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Evidence in Action

A K20 Center Research Brief

Sustained AVID Participation Improves High School Graduation and College Enrollment

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Introduction

College enrollment rates for students from low-income families and historically underserved racial and ethnic groups continue to lag behind those of more advantaged students. Research reviewed by the authors suggests that these disparities are influenced by factors such as limited access to rigorous coursework, lower expectations regarding college attendance, and insufficient guidance during college selection, application, and financial aid processes.

College outreach programs have been created to address these barriers by exposing students to academic rigor, college-going cultures, and additional support. However, prior evaluations of college outreach initiatives have produced mixed findings, and few studies have examined program costs alongside outcomes. Previous AVID research also produced inconsistent results often because studies relied on descriptive comparisons and did not adequately account for pre-existing differences between participating and nonparticipating students.

The purpose of this study was to evaluate AVID implementation in a large Florida school district, estimate implementation costs, and determine whether participation in AVID was associated with higher rates of high school graduation and college enrollment. The study also examined whether outcomes varied based on how long students remained in the AVID program.

Methodology

Research Design

The study used a quasi-experimental design. Researchers compared students who participated in AVID with similar students who did not participate. To create comparable groups, the researchers used Coarsened Exact Matching (CEM), a statistical matching method that matched students on 40 baseline characteristics measured before AVID participation. This approach was intended to reduce differences between groups and strengthen comparisons of outcomes.

Sample

Number of Participants

The study initially included 44,813 students across three graduating cohorts. After restricting the sample to students with complete baseline and outcome data, the final analytic sample included 29,485 students. Of these students, 1,329 students completed at least one AVID elective during high school.

Grade Levels

Students were tracked from the following grades:

- Grade 8 (baseline)
- Through Grade 12
- One year after high school graduation

Student Characteristics

Among AVID participants:

- 52% were female
- 53% were Black
- 30% were Hispanic
- 11% were White
- 79% were eligible for free or reduced-price lunch
- 75% were identified as “mid-range achievers” based on state assessment performance

Setting

The study was conducted in the School District of Palm Beach County, Florida, the eleventh-largest school district in the United States. During the study period, AVID was implemented in 12 high schools. AVID electives were offered only in Title I schools and primarily targeted low-income and non-White students.

Intervention Description

What Students and Educators Did During the Intervention

According to the methodology and program description, the AVID high school program consisted of a sequence of four elective courses that students could take during high school. Each course was designed to be more rigorous than the previous one. Students could enter the program in any year of high school and continue for multiple years. Participation decisions were made jointly by students and teachers.

AVID students engaged in the following activities:

- Participated in AVID elective courses
- Discussed college options regularly
- Examined college brochures and materials
- Engaged in instructional activities, including debate, creative problem-solving, and real-world challenges
- Participated in tutorials twice each week
- Worked collaboratively with peers to solve challenges they were experiencing in English language arts and mathematics courses
- Received systematic instruction on note-taking
- Learned organizational skills
- Learned study skills and exam preparation strategies

Parents or guardians participated by meeting with AVID staff and signing a contract affirming their commitment to supporting their child's education.

Academic or Developmental Focus

The intervention focused on the following skills:

- College readiness
- Postsecondary planning
- Academic rigor
- Study skills
- Organization
- Note-taking
- Academic support in English language arts and mathematics
- Exposure to college opportunities

How the Intervention Was Delivered

The intervention was delivered through the following academic activities:

- High school elective courses
- Classroom instruction
- Structured tutorials
- Collaborative peer problem-solving activities
- Ongoing exposure to college-preparation activities and materials

Who Implemented the Intervention

The article reports that implementation involved the following personnel:

- AVID elective teachers
- College-level tutors who facilitated small-group instruction during AVID tutorials
- District AVID administrators who provided oversight, training, and support for implementation

Dosage

Reported Dosage Information

The article provides several intervention dosage details.

Number of Lessons or Sessions

The study reports the following details regarding number and frequency of courses and tutorials:

- Students participated in AVID elective courses lasting one academic year per elective
- Students could complete between one and four AVID electives during high school
- AVID tutorials occurred **twice per week**

Session Length

The study does not report the duration of AVID classes and tutorials.

Duration of Intervention

The intervention could extend across the following:

- One year (one elective)
- Two years (two electives)
- Three years (three electives)
- Four years (four electives)

The study also reports cost analyses based on number of courses students took:

- One to two electives (average participation estimated by researchers as 1.5 years)
- Three to four electives (average participation estimated by researchers as 3.5 years)

Dosage Calculation

The article provides insufficient information regarding class frequency, tutorial duration, and instructional minutes.

Therefore, the following conclusions have been drawn:

Calculable Dosage

- Duration range: 1-4 academic years
- Tutorials occurred twice weekly

Not Calculable

The following could not be calculated from reported information:

- Total instructional sessions
- Number of class periods attended
- Total number of tutorial sessions
- Total instructional minutes or hours

The study does not provide sufficient information to calculate total intervention dosage.

Data Analysis

Researchers matched AVID students with non-AVID students on 40 baseline characteristics, including demographics, prior achievement, attendance, disciplinary history, language status, and program eligibility factors. After matching, they compared high school graduation rates and college enrollment rates between groups. Separate analyses examined students who participated for shorter periods (one to two electives) and students who participated longer (three to four electives). Researchers also conducted a cost analysis using the ingredients method to estimate implementation expenses and cost-effectiveness.

Results

What Outcomes Improved?

Students who completed at least one AVID elective demonstrated the following outcomes:

- Higher on-time high school graduation rates
- Higher college enrollment rates than matched non-AVID students

Specifically

- 93.9% of AVID students graduated on time compared with 90.5% of matched non-AVID students
- 59.9% of AVID students enrolled in college compared with 56.4% of matched non-AVID students

Which Students Benefited?

Benefits varied by duration of participation.

Students Completing 1–2 AVID Electives

Compared with matched peers, these students demonstrated the following outcomes:

- Higher graduation rates
- No statistically significant difference in college enrollment

Students Completing 3–4 AVID Electives

Compared with matched peers, these students demonstrated the following outcomes:

- Higher graduation rates
- Significantly higher college enrollment rates

College enrollment rates were as follows:

- 68.6% for students completing three to four electives
- 58.7% for matched non-AVID students

What Do the Findings Suggest for Practice?

The findings suggest that AVID may help improve both secondary and postsecondary outcomes for underserved students. While even shorter participation was associated with improved graduation rates, sustained participation across multiple years appeared necessary to produce meaningful improvements in college enrollment.

Application into Practice

Schools and districts can use AVID as a structured college-readiness model that combines rigorous coursework, tutorials, collaborative learning, and study-skills instruction to support students who have college potential but may require additional academic guidance and support.

Action Steps for Implementation

- Identify students who demonstrate college potential and are near proficiency levels on academic assessments
- Offer the AVID elective sequence as a multi-year program when possible
- Integrate regular college-awareness activities into AVID classrooms
- Provide twice-weekly AVID tutorials focused on helping students address challenges in English language arts and mathematics courses
- Include structured instruction in note-taking, organization, and study skills
- Employ trained AVID elective teachers and college-level tutors to support implementation
- Secure parent or guardian commitment through participation agreements, as reported in the study setting
- Encourage long-term participation because stronger college enrollment outcomes were associated with completing three to four AVID electives

Time Commitment

Based on the study:

- Participation may last from one to four years
- Tutorials occur twice weekly
- The article does not provide enough information to estimate total instructional hours

Replication Constraints

Although the article clearly describes the major program components, it does not report class period lengths, tutorial duration, or total instructional time. Consequently, exact intervention dosage cannot be replicated from the article alone.

Work Cited

Todhunter-Reid, A., Burke, A., Houchens, P., & Howard, M. (2020). AVID participation in high school and post-secondary success: An evaluation and cost analysis. *Journal of Research on Educational Effectiveness, 13*(4), 679–701. https://doi.org/10.1080/19345747.2020.1772421