This research program examined the effects of schooling on 10 student outcomes selected as indicators of labor market success: four academic test scores (verbal, qualitative, science, and civics); two measures of career expectations (educational and occupational expectations); three attitudinal factors (self-esteem, work values, and sense of control); and school deportment. Four separate studies were conducted, based on an analysis of the High School and Beyond Survey data. Findings are based on information from about 27,000 students surveyed in 1980 as sophomores and then, again, two years later. Some of the major findings of the research are these: (1) more academic course offerings raised test scores and educational expectations; (2) dropping out of school decreased verbal and mathematics test scores, had a substantial effect on individuals' readiness to learn and was more injurious to blacks; (3) longer school days or school years did not have large effects on any of the outcomes; and (4) family background had a strong effect on whether a student entered the academic track, especially during the last two years of high school. Although the effect of track membership was small, some of the effects reported were that students' educational expectations and mathematics test scores rose with membership in the academic track, and that taking vocational courses often deflated students' test scores and career expectations. Among the implications for school policy are that consideration be given to increasing the required number of academic courses, strongly encouraging youths to complete high school, and possibly discontinuing the track system. (KC)
Research Findings

This research program examined the effects of schooling on 10 student outcomes selected as indicators of labor market success:

- Four academic test scores—verbal, quantitative, science, and civics
- Two measures of career expectations—educational and occupational expectations
- Three attitudinal factors—self-esteem, work values, and sense of control
- School deportment

Four separate studies were conducted, based on an analysis of the High School and Beyond Survey data. Findings are based on information from about 27,000 students surveyed in 1980 as sophomores and then 2 years later.

Some of the major findings of the research are these:

- School curriculum had the expected effects on learning. More academic course offerings raised test scores and educational expectations. The number of math and science courses offered at a school raised verbal, science, and civics test scores.

- Dropping out of school decreased verbal and math test scores. Dropping out had a substantial effect on individuals' "readiness" to learn as well as their exposure to learning opportunities. These effects were more injurious to blacks.

- Although the amount of time that individual students spent on study had effects on learning, increases in scheduled time through longer school days or school years did not have large effects on any of the outcomes.

- Family background had a strong effect on whether a student entered the academic track and this effect more than doubled during the last 2 years of high school. Although the effect of track membership on most of the 10 outcomes was small, some of the reported differences were as follows:
  - Students' educational expectations and math test scores rose with membership in the academic track.
  - Taking vocational courses often deflated students' test scores and career expectations. Business and office courses increased verbal test scores of females, increased work values of all students, increased educational and occupational expectations of males, and decreased educational expectations of females.
Implications

This research has implications for school administrators, board members, teachers, and policymakers. However, effective schooling is a complex issue and these findings should be interpreted as only one set of observations to be used in the process of formulating educational policy. Implications include the following:

- Consideration should be given to increasing the number of academic courses offered in high school, and students should be encouraged (required) to take academic courses.

- Lengthening the school day or school year apparently does not automatically result in increased learning. An increase in time spent in school may be necessary where standards are being raised, but this is not a panacea.

- Youth should be encouraged to complete high school. Efforts to discourage blacks from leaving school early should be especially intense.

- The key role of family income in the last 2 years of high school in determining whether a student is in the academic track suggests that tracking may serve an undesirable selection function. Although the effects of tracking were not large, a review of its positive and negative aspects should be undertaken and consideration given to abandoning the tracking system in high schools. This does not mean that vocational courses should be discontinued or reduced. These courses are important in preparing youth for the world of work.

Additional Information

The final report was submitted to the ERIC system. Written by Lawrence Hotchkiss, the title is “Effects of Schooling on Cognitive, Attitudinal, and Behavioral Outcomes.” A 6-page summary of the research program was published in the spring 1985 (vol. 3, no. 5) issue of Facts & Findings, a calendar subscription research series. To request the ERIC number for the final report or ordering information for Facts & Findings, contact the National Center’s Program Information Office toll free at 800-848-4815 or 614-486-3655 (in Ohio and outside the continental U.S.). Cable: CTVOCEDOSU/Columbus, Ohio. Telex: 8104821894.

This is the eighth of a series of eight “research briefs” highlighting findings of studies on education and employment conducted by the National Center and sponsored by the National Institute of Education. The summary was prepared by Ruth Gordon of the Resource and Referral Service.

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