

Career Academies: Junior ROTC

A Summary of:

CAREER ACADEMIES: EVIDENCE OF POSITIVE STUDENT OUTCOMES, 1999, unpublished document, by Lawrence M. Hanser and Marc N. Elliott (RAND), and Curtis L. Gilroy (U.S. Department of Defense)

Overview

Career academies are schools-within-schools that provide students with academic and vocational instruction integrated around a career theme. In 1992, the U.S. Departments of Defense and Education added a new dimension to the traditional career academy model with the Junior Reserve Officers Training Corps (JROTC) program of instruction. JROTC career academies (JROTC-CA) aim to foster academic and vocational skills, while giving students a sense of civic and personal responsibility. At the time of the study, there were 36 JROTC-CAs operating in 33 cities in 23 states, with a total of approximately 3,800 students.

POPULATION

Researchers collected data on almost 7,000 students in schools on the West Coast and in the Midwest, including students in JROTC Career Academies, other career academies, magnet schools and other programs. Of the whole sample, more than half of the students were Hispanic, nearly one quarter were African American, 16 percent were white, and 49 percent were females. Of the students who attended the JROTC academies, 77 percent were Hispanic, 11 percent were African American, ten percent were white, and 48 percent were female. The JROTC academies start in the 11th grade on the West Coast and in the 10th grade in the Midwest. Overall, the students in JROTC academies had lower performance levels at the time of referral when compared with the other groups, and almost half the levels of performance of students in other career academies and magnet schools.

Evidence of Effectiveness

Researchers compared students enrolled in the JROTC-CAs with those enrolled in other career academies, magnet schools, JROTC programs not related to the academies, and students in regular high school programs (the Midwest site had no other career academies). Their findings show that JROTC-CA students had:

- ♦ a mean GPA 40 percent higher than students in regular school and JROTC programs and similar to those of students in other career academy and magnet schools, despite their initial lower level of performance (at the Midwest site, the average GPA for JROTC-CA students was 2.39, for students in no special program was 2.05, and for those in JROTC programs outside the academies was 1.97)
- ♦ lower rates of absenteeism (at the first West Coast site, the absenteeism rate for JROTC-CA students was 11 percent compared with 15 percent for students in other career academy and magnet schools, 20 percent for students in no special program, and 21 percent for JROTC programs outside the academies)

- ◆ lower dropout rates (no students in any of the JROTC-CAs dropped out during the school year; at the second West Coast site, the dropout rate was 1.3 percent for other career academy and magnet students, 6.4 percent for students in no special program, and 4.4 percent for JROTC programs outside the academies)
- ◆ earned more credits (at the first West Coast site, from a maximum of 55 credits per year, JROTC-CAs students earned 47.75 compared to 43.05 for other career academy and magnet schools, 35.33 for students in no special program, and 37.63 for JROTC programs outside the academies)

Key Components

The traditional career academy model includes these main components:

- ◆ a school-within-a school
- ◆ rigorous core academic curriculum that includes mathematics, English, social science and sciences
- ◆ vocational curriculum aiming to develop critical work-related skills integrated with the academic component
- ◆ employer involvement in designing the curriculum, providing equipment, serving as mentors to students, offering job opportunities and providing direct funding for the academy

- ◆ paid summer internships

To these components, the JROTC academies add:

- ◆ a one-hour course each week focusing on building civic values, responsibility, citizenship, discipline and leadership
- ◆ extracurricular activities, including drill team exercises
- ◆ summer camp for some students

The added components are taught by retired military instructors, who are hired by the school district and must report to the high school principal. The Department of Defense pays for JROTC students' books, supplies, uniforms and half of this instructor's salary.

Contributing Factors

Attractiveness of Dual Focus Program

Researchers are cautious to speculate on why students prefer the JROTC-CAs over other programs. They suggest that some students were attracted due to the combination of the JROTC military-style instruction with the vocational components associated with career academies. Some students may have enrolled because they did not meet the performance levels required for other career academy and magnet programs. In addition, many teachers and counselors focused on the military discipline aspect of the JROTC-CAs and assumed that the programs were appropriate for students who needed extra discipline. Teachers and counselors thus referred students with poor

discipline, attendance and academic performance, including low grades and few earned credits to academies.

Nurturing Environment

Researchers did not find information leading them to believe that the JROTC-CAs' discipline, use of uniforms or other military-style elements played a role in the programs' success. However, they could not rule out these influences, except that the JROTC-CA students performed better than students in the regular JROTC programs. In focus groups, students mentioned that the major factor in their success was the nurturing environment provided by the academy. A survey done in 1996 showed that

JROTC-CA students were more positive than the students in the three comparison groups (see study methodology) about their classroom environment, teachers' interest in them, individual attention received, and the overall quality of their education.

STUDY METHODOLOGY

The study is a quasi-experimental design with multiple comparison groups nonrandomly chosen. The sites chosen for analysis were three schools with JROTC-CAs that were able to provide early and timely data and three schools chosen by school district officials as similar in population, but not having JROTC-CAs. The sample was adjusted for demographic and other variables. The almost 7,000 students included students in JROTC Career Academies and students in three comparison groups: (1) students in other academy or magnet programs in the target and other schools; (2) students in regular JROTC programs; and (3) students not enrolled in any special programs. Researchers collected school record data. A multiple regression model was used to test whether students in the JROTC academies performed better than students in other programs in a series of variables, such as

absenteeism, GPA, dropout rates and credits earned. Researchers also used focus groups and a 1996 survey of JROTC-CA students.

EVALUATION FUNDING

U.S. Department of Defense.

GEOGRAPHIC AREAS

The research included four JROTC Career Academies on the West Coast and one in the Midwest. The locations were not identified.

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