



Evidence in Action

A K20 Center Research Brief

Freshmen Success: A Tier 1 Ninth-Grade Transition Program That Improves Engagement, Attendance, and Credit Accrual

Flannery, K. B., McGrath Kato, M., Kittelman, A., McIntosh, K., & Triplett, D.

2020

Introduction

Although high school graduation rates have improved over the past decade, many students still leave school without a diploma. Research reviewed by the authors identified ninth grade as a critical transition year because students frequently experience declines in attendance, course performance, and school engagement during their first year of high school. Students who fall behind in ninth grade are substantially less likely to graduate.

The authors noted that many existing dropout-prevention programs provide Tier 2 or Tier 3 supports for students already identified as at risk. However, fewer interventions focus on preventing disengagement before students begin to fail. The authors designed the **Freshmen Success (FS)** intervention as a Tier 1, schoolwide prevention model within a Multi-Tiered System of Supports (MTSS) framework. The intervention was intended to increase student engagement, attendance, and academic success for all ninth-grade students.

The study examined whether implementing Freshmen Success improved student motivation, engagement, attendance, credits earned, and grade point average compared with business-as-usual practices.



Methodology

Research Design

The study used a cluster randomized controlled trial. Four public high schools were matched and then randomly assigned to either implement the Freshmen Success intervention or continue with business-as-usual practices. Two schools implemented Freshmen Success and two schools served as waitlist control schools.

Sample

Number of Participants

- Total ninth-grade students: **1,588**
- Treatment schools: **854 students**
- Control schools: **734 students**

Grade Levels

- Ninth grade students only

Student Characteristics

Treatment schools:

- 55.9% White
- 25.4% Hispanic/Latinx
- 13.2% students receiving special education services through an Individualized Education Program (IEP)



Control schools:

- 62.7% White
- 13.2% Hispanic/Latinx
- 14.4% students with IEPs

Most students were approximately 14 years old when entering ninth grade.

Setting

The study occurred in four public high schools located in one Pacific Northwest state. Schools were located in suburban, rural, and small-city settings.

Intervention Description

The intervention was the Freshmen Success (FS) model, a Tier 1 prevention-oriented framework designed to increase school engagement and academic success among all ninth-grade students.

What Students and Educators Did During the Intervention

The Freshmen Success model included three components:

Ninth-Grade Leadership Team

First, each treatment school established a ninth-grade leadership team that contributed in the following ways:

- Monitored attendance, behavior, and course performance data
- Set goals for ninth-grade outcomes
- Reviewed implementation data



- Adjusted intervention activities as needed

The team included the following personnel:

- A building administrator
- Three to four teachers or staff members working with ninth graders
- Student-support personnel such as counselors, school psychologists, or deans

Freshmen Success Curriculum

Second, students received explicit instruction on engagement-related skills through a structured curriculum. Lessons focused on the following:

- Study skills
- Test-taking skills
- Goal setting
- Problem-solving
- Decision-making
- Time management
- Organization
- Self-advocacy
- Graduation planning
- Reading transcripts
- Identifying school supports and teacher allies



The curriculum aligned with behavioral, cognitive, and emotional components of school engagement.

Peer Navigator Support

Third, students were trained to provide support. Upperclassmen served as Peer Navigators who provided the following:

- Supported ninth-grade students in learning “how to do school”
- Reinforced concepts taught in the curriculum
- Provided engagement-focused peer support
- Shared experiences and knowledge about successful high school participation

Academic or Developmental Focus

The intervention focused on the following components:

- School engagement
- Motivation
- Attendance
- Academic success
- Credit accumulation
- High school completion readiness

How the Intervention Was Delivered

The intervention was delivered through the following activities:

- Monthly leadership team meetings



- Weekly advisory lessons
- Classroom-based curriculum instruction
- Peer support provided by trained upperclassmen

Who Implemented the Intervention

Implementation involved the following personnel:

- Ninth-grade leadership teams
- Advisory teachers
- Building coordinators
- Peer Navigators (upperclassmen)
- Research staff who provided training and technical assistance

Dosage

The article provides sufficient information to calculate most elements of intervention dosage.

Curriculum Dosage

Number of Lessons

- 12 curriculum lessons.

Length of Each Lesson

- 30 minutes per lesson.



Curriculum Duration

- Implemented during the fall semester.
- Delivered during weekly advisory periods.

Total Curriculum Dosage

- 12 instructional sessions
- 360 minutes total
- Approximately 6 hours of instructional time

Leadership Team Dosage

The article reports that leadership teams performed as follows:

- Met monthly during implementation
- Received approximately 8 hours of initial training prior to implementation
- Conducted monthly meetings lasting approximately 90 minutes during the implementation year

Because the exact number of leadership team meetings is not reported, a total meeting dosage cannot be calculated precisely.

Peer Navigator Dosage

Peer Navigators:

- Received 2 hours of training before the school year
- Participated in approximately monthly lunch meetings



The article does not provide enough information to calculate total Peer Navigator support time provided to ninth-grade students.

Dosage Limitations

While curriculum dosage can be calculated, the study does not provide sufficient information to calculate total dosage for leadership team activities or peer support interactions.

Data Analysis

Researchers used multilevel statistical analyses to compare outcomes for students in treatment and control schools while accounting for the fact that students were grouped within schools. Baseline measures of attendance, motivation, and engagement were included when available so that researchers could estimate intervention effects after considering students' prior performance.

Researchers examined outcomes related to the following behaviors:

- Student motivation
- Student engagement
- Attendance
- Credits earned
- Grade point average (GPA)



Results

What Outcomes Improved?

Motivation and Engagement

Students in Freshmen Success schools showed significant improvements in the following attributes:

- Positive motivation
- Positive engagement
- Reduced negative engagement

Students reported stronger self-belief, learning focus, persistence, planning, task management, and decreased disengagement.

Attendance

Students in Freshmen Success schools had significantly higher attendance than students in comparison schools.

Credits Earned

Students in treatment schools earned significantly more credits during ninth grade than students in control schools. The intervention produced a large effect on credits earned, one of the strongest findings in the study.



What Did Not Improve?

Grade Point Average

The study found no statistically significant improvement in GPA for students participating in Freshmen Success.

Which Students Benefited?

The intervention was implemented universally for all ninth-grade students. Results were reported at the whole-group level and did not identify specific subgroups that benefited more than others.

Implications for Schools

Findings suggest that schools can improve key early indicators of graduation success by combining the following skills:

- Data-driven decision making
- Explicit instruction in school-success skills
- Structured peer support

The strongest effect was found for credit accrual, which is a critical predictor of eventual graduation.

Application into Practice

Schools can use the Freshmen Success model as a Tier 1 transition and engagement framework to strengthen ninth-grade success before students become academically off-track.



To implement the intervention as described in the study, schools should address the following concerns:

- Establish a dedicated ninth-grade leadership team that regularly reviews attendance, behavior, and course-performance data.
- Include administrators, teachers, counselors, school psychologists, and other student-support personnel on the leadership team.
- Provide leadership teams with training in data-based decision-making and intervention management. The study provided approximately 8 hours of training.
- Schedule monthly leadership team meetings to monitor progress and implementation.
- Deliver a structured engagement curriculum to all ninth-grade students.
- Allocate time in advisory, transition, health, or similar courses for curriculum delivery.
- Provide 12 curriculum lessons totaling approximately 6 instructional hours.
- Teach skills related to organization, planning, study habits, problem-solving, graduation requirements, and help-seeking.
- Recruit and train upperclassmen to serve as Peer Navigators.
- Train Peer Navigators on curriculum content and student support practices. The study provided 2 hours of training before implementation.
- Provide ongoing support and monitoring for Peer Navigators through regular meetings.
- Monitor implementation fidelity regularly to ensure all intervention components are delivered consistently.



Replication Considerations

The study provides clear descriptions of the leadership, curriculum, and peer-support components. However, the exact duration of peer interactions and total leadership team meeting time were not reported, limiting full dosage calculations for those components.

Works Cited

Flannery, K. B., McGrath Kato, M., Kittelman, A., McIntosh, K., & Triplett, D. (2020). A tier 1 intervention to increase ninth grade engagement and success: Results from a randomized controlled trial. *School Psychology*, 35(1), 88-98.

<https://doi.org/10.1037/spq0000347>