# Middle-Class Follow Through Students Siegfried Engelmann 

Follow Through was all about disadvantaged students; however, each site was supposed to have a mix of $10 \%$ to $15 \%$ middle-class students. In some sites this requirement was difficult to meet because the Follow Through school did not have more than possibly 5\% of the students who could be designated middle class. In places like He Dog, South Dakota and Las Vegas, New Mexico (not Nevada) there was little hope of "bussing" in middle-class students.

In any case, about 13\% of the DI Follow Through sites that started children in kindergarten (rather than first grade) were a middle-class mix. This group has been completely ignored in nearly all significant discussions of what Follow Through showed, or even what DI showed. Some have suggested that DI works only with low performers. This suggestion is technically impossible because it is easier to teach students who know more. Also, performance data speaks directly to this question. Middle-class DI students started with higher IQs than the at-risk population, but remarkably, the rate of new learning was quite similar for all ranges of IQ. Wes Becker did an analysis of grade-to-grade performance of students in different IQ ranges as they progressed through grades 1 through 3 .

Figure one shows the remarkably similar math progress profiles for entering-IQ ranges of below 71 to above 131.

Figure 30.5


Note that this figure does not directly address middle-class versus at-risk populations. It simply shows the trends for different IQ ranges. The lines that show improvement in math from grades 1 through 3 are almost straight and almost the same slope for all IQ ranges. The straightness shows that students learned about the same amount of new material through grade one, grade two, and grade three. The slope shows that even the low-IQ students learned about a year's worth of skills each school year.

The main difference in the groups is the starting point. The lowest IQ group entered and finished with the lowest pair of scores. Their 3rdgrade score is lower than the 2 nd-grade score of the highest-IQ group.

All groups with entering IQs of 91 and above, however, finished third grade, at or above the national median score (standard score of 70 or above). The IQ group that entered with IQs of 71-90 finished third grade with a standard score of 67.7 , less than three points below the national median.

In the end, the students who came from environments that fostered higher entering IQs finished higher, but they did not improve as much as they could have. The reason they didn't learn more is an artifact of the program, which placed stronger emphasis on accelerating the performance of very low performers than accelerating higher performers.

This emphasis was based on practical considerations. It is possible to maintain only so many classrooms or groups in a school. The number of available teachers is the primary variable that limits a school's grouping capacity and flexibility. So the highest performers in Follow Through were usually placed in higher classrooms, but these classrooms were designed primarily to accommodate the higher performing at-risk students. Those were the students who would determine the success of DI as a Follow Through sponsor. It was, therefore, impractical to do any more with the higher-IQ middle-class students than put them in the higher classroom and adjust the rate of progress through the lessons according to the performance of average and lower performers in the classroom.

Despite this less-than-ideal context, the middle-class students were taught well. Third-grade middle-class students greatly outperformed the at-risk students in all subjects.

Table 2 shows the summary of 1,800 poor students and 250 middle-class students at the end of third grade.

| Mean Standard Scores on Metropolitan Achievement      <br> Test Converted to Percentiles      |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Total <br> Reading | Total <br> Math | Language | Spelling |
| Poor <br> Students | 1800 | 41 | 52 | 50 | 47 |
| Middle-class <br> Students | 250 | 62 | 69 | 75 | 60 |
| Difference |  | 19 | 17 | 25 | 13 |
|  |  |  |  |  |  |

The differences are huge. The only one that is less than a standard deviation between the middle-class and poor students is in spelling-13 percentiles difference. The greatest difference is in language-25 percentiles difference.

The instruction accelerated the middle-class students more than one standard deviation above their historical achievement in reading, language, and math. Note that middle-class children were selected solely on the basis that they were middle-class, not that they had high IQs.

The performance differences are disturbing because they suggest that if the goal had been to deliver maximum acceleration for middle-class students, the differences would have been considerably greater. That would serve the middle-class but raises questions about social justice. To us, the differences underscored the importance of providing welldesigned instruction for at-risk students and maximizing their acceleration as much as possible. Unless this maxim is followed, effective instruction would widen the gap between the populations. The issue is moot for
today's technically naïve school systems, because they are not well equipped to accelerate even middle-class students, which is a lot easier than accelerating at-risk students. Because of the system's technical naïveté, however, at-risk students continue to fail miserably.

If effective instruction is applied equally to all students (as it was in our Follow Through model), the gap between middle-class and at-risk populations would increase; but in one sense, this would not be a problem. If at-risk students reached an absolute performance level that provided them with the skills and knowledge needed to become an engineer or a doctor, or a teacher, it wouldn't matter that middle-class students performed higher, on average. If at-risk students didn't reach this absolute level, they won't have significant occupational options. As the Follow Through data of the 1970s disclose, this degree of social justice is far more achievable than it is in current districts. A large segment of the DI school population was able to master the early levels of instruction. They graduated from the Follow Through program with a skill level that would permit future and continuous acceleration of their performance over their historical and current norms.

Unfortunately, there doesn't seem to be enough interest in social justice to fund an undiluted effort that documents just how much beyond the Follow Through results could be achieved with a strict continuation of the efforts to teach students in grades 4-12 in technically sound ways. The results would be far more impressive than those of the DI Follow Through model.

