You recently reported some new research evidence about the effects of early education.

Yes. We've done a longitudinal study (Schweinhart et al. 1986) comparing three different models of preschool education for disadvantaged three- and four-year-olds. It was a tightly designed experimental study; the three groups of children were very similar to each other on all kinds of demographic characteristics before the study began. And we tried to run each curriculum model as well as we possibly could. The teachers were enthusiastic, they wanted to do the best job possible, and by-and-large, they had the resources to do it. We wanted to find out what the results would be if each of these three programs were done well.

How were the programs different from one another?

First let me mention the similarities. They were all part-day programs—either mornings or afternoons—five days a week. With each program there were home visits that lasted an hour and a half or so every two weeks. In each case the home visits employed the same curriculum philosophy as the classroom components. The teacher-child ratio was about one to eight, which is relatively good but not unrealistic.

Now, the differences: one program was heavily teacher-directed. Basically, we used the model developed by Berrien and Englemann at the University of Illinois in the '60s that preceded the DISTAR program, now sold by Science Research Associates. Although our version was for preschool rather than school-age kids, we had consulting assistance from representatives of the developers, so we were pretty confident that we were running the program the way they would want it run.

Our other two programs were not so heavily teacher-directed; both focused on child-initiated learning activities. One of the programs was the High/Scope model, in which the teacher and the child engage in collaborative planning. When the child comes in the morning, the teacher says, "Well, what are you going to do today?" After she has encouraged the child to make conscious choices, the teacher's role is largely to facilitate learning. The children go to the various activity areas and the teacher goes around talking to individual children, trying to get them to think about what they're doing and sometimes to elaborate on it in different ways.

The third model was a traditional nursery school in which the teacher tries to respond to the needs of the children as they are expressed. The children choose activities, as in the High/Scope model, but they don't necessarily engage in extensive planning. The important contrast is that the one model is heavily teacher-directed, while in the other two models activities are mostly initiated by individual children.

When we followed the children in these programs to age 15, we found that the young people who had been in the teacher-directed model reported twice as much delinquency as the children who had been in the other two models. We're talking about serious delinquency: those in the teacher-directed model reported five times as many instances of property damage, twice as much personal violence, and twice as much drug abuse. We also found a couple of other things consistent with those findings. For example, the young people who had been through the teacher-directed program reported that their parents didn't think as highly of them (which makes sense since they were engaging in twice as much delinquency). Those students were less likely to engage in sports and other student activities. There was a very clear differentiation between the teacher-directed model and the other two programs.

What about other outcomes?

Well, here's a fascinating thing—and something that raises a serious caution. On short-term measures, such as impact on IQ, all three of these programs were dramatically successful. The average IQ of kids before the programs was 78, while afterward it was 105, 27 points higher!
And that kind of gain was made in what period of time?

After one school year of a part-day program. As usual, by the way, part of the increase wasn’t permanent. By age ten, which is the last time we measured it, the average IQ of these kids had fallen, but was still about 15 points higher than it had been originally. So there was some sustained improvement in academic abilities in all three programs.

The point, though, is that if you only look at that—which would be reasonable in terms of the way we evaluate most curriculum models—you would say, “Well, all three of these programs seem to be doing a good job and we recommend them.” In fact, we did say that for a number of years. We said as long as you’re running a good curriculum model, it doesn’t matter what kind it is.

Has this study changed your mind, then?

Yes. We certainly can’t make that kind of recommendation now.

But you must have considered the possibility of such a finding, or you wouldn’t have run the study in the first place?

Well, originally we may have expected the High/Scope approach to do better, but it didn’t turn out that way. So for about ten years, we’ve not been saying that our curriculum model is the best. In fact, we still don’t make that claim on the basis of the data from this study. What we do say now is that child initiation seems to be a very important factor: that if you’re interested in preventing delinquency, you should give young children opportunities to help design their own learning activities. In other words, you can’t do just any kind of a program and expect to get positive results in both cognitive and social areas.

Let me ask a little more about the study. Is it possible that a small number of students accounted for our social problems, but we are saying that here’s a workable approach to dealing with these problems—and that’s fairly rare.”
example—we took the one with the highest score and dropped it back to make it the same as the second highest score, and we still found the same thing. We were dealing with a small sample, yes, but it was a real finding for those kids.

A skeptic might say that you probably hoped to find what you found. Is there any danger of experimenter bias? If somebody else had gathered these data, would they have found what you found?

Well, there’s a certain schizophrenia in being a researcher who is also interested in program development, because on the one hand you want to see a program work, but on the other you’re determined to be very cautious and responsible. In fact, I think the word “conservative” is appropriate, because you want to make sure you don’t mess up and make inappropriate claims. There are different degrees of rigor in research; we try to employ the highest standards.

For example, we used completely random assignment. No parent could say, “I want my child in that model.” The parent simply agreed to participate in the project, after which the child was assigned to a particular condition on a purely randomized basis. In this case, you organized and conducted a teacher-directed model—even though you and your colleagues had professional reservations about it—for research purposes. In light of your new findings, would you do that again?

I doubt that the High/Scope Foundation would ever do it again. At the time we did it, we encountered substantial criticism from many early childhood educators. In one case, a teacher said it made her physically sick to see what was going on in that program. Now, I certainly wouldn’t go that far; there was no child abuse in any sense. In fact, there are a lot of good things in the program; it emphasizes positive reinforcement, and teachers unquestionably have the highest standards for kids. But the approach apparently has some unintended consequences. Do you expect the advocates of teacher-directed programs to have second thoughts?

I think they ought to. There’ll be resistance to the findings, though. It’s a small study, with only 68 kids in the original group, and we found only about 80 percent of them at age 15. We don’t see the study as a basis for public policy, by the way. It doesn’t provide answers; it certainly raises questions.

It also suggests that we need more longitudinal studies like yours for other education programs.

It does. They’re hard to do, because it’s hard to keep samples together. In some cases you have 50 or even 60 percent attrition rates, and under those circumstances it’s unclear what you have found. But it’s really important.

Let’s talk more about that. One of the factors that helps account for the current national interest in early education is the convincing findings of your earlier longitudinal research on the effectiveness of preschool programs.

You’re referring to the Perry Preschool Program (Berrueta-Clement et al. 1984), which we evaluated over an even longer period of time. It used the High/Scope model, so the findings I’ll summarize are only for it, and may not apply to all other models.

What we found is that a lot of social problems were prevented. First, the program tended to prevent school failure. It produced higher IQs and therefore reduced the need for special education placement. It ultimately led to a lower high school dropout rate. Then, because it reduced the rate of school failure, the program helped prevent a lot of associated problems. There was a lower delinquency rate, a lower rate of teenage pregnancy among girls. The kids who had been in the program were more likely to be employed, less likely to be on welfare. But let me make clear that these earlier findings were not a comparison of High/Scope with other curriculum models.

They were a comparison of the High/Scope model with . . .

...with no program at all. I should say, too, that we didn’t find that our program was a cure-all; it didn’t solve the social problems, although it did help measurably. We’re not talking about a panacea for our social problems, but we are saying that here’s a workable approach to dealing with these problems—and that’s fairly rare.

Your findings provide a rationale for expanding early education, then?

We’ve done a fairly careful cost-benefit analysis and found that the program pays for itself many times over. That’s not just rhetoric; we have data from school systems, from the courts and other sources, that show that our society could actually save money by offering more quality preschool programs.

These findings have proven to be extremely persuasive among policymakers, and they should be. If people want to reduce waste in government, preschool programs are a pretty good bet. We’re currently spending more on special education programs than we need to. By that I mean we’re treating kids whom we don’t need to be treating. We’re spending more money on dealing with juvenile delinquency and on high school dropouts than we need to. These problems can be prevented to a degree.

When you say that, you’re not talking about just any day care.

No. Because our research has been widely publicized, people sometimes misapply it for their own purposes. We’ve heard it said that our research shows that Headstart works. It doesn’t show that; it shows that it can work. It’s been said that our research proves day care works, but it doesn’t show that either. It shows that day care—specifically good day care for low-income children—can work. The findings can’t be generalized across the board.

So it’s important to say we’re not talking here about just any kind of childhood program?

No. There’s only one study I know of that’s really tried to tackle that issue head-on: the Brookline Early Education Project in the Boston area (Pierson et al. 1984). They found—and I think this is what we would probably find if we did a whole lot more studies—a reduction in academic and social problems among all children who were in a good early childhood program. But the reduction was in different degrees, because the number of problems was different.

Let me simplify to make the point. Let’s say that a child at risk will have
eight school problems, while another has only two. If both kids go through a good preschool program, in the one case you may prevent six of the problems, so there are two left, while in the other you prevent both school problems. The extent of improvement is not as great, so the return on the investment is not as great. It may still be worth doing, though, because parents and others may consider it valuable for the child to have a little extra edge, socially and academically.

What do you mean by "edge"? Are you talking about learning academic skills earlier?

No. School readiness doesn't mean getting a jump on what you're going to learn in school anyway, and academic edge doesn't mean pushing first-grade expectations down to four-year-olds. The learning of early childhood is different from what needs to be learned in the elementary grades.

School readiness means learning some other things—things that are not self-evidently "academic"; they're not reading, writing, and arithmetic. Young kids don't learn from symbols but from their own concrete, physical environment. They learn from toys, they learn from play, they learn from touching things and moving them around, from their senses, from looking things to see how they react. That's the kind of learning that ought to take place in programs for four-year-olds even if we're tremendously concerned with academic readiness. That's the kind of program that resulted in the reduction in need for special education and in fewer high school dropouts.

You've mentioned that student planning is part of the High/Scope model.

It's one of two critical characteristics that distinguish High/Scope from other child development models. A second is what we call "key experiences": orientation devices that help teachers focus on certain kinds of cognitive and social activities.

An example of that?

Classifying objects: putting things into categories, direct manipulation of objects. Aside from student planning, which is something that's very observable (you can see if it's going on in a classroom or not), the program deals primarily with the orientation of the teacher. High/Scope teachers capitalize on certain kinds of behavior children will naturally engage in and encourage them to take it a little farther.

For example?

If the child is building with blocks, the teacher might encourage him or her to build a little more or to think about what it would be like if this toy car went down that road. It's very simple things like that, as well as cognitive things like, "Have you thought about which car would get there first if one went faster than the other?" Those kinds of questions, lots of teacher-child interaction. It also involves getting kids to work with each other.

You've mentioned a couple of ways the High/Scope program differs from other child development programs. In what ways are they alike?

Basically, a child development program doesn't have desks. It might have tables where kids get together for small-group activities, but not individual desks. It doesn't have a teacher standing in the front of the room. There's probably a rug on the floor in a child development program, because that's where everybody ought to be: down on the floor.

And why is that?

Because little kids aren't very tall, so if teachers want to relate to children on a face-to-face, person-to-person basis, they've got to be down at their level. One of the key elements in all child development programs is that teachers and children talk to each other person-to-person. The biggest danger in programs that don't take this orientation is that the teacher spends too much time talking to the whole group and in some cases almost never talks to children as individuals. Another hallmark of a good child development program is that toys and other materials are accessible to children without teacher intervention. You will see programs with a different orientation that have similar materials but they're out of reach of the children. Now, that's because the teacher wants to control access—and the reason for that is that the teacher is afraid that the children will misuse the materials. That's understandable, but you've got to create opportunities for them to learn to make choices and to experience the results.

What you've described again and again in this conversation as a "good program" sounds suspiciously like what we used to refer to as "informal" or "open school." A lot of people in our society think that kind of education was thoroughly discredited a few years ago, and they may be surprised to hear you calling it better.

I don't think there was any discrediting. We could talk more broadly about what seems to have been discredited, which in fact was not discredited: a whole lot of ideas behind the war on poverty fall in that category. They weren't discredited; they just got old. As time went by, the values and expectations of our society shifted. For example, the effective schools and effective teaching movement came to the fore. Now, those movements were basically empirical: they tried to identify the kinds of things going on in schools that were better than other things already going on in schools. So, because well-run open education programs didn't exist in many schools, they never had a chance. In that sense, the effective schools movement is not innovative; it's just trying to make the best of the existing situation.

But we're also talking here about younger children, and their learning needs are different. In any case, if the issue is documentation of what actually works with young children, we have it.

References


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