Forget classifying children; districts should be allowed to use Title I funds for schoolwide programs in low-income schools.

Effectiveness of Compensatory Education

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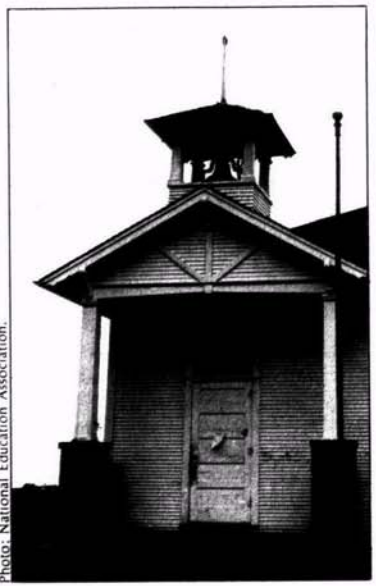

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Because the $3 billion spent each year on Title I looms large even in the federal budget, it is the most intensively studied program in education. Title I reaches 90 percent of our nation's school districts, but its effectiveness in providing compensatory education is still debated in spite of the attention it has received. The research has focused on three questions:

1. Who is the program serving?
2. What services are the participants receiving?
3. What impact are the services having on student achievement?

The federal government has taken steps that make it easier to answer these questions today than it would have been five years ago. First, Congress mandated that the National Institute of Education (NIE) conduct a major investigation of compensatory education, and several very informative reports have been produced by that effort (see, for instance, Hill, 1980). Second, System Development Corporation (SDC) has been conducting a longitudinal study of the sustaining effects of compensatory education for the Education Department, and that effort has generated an impressive amount of information about Title I (for example, Wang and others, 1978). Finally, for the past five years the National Center for Education Statistics (NCES) has produced annual reports on the *Condition of Education*, which include data relevant to Title I.

Who Is Title I Serving?

A major controversy surrounding Title I is whether it should be serving students who are economically disadvantaged or students who are educationally disadvantaged. As part of the SDC effort, Breglio, Hinckley, and Beal (1978) have produced the best data available on the economic status and achievement level of Title I participants. Figure 1 summarizes these results in terms of approximate percentages in the elementary school population. As Figure 1 shows, Title I is serving about 15 percent of the children in the elementary grades. Of those in Title I, about half are low achievers and half are not. While 40 percent of Title I participants are considered poor, 60 percent are not poor. Notice, however, that there are more children in Title I who are neither low achievers nor from poor families (5.2 percent of the population) than children who are both poor and low achievers (3.5 percent). Also, there are more poor, low-achievers not in the program (5.1 percent) than in the program (3.5 percent). Of the one-fifth of the population that are classified poor, 30 percent are in Title I, and of the 23 percent of the population that are scoring below grade level on achievement, about 30 percent are in Title I. Thus, with regard to whether Title I should be serving students who are considered economically disadvantaged, or educationally disadvantaged, it is serving about the same proportion of each group, but less than one-third of either group.

Although there continues to be considerable confusion surrounding the Title I regulations, the general procedure is to allocate funds to states and then to school districts in terms of poverty criteria, and then to allocate funds to schools within a district in terms of a mix of poverty (that is, free lunch eligibility) and low standardized achievement performance. Within schools that are eligible for Title I support, students are generally considered eligible if they score below grade level on a standardized achievement test.

Thus, disadvantaged children who attend schools that do not receive Title I funds would not be participants, nor would students in Title I schools who happen to have scored above the achievement cut-off score the previous spring. SDC's achievement and economic criteria for developing the data in Figure 1 were uniformly applied across their national sample, whereas the actual determination of eligibility is susceptible to all the vagaries of local implementation of the guidelines, and both SDC's and local estimates of

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poverty and achievement are subject to measurement error.

Possible negative side-effects of the introduction of achievement considerations into the allocation procedures concern the instability of programs and lack of continuity of services provided to students. Although Title I regulations now state that any school found to be eligible in a given year may also be designated as a project area school for an additional two years, this "formerly eligible" requirement operates at the school level only. The regulations address the need for continuity of services and specify that students may continue in Title I if they were participants the preceding year. However, this is to be the case only "if such children are still educationally deprived." Hence, students whose general achievement level is near the cut-off score may bounce in and out of the program from year to year as their observed achievement score moves below or above the cut-off. In fact, a startling statistic from the SDC study is that one-third of the students in Title I for one year are not eligible for Title I the following year. A lot of this must be due to this "bouncing" phenomenon.

What Services Are the Participants Receiving?

There are two different ways of trying to determine the services that are reaching Title I eligible children. One is to examine program proposals and budgets and identify how districts claim to be spending their federal dollars. The other is to go into a sample of schools and observe what services children are actually receiving. One of the SDC studies did the latter (Haggart and others, 1978), reporting some very useful results. For example, they found that the cost of resources used by a Title I child in learning to read averaged $411 per year, whereas a noneligible child in the same school averaged $257 for reading. The difference in resources available ($154) was primarily used for special teaching personnel, equipment and materials, and classroom aides. A similar pattern was found in mathematics, but here the increase in cost was $95 per eligible child.

From this and similar studies, it is clear that most of the Title I effort is directed at providing extra instruction in reading and mathematics. The nature of that extra effort is in terms of special teachers, equipment and materials, and paraprofessionals. It is also important to note that the extra Title I resources seem to be spread evenly over all of the grades in the elementary schools.

The Title I supported teachers provide additional instructional services to eligible students. Two aspects of the regulations complicate their deployment in the schools. Teachers are not to serve students who are ineligible for Title I services, and they cannot be the only teachers to serve eligible students. The latter condition is because the Title I funds cannot supplant regular district funds, only supplement them. Thus, schools have little alternative but to pull children out of their regular classrooms for part of the week and provide this "extra" instruction in special Title I classes with other eligible children.

What Impact Are the Services Having on Student Achievement?

Since school districts use most of their Title I funds to try to improve the reading and mathematics performance of the eligible children, one might think it would be easy to establish whether such improvement is occurring. Unfortunately it is not easy. Of course, it is possible to observe how much achievement growth students in Title I are realizing, but the difficult task is to determine whether that growth can be attributed to their Title I experience.

One way to establish the effect of Title I is to use experimental designs that contrast achievement results of students who participated in a Title I program with a control group that did not. The catch here is that for the results to be clear-cut, the two groups (Title I versus control) must be determined by random assignment; they must remain intact for the duration of the experiment; and the treatment differences must be carefully controlled. These conditions are just not possible in school settings.

Another way to establish how much of a child's achievement growth can be attributed to the child's Title I experiences is to begin with a good theory for understanding what produces achievement, derive from the theory a causal model for explaining achievement growth, measure the variables represented in that model, and then estimate the influence of the Title I supported experiences in the presence of the other variables in the model that are known to influence student achievement. The catch here is that convincing, adequately specified models for explaining student achievement are just now coming into existence. (See, for example, Cooley, 1978, for a discussion of this point.)

A major reason for this shortage of causal models has been the dominance of the experimental paradigm in program evaluation. Even though true experimental designs could not be realized, the general experimental vs. control group approach was used without randomization or adequate treatment controls. Such quasi-experiments have tended not to find significant achievement differences between the two contrasted groups, and when they have, the differences are so modest and the experimental designs so weak that the prior beliefs that people held about the effectiveness of the experimental treatments were not influenced by the results of the study.

One problem with the quasi-experimenters is that they seemed not to realize that it is essential to substitute good theory and adequately specified causal models for the aban-

Figure 1. Percentages of the Elementary School Population Classified by Family Economic Status, Achievement Level, and Title I Participation

		Title I Participation				
		In Title I		Not in Title I		
Achievement Level		Low	Regular	Low	Regular	
Economic Status	Poor	3.5	2.7	5.1	9.7	21.0
	Non-Poor	3.7	5.2	10.6	59.5	79.0
		7.2	7.9	15.7	69.2	100.0
		15.1		84.9		

doned experimental controls. For example, the quasi-experimenter who uses only a pretest as the covariate assumes the simplistic model that pretest and the treatment in question are the only determinants of student achievement. That model is just not tenable.

The other major problem with the quasi-experimenters is that they have tended to consider a federal dollar as an educational treatment. Schools do lots of different things with Title I dollars. Some of them facilitate learning and some of them do not. Some of what schools do with Title I money may even interfere with a child's development. Title I versus control group designs have not revealed how Title I money might be spent for improving the educational experiences of disadvantaged children.

An important example of the waste that can occur when a funding program is considered to be an educational treatment is the national Follow-Through Program. Follow-Through has great potential as a network in which alternative approaches to compensatory education can be examined. It can be done in ways that reveal dimensions along which classrooms differ that influence student achievement, whether or not those dimensions reflect differences in program design or program implementation. (See, for example, Cooley and Leinhardt, 1980.) Unfortunately, too much of the effort has gone into trying to find an overall Follow-Through effect (using quasi-experimental contrasts) or trying to find differences among the sponsored programs, without measuring implementation variation within programs or among programs. Too little has been learned about the major factors that determine student achievement or successful implementation of a program, and one would expect a federal program that serves less than one percent of the school districts to have that as its primary focus. It does not seem sensible to try to justify the program by finding an overall Follow-Through effect.

The SDC longitudinal study of compensatory education has tried to establish an overall achievement effect for Title I, as well as identify the practices within Title I that are more or less effective. Wang (1980) reports that although compensatory education (CE) "has had consistently positive impacts on achievement growth . . . the beneficial effects of CE, while detectable, are not large" (p. 3). In her search for effective practices among the Title I services, Wang found that the "evidence for positive effects of special instruction on achievement growth is sparse" (p. 8). The fact that the dominant Title I practice is not producing a positive effect helps to explain why the overall Title I effect is so modest.

Another way of considering a program's possible effectiveness is to synthesize what is known about the effectiveness of the kinds of services a program is delivering. For example, Glass and Smith (1977) have summarized the evidence regarding pull-out practices and have concluded that they are not educationally sound. They found no evidence that the practice facilitated achievement, and lots of evidence that the unintended negative side-effects of "labeling pupils are large and worrisome."

Schuetz (1980) has reviewed the studies that have been done on classroom aides and has summarized the conditions that appear necessary for their successful use: (1) they must be literate (many aides are not even reading at the grade level in which they are being used); (2) classroom management systems must be designed to take advantage of the presence of aides; and (3) the aides must receive intensive training in the tasks they are to perform. When these conditions are not met, aides can be doing more harm than good.

What emerges from the studies of Title I is that in spite of a concerted effort to restrict Title I to children who are either educationally or economically disadvantaged, many children who are neither are participating in the program. Also, in the effort to restrict services to eligible children, schools have been forced to classify children as disadvantaged, remove them from their classroom for a portion of each week, and provide them with extra services. No doubt there are schools in which this pull-out practice is being done well, but there are certainly schools in which this may be doing more harm than good. On balance, Title I is not producing the kind of achievement impact that people had hoped it would have. An unfortunate aspect of the evaluations of Title I is the focus on justifying the federal funding program by seeking an overall Title I effect, instead of focusing on ways in which Title I practices might be improved.

Implications

What I conclude from the evidence I have examined regarding the effectiveness of Title I is that school districts should be allowed (or encouraged) to change the manner in which they allocate and use Title I funds. Vanecko and Ames (1980) have produced an excellent book on alternative allocation procedures, including a summary of studies they did as part of the mandated NIE effort. But they focused on the question of whether test scores or poverty indices should be used to decide which *children* should be classified as disadvantaged. A procedure that clearly should be explored would be to eliminate the necessity of labeling children as disadvantaged and allow school districts to use the Title I support they receive in schools that are most heavily impacted with children from poor families.[1] Then within those schools, the extra Title I funds should be focused on the primary grades and used to reduce class size, attract teachers who have demonstrated their effectiveness in teaching reading and mathematics, hire and train literate paraprofessionals, and provide additional instructional leadership in that school.

It is difficult to create a productive, stimulating educational environment in schools with large numbers of poor children. Schools serving poverty neighborhoods need more resources to perform the same task than do schools with few poor children. Of course, there will be (in fact, should be) children in that school who are not poor or slow at learning the skills essential to further education. However, as Figure 1 clearly shows, 15 years of trying to restrict Title I funds to eligible children has not been successful, and the kinds of programs that are possible under such restrictions appear not to be particularly effective. Also, we know from experience that a child who is economically advantaged cannot be forced to attend a school that the child's parents feel places that student at an educational disadvantage because of an unsatisfactory school environment. Such a child might remain in the public schools if the apparent disadvantage of attend-

ing a particular school was removed by employing extra resources through Title I.

Title I was launched in the 1960s in a tidal wave of optimism about the potential of education to sweep away poverty and ignorance almost overnight. When the quick fix did not come, the pessimists took over, inspired by the works of Jensen, Coleman, Jencks, and others. But as Tavris (1976) put it, "the new pessimism is as naive as the old optimism" (p. 63).

Unfortunately, the evaluators did not help. Instead of looking for ways to improve the education of children who were somehow disadvantaged, they tended to look for evidence to justify the continuation (or discontinuation!) of a federal funding program. Fortunately, the futility of that kind of effort is now becoming more widely recognized. By turning to improvement-oriented evaluation research, we can surely find the procedures necessary to ensure that every child learns the fundamentals that are so clearly essential in American society. It won't be easy, but it is surely possible. ■

[1] It should be noted that within large school districts, rank ordering schools by economic disadvantage produces essentially the same ordering of schools as ranking them by educational disadvantage. This is due to the effect of aggregated data.

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