



INTERVENTION REPORT

Topic Area: Transition to College



Facilitating Long-term Improvements in Graduation and Higher Education for Tomorrow (FLIGHT)

Large numbers of qualified students do not apply to and enroll in college. Yet, earning a college degree is one of the primary pathways for economic success and is increasingly required for good jobs and high wages.¹ A number of programs and practices aim to improve college readiness and enrollment, including *Take Stock in Children's® (TSIC's®) Facilitating Long-term Improvements in Graduation and Higher Education for Tomorrow (FLIGHT)* program. *FLIGHT* provides mentoring, scholarships, and additional support services to help disadvantaged middle and high school students stay on track for graduation, apply to college, and enroll in college. *FLIGHT* students also have access to college transition and retention services in their first three semesters of college. This What Works Clearinghouse (WWC) report, part of the WWC's Transition to College topic area, explores the effects of the *FLIGHT* program on student success. The WWC identified six studies of *FLIGHT*, and one study met WWC standards.²

What Happens When Students Participate in *FLIGHT*?³

The evidence indicates that implementing *FLIGHT*:

- may increase the number of students who enroll in college
- may result in little or no increase in high school student attendance
- may result in little or no increase in high school students' GPA

Findings on *FLIGHT* from the available research that meets WWC standards are shown in Table 1. For each student outcome reviewed by the WWC, an effectiveness rating, the performance of the *FLIGHT* intervention group relative to the comparison group, and the number of studies and students that contributed to the findings is presented.

Table 1. Summary of findings on *FLIGHT*

Outcome	Effectiveness rating	Average performance (study findings)		Evidence meeting WWC standards (version 3.0)	
		Intervention group	Comparison group	Number of studies	Number of students
College access and enrollment	Potentially positive effects	97% enrolled	83% enrolled	1	180
High school attendance	No discernible effects	12.37 absences	12.45 absences	1	241
General high school academic achievement	No discernible effects	3.90 GPA	3.95 GPA	1	240

Note: Average performance values (study findings) are generated by one analysis conducted for each outcome, as reported by Philp (2005). These outcomes include enrollment in college the first semester after graduating high school (college access and enrollment), number of absences in the third year of the intervention (high school attendance), and weighted grade point average (GPA) in the third year of the intervention (general high school academic achievement). The effects of *FLIGHT* are not known for academic achievement or attendance in middle school; college readiness; staying in, progressing in, or completing high school; attendance, credit accumulation, or academic achievement in college; college degree attainment; and, labor market participation/success.

Based on findings from one study that met WWC evidence standards, the effectiveness rating for the college access and enrollment outcome is *potentially positive effects*, indicating that there is evidence of a positive effect with no overriding contrary evidence. The percentage of students enrolling in college in the fall following high school graduation was 97 for the FLIGHT group and 83 for the comparison group. This finding is based on 180 students. The effectiveness rating for the high school attendance and general high school academic achievement outcomes is *no discernible effects*. These findings are based on 241 and 240 students, respectively.

HOW THE WWC REVIEWS AND DESCRIBES EVIDENCE

The WWC evaluates evidence based on the quality and results of reviewed studies. The criteria that the WWC uses for evaluating evidence are defined in the [Procedures and Standards Handbooks](#) and the [Review Protocols](#). The studies summarized in this report were reviewed under WWC Standards (version 3.0) and the Transition to College topic area protocol (version 3.2).

To determine the effectiveness rating, the WWC considers what methods each study used, the direction of the effects, and how many studies tested the intervention. The higher the effectiveness rating, the more certain the WWC is about the reported results and about what will happen if the same intervention is implemented again. The following key provides a link between effectiveness ratings and the statements used in this report:

Effectiveness Rating	What Happened Statement	Description of the Evidence
Positive (or Negative) Effects	The intervention is <i>likely</i> to change an outcome	Strong evidence of a positive effect, with no overriding contrary evidence
Potentially Positive (or Negative) Effects	The intervention <i>may</i> change an outcome	Evidence of a positive effect with no overriding contrary evidence
No Discernible Effects	The intervention <i>may result in little to no change</i> in an outcome	No affirmative evidence of effects
Mixed Effects	The intervention <i>may result in positive or negative change</i> in an outcome	Evidence of inconsistent effects

How is FLIGHT Implemented?

The following section provides details of how FLIGHT was implemented. This information can help educators identify the requirements for implementing FLIGHT, and determine whether those implementation requirements would be feasible in their districts. Information on FLIGHT presented in this section comes from the study that met WWC evidence standards (Philp, 2015) and from correspondence with the developer. Information on TSIC® was gathered from TSIC’s website.

- **Goal:** To help low-income middle school and high school students stay on track for graduation, apply to college, and enroll and succeed in college.
- **Target Population:** To be eligible for FLIGHT, a student must (1) be in middle or high school grades; (2) be eligible for free or reduced-price lunch; (3) have a minimum 2.0 GPA and no Ds or Fs for the previous year; (4) be performing at grade level or above in reading and math as indicated by standardized testing; (5) have no out-of-school suspensions for the prior year and no more than six incidents of in-school suspensions for the prior year; (6) have no more than 10 unexcused absences in the previous year; and (7) be attending a public school. Students’ parents also must agree to adhere to TSIC’s® policies.
- **Method of Delivery:** FLIGHT offers students individualized assistance and group workshops during the school day from volunteer mentors, student advocates, and, in one study site, College Enrollment and Retention Specialists.
- **Frequency and Duration of Service:** Students who continue to meet eligibility requirements can participate in FLIGHT for up to eight years, from grade 6 through the first three semesters of college. See Table 2 for details on the frequency in which individual service components were delivered.
- **Intervention Components:** The FLIGHT intervention adds several components to the TSIC® model, as noted in Table 2.

Comparison Group: In the one study that contributes to this Intervention Report, students in the comparison group had access to college preparation support that was already available in their schools.

Table 2. Components of FLIGHT

Key component	FLIGHT
Volunteer mentors	Students meet with trained adult volunteer mentors in school for a minimum of 15 sessions per year for at least 30 minutes per session. These sessions typically focus on identifying needs, personal growth and development, educational planning, supporting academic success, and career planning.
Student advocates/ case managers	Every student is assigned a student advocate, an adult <i>TSIC</i> ® staff member that serves as a case manager. The student advocate works closely with volunteer mentors and school staff to make sure students are on track academically. <i>FLIGHT</i> includes more intensive academic, attendance, and behavioral monitoring than <i>TSIC</i> ® and includes: <ul style="list-style-type: none"> • College Access and Success Meetings to review progress toward graduation and college enrollment, one to four times per year for 15-30 minutes each. • Advocacy Meetings to monitor students' grades, attendance, and satisfaction with his/her mentor, four times a year for 15 minutes each. Student advocates address any academic or behavioral issues that arise by organizing meetings among teachers, guidance counselors, parents, and mentors. One <i>FLIGHT</i> study site also includes a College Enrollment and Retention Specialist who coordinated workshops and college tours.
Florida Prepaid Scholarships	Students who fulfill <i>FLIGHT</i> requirements receive a two-year scholarship to college, or they may use their scholarship funding to attend vocational training.
Continued mentoring	Students have access to college transition and retention services in their freshman year of college. One <i>FLIGHT</i> study site includes a College Enrollment and Retention Specialist who coordinated post-graduation activities.
Workshops	<i>FLIGHT</i> adds workshops to the <i>TSIC</i> ® model. Student advocates provide students (and parents) with workshops that cover a range of topics such as goal setting, study skills, and college preparation and applications. Students in grades 7-10 participate in three workshops per year, which last from one to four hours each. Students in grades 11-12 participate in six workshops per year, which last from one to four hours each.
Student detail reports	At the end of each school year, parents and teachers are provided a one-page snapshot of the student's grades, standardized test scores, attendance, office referrals, program participation, and whether the student is on track to graduate high school.

What Does *FLIGHT* Cost?

The cost of *FLIGHT* is not reported in the one study reviewed (Philp, 2015), and no cost information on *FLIGHT* was available on the *TSIC*® website. However, the WWC identified a number of cost components from the intervention description in the study's report. This preliminary list of costs is not designed to be exhaustive; rather, it is designed to provide educators an overview of the major cost components of implementing *FLIGHT*.

- **Personnel Costs:** Schools that implemented *FLIGHT* conducted one 2-hour mentor training, one 1-hour staff training, and nine hour-long workshops for staff each year. Student advocates/case managers were volunteers and required only training costs. Student advocates were hired by *TSIC*® and embedded within the school.
- **Facilities Costs:** Schools needed dedicated space to accommodate meetings between students and their mentors and student advocates/case managers during the school day. Space was also needed for workshops.
- **Equipment and Materials Costs:** Information on equipment and materials costs is not reported.
- **Costs Paid by Students or Parents:** Students and parents were responsible for transportation costs to workshops and for college costs not covered by the *FLIGHT* scholarship.
- **In-Kind Supports:** *FLIGHT* received in-kind services from volunteers and through private foundations and community agencies.
- **Sources of Funding:** College scholarships and student services were funded in a public-private funding model. *FLIGHT* received funding from corporate, foundation, and private donations, which were matched by the Florida Prepaid College Foundation funded by the Florida Legislature.

For More Information:

About *FLIGHT*

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About the Study Reviewed

Philp, J. D. (2015, October). *FLIGHT: Final Evaluation Report*. Columbia, SC: The Evaluation Group.

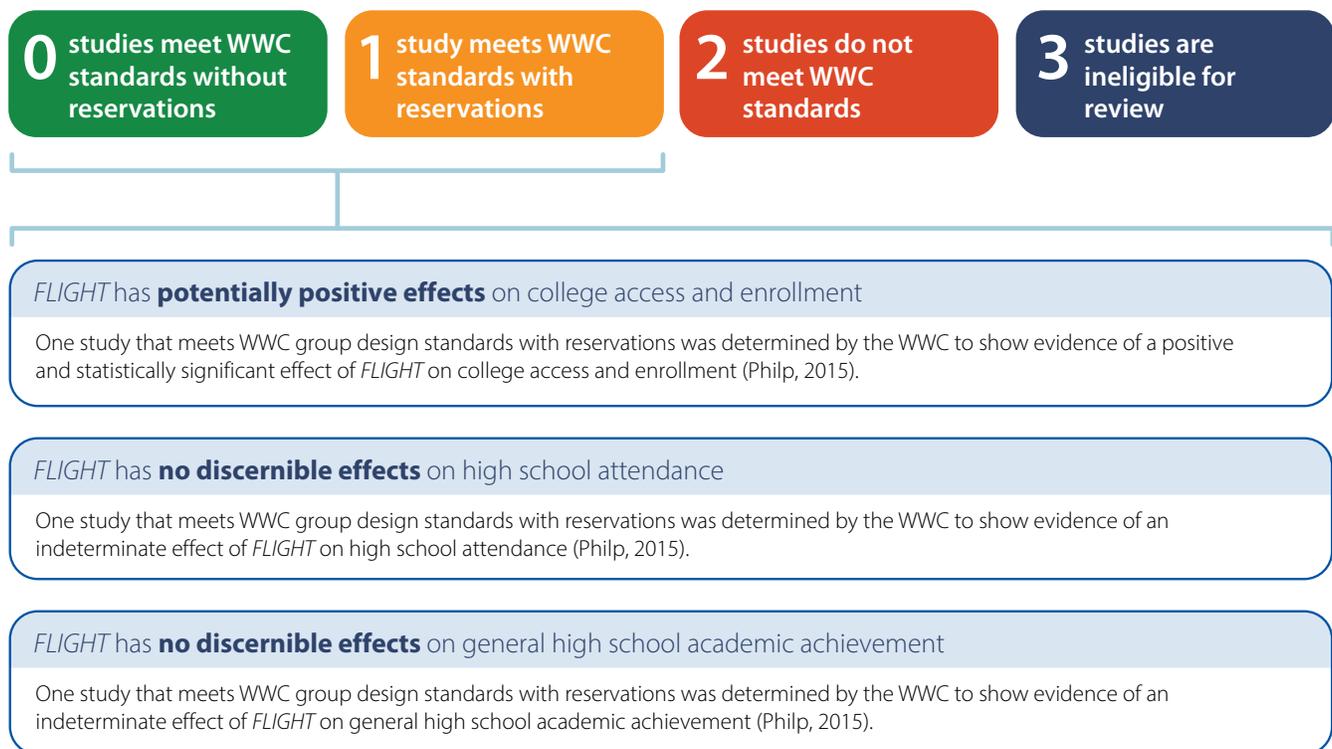
Research Summary

The WWC identified six studies that investigated the effectiveness of *FLIGHT* (Figure 1):

- 1 study met WWC group design standards with reservations
- 2 studies do not meet WWC group design standards
- 3 studies were ineligible for review

Citations for all six studies are in the References section, which begins on page 8.

Figure 1. Findings by outcome domain



The one study that meets WWC group design standards did not report findings on the following 11 outcome domains covered by the Transition to College Topic area: general middle school academic achievement, middle school attendance, college readiness, staying in high school, progressing in high school, completing high school, college attendance, credit accumulation, general college academic achievement, college degree attainment, and labor market.

Main Findings

The following table shows the findings from one *FLIGHT* study that meets WWC evidence standards, and includes WWC calculations of the mean difference, effect size, and performance of the intervention group relative to the comparison group. Note that because only one study of *FLIGHT* meets WWC standards, the summary information for the outcome will match the individual study findings for that outcome. Based on findings from one study that meets WWC evidence standards, the effectiveness rating for the college access and enrollment outcome is *potentially positive effects*, indicating that there is evidence of a positive effect with no overriding contrary evidence. The relative performance of 89 means that 89 percent of the *FLIGHT* group can be expected to enroll in college at higher rates than the average comparison group student. This finding is based on 180 students. The effectiveness rating for high school attendance and general high school academic achievement outcomes is *no discernible effects*. These findings are based on 241 and 240 students, respectively.

Table 3. Findings by outcome domain

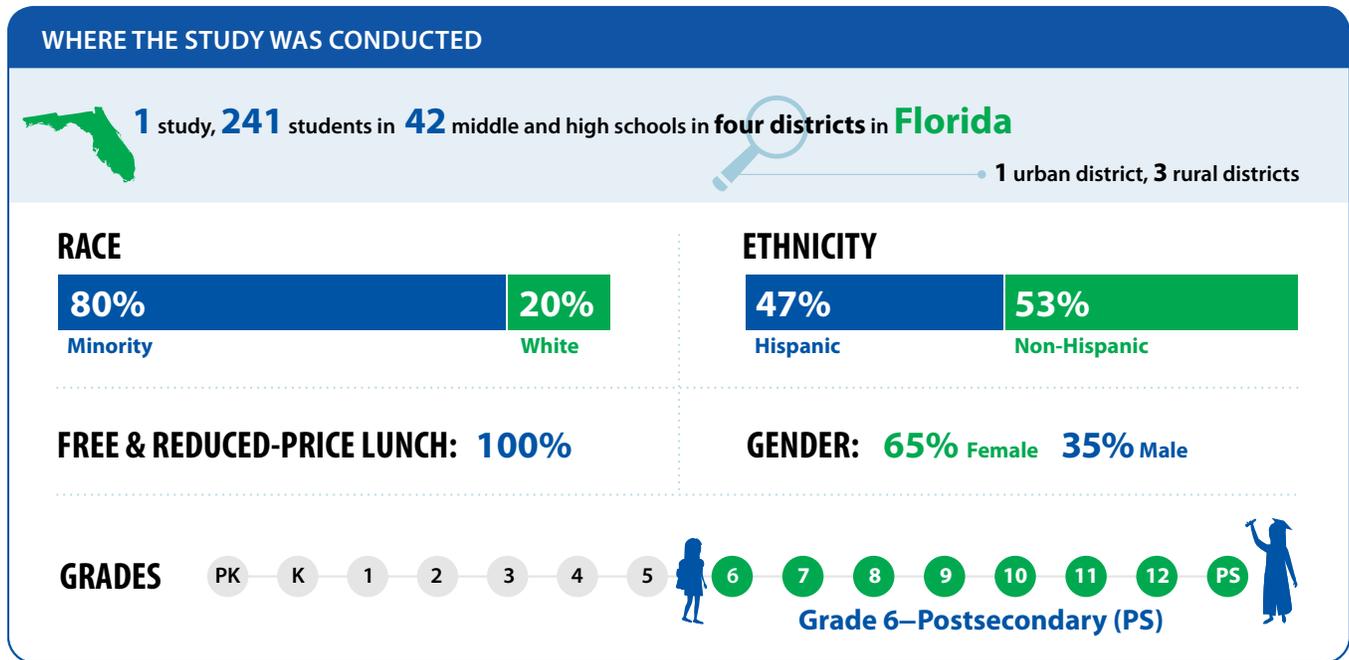
Measure (study)	Study sample	Sample size	Mean (standard deviation)		WWC calculations			p-value
			Intervention group	Number of Students	Mean difference	Effect size	Relative performance	
<i>College enrollment (%)</i> (Philp, 2015) ^a	9 th and 11 th grade cohorts (4 and 2 year follow-up)	180 students	97	83	0.14	1.23	89	.01
Outcome average for college access and enrollment across all studies						1.23	89	
<i>Absences</i> (Philp, 2015) ^a	7 th and 9 th grade cohorts (3 year follow-up)	241 students	12.37 (12.31)	12.45 (11.04)	0.08	0.01	50	.96
Outcome average for high school attendance across all studies						0.01	50	
<i>Weighted GPA</i> (Philp, 2015) ^a	7 th and 9 th grade cohorts (3 year follow-up)	240 students	3.90 (0.91)	3.95 (0.86)	-0.05	-0.05	48	.58
Outcome average for general high school academic achievement across all studies						-0.05	48	

Table Notes: For mean difference and effect size values reported in the table, a positive number favors the intervention group and a negative number favors the comparison group. The effect size is a standardized measure of the effect of an intervention on outcomes, representing the average change expected for all individuals who are given the intervention (measured in standard deviations of the outcome measure). The relative performance of the treatment group is a standardized measure of the effect of an intervention on outcomes. The value presented is Cohen's U3, derived from the effect size, and represents the expected percentile rank of the intervention group relative to a comparison group average at the 50th percentile. For example, a relative performance of 50 means that no difference is expected from the comparison group on that outcome. The statistical significance of the domain average was determined by the WWC. Some statistics may not sum as expected due to rounding.

^a For Philp (2015), no corrections for clustering or multiple comparisons and no difference-in-differences adjustments were needed. The adjusted intervention group mean and p-value presented here were provided in response to an author query. This study is characterized as having a potentially positive effect on college enrollment because the estimated effect is positive and statistically significant. The study is characterized as having indeterminate effects on high school attendance and general high school academic achievement because the mean effect reported is not statistically significant. For more information, please refer to the WWC Procedures and Standards Handbook, version 3.0, page 26.

In What Context Was *FLIGHT* Studied?

The following section provides information on the setting and participants involved in the one study of *FLIGHT* that meets WWC evidence standards. This information can help educators understand the context in which the study of *FLIGHT* was conducted, and determine whether the program might be suitable for their setting.



Details of Each Study that Met WWC Standards

Research details for Philp (2015)

Philp, J. D. (2015, October). *FLIGHT Final Evaluation Report*. Columbia, SC: The Evaluation Group.

Findings from Philp (2015) show evidence of a positive effect of *FLIGHT* on college access and enrollment. The relative performance of 89 means that 89 percent of the *FLIGHT* group can be expected to enroll in college at higher rates than the average comparison group student. This finding is based on one outcome and 180 students. Findings on high school attendance and general high school academic achievement outcomes show evidence of indeterminate effects. These findings are based on one outcome per domain, with 241 and 240 students, respectively.

Table 4. Summary of findings

Meets WWC group design standards with reservations

Outcome domain	Sample size	Study findings		
		Average effect size	Relative performance index	Statistically significant
College access and enrollment	180 high school graduates	+1.23	89	Yes
High school attendance	241 high school students	-0.01	50	No
High school general academic achievement	240 high school students	-0.05	48	No

WWC evidence rating	Meets WWC Group Design Standards With Reservations. This is a randomized controlled trial (RCT) with compromised random assignment, and the analysis did not account for unequal probabilities of assignment to the treatment and comparison groups in one study site. Baseline equivalence of the treatment and comparison group is established. ⁴
Setting	The study took place in four Florida school districts (Broward, Highlands, Hardee, and DeSoto). Broward is a large urban county in southeast Florida, and Highlands, Hardee, and DeSoto are rural counties in south-central Florida.
Methods	In February 2011, 315 students in grades 7, 9, and 11 in four Florida school districts were identified who met <i>FLIGHT</i> eligibility criteria. The study author randomly assigned 150 students to the <i>FLIGHT</i> intervention group and 165 students to the comparison group, stratified by county and grade. In Broward, randomization was conducted separately within each school, in proportion to the total number of slots available. In the other three districts, randomization was conducted separately by grade and county, in proportion to the total number of slots available. One student in a Broward high school was automatically assigned to a slot in <i>FLIGHT</i> , as requested by <i>TSIC</i> [®] , since they were the only eligible student to participate within the school. Because one student was not randomly assigned to treatment and because the probability of random assignment was not controlled for in the analysis, the integrity of the RCT was compromised. One month following random assignment, three students randomly assigned to the intervention group were determined to be ineligible for <i>FLIGHT</i> and these students were replaced by randomly selecting three students from the comparison group to ensure that the intervention operated at capacity.
Study sample	In February 2011, 315 students in grades 7, 9, and 11 in four Florida school districts were identified who met the following <i>FLIGHT</i> eligibility criteria: (1) they were in middle or high school grades; (2) the student must be eligible for the free and reduced lunch program; (3) the student must have a minimum 2.0 grade point average, and no Ds or Fs for the previous year; (4) the student must be performing at grade level or above in reading and math as indicated by standardized testing; (5) the student must have no out-of-school suspensions for the prior year and no more than six incidents of in-school suspensions for the prior year; (6) the student must have no more than ten unexcused absences in the previous year; and (7) the student must be attending a public school. The parents also must agree to adhere to <i>TSICs</i> [®] policies. In order to be eligible for the study, students must have been able to be tracked between the application and enrollment period. Participants in Broward were drawn from 8 of the 55 middle schools and 23 of the 39 high schools in the county. Participants in Highlands, Hardee, and DeSoto were drawn from 5 of the 11 middle schools and all 6 high schools in the three counties. At baseline, the average age of students in the sample was 14.8 years, 65 percent were female, 80 percent were minority, and 47 percent were Hispanic. Just over one-third (37 percent) came from single parent homes, all students were eligible for free or reduced price lunch, 54 percent were eligible to receive social services such as food stamps or Medicaid, and 78 percent had a mother who was a high school graduate. Forty percent of students reported that they have (or had) a sibling enrolled in college.
Intervention group	<i>FLIGHT</i> was implemented during three school years. The intervention included five components aimed at increasing the likelihood of students applying for, being accepted to, and enrolling in college. The first component was a pre-paid college scholarship for students who remained in good academic standing throughout high school. The second through fourth components were one-on-one mentoring from adult volunteers, intensive case-management services from school staff, and academic and college preparation workshops for students and their parents. The fifth component was a Student Detail Report of students' grades, attendance, test scores, and status in the intervention that was provided at year-end to parents, teachers, and guidance counselors.
Comparison group	Students assigned to the comparison group did not receive the <i>FLIGHT</i> intervention and had access to college preparation support that was already available in their schools.
Outcomes and measurement	Study authors reported findings on three outcome measures that are eligible for review under the Transition to College topic area. The first is college enrollment (college access and enrollment domain) in the fall following high school graduation for the grade 9 and grade 11 cohorts of students. This outcome is binary and was obtained from the National Student Clearinghouse and <i>TSICs</i> [®] administrative records. The second eligible outcome was weighted GPA (general high school academic achievement domain), measured in the third year of the intervention. The third eligible outcome is attendance (high school attendance domain), which is also measured in the third year of the intervention. Weighted GPA and attendance were reported for the grade 7 and grade 9 cohorts, at the end of 9th and 11th grade, respectively. The study also examined the impact of <i>FLIGHT</i> on perceptions of barriers to postsecondary education. This outcome is not eligible for review under the Transition to College topic area.
Additional implementation details	<i>FLIGHT</i> staff were trained to create and distribute the year-end Student Detail Reports. New mentors are provided with a 2-hour orientation and training session before being assigned as a mentor. New and returning mentors are also asked to participate in at least one 1-hour enrichment event during the year. These enrichment events are informal and can be in the form of a lunchtime online webinar or a mentor appreciation breakfast with <i>FLIGHT</i> staff.

References

Study that meets WWC group design standards with reservations

Philp, J. D. (2015, October). *FLIGHT: Final Evaluation Report*. Columbia, SC: The Evaluation Group.

Studies that do not meet WWC group design standards

Elwell, T., West, M., & Scott, L. (2011). State-funded mentoring program performance mixed; Take Stock and Best Buddies do well. Report No. 11-11. Tallahassee, FL: The Florida Legislature, Office of Program Policy Analysis & Government Accountability (OPPAGA). Retrieved from: <http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/1111rpt.pdf>. The study does not meet WWC group design standards because equivalence of the analytic intervention and comparison groups is necessary and not demonstrated.

Grisé, P., Chen, Y-S, Drennan, A., & Fisher, T. H. (2007). Mentoring in Florida, 2004-2005. Report prepared for the Florida Mentoring Partnership. Tallahassee, FL: Florida State University. The study does not meet WWC group design standards because equivalence of the analytic intervention and comparison groups is necessary and not demonstrated.

Studies that are ineligible for review using the Transition to College Evidence Review Protocol

Clark, M. A., Shreve, K., & Stone, C. B. (2004). Taking stock in children: Collaborating to promote success for low-income secondary students. *NASSP Bulletin*, 88(641), 61-73. The study is ineligible for review because it does not use an eligible design.

Dassler, B. W. (2016). Take Stock matters: Pre-college factors and their relationship to attainment, a study of a Florida-based college access program. (Doctoral dissertation, University of Florida). The study is ineligible for review because it does not use an eligible design.

Preece, B., Haunty, S., & Fashano, M. (2004). Collaboration Florida style. Paper presented at the Women in Engineering ProActive Network (WEPAN), Albuquerque, NM. The study is ineligible for review because it does not use an eligible design.

Endnotes

¹ Avery, C. (2013). Evaluation of the College Possible Program: Results from a randomized controlled trial. NBER Working Paper 19562. Cambridge, MA: National Bureau of Economic Research. See also Hoxby, C. & Turner, S. (2013). Expanding college opportunities for high-achieving, low income students. Stanford, CA: Stanford Institute for Economic Policy Research.

² The descriptive information for this intervention comes from Philp (2015). The What Works Clearinghouse (WWC) requests developers review the intervention description sections for accuracy from their perspective. The WWC provided the developer with the intervention description in January 2018 and the WWC incorporated feedback from the developer. Further verification of the accuracy of the descriptive information for this intervention is beyond the scope of this review.

³ The literature search reflects documents publicly available by January 2018. Reviews of the studies in this report used the standards from the WWC Procedures and Standards Handbook (version 3.0) and the Transition to College review protocol (version 3.2). The evidence presented in this report is based on available research. Findings and conclusions could change as new research becomes available.

⁴ As required by the Transition to College protocol (version 3.2), baseline equivalence must be established for an academic measure and a measure of socioeconomic status when an outcome has no natural pretest, and if these differences are within the adjustment range (i.e., greater than .05 and less than or equal to .25 of a standard deviation) baseline measures must be included in the analytic model. For the college enrollment outcome, the WWC found that baseline equivalence between treatment and comparison groups was established on GPA and was within the adjustment range on socioeconomic status variables (eligible for social services and single-parent household). The author noted in the original study that a previous iteration of the analytic model was run that included a baseline control for social service eligibility. The results reported in this intervention report were drawn from this previous iteration of the analytic model, which the WWC obtained via an author query.

Recommended Citation

What Works Clearinghouse, Institute of Education Sciences, U.S. Department of Education. (2018, December). *Transition to College intervention report: Facilitating Long-Term Improvements in Graduation and Higher Education for Tomorrow (FLIGHT)/Take Stock in Children (TSIC)*[®]. Retrieved from <https://whatworks.ed.gov>