



# Evidence in Action

## *A K20 Center Research Brief*

### Pathways to College and STEM Careers: Enhancing the High School Experience

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#### Introduction

The study investigates the College Ambition Program (CAP), an intervention designed to create a college-going culture in high schools, particularly for low-income and first-generation college students. The authors highlight the challenges these students face in the college application process, including limited access to information, resources, and support. The CAP aims to address these challenges by providing comprehensive support to help students visualize themselves in college, develop strategic plans, and navigate the complexities of the college application process.

#### Methodology

##### Research Design:

The study employed a mixed-methods approach, including surveys, interviews, and administrative data analysis, to evaluate the impact of the CAP on students' college-going behaviors and outcomes.

##### Sample:

The sample included high school students from six schools in mid-Michigan with both treatment (CAP) and control groups. The study also involved mentors, teachers, and school staff.

##### Data Analysis:

Quantitative data were analyzed using logistic regression and other statistical procedures to measure the impact of the CAP on students' postsecondary intentions and enrollment. Qualitative data from interviews were analyzed to provide insights into students' experiences and the effectiveness of the CAP.

#### Results

The study found that the CAP had a positive impact on creating a college-going culture and supporting students in their college application process:

- **Increased College Enrollment:** Students in treatment schools were more likely to enroll in postsecondary institutions compared to those in control schools.



- **STEM Major Interest** Students in treatment schools showed a higher interest in pursuing STEM majors.
- **Support for Low Income Students** The CAP provided critical support for low-income students, including financial aid planning, college visits, and mentoring.
- **Positive Student Experiences** Qualitative interviews revealed that students benefited from the CAP's comprehensive support, including tutoring, mentoring, and assistance with college applications and financial aid.

## Application into Practice

To replicate this intervention in a school context, the following steps can be taken:

1. **Establish a CAP Center** Create a dedicated space within the school where students can receive tutoring, mentoring, and college application support.
2. **Engage Near Age Peers** Recruit undergraduate students as tutors and mentors to provide relatable role models and support for high school students.
3. **Provide Comprehensive Services** Offer a range of services, including course counseling, financial aid planning, and college visits, to support students throughout the college application process.
4. **Leverage Technology** Use mobile technology and text messaging to provide timely information and reminders to students about college application deadlines and financial aid opportunities.
5. **Foster a College-Going Culture** Encourage teachers and school staff to promote college aspirations and provide ongoing support to students in their college planning efforts.

## Work Cited

Schneider, B., Broda, M., Judy, J., & Burkander, K. (2013). Pathways to college and STEM careers: Enhancing the high school experience. *New Directions for Youth Development*, 149. <https://doi.org/10.1002/yd.20076>