An Experimental Program for Slow Learning Adolescents

A STUDY of the “problem adolescents” (delinquents, school failures, dropouts, and discipline cases) in a Midwestern community of 45,000 revealed that they were often nonachieving children with IQ’s in the 75-89 range, children we designate as slow learners.

From an eighth grade population of 470, 61 children with IQ’s in this range who were also doing below “C” work in their academic subjects were selected for an action research experiment. Two-thirds of these 61 children were put into a special curriculum with two selected teachers for an experimental period of two years, while the remaining 20 children stayed in regular classrooms. Achievement and adjustment measures were taken before and after this period, and process data were collected through records of teacher observations, observations by clinical observers, interviews with the students, and questionnaires.

The perceptions of the school experiences and job adjustments of an older group of dropouts played a major role in designing the school program. We found that this group, most of whom fit our definition of slow learners, had lived in an atmosphere of defeat in almost everything they undertook at home and in the neighborhood as well as at school. Their relationship to their teachers, their classmates, and the curriculum had been painful, particularly after they entered a junior high school in a middle class area. Inflexibility, lack of certain skills, and especially a “chip on the shoulder” attitude had made the transition to the world of work difficult for most slow learner dropouts. It seemed that much of the curriculum for slow learners might well be concerned with the application of the academic skills to practical situations in the work world, rather than with additional content in subject matter areas.

For the group as a whole, attitudinal changes seemed as important as improvement in academic skills. The records of school disciplinarians and the police showed that many of the antisocial attitudes expressed by these adolescents on personality inventories and in interviews were being expressed in antisocial actions.

Through the curriculum our aim was to provide:

1 This investigation was supported in part by the Moorman Foundation and in part by a research grant from the National Institute of Mental Health, United States Public Health Service.
1. A sustained contact with one or two teachers who were genuinely interested in children of this type. A majority of the school day was to be spent with these teachers, although there would be an opportunity for the students to participate in courses such as chorus, industrial arts, typing, and physical education.

2. Instruction in reading, arithmetic, and oral and written communication was aimed at preparing them for their roles in jobs and in their own homes, through materials that would appeal to them.

3. Maximum use of learning experiences with nonacademic connotations, including role playing, dramatics, field trips to local industries, to see the jobs they would hold in a few years, part-time work experience for interested students, ordering from mail order catalogs, and reading such things as directions for applying enamel or operating instructions for a power drill.

4. A relaxed, informal class atmosphere aimed at encouraging participation by all—little threat of failure or time pressure.

5. Planned opportunities to help students with personal and social problems through group activities and discussions, and, where necessary, referral to treatment agencies.

After two years we compared the 20 slow learners who had been left in regular classes in the usual curriculum with the two groups of 20 children each who had been in the experimental program. Our major findings were as follows:

1. There was no significant difference in improvement in school achievement. There was slightly greater progress on the California Achievement Battery among the experimental students. The experimental groups as a whole, however, improved a mean grade placement of only .6 years in two school years. It would seem that the slow learners' maximum level of academic performance had been reached by early high school, and that special classes at the high school level are not likely to improve academic performance significantly.

2. There was significant improvement in attitudes toward school in the experimental group. There was some labeling of the special class children by their peers (dumb class, etc.). This was not a serious problem, however, after the first few weeks except for two children. Each semester the students could choose to return to regular classes, but only two chose to do this. Periodic written evaluations by the students contained criticisms and suggestions, but were predominantly positive. The improved attitude toward school shown by most of the children during the experiment was observed by all concerned.
These observations are supported by the finding that children in the experimental groups were absent an average of 14 days and were tardy four times during the experimental period, while the children in regular classes missed 27 days and were tardy an average of seven times. The percentage of slow learners who left school during the experiment was not significantly different—53 percent of the controls as compared to 45 percent of the experimental children.

3. There was a significant decrease in antisocial behavior as seen in both frequency and seriousness of delinquent acts. During the period of this experiment most of our subjects were in the 15-17 age group, a period of peak delinquency. The number of control group children with court records during the experiment, as opposed to before the experiment, increased 147 percent and the seriousness of their misdemeanors had increased 226 percent. For the experimental group, however, there was only an 11 percent increase in the number with court records and the seriousness index decreased 19 percent.

4. There was no significant difference in personal adjustment scores. During the study both control and experimental groups made good improvement in their scores on the California Psychological Inventory. The differences between groups were not significant. In general, girls who dropped out of school to get married or to go to work showed the greatest improvement, and boys who dropped out and did not get jobs became even more disturbed.

Since the norms for the California Psychological Inventory indicate that adults give more "right" answers than do high school students, it seems that much of
the improvement in personal adjustment shown can be attributed to maturational factors. While those in the experiment felt that the special classes had been responsible for much of the improvement in personal adjustment, the control group improved an equal amount.

As the level of abstractions demanded by the curriculum rises in late grade school and in secondary school, the number of individuals identified as slow or as mentally retarded rises sharply. However, since most of these handicapped individuals are capable of holding a job and raising a family, society no longer labels them as different. Thus by the age of 17, it appears that the worst years are over for the slow learners, even though as a group their personality adjustment is still below average. The slow learner has either made the adjustment to high school or has gotten a job as a wife or a wage earner after leaving school.

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**Conclusion.** A special program in the ninth and tenth grades was fairly successful in improving the social adjustment of an experimental group of slow learners in both the school and the community, while the control group during the same period tended toward a worse social adjustment. Personality and school achievement were not significantly affected, but there are indications that these might be improved by an early elementary program.

—GORDON P. LIDDLE, assistant professor, Committee on Human Development, University of Chicago, Illinois.


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**Physics Program**

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presentation of subject matter, in which rational thought and analysis are more important than brute force memory; (d) High school teachers, with proper support, can teach subject matter far beyond the limits of what they studied in college; (e) Proper support consists not only of subject matter but of the points of view, attitudes and concepts of the specialists; (f) An exceptionally favorable method for providing this kind of support is through the use of teaching films in which these specialists are the film personalities, seen and heard by the students.

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