM		CLM	CLM	CLM	CLM
COM	COM	COM		COM	COM	COM	COM		COM	COM	
CLA	CLA	CLA		CLA	CLA	CLA	CLA	CLA	CLA	CLA	CIA
DIA	DIA	DIA		DIA	DIA	DIA	DIA		DIA	DIA	
DI	DI	DI	DI			DI		DI	DI	DI	DI
ESA		ESA						ESA	ESA	ESA	
H/SCM	H/SCM	H/SCM		H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM
ILM	ILM	ILM		ILM		ILM	ILM	ILM	ILM	ILM	ILM
INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL			INREAL	INREAL	INREAL
LDA	LDA	LDA	LDA		LDA	LDA			LDA	LDA	
SEM	SEM	SEM				SEM		SEM	SEM	SEM	
TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM		TEEM	TEEM	TEEM	TEEM
UGA	UGA	UGA		UGA	UGA	UGA		UGA	UGA	UGA	UGA

Parental Involvement

parent orientation sessions	joint school personnel-parent training	parent committee (advisory)	individual volunteer activities in classroom	paid parent instructors	teacher home visits	parent-teacher conferences	parent room	parent training/education	parent selection of training topics	training materials provided	newsletter/bulletins for parents
ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM		ALEM	ALEM	ALEM	ALEM
COGNET		COGNET	COGNET	COGNET		COGNET	COGNET	COGNET	COGNET	COGNET	COGNET
CLM	CLM		CLM	CLM	CLM			CLM	CLM	CLM	
CCM		CCM	CCM	CCM	CCM	CCM	CCM	CCM	CCM	CCM	CCM
CLA	CLA	CLA	CLA	CLA		CLA	CLA	CLA	CLA	CLA	CLA
DIA		DIA	DIA	DIA			DIA	DIA	DIA	DIA	
DI	DI	DI	DI	DI	DI	DI		DI	DI	DI	
ESA		ESA	ESA	ESA	ESA	ESA		ESA	ESA	ESA	
H/SCM	H/SCM	H/SCM	H/SCM		H/SCM	H/SCM		H/SCM	H/SCM	H/SCM	
ILM	ILM	ILM	ILM			ILM	ILM	ILM	ILM	ILM	
INREAL	INREAL	INREAL	INREAL		INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL
LDA	LDA	LDA	LDA	LDA		LDA	LDA	LDA	LDA	LDA	
SEM	SEM	SEM	SEM	SEM		SEM	SEM	SEM	SEM	SEM	SEM
TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM
UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA

Staff Development

orientation session from site leadership personnel	orientation session for school personnel	annual conference/meeting	annual administrative visit/management/monitoring	monitoring schedule	series of workshops	on-going training/technical assistance on site	classroom observations/ feedback/peer coaching	training of site leadership (trainer of trainers)	slowly decrease staff development from sponsor	training materials provided	set aside staff planning time/sharing	extrinsic reward system
ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	
COGNET	COGNET	COGNET	COGNET		COGNET	COGNET	COGNET	COGNET	COGNET	COGNET	COGNET	COGNET
		CLM			CLM	CLM	CLM	CLM	CLM	CLM	CLM	
COM		COM	COM	COM	COM	COM	COM		COM	COM	COM	
CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA	CLA
DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA	DIA		DIA	DIA	
DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI
ESA	ESA	ESA	ESA		ESA	ESA	ESA	ESA	ESA	ESA	ESA	ESA
H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	H/SCM	
ILM	ILM		ILM	ILM		ILM	ILM	ILM	ILM	ILM	ILM	ILM
INREAL	INREAL	INREAL		INREAL	INREAL	INREAL	INREAL	INREAL		INREAL	INREAL	
LDA	LDA	LDA	LDA	LDA	LDA	LDA	LDA	LDA	LDA	LDA		
SEM	SEM	SEM	SEM	SEM	SEM	SEM	SEM	SEM	SEM	SEM	SEM	
TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM		TEEM	TEEM	
UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA	

Support Services

social	health	nutritional	community focus/involvement
ALEM	ALEM	ALEM	ALEM
COGNET	COGNET	COGNET	COGNET
CLM		CLM	
COM	COM	COM	COM
CLA	CLA	CLA	CLA
DIA	DIA	DIA	DIA
DI	DI	DI	DI
			ESA
H/SCM	H/SCM	H/SCM	H/SCM
INREAL	INREAL	INREAL	INREAL
LDA	LDA	LDA	LDA
SEM	SEM	SEM	SEM
TEEM	TEEM	TEEM	TEEM
UGA	UGA	UGA	UGA

Evaluation

student performance monitoring	student achievement data	student attendance	grad. . etentions	student special program referrals	perception data-school personnel	perception data-parents	student attitude/ behavior/perceptions	staff assessment	model implementation	degree of parent involvement	extent of support services
ALEM	ALEM	ALEM		ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM	ALEM
COGNET	COGNET	COGNET	COGNET	COGNET			COGNET	COGNET	COGNET	COGNET	COGNET
CLM	CLM	CLM			CLM	CLM	CLM	CLM		CLM	
CCM	CCM					CCM				CCM	CCM
CLA	CLA	CLA	CLA	CLA			CLA	CLA	CLA	CLA	
DIA	DIA				DIA	DIA	DIA	DIA			DIA
DI	DI	DI						DI	DI	DI	
ESA	ESA	ESA		ESA	ESA	ESA	ESA	ESA	ESA	ESA	ESA
H/SCM	H/SCM	H/SCM							H/SCM		
ILM	ILM	ILM	ILM	ILM			ILM	ILM	ILM	IEM	ILM
INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL	INREAL
LDA	LDA	LDA	LDA	LDA	LDA	LDA			LDA	LDA	LDA
SEM	SEM	SEM	SEM	SEM		SEM		SEM	SEM	SEM	SEM
TEEM	TEEM	TEEM	TEEM	TEEM	TEEM	TEEM		TEEM	TEEM	TEEM	TEEM
UGA	UGA	UGA		UGA	UGA	UGA	UGA	UGA	UGA	UGA	UGA

When you enter an ESA kindergarten classroom, you'll see several small groups operating simultaneously. You'll be in the midst of lots of activity with animated teachers overseeing simultaneous reading, math, handwriting, spelling. . . .

Don Dorsey, Director of Field Services, Effective Schools Approach

Self-reflection is the best evaluation. We want the kids to know it's OK to examine their own work without waiting for external direction or approval. Our staff development with the teachers is similarly self-reflective. Teachers come to feel more ownership in their efforts so they don't need outside validation.

Mathew Morrison, Coordinator,
Inter-Reactive Learning Model

There's a Bank Street quality in effectively operating classrooms. It's a kind of competence and confidence when the kids approach adults, a sense of comfort and responsiveness that's the unmistakable mark of a child in the process of learning.

Richard Feldman, Director, Bank Street
Developmental-Interaction Approach

We want the children to understand that learning occurs everywhere. Parents help tremendously when they can show children how to process what's going on around them outside of school—especially in the home. Parents also reinforce what teachers are doing in the classroom, and a partnership in the network forms.

Katherine Greenberg, Founder,
Cognitive Enrichment Network

Until the 1960s, educators had blamed the child for not "fitting" into the school system. A shoe store is more accommodating in helping us to fit our footwear needs than schools have been in helping to fit the educational needs of our children. You can go into a shoe store and buy different sizes, different styles, and different colors depending on your foot and your preferences. . . . In Follow Through, we are simply trying to give the child a good, comfortable educational fit.

Alice S. Paul, Director, Tucson Early Education Model

"The first thing you'll see in a High/Scope classroom is the way the room is organized. There are activity centers, lots of materials, a computer center. It's designed in such a way that children move throughout the classroom to various areas during the daily routine. . . . You will not find a quiet classroom, but the noise is constructive. It's the learning sound of children working together, reading aloud, manipulating objects. . . "

Chuck Wallgren, Director,
High/Scope Curriculum Model

"We're intent upon instilling this I can *idea in the children. That's what all the images, and manuals, and field trips, and bulletin boards are for. It's also what the emphasis on culture hopes to drive home. Children in the program must see and feel that they can do whatever they put their minds to, and each child must be able to take that message off the wall and put it into his heart."*

Berlina Baker, Consultant, Cultural Linguistic Approach

Teachers line up and ask to be involved in the Follow Through program because they appreciate the ongoing support that it offers. It's the staff development teachers clamor for. The training becomes a you're-really-special affiliation.

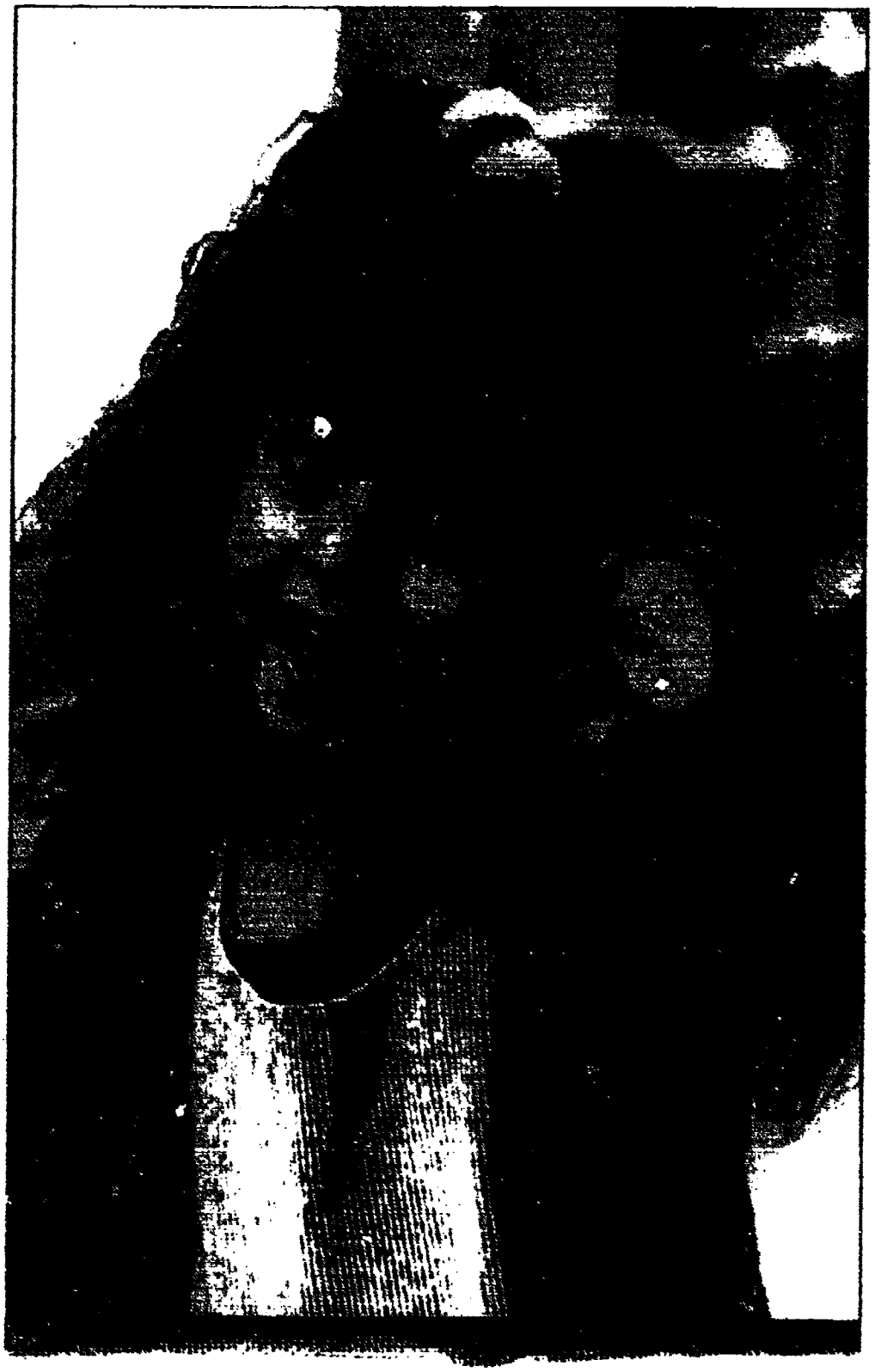
Betty Mace-Matluck, Director, SEDL
Language Development Approach

"Students learn background information through reading bona fide science and social studies passages. Then they read selections that have plot, theme, character, and humor woven into the science context. It's a unique aspect of the curriculum that sets us apart from other reading programs that dip into science here and drop a little social studies there."

Gary Johnson, Director, School Effectiveness Model

"Young children have roles in the world. Through play, we try to help make them comfortable within different social contexts and cultural roles. . . . Our model is concerned with more than teaching children how to better solve math problems or to read better. It's about making them competent as individuals.

Harold Freedman, Director,
Interdependent Learning
Model



EFFECTIVENESS

Follow Through's bottom line

Probably the indicator of most interest in the various efforts to document the impact of Follow Through has been student learning outcomes. In both immediate and long-term achievement in basic skills, Follow Through students have repeatedly demonstrated gains that at least match, and often exceed, national and population-specific norms.

— from *The National Follow Through Program: Lessons from Two Decades of Research and Practice in School Improvement* by Margaret Wang and Eugene Ramp

As detailed in the individual descriptions of the various Follow Through models in the previous chapter, the success of Follow Through has been evidenced in a variety of ways. Professional growth and development of Follow Through staff, parent empowerment and school participation, community-school partnerships, and model adoption successes of all sorts accompany and reinforce what many feel to be the single most significant accomplishment any education program could hope to garner: *consistently impressive gains in student achievement*. Academic gains (as evidenced by standardized achievement tests) routinely skyrocket from below average to grade level and above in Follow Through programs nationwide.

These are but a few of the indicators to which Follow Through sponsors turn to display their healthy bottom line. Many also cite their projects' validation as exemplary by the Joint Dissemination Review Panel (JDRP) of the U.S. Department of Education. According to Wang & Ramp's 1987 report, Follow Through has the highest proportion of JDRP-validated projects of any federally sponsored educational program, which may account in part for the proliferation of Follow Through innovations in America's classrooms. If there is a deficit, they maintain, it lies in the fact that all schools are not personally acquainted with the successes and the lessons learned through 25 years of sponsor-by-sponsor and site-by-site evaluations that showed the difference made by comprehensive, research-based early childhood education.

Student gains

What we have here at our school are a group of kindergarten kids who are about ready to parade off into the future. We've had any number of outstanding students. But we've also had many students who have simply become caring and committed citizens.

— Follow Through School Principal

The short-term effectiveness of the models is documented daily in Follow Through schools. Aside from their greatly improved achievement test scores, students' problem solving skills and attitudes about learning are also greatly improved with the introduction of Follow Through programs. More Follow Through students are placed in gifted and talented programs, and there are noticeable gains in student attendance. It has therefore been demonstrated, as Wang and Ramp note, that Follow Through students routinely gain more ground—in language arts, math, and reading achievement—than their non-Follow Through peers. Socio-emotional gains by students are similarly encouraging, although often more subtle in their achievement impact. Under the tutelage of Follow Through models, student self-esteem, self-reliance, and ability to learn have been shown to increase dramatically.

The long-term results of Follow Through's presence with particular children in a given school and community for a decade or more are, however, where the program's effectiveness and impact surface most readily. Although no nationwide longitudinal study of Follow Through children has yet been undertaken, several individual model sponsors have conducted such long-term evaluations of their own models. They found that students who participate in Follow Through model

programs tend to experience less grade retention, lower dropout rates, and fewer special education placements in their later school years when compared to their non-Follow Through peers. Since the benefits of multicultural education, language experience and/or whole language, and process learning were being sustained by Follow Through students decades ago, it is of course interesting to note that a disproportionately high percentage of Follow Through students go on to apply for and attend college compared to their non-Follow Through peers.

Staff efficacy

We grew personally and professionally. None of us could be the same—after or during—Follow Through. Those of us who left classrooms could not help but grow and become spokesmen for children as they grew into independent, autonomous students.

—former Follow Through Program Evaluator

Follow Through sponsors boast of the decidedly familial closeness that implementing, nurturing, and taking ownership of a Follow Through philosophy or strategy can produce. All recount stories of Follow Through paraprofessionals and teachers who grasp the model strategies as a much-needed handle on their individual teaching beliefs that were inaccessible to them before the introduction of Follow Through. Some teachers change miraculously overnight; most more slowly, from the inside out. Regardless, school districts in which Follow Through models are introduced quickly realize the value of professional training and typically use Follow Through site trainers for district-wide inservice training. Further, Follow Through programs may affect school improvement far beyond the actual campuses that adopt the models in that Follow Through teachers move on, taking the strategies that worked for them to their next assignments and educational roles. As one Follow Through teacher put it: "Follow Through has had a tremendous impact on my teaching career. As a result of my training and new knowledge, our children are beginning to think, problem solve, make decisions about what they learn, and how they learn. I'm in the process of sharing what I've learned with other colleagues not involved in Follow Through."

Parent empowerment

My first experience with education was in Follow Through. I had three children to come through the program, and all three are graduates. I know firsthand that one-on-one involvement with parents is very important.

—Follow Through Parent

Parents who at first volunteer to help in the classroom, on the playground, in the library, and at the nurse's station learn quickly what goes on in the school in general and in their children's classrooms in particular. By becoming part of the school, parents come to value education and can reinforce its importance with their children at home. Involved Follow Through parents become intimately aware of what it will take to improve their children's achievement and begin to work toward that all-important goal at home by reading to their children or helping them with school lessons. Most parents assume a partnership with the school that is at first orchestrated by the Follow Through sponsor's parent involvement plan, but ultimately exceeds it. That parental support then translates to school support, and school support extends to the community at large.

Follow Through parents who have gone on to become educators, administrators, community leaders, and elected officials frequently credit Follow Through with their start. Others use their volunteer work in the classroom as the basis for hard-earned, but nonetheless eventually won, degrees in education. Slowly, parents who have always perceived themselves as poor and power-

less, who have concentrated all their energies on struggling to build home and family so that their children can have better lives, realize that they can also make a difference through the school. They become involved in policymaking, tackle the toughest of school reform issues in some of the nation's largest inner cities, and make steady headway on school boards. These parents often continue to feel that what is best about schools is embodied in Follow Though. Therefore, it should not be surprising that all of the parents on the first Chicago school reform board are Follow Through parents. That fact is especially significant as the nation watches for viable cues from the board regarding site-based management, school restructuring, and other educational policy issues that will likely have long-term educational and social implications. In short, Follow Through parents may literally move from the welfare rolls to positions of highest responsibility and self-sufficiency. It's a transformation that most feel would not have been possible without Follow Through as both catalyst and bridge.

Even parents who do not choose to seek office or work visibly with school policy, work diligently and effectively behind the scenes to help create school-based islands of peace for their children. At some Follow Through sites, the school building is the only place children may enter and feel safe from random violence, crime, and the drug culture. Their parents value that fact sometimes more than any other element of the program, and they work to keep the safe haven for their children.

Early education's three-way partnership

Perhaps Follow Through's most salient bottom line lies in the three-way foundation that it has introduced to early childhood education. The partnership between parent, school, and sponsor may yet be a standard with its origins on the Follow Through bridge. Although Follow Through models realized and advocated such well-received tenets as starting education from the foundations of how children learn; believing in the children's culture; looking at the child as a whole being; respecting the family; changing the school to meet the needs of the child rather than expecting the child to change to meet the needs of the school; and, intervening before—not after—the child fails, none of the theories could have found their way into classroom and campus practice without the equally important roles and contributions of parent, school, and Follow Through sponsor. Motivating those contributions and the partnership is a distinct sense of "specialness" that lies at the heart of Follow Through.

Although Follow Through began as an effort to compensate for the "disadvantaged" status of poor children and their families, it has proven to be anything but compensatory and stigmatized by the people who cross over. Since success begets success, the Follow Through models have translated themselves into something sought after. The models know how to implement what works. A generation of students, families, and communities has graduated from the programs, and continue contributing to society as they reach back to help others across the bridge. Put simply, Follow Through's most salient big-picture legacy may be the evolution of its perception by those it was designed to serve. People in poverty know there's a world of humanity between accepting a hand-out and reaching for an extended hand. And that subtle realization has saved many who would have otherwise bypassed a bridge they didn't trust to tackle the harsh currents alone—and lose.

RECOMMENDED READING

America 2000: Within our reach

by Alice S. Paul

Contrary to popular belief, the field of early childhood education has kept abreast of the nation's radical social, economic, and technological changes. Private, state, and federally supported programs like Head Start and Follow Through translate theory into practice daily. The programs are also constantly evolving and developing diverse and customized educational alternatives designed to improve the quality of life for young children and their families. Today's early childhood educators recognize the importance and value of having a continuum of care and education between home and school. An abundance of research supports the significance of a child's family and its relationship to school success. Parents are their children's first teachers. What happens to a child in the home affects his or her social, emotional, physical, and cognitive development for life.

Historically, the U.S. has supported the needs of children as a response to social problems, poverty, and political overtones. Children have benefited, but they were not the initial focus. As Robert Egbert explains in his glance back at Follow Through's beginnings, the 1960s reawakened interest in the area of early childhood education—due in large part to the federal government's War on Poverty. National leadership was supportive in providing funds to assist the poor in the mainstream, but the concentration and study of the times supported the belief that a child's early years were also the time of the most rapid physical and mental growth. It was also generally accepted that in this early period of life, a child was most susceptible and responsive to environmental influences. Early intervention in the education of children was supported by psychologists, educators, pediatricians, psychiatrists, and anthropologists.

In keeping with the then-popular "big bang" theory of reform, most educators believed that a technique or program could be discovered that would solve the problem of low-income students' failure. This cure-all could then be nationally distributed.

Application of such big bang-inspired beliefs, however, may have been overly optimistic at best and a dangerous oversimplification at worst. In his *Early Childhood Education: Twenty Years in Review (1971-1990)*, James Hymes, Jr. highlights three pervasive trends that have informed the literature and the various schools of thought since the time of Follow Through's creation. The predominant trend he identifies is the flooding of women into the labor force, which has touched young children at every turn. As a consequence of the first trend, the second—an unprecedented growth of public kindergartens in all 50 states—has challenged early childhood education policymakers, researchers, and practitioners to adequately meet the burgeoning need. The third crucial trend is the groundswell of support for educating all children early. The evolving nature of the early childhood field has begun to recognize cultural diversity as a positive force and one that allows educators and helping professionals to meet the individual needs of children and their families. Indeed much of the most recently published professional literature boasts and argues that we are now at a critical point in our societal evolution as a nation. The information and experience we have gained since the middle of this fast-closing century clearly suggest that we must invest in the future of all our children. We can no longer neglect the natural resources that are found in children and their families. It's a revolutionary idea that echoes those heard at Head Start and Follow Through's inception in 1967. But this time around, the literature suggests, the way is clear.

The National Commission on Children, for example, recently released a unanimously approved blueprint of national policy for America's children. Commission Chairman

John D. Rockefeller IV prefaces the document:

> *As a nation, we must set a new course to save our children, strengthen their families, and regain control of our national destiny. There are no quick fixes to the problems that threaten the lives and prospects of so many of America's young people. But the solutions are within reach.*

Logically, in November of 1990, the 101st Congress passed key legislation addressing early childhood issues. Head Start programs and Chapter 1 are supported at the highest funding level ever, and an honest attempt is being made to provide full funding to serve all eligible three through five-year-olds. The President and the Governors have declared school readiness "Goal 1." And, from all indications, they are reaching for the lessons learned and the literature written in light of programs like Follow Through to articulate comprehensive solutions that will allow America's schools to achieve that goal.

In order to assist America's schools, the following annotated references are personally recommended by each of the 15 Follow Through model sponsors. Together they provide a wisdom-weathered, close look at the subject of early childhood education in general and Follow Through practices in particular. The texts reflect both seminal and recent research, theory, and practice in reading, curriculum, culture, staff development, parental involvement, assessment, and school leadership.

RECOMMENDED READING

During the brainstorming sessions that characterized the first planning sessions for Follow Through: A Bridge to the Future, *all agreed that the bibliographic section should include key publications that informed and influenced each Follow Through approach. Consequently, model sponsors were asked to list works to which they had referred over the years for guidance, and to which to they routinely referred others who wished to explore the theoretical and research bases of their approaches in greater depth. Each sponsor was also asked to include a personal annotation detailing why and how they found the cited work useful. In this way, the planners hoped to provide a practical resource list with a personal touch for the book's readers.*

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: The Massachusetts Institute of Technology.

Drawing from educational and psychological sources on both basic and applied research, Adams writes on what is known about basic processes and instructional practices in early reading as well as in word and letter identification. Addressing the controversy surrounding phonics instruction, Adams insists that the sound-symbol system be taught explicitly and early. An afterword included in this volume attempts to place phonics within a "broader perspective in literacy development." This reference is suggested by **Gary Johnson** with the School Effectiveness Model (SEM) at the Washington Research Institute.

Anderson, R. C., Osborn, J., & Tierney, R. J. (Eds.). (1984). *Learning to read in American schools: Basal readers and content texts.* Hillsdale, NJ: Lawrence Erlbaum.

Recommended to be reflected on and considered by anyone involved with instruction in reading, social studies, and science in the elementary and middle schools, this book offers information, research, and conclusions on five major topics: reading comprehension, instruction, stories in basal readers, appraisal of text difficulty, content area textbooks, and teacher's guides and workbooks. This work was presented at a conference for educational publishers as an effort to initiate dialogue among researchers and publishers. This text is recommended by **Gary Johnson** with the Follow Through School Effectiveness Model.

Bellanca, J., & Fogarty, R. (1990). *Blueprints for thinking in the cooperative classroom.* Palatine, IL: Skylight.

This publication, suggested by the **Cooperative Learning Model/Project Extend** staff, contains lessons in cooperative learning and cognitive instruction. The lessons are grouped into six phases: forming groups, developing trust, building self-esteem and self-concept, learning conflict resolution strategies, performing higher-order-thinking functions, and re-forming. In addition to an extensive bibliography, two appendices are included: a synthesis of the research that provides the rationale and theoretical foundations for the themes of cooperative learning and cognitive instruction, and a set of blackline masters for classroom use.

Berk, L. E. (1989). *Child development.* Needham Heights, MA: Allyn and Bacon.

Regarded as an overall sourcebook by **Naomi Millender** with the Follow Through Cultural Linguistic Approach (CLA), this publication is divided into five parts: theory and research, developmental foundations, cognitive and language development, personality and social development, and contexts for development. The author draws on her experiences as student, teacher, researcher, and parent to form the philosophical orientation of this textbook.

Blackwell, F. F., & Hohmann, C. (1991). *High/Scope K-3 curriculum series: Science (Field Test ed.).* Ypsilanti, MI: The High/Scope Press.

According to **High/Scope** staff, these series reflect the educational philosophy and practices of their Follow Through model. In part 1 of this edition, the authors discuss a developmental approach to science learning, suggest themes for K-3 science, recommend contexts for sciencing, describe classroom management and science materials, and review assessment by observation, note-taking, and samples. Part 2, Activities for K-2 Science, is organized into science areas such as life and environment, structure and form, and energy and change.

Bredekamp, S. (Ed.). (1987). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8.* Washington, D. C.: National Association for the Education of Young Children.

While programs in early childhood education have changed in response to social, economic, and political forces, these changes have not always acknowledged the basic developmental needs of young children, according to a position statement from the National Association for the Education of Young Children. In addition to the position statement, this expanded edition includes guidelines as to what is and what is not a developmentally appropriate practice for children at the different age levels. According to **Betty Mace-Matluck,** Southwest Educational Development Laboratory (SEDL) Language Development Approach (LDA), this source is a "must for all early childhood educators."

Brophy, J., & Good, T. (1986). *Teacher behavior and student achievement.* In Wittrock, M. C. (Ed.), *Handbook of research on teaching (3rd ed.),* (pp. 328-375). New York: MacMillan.

This chapter, a review of the research on the effects of teacher behavior on student achievement, includes a historical overview and descriptions of major programs of process-product research in the field. Emphasizing consistency and replication of findings, not size of correlation, the researchers found that the most consistent link to achievement was the quantity and pacing of instruction. This reference is suggested by **Gary Johnson** with SEM.

Bybee, R., & Sund, R. B. (1982). *Piaget for educators (2nd ed.).* Columbus, OH: Charles E. Merrill.

Organizing this book as well as most of the chapters into sections, the authors offer an explanation of Piaget's theory on cognitive growth, an extension and discussion of implications, and a general evaluation of Piaget's theory for educators. Included in this work is a guest editorial at the end of each chapter. **Horace C. Hawn** at the University of Georgia at Athens (UGA) Model, considers this a comprehensive look at Piaget.

Carnine, D. (1990, January). New research on the brain: Implications for instruction. *Phi Delta Kappan, 79,*(5), pp. 372-377.

Drawing from the work of Gerald Edelman (Nobel laureate and director of the Neurosciences Institute at Rockefeller University) regarding the categorization and recategorization activities of the brain, the author shows how the ability of the learner to note "sameness" has important implications for educators. In addition to providing examples and guidelines on how to induce this "sameness," he shows how mistakes make sense. For example, if a child thinks that the letter *d* is a *b*, he may also confuse the operation of subtraction with that of addition. Likewise, shifting from reading texts with lots of pictures to those with almost no pictures may signal similar "sameness" problems. **Doug Carnine,** of the Follow Through Direct Instruction (DI) Model, notes that this article explores the implications of Direct Instruction for higher-order thinking.

Carnine, D., Granzin, A., & Becker, W. (1988). Direct instruction. In V. L. Graden, J. E. Zins, & M. J. Curtis, (Eds.) *Alternative educational delivery systems: Enhancing instructional options for all students* (pp. 327-349). Washington, D. C.: National Association of School Psychologists.

Based on Rosenshine's (1986) principles of direct instruction, DISTAR and similar programs contain principles of instructional programming such as pretested scripted lesson; teacher-directed, small-group instruction for part of each lesson; and procedures for teaching, motivating, training, and formative evaluation. In addition to a review of general features of direct instruction programs like the **Direct Instruction Model**, this article also contains research findings from a number of sources that attest to the effectiveness of those programs as demonstrated by higher academic achievement scores as well as higher scores in the affective domain.

Cleveland, H. (1985, July/August). Educating for the information society. *Change*, pp. 13-21.

Suggested by the **INREAL (Inter-Reactive Learning)** Follow Through Model, this article is a discussion on the need to educate people for participatory roles in order to accommodate broader societal trends. Some of the elements that will need to be addressed to prepare citizens for an Information Society, the author contends, include shared knowledge, decision-making, cooperation, and integrative teaching and learning.

Cohen, D. H. (1972). *The learning child.* New York: Schocken Books.

Contending that schools must be places where children are not only involved in responsible work, but are encouraged to understand and order their world through full use of their senses, their feelings, and their intellects, Cohen examines for teachers and parents the crucial links between learning and the successive stages of childhood up to the intermediate years.

De Pree, M. (1989). *Leadership is an art.* New York: Doubleday.

In this source suggested by the **Inter-Reactive Learning Model (INREAL)**, De Pree perceives a new attitude, as opposed to a system, of leadership. This new attitude of leadership, applicable in many settings, depicts shared responsibility. The result is not only increased productivity and empowerment, but also greater creativity in problem solving and a maximization of individual and group potential. If a corporation is to be effective, he contends, corporations must give space to their "giants" to practice "roving leadership."

Doll, W. E., Jr. (1986). Prigogine: A new sense of order, a new curriculum. *Theory into Practice, 25*(1), 10-16.

Doll equates the work of Prigogine, the 1977 Nobel Prize winner in chemistry, with Piaget's work on adaptive biological and cognitive structures. He notes that Prigogine and Piaget draw upon the work of theoretical biologists, while American psychologists and educators draw upon the classical scientific paradigm of Newton. The measured curriculum, a closed and linear system, is perceived as an outgrowth of the Newtonian, closed system paradigm, while Prigogine, Piaget, and others are helping to develop a transformative curriculum where change is internal, including disequilibrium as a prime motivator as well as the opportunity for self-regulation. This source is recommended by the **INREAL** Follow Through staff.

Edmonds, R. R., & Frederiksen, J. R. (1979). *Search for effective schools: The identification and analysis of city schools that are instructionally effective for poor children.* Cambridge, MA: Harvard University Press. (ERIC Document Reproduction Service No. ED 142 610).

Contending that all children, except those with certifiable handicaps, can learn and are "eminently educable," Edmonds describes efforts at the time of publication of this document to identify and analyze city schools that were instructionally effective especially for poor and/or minority children. After establishing that these effective schools could be identified, the researchers looked for the relationship between these schools and pupil family background. While recognizing the importance of family background in developing a child's character, personality, and intelligence, the researchers found that a school can successfully teach basic school skills to all children, regardless of family background. This source is suggested by **Eugene Ramp** with the Effective Schools Approach (ESA) Follow Through model.

Erikson, E. H. (1963). *Childhood and society (2nd ed.).* New York: W. W. Norton & Company.

Leaving it up to man to decide whether he can afford to exploit childhood as an "arsenal of irrational fears" instead of establishing a partnership in a more reasonable order of things, Erikson presents and discusses case studies dealing with conflict, apathy, confusion, and arrogance. The author also claims that this is a book on the relation of the ego to society, on childhood, on historical processes of psychoanalysis, and that it is also a subjective book, a "conceptual itinerary." According to the **Southwest Educational Development Laboratory Language Development Approach** to Follow Through, this volume points out the importance of social interaction in the intellectual development of young children.

Evans, E. D. (1971). *Contemporary influences in early childhood education.* New York: Holt, Rinehart and Winston.

Drawing on empirical investigations in Early Childhood Education (ECE) whenever possible, Evans focuses on broad educational strategies applicable to children ages three to six. This treatise includes a summary of the major issues of ECE, such as what kind of content should be selected; when is the content appropriate; how will the content be delivered; where is instruction to take place (age is also involved here); and who will deliver the content. The why question involves the goals of ECE: Do we prepare children for now, or do we prepare children for tomorrow? Notes **Alice S. Paul** of the Tucson Early Education Model (TEEM), this is "...one of the first ECE texts that referenced both Head Start and Follow Through efforts in the development of alternative ECE programs for poor children."

Feuerstein, R., Rand, Y., Hoffman, M. B., & Miller, R. (1980). *Instrumental enrichment: An intervention program for cognitive modifiability.* Baltimore, MD: University Park Press.

The major goal of the Feuerstein Instrumental Enrichment (FIE) program is to transform passive and dependent cognitive styles into autonomous and independent thinking. This is accomplished by direct exposure to stimuli and experiences provided by contact with life events and formal and informal learning opportunities. In addition to the rationale for FIE, this publication contains description of program instruments, classroom implementation, evaluation, and a discussion on future directions of FIE. According to **COGNET (Cognitive Enrichment Network)** staff, their Follow Through model is an application of the theory presented in this book. The model cites this source as the "best reference for those interested in Feuerstein's theory."

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Defining intelligence as the ability to solve problems or fashion products, especially those that are of value to a culture, Gardner identifies seven abilities: linguistic, musical, spatial, logical/mathematical, bodily kinesthetic, interpersonal, and intrapersonal. In addition to advancing his theory, he recommends the development of a model on how to foster the different intellectual capacities. Inclusion of this volume has been suggested by **Betty Mace-Matluck** of the SEDL Language Development Approach.

Gersten, R., & Carnine, D. (1984). Direct instruction mathematics: A longitudinal evaluation of low-income elementary school students. *Elementary School Journal, 84*(4), 395-407.

Results of the use of the Direct Instruction model in the teaching of mathematics to disadvantaged students in grades one, two, and three, showed that these students (after receiving the full three or four year intervention) tended to perform significantly better on all subtests of the Metropolitan Achievement Test than their peers. The key principles of the Direct Instruction curriculum design provide for explicit instruction of each step of the problem-solving process in the early stages of the intervention, move the learner from a highly structured context to unstructured applications, and use general case strategies for working complex problems. **Doug Carnine** with the Follow Through Direct Instruction Model recommended this source for its focus on mathematics.

Gersten, R., & Carnine, D. (1986). Direct instruction in reading comprehension. *Educational Leadership, 43*(7), 70-78.

A group of researchers at the University of Oregon examined the applicability of direct instruction for teaching reading comprehension to students at the intermediate and secondary levels. The research demonstrates that the type of questions, the detailed step-by-step breakdowns, and the extensive practice with a range of examples illustrated in their three studies significantly benefit students' comprehension. The next step, therefore, is to integrate these procedures into reading series and into teacher training programs.

Gersten, R., Carnine, D., & Zoref, L. (1986). A multifaceted study of change in seven inner-city schools. *Elementary School Journal, 86*(5), 257-276.

Acknowledging that there is some controversy concerning the effectiveness of direct instruction and the use of standardized achievement tests for assessing the merits of an instructional intervention, the authors note that direct instruction appears to be a "relatively consistent, effective intervention for low-income children if one allows the use of achievement test data as reasonable." Comprehensive in the number of variables examined, the study suggests that intervention programs can succeed with "virtually no principal involvement, as long as teachers are well trained and supported by consultant and supervisory personnel." This source is suggested by the Follow Through **Direct Instruction Model**.

Goodlad, J. I., & Anderson, R. H. (1987). *The non-graded elementary school.* (Revised ed.). New York: Teachers College Press.

Harold Freeman, Jr. of the Follow Through Interdependent Learning Model (ILM) notes that this publication provides the rationale and hard data support for changing the organization of elementary school instruction to assure educational equity for all children. The authors address such issues as promotion vs. nonpromotion, heterogeneous vs. homogeneous groupings, pupil progress reporting, cooperative teaching and learning approaches, and student productivity and test scores.

Goodman, K. S. (1986). *What's whole in whole language?* Portsmouth, NY: Heinemann.

The major purpose of this book is to describe the essence of the whole language movement including its basis, features, and trends. More specifically it provides criteria that parents and teachers can use in helping children to develop literacy, and it suggests directions for initiating whole language programs as well as incorporating whole language strategies into existing language programs in need of transformation. This source is suggested by the staff of the Follow Through **Cooperative Learning Model/Project Extend** (CLM).

Hale-Benson, J. E. (1986). *Black children: Their roots, culture, and learning styles* (Revised ed.). Baltimore, MD: The Johns Hopkins University Press.

Arguing that black children are being effectively miseducated in American schools, Hale-Benson draws from the fields of anthropology, sociology, history, and psychology to explore the effects of African and African-American culture on black children's intellectual and behavioral development. While suggesting that the educational process must be sensitive to the culture of black children, she agrees that the same holds true for any other group of children. According to **Naomi Millender** of the Follow Through Cultural Linguistic Approach, this publication is an initial step in describing the relationship between black children's cultural base and learning.

Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms.* Cambridge: Cambridge University Press.

Advocating that the language of any social group is interdependent with the habits and values of behaving shared among members of that group, the author tells the story of how children of two culturally different communities came to use language and how their teachers not only learned to recognize and understand their patterns of language but also how these teachers used the knowledge for classroom instruction. **COGNET** staff found this source useful because of its implications for "non-mainstrean elementary students."

Hodges, H., Branden, A., Feldman, R., Follins, J., Love, J., Sheehan, R., Lumbley, J., Osborn, J., Rentfrow, R. D., Houston, J., & Lee, C. (1980). *Follow Through: Forces for change in the primary school.* Ypsilanti, MI: The High/Scope Press.

Follow Through's accomplishments include the improvement of primary education through implementation of a range of educational models generated from prevalent educational philosophy and theory. This volume documents the contributions of Follow Through programs as perceived by the model developers. **High/Scope** staff maintain that this publication provides insight into values, operations, and outcomes of Follow Through.

Hohmann, C. (1991). *High / Scope K-3 curriculum series: Mathematics (Field Test ed.).* Ypsilanti, MI: The High/Scope Press.

Drawing on the work of Howard Gardner's theory of multiple intelligences, Hohmann notes that the content of mathematics must be socially meaningful and valuable. In the first part of this edition, he develops a framework for mathematics by providing an overview of the developmental approach to mathematics and describes the classroom environment for fostering the right kinds of mathematics experiences. In addition to a scope and sequence of the mathematical milestones, part 2 contains specific key experiences and activities for each grade level in K-3 and a discussion on child assessment and program evaluation. One of the appendices lists selected computer software and activities. **High/Scope** staff note that this publication is based on the educational philosophy and practices of their Follow Through model.

Honig, A. S. (1979). *Parent involvement in early childhood education.* Washington, D. C.: National Association for the Education of Young Children.

This is a survey of program models and methods attempting to promote parental involvement in children's development as well as in children's learning. The programs mentioned, according to the author, confirm the variety of efforts undertaken as well as the difficulties encountered and the successes achieved. According to **Betty Mace-Matluck** of SEDL's Language Development Approach, this source points out the critical role parents play in linking the child's home/community environment with his or her formal learning.

Joyce, B. R., & Showers, B. (1983). *Power in staff development through research on training.* Alexandria, VA: Association for Supervision and Curriculum Development.

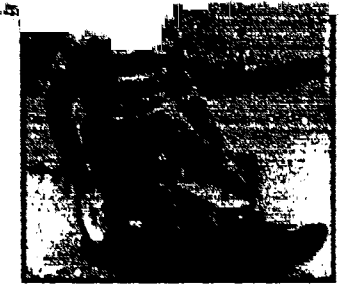
Envisioning a major change in the "ecology of professional life," Joyce and Showers have found that high quality training precedes superior teaching results. They caution trainers and teachers that the learning of a new, powerful skill and its transfer vertically and/or horizontally, can be discomfiting until executive control of the skill is achieved. To make training more effective, the authors recommend forecasting the problem of transfer during training, developing high degree of skill prior to classroom use, providing for executive control, providing for practice in the workplace, providing for collaboration, and including how-to-learn strategies. This reference is suggested by **Cooperative Learning Model/Project Extend** staff.

Kamii, C. (1984, February). Autonomy: The aim of education envisioned by Piaget. *Phi Delta Kappan*, 410-415.

Stating that the most important ideas of Piagetian theory are not the stages of development, Kamii proposes that Piaget's aim in education was moral and intellectual autonomy. Autonomy enables children to make decisions for themselves, taking into account the best source of action for all concerned. Using rewards and punishments does not develop autonomy, they reinforce a child's heteronomy. A child acquires moral autonomy like he or she acquires intellectual autonomy, constructing it from within, and not by internalizing it from without. **INREAL** staff note that this theory provides basis for the transformation of teaching.

Katz, L. G., Glockner, M. Z., Watkins, C., & Spencer, M. J. (1979). *Current topics in early childhood education.* Norwood, NJ: Ablex.

The second of a series, this volume contains review, analyses, and syntheses of the research and development in the field of early childhood. Of the ten papers presented, four are programmatic reviews. The other papers address issues of pedagogical innovation such as the role of play in the intellectual development of young children. **Alice S. Paul** of TEEM notes that this volume records early evaluative efforts to assess the impact of Follow Through.



Katz, L. G., & Chard, S. C. (1989). *Engaging children's minds: The project approach.* Norwood, NJ: Ablex Publishing.

The authors describe how project topics that children study in-depth promote social competen and meaningful learning. Notes **Diane Trister Dodge** with the Creative Curriculum Follow Through model, "The book extended my understanding of the richness of projects, how to generate creative ideas for new projects that will engage children, and the steps involved in planning. The project approach is very similar to my own views of the role of themes in integrating the curriculum."

Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom.* Hayward, CA: The Alemany Press.

Differentiating between language acquisition and language learning, the authors cite four principles in using the Natural Approach for language acquisition: comprehension precedes production, production is allowed to emerge in stages, a classroom activity has a communicative end/goal, and student affective filters must be lowered. In addition to a description of the theoretical model, this book includes implications of second language theory for the classroom as well as specific information about how the Natural Approach works in practice. This reference is suggested by **Betty Mace-Matluck** with SEDL's Language Development Approach.

Labinowicz, E. (1980). *The Piaget primer.* Menlo Park, CA: Addison-Wesley.

This source, found particularly good for teachers by **Horace C. Hawn** of the University of Georgia at Athens (UGA) Model, contains many graphic representations of Piaget's ideas. In addition to suggestions on how to organize the classroom for thinking, learning, and teaching, alternative approaches to instruction of mathematics, reading, science, and social studies are presented.

Lee, D. (1959). *Freedom and culture.* Englewood, NJ: Prentice-Hall.

Lee, an anthropologist, proposes that an examination of other cultures in the issues of personal autonomy, freedom of choice, principles of conformity, and social regulation may prove insightful and helpful in understanding the American belief in human dignity— a belief not entirely supported by present practices. In this series of essays suggested by **INREAL** staff, Lee examines the belief systems of several societies: the Wintu Indians of California; the Tikopia in Polynesia; the Hopi in Arizona; and the Navajo.

Maehr, J. M. (1991). *High/Scope K-3 curriculum series: Language & literacy (Field Test ed.).* Ypsilanti, MI: The High/Scope Press.

Defining language as the oral expression of ideas and literacy as the mastery of language in its written form, the author discusses a framework for language and literacy in part 1 of the publication such as the acquisition of language by children; commonly held assumptions in learning to read and write; literacy learning in the home; and classroom settings for literacy development. Part 2 includes key experiences, suggested activities, and assessment measures. In addition to an extensive bibliography, the publication has appendices that include literature resource lists, computer software for language and literacy development, and writing/reading checklists and inventories. The educational philosophy and practices of the **High/Scope Curriculum Model** are reflected in this comprehensive work.

Morrison, G. S. (1988). *Early childhood education today (4th ed.).* Columbus, OH: Merrill.

The author claims that changes in the field of early childhood education makes this fourth edition different because of the continued and growing interest in child development information and child care practices. In addition to including a new chapter on infants and toddlers, there are also vignettes with real-life applications of current educational theory. One of the purposes of this text is to help educators understand what is developmentally and educationally appropriate for young children. **Alice S. Paul** of TEEM notes that this new text lists good early childhood practices, essential for good early childhood programs.

National Association of Elementary School Principals. (1991). *Early childhood education and the elementary school principal: Standards for quality programs for young children.* Alexandria, VA: Author.

Noting that providing good early education is not a simple matter, the authors of this report have two purposes: to offer some tenets and guidelines for those interested in the establishment and conduct of a high quality educational program for young children and to assist in the assessment of program progress and impact. In addition to standards and quality indicators for curriculum, personnel, accountability, parents, and community, this publication includes a checklist to facilitate the review of those standards and quality indicators.

National Association of State Boards of Education. (1991). *Right from the start: The report of the NASBE Task Force on Early Childhood Education.* Alexandria, VA: Author.

This report includes a checklist for state boards of education as well as other state policymakers for initiating a process to enhance school success and overall development of children. The report, submitted by a task force consisting of leaders from public education, early childhood education, and state policymaking bodies contains two recommendations: the establishing of early childhood units in elementary schools, providing a new pedagogy for working with children ages 4-8 and a focal point for enhanced services to preschool children and their parents; and the developing of partnerships by public schools with other early childhood programs and community agencies to build and improve services for young children and their parents.

Piaget, J. (1975). *The development of thought: Equilibration of cognitive structures.* New York: The Viking Press.

Piaget's central idea in this volume is that the development of knowledge proceeds in "increasing equilibration," a process for correcting and completing preceding forms of equilibriums. He also addresses constructions, compensations, and regulations of the process, such as sensorimotor, perceptive, and spatial regulations. According to **Betty Mace-Matluck** of SEDL's Language Development Approach, this source discusses the relationship between learning and mental development and addresses the "readiness" principle.

Rhine, W. R. (Ed.). (1981). *Making schools more effective: New directions from Follow Through.* New York: Academic Press.

This volume was organized to answer three concerns: limited access to the public about information on Follow Through; focus on the results of the national longitudinal evaluation; and lack of dissemination regarding the "unique perspectives" of model sponsors. Regarded by **High/Scope** as a review of a spectrum of Follow Through practices and program history, this comprehensive volume includes the significance, perspectives, and possibilities of Follow Through as well as the description of five Follow Through models: Parent Education, Direct Instruction, Behavior Analysis, High/Scope Cognitively Oriented Curriculum, and Bank Street's Developmental-Interaction Approach.

Roopnarine, J. L., & Johnson, J. E. (Eds.). (1987). *Approaches to early childhood education.* Columbus, OH: Merrill.

Beginning to look at cultural diversity and the individual needs of children, the authors of the various sections of this book describe current models of early childhood programming. TEEM's **Alice S. Paul** at the University of Arizona finds this text relevant because it includes several of the Follow Through models such as the Bank Street Approach, High/Scope, and her own Tucson Early Education Model.

Rosenshine, B. V. (1986). Synthesis of research on explicit teaching. *Educational Leadership. 43*(7), 60-69.

In summarizing the studies on effective teaching, the author has divided the results into seven teaching functions: review, presentation of new material, guided practice, practice, feedback and corrections, independent practice, and weekly and monthly reviews. These seven functions can be modified to suit different learners. Results from the research consistently show that when teachers teach more systematically, student achievement improves. This publication is suggested by **Gary Johnson** with SEM.

Segal, J. W., Chipman, S. F., & Glaser, R. (Eds.). (1985). *Thinking and learning skills: Vol. 1. Relating instruction to research.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Representing efforts to relate instruction to theory and research in higher cognitive development, this volume contains descriptions of nine instructional programs and their assumptions regarding instruction of thinking and learning skills. The programs were selected on the basis of field experience, category (intelligence and reasoning, knowledge acquisition, and problem solving), innovation, and work with older children. Analysis by three leading psychologists of how these instructional programs in cognition relate to ideas in the relevant basic research literature is also included. **COGNET** cites this volume as a "good presentation of recent work in cognitive education."

Skinner, B. F. (1984). The shame of American education. *American Psychologist, 39*(9), 947-954.

Because psychological theories are presented to teachers through schools of education and teachers' colleges, it is there, claims Skinner, that we must lay the major blame for what is happening in American education. Deeply entrenched views of human behavior interfere with the solution to the major problems in education. The solution does not mean a longer day or year or more homework, it means that teachers must be taught more effective and efficient ways of teaching. Teachers must be clear about what is to be taught; teach first things first (excellence and creativity follow rather than precede basic knowledge); let each student advance at his or her own pace; and construct a good program of instruction with reinforcements. This reference is recommended by **Eugene Ramp** with the Effective Schools Approach.

Slavin, R., Karweit, N. L., & Madden, N. A. (1989). *Effective programs for students at-risk.* Needham Heights, MA: Allyn and Bacon.

Focusing on "students whose intelligence is within normal limits but who are failing to achieve the basic skills necessary for success in school and in life," the authors present a practical synthesis of the latest research on effective practices for students in compensatory programs, special education programs, and general education programs. Some of their conclusions are: (1) identification of the services makes little difference, it's the quality of the programs that is important; (2) prevention and early intervention are more promising than remedial and special education services; (3) pull-out programs should be designed for early transition into regular classroom placement; (4) effective early childhood programs use developmentally appropriate strategies; and (5) effective teaching practices for students at risk tend not to be qualitatively different from the best teaching practices of general education. This volume is recommended by **Naomi Millender** of the Cultural Linguistic Approach (CLA).

Smilansky, S., & Shefatya, L. (1990). *Facilitating play: A medium for promoting cognitive, socio-emotional and academic development in young children.* Gaithersburg, MD: Psychological and Educational Publications.

The authors explain the six components of socio-dramatic play and how teachers can assess children's competence to determine when and how to intervene for the purpose of promoting and extending children's pretend play. "Dr. Smilansky's research on play has been invaluable in helping me understand the different types of play and the connection between socio-dramatic play and children's academic success," states **Diane Trister Dodge** with the Creative Curriculum Model (CCM).

Smith, F. (1986). *Insult to intelligence: The bureaucratic invasions of our classrooms.* New York: Arbor House.

Claiming that present educational systems, such as schools and universities, ignore and insult the natural intelligence of adults and children, Smith encourages parents to get into the classroom. He strongly suggests that programmed instruction harnesses and constrains the natural learning process of children. Children learn constantly, they learn what others do, and what makes sense to them. Smith especially is concerned about the misuse of computers as "ultimate weapons of instructional programming." **COGNET** regards this publication as an excellent rationale for personally-relevant learning activities in school.

Smitherman, G. (1977). *Talkin and testifyin.* Boston: Houghton-Mifflin.

In this volume, Smitherman defines Black English, traces its development, and discusses the implications for black-white interaction and the teaching of black children. She perceives the inclusion of black studies in the curriculum as a means of reflecting America's diverse cultural heritage, as well as its multilinguistic characteristic. **Naomi Millender** of the Cultural Linguistic Approach (CLA) notes that this is an excell nt encyclopedic sourcebook on African-American linguistic styles.

Smock, C. D. (1976, June). *Constructivist model for instruction.* Follow Through Research Report, 19. Athens, GA: University of Georgia.

According to **Horace C. Hawn** of UGA, this publication deals specifically with the University of Georgia's initial Follow Through Model, the Mathemagenic Activities Program (MAP). MAP, most commonly called University of Georgia at Athens Follow Through Model, is based primarily on Piaget's theory of cognitive development. While it contains a description of the Model, this monograph also includes a discussion of the implications of Piaget's theory for mathematics learning and teaching.

Spodek, B. (Ed.). (1982). *Handbook of research in early childhood education.* New York: The Free Press.

Designed to be used by students of early childhood education, this publication may also be used by teachers and administrators. With an introduction and a list of contributors, this handbook is divided into six parts, dealing with child development, developmental theories, classroom processes, public policy, research methods, and measurement/evaluation. This volume is recommended by **Betty Mace-Matluck,** SEDL LDA.

Strickland, D. S., & Morrow, L. M. (Eds.). (1989). *Emerging literacy: Young children learn to read and write.* Newark, DE: International Reading Association.

Contributors to this volume are educators and researchers who give examples of the ways in which literacy emerges from infancy through the preschool years and in the early years of school. While each of the authors has a somewhat different message about how children change or how they think about literacy activities, each provides ideas to encourage and support emerging literacy. **Diane Trister Dodge,** with the Creative Curriculum Model, found this book to be a wonderful resource for making literacy part of all activities and interest areas in the classroom. She adds that it is not difficult to apply the principles of emerging literacy to how teachers can plan for children's emerging understanding of mathematics, science, and social studies.

United States Department of Education. (1991). *America 2000: An education strategy sourcebook.* Washington, DC: Author.

In addition to remarks from President George Bush and Secretary of Education Lamar Alexander, this sourcebook contains specifics on how each of the six national education goals are to be served. The strategies for achieving the six goals are listed into four categories: better and more accountable schools for today's students, a new generation of American schools for tomorrow's students, a nation of students for yesterday's students/today's work force, and communities where learning can happen.

Vaughan, E. D., Wang, M. C., & Dytman, J. A. (1987). Implementing an innovative program: Staff development and teacher classroom performance. *Journal of Teacher Education, 36,* 40-47.

This post hoc study was designed to test three factors regarding the implementation of an innovation in four school districts over three years: local training support, time (years of implementation), and program features. The innovation in this study is a comprehensive elementary school educat onal program containing 12 critical dimensions, ranging from space and facility arrangement to develop ent of student self-responsibility. The results of the study provided "substantial" support for the designated hypotheses. Both the level of implementation and changes varied for different program features as well as at sites. This reference is suggested by the **Adaptive Learning Environments Model (ALEM)** Follow Through staff.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Translated, compiled, and combined from several of Vygotsky's works, this publication is the product of a team of editors. Included in this volume is Vygotsky's hypothesis of the zone of proximal development, a zone created when the developmental process is not congruent with learning processes. Development in children, claims Vygotsky, is not parallel to the learning processes. Also included in this volume are discussions on the role of play in development as well as the mastery of memory and thinking. **COGNET** staff found this volume to directly address the importance of learning experiences as a major determiner of cognitive development, while **SEDL LDA** staff perceive it to explain, at least in part, the cognitive operations involved in language acquisition.

Wang, M. C. (1980). Adaptive instruction: Building on diversity. *Theory into Practice, 19*(2), 122-127.

According to the author, providing adaptive instruction requires that it be matched to what is known about a student's background, talents, interests, and past performance—all factors assessed prior to and during the course of learning. This discussion of the **Adaptive Learning Environments Model** (ALEM) focuses on describing the characteristics of adaptive instruction, such as diagnosing and monitoring student learning progress, teaching self-management skills, defining organizational support, and securing family intervention. The approach is built on the assumption that students learn in different ways; therefore instruction should be "adaptive."

Wang, M. C., & Zollers, N. J. (1990). Adaptive instruction: An alternative service delivery approach. *Remedial and Special Education, 11*(1), 7-21.

When principals serve as both instructional and administrative leaders it is possible to remove many programmatic, administrative, and fiscal roadblocks that may occur when integrating students with special needs in general education classrooms, according to the research on the product and implementation process of the **Adaptive Learning Environments Model (ALEM).** In addition to its research findings, this article contains a description of ALEM and its philosophical basis.

Weber, G. (1971). *Inner-city children can be taught to read: Four successful schools (Occasional Papers No. 18).* Washington, D. C.: Council for Basic Education. (ERIC Document Reproduction Service No. ED 057 125).

With the hypothesis that schools make a difference in the education of poor children, the researcher compared four successful schools in order to identify their common characteristics. School selection was based on location, poor children population, and success in the teaching of reading. Common factors included: strong leadership, high expectations, good atmosphere, strong emphasis on reading, additional reading staff, use of phonics, individualization, and careful evaluation of pupil progress. This ERIC document is suggested by staff with the Follow Through **Effective Schools Approach.**

Weisberg, R. (1986). *Creativity: Genius and other myths.* New York: W. H. Freeman and Company.

Stating that most of what we believe about creativity is based on folklore, the author contends that creativity does not happen by leaps and bounds as professed by the genius view or that it is "nothing new" as defined by the behaviorist point of view. Weisberg dispels other myths on artistic creativity, scientific discovery, and divergent thinking. He develops a framework for understanding creativity based on experimental results, demonstrating the incremental nature of creativity grounded on the experiences of the creative individual and others. This reference is suggested by **INREAL** staff.

Acknowledgments: Recalling Co-contributors to the Cause

The drive to work together and the dedication of all participants in Follow Through seems to be a unifying force in that a common bond of understanding is immediately established. I'm sure that such experiences have been multiplied thousands of times in the Program.

— Former Follow Through teacher, now Managing Editor of *Weekly Reader*

The bridge to success that is Follow Through would not exist for children, families, communities, and schools were it not for many hardworking co-contributors to the cause. Likewise, if a book's value is measured by the process that informed its writing rather than the printed paper product, then the preparation of *Follow Through: A Bridge to the Future* is worth a million times its weight in silver. At SEDL, we knew that it would be difficult to coordinate and synthesize the ample contributions of an impressive array of early childhood educators, parents, children, and publication professionals into a single effort. But we had no clue when we began that the effort would engender the unwavering support of so many. To our surprise, the intent and importance of this book seemed to have tapped all those involved like a mission. Contributors managed to do whatever we asked willingly, expeditiously, and with an infectious sense of purpose.

Mary Jean LeTendre, Director of Compensatory Education Programs, and her staff at the National Follow Through Office in Washington, D. C., believed in this sourcebook from its inception and have encouraged and supported it every step of the way. Patricia McKee, Bob Alexander, and Barbara Little of LeTendre's staff threw the heart of their work, experience, and their considerable strength into favorably positioning the federal funding wheels behind the book. Their support told us, "We will take care of the red tape so that you can concentrate on spelling out and spreading the Follow Through story." We're deeply indebted to these public servants—as are the thousands of Follow Through children and their families.

Obviously, to compile a volume that sets out to record any phenomenon firsthand through words and pictures, the cooperation of sources and resources is essential. From our vantage point at Southwest Educational Development Laboratory, Diane Trister Dodge with the Creative Curriculum Model, Richard Feldman at Bank Street College, Harold Freeman with ILM, Katherine Greenberg at COGNET, Horace "Cy" Hawn at the University of Georgia model, Elizabeth "Tikki" Heublein at INREAL, Naomi Millender at CLA in Chicago, Alice Paul at TEEM, Eugene Ramp of the Effective Schools Approach, Beth Swartz of the Cooperative Learning Model's Project Extend, Charles "Chuck" Wallgren at High/Scope, Margaret Wang and Jeff McLaughlin of ALEM in Philadelphia, Doug Carnine and Siegfried Engelmann of the Direct Instruction Model, and Gary Johnson of the School Effectiveness Model were more than editors, they were cooperative, sharing friends. They not only showed us their sites, they showed us themselves and their commitment. They exposed their hopes for Follow Through's future, were candid about their models, and extended helpful, supportive, and steady hands over and over again. Linda Kolbusz, of the Cooperative Learning Model, and Margaret LaFleur, of the Fall River Follow Through Project, were also key contributors to the conceptualization and planning of the sourcebook.

Likewise Robert Egbert, one of the first national Follow Through directors, offered not only his retrospective of the era that began Follow Through's bridge-building, but also of the troubled waters that swelled beneath it in the decades that followed the program's authorization. He consented to review the manuscript, as did Chris Dwyer of RMC Research Corporation, and Bob Alexander and Tom Fagan of the U. S. Department of Education. All were supportive planners, implementers, and constructive critics.

Kari Kaplan, who painted the book's cover illustration, contributed literally hours of time above and beyond her contract specifications working with us from concept realization to the reproduction of her lush colors. Like so many who worked to make the sourcebook a text that people would be drawn to, Kari teaches children to paint. She believed in Follow Through because Follow Through believes in children. "It's a way of giving back a bit of one's gift," she explained, and offered her services at a fraction of their market value—as did design artist, Laura Alexander, and desktop publisher/soon-to-be elementary school teacher, Diana Paciocco.

So many others invested so much of their time and talent in the project, that it's negligent to consider their commitment "just a job." Bill Waller at Futura Communications, Inc. lent years of expertise in printing to his close and careful work with the authors, as did Wallace's Ann Stapleton and copy editor Roxanne Bogucka. Enthusiastic assistants like Lydia Rocha and Michelle Brown gave 200 percent to helping us stay on top of reams of informational materials that spanned nearly 25 years of Follow Through. At the same time, they managed to arrange travel, type, revise, fax, sort, check, and recheck our transcriptions, notes, and drafts.

We applaud each of these contributors and the hundreds of unnamed students, parents, teachers, and administrators who offered their help and their hands so that we could see their reality and document it as part of this bridge called Follow Through. Each of their faces and words are unforgettable in that they offered us new insights and understandings, perseverance, and the peace of mind that comes with knowing there are so many others who share our belief that Follow Through has much to teach the world.

— *Rosalind Alexander-Kasparik,*
Betty Mace-Matluck, Cris Garza,
and Maria Torres
Southwest Educational Development
Laboratory,
December, 1991

One-Page Follow Through Model Descriptions

Follow Through Adaptive Learning Environments Model (ALEM)

Contact: Dr. Margaret C. Wang
Temple University Center for Research in Human Development and Education
9th Floor Ritter Hall Annex
Broad Street & Cecil B. Moore Avenue
Philadelphia, PA 19122

Telephone: 215/787-3001

Projects: New Orleans, Louisiana; Philadelphia, Pennsylvania; Montevideo, Minnesota; Randolph County, West Virginia

Tenets:
An underlying premise of the ALEM's design is that students learn in different ways and require different amounts and varying rates of instruction. Effective school programs accommodate and build upon these differences through a variety of instructional methods and learning sequences. Under the ALEM, students are taught to take responsibility for their own learning by participating in the planning and management of their educational tasks. Regular students, as well as students classified in special or compensatory education programs and those considered to be academically gifted, receive appropriate instruction in ALEM classes without experiencing the negative effects of special labeling or segregation.

Educational Approach:
The program is designed with the overall goal of ensuring the learning success of each individual student through an adaptive educational and related service delivery system that effectively responds to the diverse social and academic needs of individual students in regular learning environments. The delivery of adaptive instruction is facilitated by individualized progress plans, a diagnostic-prescriptive monitoring system, and the Self-Schedule System, a classroom instructional-learning management system that helps students take increasing responsibility for their own behaviors and learning progress. Features that support the implementation of adaptive instruction include an adaptive program delivery system, a systematic staff development sequence known as the Data-Based Staff Development Program, school and classroom organization supports, and family involvement.

Through the ALEM's adaptive program delivery system, school personnel make systematic adjustments through redeployment of school resources and staff expertise to improve program implementation. A site-specific plan for implementing the ALEM is developed based on assessments of school characteristics such as student needs, staffing patterns, curricular options, operating practices, record-keeping procedures, and physical resources.

Recommended Personnel:
Implementation of the ALEM requires an organizational pattern that promotes coordination and collaboration among the school staff. Specialized professional staff (e.g., special education teachers, Chapter 1 teachers, and school professionals) work closely with regular education teachers, assisting them in the diagnostic-prescriptive process, providing direct instruction, and serving as consultants.

Model Effectiveness:
Findings from over a decade of research provide consistent evidence that high degrees of ALEM implementation lead to positive changes in classroom processes, including increased student-teacher interactions for instructional purposes, decreased management-related interactions, increased time spent on-task, decreased disruptive behavior, and increased student-initiated activities.

Achievement results for students in mathematics and reading are comparable to national and population norms, and have exceeded these norms in many school. Results are also positive for students with mild handicap classifications integrated in ALEM classes. Studies have shown a dramatic increase in the percentage of special education students recommended by their teachers for decertification.

Surveys of ALEM teachers and parents indicated highly positive attitudinal outcomes. Teachers have found the implementation of the ALEM rewarding and challenging. They have also found the teaming approach helpful and professionally stimulating. Parents have appreciated the requirement of family involvement and have been pleased with the program's impact on their children's progress.

Follow Through Cognitive Enrichment Network (COGNET)

Contact: Dr. Katherine H. Greenberg
The University of Tennessee, Knoxville
321 Claxton Addition
Knoxville, TN 37996-3400

Telephone: 615/974-0797

Projects: Chattanooga, Tennessee; Knox County, Tennessee; Flathead Indian Reservation, Ronan, Montana; Jefferson County,Tennessee.

Tenets:
School success is dependent on children's opportunities to actively explore new ideas and connect them to their own stories of how the world works.

The classroom should be a laboratory for learning where the thinking process is valued as much as the final product.

If children are to transfer what they learn at school to the real world, learning needs to occur in a social context where justifications, principles, and explanations are socially fostered.

Children learn how to learn and develop an ability to adapt to new situations when adults serve as mediators of learning experiences.

Educational Approach:
By taking the role of mediators of learning experiences, adults focus children's attention directly on the connections between school learning and the real world. Mediators in the home and school work together to ensure that children reflect on the relevance and importance of curricular activities selected by the teacher and make connections to their own world view.

As children engage in personally relevant activities, adults help children understand fundamental methods for exploring and connecting new ideas, including ten *Building Blocks of Thinking* and eight *Tools of Independent Learning*.

Cooperative learning is used frequently to structure carefully selected computer activities which are integrated into the curriculum.

As children participate in challenging activities, Building Blocks and Tools of Independent Learning are introduced and their need discussed. Then, children are guided to "bridge" or relate the Building Blocks and Tools from the present to anticipated situations in school, home, work, and social settings.

Recommended Personnel:
One teacher and one aide per classroom; one support teacher for every 20 classrooms; one social worker per school.

Model Effectiveness:
In a three year study, COGNET children from White Pine, Tennessee made significantly higher gains than a comparison group in math and reading on the Stanford Achievement Test, going from the 36th percentile for both prior to the program to the 64th percentile in math and the 56th percentile in reading.

COGNET children also made significantly higher gains than the comparison group on measures of intrinsic motivation and cognitive functioning.

Children from several schools have demonstrated through journal writings a high level of internalization and ability to transfer COGNET concepts.

According to observation data, COGNET teachers' classroom interaction profiles changed after training. These teachers began to ask many more questions requiring higher level thinking. Unlike comparison group teachers, the COGNET teachers spent more time with children who gave partial or misguided responses and taught their students to respect each child's opportunity for learning by not blurting out answers.

Parent interview data indicate that COGNET parent workshops helped them understand their children and work better with them in both school-related and home-related activities and problems.

Follow Through Cooperative Learning Model/Project Extend (CLM)

Contact: Dr. Jim Bellanca
IRI (Illinois Renewal Institute)
200 East Wood Street, Suite 274
Palatine, IL 60067

Telephone: 708/991-6300

Projects: Chicago, Illinois; Chicago Heights, Illinois; Elgin, Illinois; Harvey, Illinois; Rockford, Illinois

Tenets:
Given intensive instruction in the cooperative/cognitive instructional model by well-trained teachers, at-risk students can perform at or above grade level even when living conditions, home environment, and other extra school parameters act as deterrents.

Educational Approach:
Intensive and systematic training, peer coaching, and consultant follow up prepare teachers to teach K-3 at-risk students to cooperate, respect, take responsibility, learn, and master basic skills. Teachers learn to work in collaborative teams to redesign curriculum, involve parents, and restructure the school for cooperative and cognitive outcomes. By integrating the principles and practices of whole language, cooperative learning, and computer-assisted instruction with reading and math content, the cohort teams create cooperative, caring, and thoughtful schools that mean success for all of their at-risk students.

Recommended Personnel:
Project coordinator for staff development (full time); social services coordinator; all K-3 staff and administrators receive six hours in-service training per month; all K-3 staff meet one to two hours weekly for planning and assignment work.

Model Effectiveness:
At-risk students show significant gains in academic achievement, school liking, social responsibility, and attendance. Gains equal or exceed norms reported in cooperative learning and thinking skills literature for non-at-risk students. Teachers report a greater sense of professionalism, enhanced teaching skills, and much more sharing and cooperation among faculty members.

Follow Through Creative Curriculum Model (CCM)

Contact: Dr. Diane Trister Dodge
Teaching Strategies, Inc.
4545 42nd Street, N.W., Suite 306
Washington, DC 20016

Telephone: 202/362-7543

Projects: Brattleboro, Vermont

Tenets:
Children continually learn from their environment by observing, actively exploring, and using the knowledge and skills they have already acquired to gain new understandings and abilities.

A rich and well-organized physical environment invites children to try out their ideas, make connections, and construct their own knowledge in a meaningful context.

Social development cannot be separated from cognitive development. When the classroom environment and daily interactions promote the development of social competence and self-esteem, children are able to pursue activities of interest to them and are motivated to learn.

A partnership between parents and staff, based on mutual respect for the value of each one's role in nurturing the child's development, is central to the curriculum.

A thematic approach allows children to think, question, solve problems, and work collaboratively as they study content of interest to them. It provides an effective way to integrate the teaching of skills and concepts.

Educational Approach:
Teachers organize indoor and outdoor environments into distinct interest areas offering different types of activities that invite children to explore, discover, construct, and share their ideas with others.

An underlying strategy for classroom management is the careful arrangement and labeling of materials so that children can select and return materials independently.

The physical environment is the focus for curriculum planning. Teachers plan weekly what changes they want to make in each interest area based on their observations of how children are using the materials, what skills they want to emphasize, and the theme they are studying with the children.

The Curriculum guides teachers in building a partnership with parents explaining what children are learning in each of the interest areas and how parents can support their children's learning.

The model emphasizes child-initiated activities. Teachers help children make choices, guide children's explorations, ask questions to extend children's thinking, and observe how children engage in learning.

Teachers promote children's thinking about math, science, literacy, and social studies in the context of daily activities in each interest area. Children acquire skills and understandings by applying them to real situations that have meaning to them.

Recommended Personnel:
One teacher and one aide per classroom.
Class size: 18-20 students.

Coordinators for parent involvement, social services, health, and curriculum.

Model Effectiveness:
New teachers find that the approach is easy to understand and implement because it is practical and concrete. Experienced teachers find that it validates their understanding of best practices and conforms with the definition of developmentally-appropriate practice.

Classroom observations in programs using the model indicate that children become self-directed, relate well to their peers and adults, and acquire skills and concepts.

Parents describe their children's enthusiasm for learning and their increasing language and social skills.

Follow Through Cultural Linguistic Approach (CLA)

Contact: Ms. Naomi Millender
Northeastern Illinois University/College of Education
The Chicago Teachers' Center
770 North Halsted Street
Chicago, IL 60622

Telephone: 312/733-7330

Project: Chicago, Illinois

Tenets:
The Cultural Linguistic Approach is based on the idea that culture forms the basis for the acquisition of skills. This concept is implemented through an emphasis on culture-based instruction which utilizes the history, values, traditions, and knowledge of traditionally excluded ethnic groups, i.e., African Americans, Hispanic Americans, Native Americans, and Southern White Migrant Americans.

Educational Approach:
The Culturally Responsive Classroom - an exciting and positive classroom which engages the student in the learning process.

The USISPU Teaching/Learning Sequence - a technique which accepts the oral language of students as the first step in the attainment of educational excellence.

Training Parents As Specialists - a training process to involve young, urban parents as classroom volunteers.

A Comprehensive Curriculum - a complete curriculum in all subject areas for basic and advanced instruction.

Continuous Staff Development - a process of regular professional development for the teacher and teacher assistant.

Training and Demonstration School - a public school on Chicago's South Side, Fuller School, where "seeing is believing."

Recommended Personnel:
One teacher, one teacher aide, and one parent volunteer specialist per classroom. One school-community representative per project. One master/resource teacher per seven classrooms.

Model Effectiveness:
Reading test scores confirm that the CLA Follow Through Project has been effective. Over 70 percent of the Follow Through children at Fuller School, for example, scored above national norms in 1987-89. In 1990-91, a study of eighth graders who were reading at and above grade level revealed that *all of them* had been former CLA Follow Through students in the primary grades.

Follow Through Developmental-Interaction Approach (DIA)

Contact: Mr. Richard H. Feldman
Bank Street College of Education
610 West 112th Street
New York, NY 10023

Telephone: 212/222-6700 (Ext. 246)

Projects: Boulder, Colorado; New Haven, Connecticut; Honolulu, Hawaii; Cambridge, Massachusetts; Fall River, Massachusetts; Elmira, New York; New York City, New York; Macon County, Alabama; Plattsburgh, New York; Brattleboro, Vermont.

Tenets:
The classroom should offer a rational and democratic situation in which a child's positive image as a learner and a person can develop.

Children learn most effectively and retentively through active participation. The adult's role is to support children's autonomy and extend their world while helping them to understand and express the full meaning of this experience.

A productive and enjoyable learning environment requires constant restructuring on the basis of analysis of the special needs and emerging interests of individual children.

Children learn best when the important adults in their lives understand their influences and responsibilities and constantly try to strengthen their enabling skills as they work together for children's total development.

Educational Approach:
The curriculum emphasizes learning through actual experiences, probing, discovering, and problem solving, using content which is directly relevant to the child's own world.

The curriculum focuses on tasks that are satisfying in terms of the child's own goals and productive for his or her cognitive and affective development.

The child is encouraged to select from among various options, to make decisions, to develop coping skills, and to take an active part in directing his or her own learning.

The curriculum emphasizes the mastery of language and the symbolic processes of reading and writing in every aspect of the child's day.

The curriculum develops understanding and practical application of numerical concepts as well as skills.

Social studies is stressed as one of the most important curriculum areas and as a valuable means of integrating other academic disciplines.

Academic skills are acquired within a broad context of planned learning experiences that provide appropriate ways of expressing and organizing children's interests around the themes of home and school and gradually extending these interests to the larger community.

Continuing staff development is the keynote of the program. Creative teaching develops when teachers have continuing support and professional stimulation.

Recommended Personnel:
Bank Street works with schools to identify key personnel who can provide critical functions necessary to effective implementation of the program. Education leadership can be the Principal and a leadership team; individuals responsible for staff development should retain a maximum 1:12 teaching team ratio. Parent Involvement Staff, Social Worker, Psychologist, and Nurse are critical functions—as are a classroom team, consisting of a Teacher and an Assistant. Ongoing field advisor and team members from the College address local needs. Experience indicates that time for teams to meet and work together is a critical need at the local level and must be planned.

Model Effectiveness:
Children's success in school is maintained beyond the third grade.

Research demonstrating that oral language development is basic to writing and reading is an important contribution of the program.

Classroom observation data verify that teachers gain new understanding of children as learners and the skills to translate this understanding into diagnostic teaching.

Parent interview data indicate that parents are more supportive of children's learning in school and at home, and are more effective in school and community relationships.

Many sites have demonstrated effectiveness in presentations to federal panels concerned with program effectiveness. Local evaluations have resulted in continuing support from local school districts even in the absence of federal support. Eight of the 14 original sites no longer funded by the federal Follow Through agency continue their Follow Through programs with local resources.

Follow Through Direct Instruction Model (DI)

Contact: Dr. Doug Carnine
University of Oregon
805 Lincoln
Eugene, OR 97401

Telephone: 503/485-1163

Projects: Bridgeport, Connecticut; Dayton, Ohio; Fort Hall, Idaho; Moss Point, Mississippi

Tenets:
Learning of basic academic skills and their application in higher-order thinking is essential to intelligent behavior and should be the main focus of a compensatory education program.

Low-income students must be taught at a faster rate than typically occurs if they are to catch up with their middle-class peers.

Regardless of the home background, the school program must be accountable for transmitting a sufficient amount of skills to permit low-income students to overcome the handicap of poverty.

Educational Approach:
The Direct Instruction Model for kindergarten through third grade emphasizes frequent teacher-student interactions guided by carefully sequenced daily lessons in reading, arithmetic and language. The instructional lessons have been designed by Engelmann and associates using recent principles of learning and sophisticated instructional-design techniques. The instructional programs are DISTAR, Reading Mastery, Connecting Math Concepts, and Reasoning and Writing. Each program has gone through an extensive field try out and revision procedure to ensure that it will work effectively for appropriately placed students. The programs are designed to focus on generalizable skills and strategies. For example, by teaching 40 sounds and skills for blending sounds together, students learn a generalized skill that is relevant to one-half of the common English words.

The approach controls the details of what happens during instruction. The instructional programs provide lessons that tell the teacher exactly what to say and do. Training is provided so that the staff knows how to execute the details of the program. Student progress is monitored through the use of criterion-referenced "in-program" tests in each subject area. Supervisors are trained to spend 75 percent of their time working in the classroom with teachers, aides and students. Direct Instruction stresses systematic use of praise and reinforcement for specific, desired behavior and for strengthening children's motivation.

Recommended Personnel:
Director/Principal;
Supervisor for every 10-15 classrooms;
One teaching aide for each kindergarten and first grade.

Model Effectiveness:
On the Follow Through National Evaluation, the performance of Direct Instruction students in all subjects—reading, language, math, and spelling—was superior in both basic and "cognitive" skills. The Direct Instruction Model was also superior on affective measures. A high school study of former Follow Through students in five diverse communities suggests that the Direct Instruction Model significantly decreased the dropout rate, and often increased the proportion of students applying to college.

Follow Through Effective Schools Approach (ESA)

Contact: Dr. Eugene A. Ramp
Educational Systems
317 Nichols Hall
The University of Kansas
Lawrence, KS 66045

Telephone: 913/864-4447

Projects: Compton, California; Trenton, New Jersey; Waukegan, Illinois; Northern Cheyenne Reservation, Montana

Tenets:
The process of school improvement must have the informed cooperation of parents, students, teachers, principals, and district administrators. Parents and teachers are an important part of the decision-making process for schools.

Students are compared to their own baselines, not compared to other children. This allows teachers to focus on the individual and allows students to develop independence in learning. Both teachers and children work better in an atmosphere of encouragement and support. Students' achievements are reinforced with positive motivation systems, including tokens, points, and learning contracts.

The program emphasizes comprehensive services for health, nutrition, and social welfare, and provides or coordinates these services for families.

Educational Approach:
The program emphasizes academics by encouraging small group instruction, individualization, mastery learning, and increased instructional time. Each child's academic progress is closely tracked so teachers can plan appropriate lessons. School districts may choose their own textbooks, but the program provides a guide that lets districts choose material that works best with this model. Extra time and different instructional approaches are used to help a child who is having trouble mastering a concept. The program emphasizes basic academic skills then uses those skills as springboards to higher-order learning.

Recommended Personnel:
One teacher and one aide for each classroom; third grade teachers may share an aide or work without one. Parent educators are used in classrooms as funding permits. A staff trainer is responsible for continual training of teachers, instructional aides and parent educators.

Model Effectiveness:
The emphasis on academics and individual learning results in test scores that are above test norms for reading and for math. Comparison children without this Follow Through program continue to fall farther behind test norms every year.

Surveys of parents, teachers and children show that each year 80 to 90 percent of respondents are satisfied or completely satisfied with the methods, goals, and outcomes of the program.

Parents participate as educators, as volunteers, and as members of the Parent Advisory Council (PAC), which approves the local program application and makes many decisions. This close connection between the home and school has involved thousands of parents in the educational lives of their children, and has put parents and educators on the same team.

Follow Through High/Scope Curriculum Model (H/SCM)

Contact: Mr. Charles R. Wallgren
High/Scope Educational Research Foundation
600 North River Street
Ypsilanti, MI 48198-2898

Telephone: 313/485-2000

Projects: Leflore County, Mississippi; Okaloosa County, Florida; Richmond, Virginia

Tenets:
The High/Scope Curriculum views children as active learners, who learn best from activities that they themselves plan, carry out, and reflect upon.

Educational Approach:
Key objectives are to nurture in the child the thinking skills he will need throughout his school years and adult life and to develop the academic subject competencies usually taught in the elementary grades.

Academic and thinking skills are developed through teacher-initiated instructional activities and child-initiated projects which focus on key experiences in two categories:

- Modes of learning, action (planning, working, evaluating, problem-solving, social interactions); Representation; Language (speaking and listening, writing, reading).
- Content areas: Language & Literacy, Mathematics, Art, Movement, Music, Science, Social Studies, etc.

The process of learning and specific content are emphasized.

Instruction is carried out in small groups.

Verbal interaction among children is encouraged.

Each child's level of development is continuously assessed through observational and work samples so that appropriate materials and activities can be provided.

Teachers provide a systematic, consistent, and thoroughly planned approach to child development and instruction, combined with emphasis on active experience and involvement of the child.

Teachers encourage children to direct their own activities.

Optional classroom computer learning stations and appropriate software are integrated in the model approach.

Recommended Personnel:
One teacher and one aide (recommended, but not required) per classroom. One curriculum assistant for each seven classrooms. One home-school coordinator per project.

Model Effectiveness:
Available evidence from a 1988-91 study indicates that, compared to the typical K-3 curriculum, the High/Scope K-3 Curriculum helps at-risk participants improve their school achievement. The study compared High/Scope Follow Through classes at three schools to comparison groups drawn from other classes in these schools and classes in similar schools; a total of 1,024 children participated in the study each school year. The High/Scope Follow Through groups scored significantly higher than one or both comparison groups on 16 (64 percent) of 25 overall achievement comparisons and 51 (62 percent) of 82 subtest comparisons, an overall average of 12 normal-curve-equivalent points higher.

A 1977 Leflore County study indicates that, compared to their fellow students, High/Scope Follow Through children wrote longer, more descriptive, and more effective reports with richer vocabularies; spent more time working in small groups, talking with adults, and working with adults individually; and, a year after the program, initiated reading and writing activities more frequently and had better attitudes towards them.

Follow Through Interdependent Learning Model (ILM)

Contact: Mr. Harold Freeman, Jr.
Fordham University
Graduate School of Education
113 West 60th Street (Room 1003)
New York, NY 10023

Telephone: 212/636-6494

Project: New York City, New York

Tenets:
The model is essentially a method of instruction that focuses on enhancing children's cognition and nurturing their developing affective and socio/cultural behaviors. Because it is a content-free method, developmentally appropriate curricula may be used at any level from preschool through the sixth grade.

A fundamental principle is that children learn by doing. Further, effective teaching-learning transactions should always be based on the active participation of adults and children in cooperative, interdependent, mutually responsible relationships.

Educational Approach:
To implement the model, adults are assigned two primary roles: as purposeful models of certain culturally valued academic and social behaviors, and as facilitators of children's learning.

Teachers are trained to maintain the model's classroom management system, designed to create cooperative learning environments. The curriculum materials crafted for use in ILM classrooms consist of games appropriate to any subject for children aged 3-12, and the Integrated Skills Method reading program.

Some of the most important goals for children are to teach them interdependence, independence, cooperation, responsibility, and positive self-concepts, as well as communication skills, learning-how-to-learn, problem-solving, decisionmaking, and basic academic skills.

Recommended Personnel:

Preschools
One educational director/staff developer per center; one teacher and one assistant per classroom.

Elementary Schools
One director per multiple school project; one coordinator/ staff developer per school; one teacher (up to 20 children); one teacher and one assistant (21-30+ children).

Model Effectiveness:

Preschools
The affective, social, and academic development of children who attend ILM classes is accelerated.

Children who study in ILM classes through the kindergarten year are relatively mature and are academically six months to one year ahead of their first grade peers.

Elementary Schools
Research in the model's effects, conducted from 1972 to 1991 at ILM projects in Atlanta, Georgia and New York City, has shown that—when compared to their peers in matched comparison schools—children taught with the model's methods and materials, in classrooms where the model was reasonably well implemented:

- had consistently higher reading, vocabulary, verbal fluency, verbal, and written comprehension scores;
- had higher mathematics problem solving and total mathematics scores;
- were more open and honest about their feelings and took more responsibility for their academic performance;
- had higher levels of self-esteem;
- were placed more often in programs for gifted children; and
- maintained their superior reading and mathematics skills at least up to the sixth grade.

In El Paso, Texas, every year over 1,000 children diagnosed as dyslexic, whose teachers use the model's reading program, regularly make rapid, significant progress in acquiring and retaining reading comprehension, vocabulary, and spelling skills.

The model's Atlanta, Georgia project received Joint Dissemination Review Panel validation (JDRP Number 77-121) and established a Resource Center that, from 1978 to 1988, trained teachers, supervisors, and administrators who wished to adopt the model.

Follow Through Inter-Reactive Learning Model (INREAL)

Contact: Dr. Elizabeth A. Heublein
INREAL Outreach Education Center
University of Colorado
Campus Box 409
Boulder, CO 80309

Telephone: 303/492-8727

Project: Boulder Valley Public Schools, Boulder Colorado

Tenets:
Learning is the construction of meaning through interactions with the social and physical environment. All learning is inter- and intra-communication-based. Facilitating oral and written language development of the learner is the most effective way to enhance overall learning. Language development is best facilitated by building on each child's existing strengths and expanding them through natural conversation, observation, and child-oriented and directed learning. Active participation in learning is seen as both a hands-on and minds-on situation for children and their adult facilitators.

Educational Approach:
The role of the educator, parent, teacher, or other is somewhat shifted from pre-determining curriculum and lesson plans, to following each child's lead, both in terms of curricular interests and language development stages. All interactions are treated as interpersonal conversation to create the most supportive and natural learning environment for each child. Through small group and individual work, the educator monitors each child's interests and progress and then helps the child challenge himself or herself to grow conceptually and socially by employing specific communication strategies designed to evoke self-reflection, problem-solving, cooperative learning, and mutual respect for all participants and what each brings to a learning context.

Recommended Personnel:
One director per project, preferably not a principal, but rather someone who can devote at least 50% of his or her time to the project. One teacher per classroom and as many trained teaching assistants in order to achieve a ratio of one adult to 12 children. One sponsor staff developer per site. One site staff developer per site. One nurse, one social worker/psychologist, one parent coordinator per site.

Model Effectiveness:
This model has proved to be effective with a variety of populations: bilingual/bicultural, at-risk, disadvantaged, language handicapped, mentally handicapped, behaviorally disordered, and normally developing children from preschool through age 21. Follow-up studies indicated that significantly fewer children needed special education, were retained in grade, or were referred for resource room services after INREAL intervention. All children made significant gains in language.

Follow Through Language Development Approach (LDA)

Contact: Dr. Betty J. Mace-Matluck
Southwest Educational Development Laboratory
211 E. 7th Street
Austin, TX 78701

Telephone: 512/476-6861

Projects: Tulare, California; Lindsay, California; Benavides, Texas; Seguin, Texas; Las Cruces, New Mexico

Tenets:
Language is the basis of many of the major problems facing low-income, language-minority children in their academic growth and development. The development of thought processes that are essential to educational attainment and coping in today's society goes hand in hand with, and is dependent upon, language growth and development. Mastery of the English language is necessary to achieve social and economic mobility in the contemporary society of the United States.

Development in the cognitive, affective, and psychomotor domains is not the only concern in the education of young children. The health, nutrition, and emotional well-being of the children and their families also demands attention.

Children learn both language and content best through a developmentally appropriate curriculum and a positive learning environment that encourages verbal interaction among children and adults.

Educational Approach:
A positive language-learning environment is created using classroom arrangements, instructional organization, and management, including:

- flexible use of furniture, equipment, and materials;
- teachers with early childhood certification who use a variety of research-based management and organizational patterns for instruction, including large-group, small-group, peer-tutoring, paired-learning, learning centers, and individualized-instruction strategies; and
- teaching and learning strategies from research on the nature of language and language acquisition processes that provide for optimal language input to allow for comprehension of real messages; many opportunities for students to hear and use language in a wide variety of situations; peer interaction in which students cooperatively learn subject matter content and gain language input; and regular classroom content used throughout the school day for language instruction, with integrated language-development strategies, rather than a separate language focus.

Instruction is based on the local adopted curriculum.

State-approved materials are used as basic materials in all curriculum areas.

A strong, ongoing staff development and monitoring program is provided by specialists who have had classroom and other school-based experience and who merit the confidence of local school staff.

An active parent involvement program is provided that encourages parents to participate as advisors and decisionmakers, as resources to their own children's educational experience, and as recipients of support services and training.

Recommended Personnel:
One project director for each site. One teacher per classroom. A full or part-time teaching assistant per classroom. One staff development specialist and one parent involvement coordinator per site. Services from a nurse and a social worker are desirable.

Model Effectiveness:
Children's percentile ranking relative to a normative sample have consistently increased from kindergarten through third grade.

Three sites have been validated by JDRP review, and two were funded as resource centers.

Classroom observations and teacher self-report data verify that local site Follow Through staff have kept abreast of current educational practices and research which has enhanced local teaching methods and resulted in professional growth.

Parent interview data indicate that parents of Follow Through students have become more involved in the education of their children, resulting in an increase in parental skills and knowledge regarding how to help their children at home and at school, as well as how to create positive feelings of self-worth in their children.

Follow Through School Effectiveness Model (SEM)

Contact: Dr. Gary Johnson
Washington Research Institute
180 Nickerson Street, Suite 103
Seattle, WA 98109

Telephone: 206/285-9317

Projects: Phoenix, Arizona; Sacramento, California; Champaign, Illinois; Worcester, Massachusetts; Flint, Michigan; Salt Lake City, Utah; Tacoma, Washington; Flippin, Arkansas; Agana, Guam; Athol, Massachusetts; Winchendon, Massachusetts; Ionia, Michigan; Las Vegas, New Mexico

Tenets:
The amount of time students spend engaged in tasks they can perform at high success rates results in increased student achievement.

Teachers can alter the quality of learning time through interactive instruction using demonstration, modeling, shaping, structuring and direction of assignments, peer practice, and provision of appropriate corrections.

Educational Approach:
The overall education program in the School Effectiveness Model (SEM) is derived directly from the research on Teacher Behavior, Teaching Functions, Academic Learning Time, and Peer-Mediated Learning.

The model focuses on fostering developmentally appropriate literacy skills and competencies in classrooms serving students at risk of school failure.

The model includes four essential components: Instructional Material and Teacher Behaviors; Authentic Literacy Experiences; Peer-Mediated Instruction; and Progress Monitoring.

The curriculum specifies teaching routines, ordering of teaching examples and review items, correction procedures tied to specific error categories, and transition procedures between learning to read and reading to learn.

Students have opportunities to extend their reading skills outside the classroom through reading library books and novels. A carefully monitored Home Reading program extends the learning day and involves parents in students' learning.

Teachers employ peer practice approaches, including partner reading and cooperative learning.

Through regular monitoring of individual student's work and achievement levels, teachers obtain information that helps them provide re-teaching and review.

Ongoing staff development is provided by facilitators from the teachers' district or by an SEM consultant, who frequently visits classrooms to provide feedback, support and suggestions based on observations of student learning.

Recommended Personnel:
One director for each site. One staff developer for each building, depending on its size. One teaching assistant per classroom in kindergarten and first grade; and one teaching assistant for every two classrooms in second and third grade. One parent coordinator per site.

Model Effectiveness:
Two demonstration sites (Flint, Michigan, and Las Vegas, New Mexico) have been validated by JDRP review panel as showing significant program effects. One site (Flint, Michigan) was previously funded as a Follow Through Resource Center.

A third demonstration site (Worcester, Massachusetts) has been recognized by the Massachusetts Department of Education as an Effective School, based on its reading and language arts program.

Performance of students in SEM demonstration sites exceeds that of comparison students on standardized measures of reading and spelling.

Adoption sites (such as Phoenix, Arizona, and Tacoma, Washington) report measurable gains in student performance after implementation of the model.

Parent Coordinators at SEM demonstration sites report parent satisfaction with the program at school and support of children's learning at home.

Follow Through Tucson Early Education Model (TEEM)

Contact: Dr. Alice S. Paul
University of Arizona
College of Education (Room 802)
Tucson, AZ 85721

Telephone: 602/621-1124

Projects: Sells, Arizona; Tucson, Arizona; Booneville, Kentucky; Elkhorn City, Kentucky

Tenets:
Education should build upon those experiences each child brings to school. Cultural background is a valuable part of each child's life and should be meaningfully integrated into school experiences. The family is the most important influence in the child's life. Families should participate in all levels of the educational process.

Educational Approach:
Activities in the classroom are tailored for individual interests and strengths and are embedded within a context that encourages the development of functional and immediately useful skills. TEEM's program goals center on four interrelated areas of instruction:

Language Development - Competence in using language for communication with adults and children in and away from school is vital not only for school success but for adequate adjustment to countless numbers of circumstances and events outside of school. Accordingly, TEEM places great emphasis on developing aptitude with respect to the form, function, and uses of language.

Motivational Base - Developing a positive attitude toward school and learning, taking pride in one's work and accomplishments, making a commitment to family, community, and cultural preservation, and being persistent and self-controlled are but a few aspects of this key TEEM goal.

Intellectual Skills - Choosing, planning, judging, evaluating, speculating, predicting, estimating. . . all are essential skills that are called upon repeatedly throughout the life span. Developing and refining these skills across a broad range of settings are an integral part of TEEM.

Academic and Social Skills - Reading, writing, mathematics, social studies, science, and art are traditional content areas that receive much attention within the TEEM goal structure. In addition, fostering participation in, and enjoyment of, social relations among children and adults is a central TEEM goal.

Recommended Personnel:
One director and training coordinator for each site. At least one home-school liaison for each site, depending on the size of the school. One teacher and one teaching assistant per classroom.

Model Effectiveness:
Use of meta-analysis shows that TEEM children score better on standardized achievement tests in reading and math than children from the same culture and socio-economic level without the Follow Through program. TEEM parents rate their schools and teachers with "A's"—higher than national averages reported in other research. TEEM parents are more involved each week in their children's education than those parents who responded to the PTA Dodge National Survey. TEEM students show higher self-image than children in comparison groups. Participation in the TEEM program produces child-centered responses from teachers as they reflect upon their work in the classroom.

Follow Through University of Georgia at Athens Model (UGA)

Contact: Dr. Horace C. Hawn
The University of Georgia
320 E. Aderhold Hall
Athens, GA 30602

Telephone: 404/542-4400

Projects: Goldsboro, North Carolina; Gulfport, Mississippi; Pocatello, Idaho; McCormick County, South Carolina

Tenets:
Children learn through an appropriate mismatch with their individual level of cognitive development in an active environment in which they manipulate a wide variety of realia.

Children accept responsibility for their own learning by selecting from among optional learning experiences.

Children learn best by interacting with several adult models.

Educational Approach:
The process of learning is emphasized through three Piagetian principles:

Mismatch - an appropriate disequilibration is planned for each child.

Active learning - children are provided several opportunities to become involved intellectually and physically with concrete objects.

Personal regulation - children are given opportunities to select from several options for learning.

Children have the opportunity to interact with many adult models in their learning.

Children select from among different materials and groups with which they want to learn.

Recommended Personnel:
One teacher and one aide is necessary in every classroom. A resource teacher monitors the level of implementation in every classroom and maintains a staff development program for teachers. A home school coordinator is provided in every project.

Model Effectiveness:
Observation of teachers in Follow Through classrooms show the level of model implementation in each classroom.

Academic achievement is significantly improved in classrooms which have a high level of implementation.

Follow Through classrooms show academic growth in kindergarten through third grade that exceeds that of comparison groups.

Schools report that student gains made in Follow Through classrooms continue in fourth grade and throughout the balance of students' school careers.

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211 East Seventh Street, Austin, Texas 78701 (512) 476-6861