KISSCE - ENGAGEMENT

Evidence in Action

A K20 Center Research Brief

SPARK Pre-Teen Mentoring Program: A Resilience-Focused Student Development Program for Middle School Youth

Green, A. L., Ferrante, S., Boaz, T. L., Kutash, K., & Wheeldon-Reece, B.

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Introduction

Early adolescence is a period marked by significant academic, social, emotional, and developmental changes. The transition to middle school often introduces new academic demands, increased social comparison, changes in peer relationships, and heightened risks for anxiety, loneliness, school disengagement, and declines in self-esteem and school connectedness. Research also suggests that many mental health challenges emerge during adolescence, making middle school an important period for prevention and intervention efforts.

The authors highlight the growing evidence supporting college and career programs as a way to strengthen students' social and emotional competencies, including self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. These competencies are associated with improved academic engagement, healthier relationships, stronger coping skills, better behavior, and improved well-being. However, social-emotional competencies often decline during the middle school years, creating a need for effective college and career programs delivered to all students.

The purpose of this study was to evaluate the effectiveness of the SPARK Pre-Teen Mentoring Curriculum, a classroom-based college and career program designed to build resilience, strengthen emotional well-being, and improve communication, decision-making, problem-solving, and emotional regulation skills among youth, ages 10–13.

Methodology

Research Design

The study used a randomized controlled trial (RCT) design. Students were assigned to either an intervention group or a comparison group through classroom-level randomization within participating schools. Students in intervention classrooms received the SPARK Pre-Teen Mentoring Curriculum, while students in comparison classrooms continued their typical educational experiences during the study period. Researchers collected data before and after the intervention to examine changes in social-emotional outcomes.

Sample

Number of Participants

- 365 students initially enrolled in the study.
- 357 students completed both pre- and post-intervention measures and were included in the final analysis.

Grade Levels

- The study included middle school students, ages 10–13 years.

Student Characteristics

Intervention Group (n = 188):

- Mean age: 12.3 years
- 67.2% male
- 40.4% White
- 36.6% Hispanic
- 49.2% received free/reduced lunch

Comparison Group (n = 177):

- Mean age: 12.4 years
- 64.2% male
- 39.1% White
- 26.4% Hispanic
- 54.6% received free/reduced lunch

Setting

The study took place in two middle schools located in a large southern school district:

- School A: Title I middle school with approximately 1,400 students
- School B: Middle school with approximately 1,340 students

Intervention Description

SPARK Pre-Teen Mentoring Curriculum

The SPARK Pre-Teen Mentoring Curriculum is a classroom-based learning program designed to reduce risk factors, build resiliency, promote emotional well-being, and support school success among youth ages 10–13 years.

What Students Did

Students participated in structured lessons designed to accomplish the following goals:

- Better understand themselves and others
- Develop social and emotional skills
- Build resilience
- Strengthen communication skills
- Improve decision-making
- Improve problem-solving
- Understand relationships among mind, thought, and consciousness
- Build self-esteem
- Strengthen emotional regulation
- Apply learned skills to life experiences and challenges

Students engaged in the following activities:

- Group discussions
- Role plays
- Videos
- Demonstrations
- Group activities
- Games designed to reinforce curriculum content and skills

Academic and Developmental Focus

The curriculum focused on the following tasks:

- Social learning
- Emotional well-being
- Resilience development
- Communication
- Decision-making
- Problem-solving
- Emotional regulation
- Leadership development
- School success

How the Intervention Was Delivered
The curriculum included the following components:

- Was classroom-based.
- Used a sequenced curriculum taught in a specific order.
- Included active learning opportunities.
- Was delivered in a group format.
- Used a standardized instructional manual.
- Emphasized development and generalization of personal and social skills.

Who Implemented the Intervention?
The curriculum was delivered by certified SPARK facilitators. The facilitators met these parameters:

- One facilitator taught eight intervention classrooms.
- A second facilitator taught three intervention classrooms.
- Facilitators used a standardized instructional manual and participated in fidelity monitoring procedures.

Dosage
The article provides sufficient information to calculate intervention dosage.

Stated Dosage
The SPARK Pre-Teen Mentoring Curriculum consisted of the following components:

- 12 lessons
- Delivered in hourly sessions
- Implemented sequentially over 12–13 weeks

Total Instructional Sessions

- 12 instructional sessions

Session Length

- 60 minutes per session

Program Duration

- 12–13 weeks

Total Planned Instructional Time

- 12 sessions × 60 minutes
- 720 instructional minutes
- Approximately 12 instructional hours

Average Student Exposure
Attendance monitoring indicated the following outcomes:

- Average attendance rate = 92%
- Average sessions attended = 11.04 of 12 sessions

Average Delivered Dosage

- 11.04 sessions × 60 minutes
- Approximately 662 instructional minutes
- Approximately 11.0 instructional hours experienced by the average student

Dosage Summary

Dosage Element	Amount
Planned Lessons	12
Session Length	60 minutes
Duration	12-13 weeks
Planned Time	720 minutes (12 hours)
Average Sessions Attended	11.04
Average Delivered Time	~662 minutes (~11 hours)

Data Analysis

Researchers compared student outcomes before and after the intervention. For each outcome measure, post-intervention scores were compared while accounting for students' baseline scores. This approach enabled researchers to determine whether students who participated in SPARK improved more than students in the comparison group. Researchers also calculated effect sizes to estimate the magnitude of the program's impact.

Results

Knowledge of Curriculum Content

Students who participated in SPARK significantly increased their understanding of the curriculum content and the principles of mind, thought, and consciousness. Eighty-five percent of intervention students demonstrated positive growth, compared with 41% of students in the comparison group. The program produced a significant positive effect on curriculum knowledge.

Communication, Decision-Making, and Problem-Solving Skills

Students receiving SPARK demonstrated significant improvements in the following skills:

- Communication skills
- Decision-making skills
- Problem-solving skills
- Overall life skills measured by the CDP scale

Seventy-eight percent of intervention students showed improvement compared with 45% of comparison students.

Emotional Regulation

Students participating in the curriculum demonstrated improved emotional regulation, including the following outcomes:

- Greater emotional clarity
- Better impulse control
- Reduced difficulties managing emotions

Sixty-nine percent of intervention students demonstrated improvement compared with 42% of students in the comparison group.

Resilience

SPARK participants demonstrated significant increases in the following aspects:

- Overall resilience
- Sense of relatedness
- Sense of mastery
- Optimism

Seventy-eight percent of intervention students demonstrated positive growth in resilience compared with 49% of students in the comparison group.

Practical Implications

The findings suggest that a relatively brief, classroom-based college and career curriculum can strengthen multiple competencies linked to academic success, positive behavior, healthy relationships, and emotional well-being. Results support the use of intentional college/career instruction during middle school as part of a broader system of student support.

Application into Practice

The SPARK Pre-Teen Mentoring Curriculum can be implemented as a universal classroom-based college/career program to strengthen resilience and social competencies during the middle school years.

Action Steps for Schools and Districts

- Implement the curriculum in classroom settings using a structured sequence of lessons.
- Schedule twelve 60-minute lessons across a 12–13 week period.
- Deliver instruction through group-based learning experiences.
- Use interactive practices such as the following activities:
    - Discussions
    - Role plays
    - Videos
    - Demonstrations
    - Games
    - Group activities
- Focus instruction on the following components:
    - Emotional regulation
    - Communication
    - Problem-solving
    - Decision-making
    - Resilience
    - Leadership
    - Self-understanding and relationships

- Use certified SPARK facilitators or personnel trained to implement the program using standardized materials.
- Monitor implementation fidelity through structured observation and facilitator self-assessment procedures.
- Track attendance to ensure students receive the intended level of exposure to the curriculum.

Staffing Considerations

- Certified SPARK facilitators delivered the program.
- Fidelity monitoring was an important implementation component.
- Facilitators used standardized instructional manuals.

Time Commitment

- 12 instructional sessions
- Approximately 12 hours of programming
- Average student participation was approximately 11 hours.

Contextual Considerations

The curriculum was successfully implemented in two diverse middle schools serving students from a variety of backgrounds. Positive outcomes were achieved when the program was delivered with high implementation fidelity and strong attendance.

APA Citation

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