

# What Works Clearinghouse



## Summer Training and Education Program (STEP)

### Program Description<sup>1</sup>

*Summer Training and Education Program (STEP)* is a summer employment, academic remediation, and life skills program intended to lower school dropout rates by reducing summer learning loss and preventing teen parenthood. The program is integrated into the federal summer jobs program and is offered during six-to-eight-week sessions in two consecutive summers.

It includes part-time summer work at minimum wage, a daily reading and math curriculum, and “life skills and opportunities” classes that focus on topics such as sexual behavior, drug use, careers, and community involvement. The program serves low-income 14- and 15-year-olds who have tested below grade level in either reading or math.

### Research<sup>2</sup>

One study of *STEP* meets What Works Clearinghouse (WWC) evidence standards. The randomized controlled trial included more than 2,500 students in four states: Massachusetts, California, Washington, and Oregon. Based on this study, the WWC considers the extent of evidence for *STEP* to be small for the

staying in school and progressing in school domains. No studies of *STEP* that meet WWC evidence standards with or without reservations include evidence in the completing school domain that could be used to rate the intervention’s effectiveness.<sup>3</sup>

### Effectiveness

*STEP* was found to have no discernible effects on either staying in school or progressing in school.

	<i>Staying in school</i>	<i>Progressing in school</i>	<i>Completing school</i>
<b>Rating of effectiveness</b>	No discernible effects	No discernible effects	na
<b>Improvement index<sup>4</sup></b>	Average: -2 percentile points Range: -7 to +2 percentile points	n/a n/a	na na

na = not applicable  
n/a = not available<sup>5</sup>

1. The descriptive information for this program was obtained from publicly available sources: Grossman and Sipe (1992) and Walker and Vilella-Velez (1992). Full citations are included in the reference section. The WWC requests developers to review the program description sections for accuracy from their perspective. Further verification of the accuracy of the descriptive information for this program is beyond the scope of this review.
2. The studies in this report were reviewed using WWC Evidence Standards Version 1.0 (See the WWC Standards).
3. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
4. These numbers show the average and range of student-level improvement indices for all findings across the study.
5. The WWC was unable to calculate an improvement index for the progressing in school domain because the study authors did not report enough information to make this calculation.

## Additional program information

### Developer and contact

Developed and evaluated by Public/Private Ventures (P/PV), *STEP* is no longer an active program, and no current developer or contact information is available. Additional information about the *STEP* model and the implementation experience of the organizations that used it can be found in Walker and Vilella-Velez (1992), listed in the references for this report.

### Scope of use

*STEP* was initially implemented in 1984 as a pilot program operating through two local Job Training and Partnership Act (JTPA) employment and training agencies. In 1985, the program began a five-site national research demonstration. In 1987, the program began rolling out a national replication effort with funding from both private and government sources. From 1987 through 1991, *STEP* served more than 20,000 youth at 100 sites in 15 states. Although the program has since ended, the core components—job placement combined with educational remediation—are shared with many programs for disadvantaged youth still operating, such as youth programs funded through the Workforce Investment Act.

### Description of intervention

*STEP* is a summer employment, academic remediation, and life skills program intended to lower school dropout rates by reducing summer learning loss and preventing teen parenthood. The program is offered during six-to-eight-week sessions in two consecutive summers and serves low-income 14- and 15-year-olds who tested below grade level in either reading or math. The *STEP* model is an enhancement to the federal summer jobs

program that offers full-time, paid summer work experience to youth from low-income families.

Each summer, participants are expected to complete approximately 200 hours of program activities, including part-time summer employment, a reading and math curriculum, and life skills classes. *STEP* jobs are similar to those offered through the standard federal summer employment program, except that *STEP* jobs are half time rather than full time in order to accommodate the program's remediation and life skills components. Employment opportunities vary by site and can include day care center work, buildings and grounds maintenance, and clerical positions. *STEP* reading and math classes meet daily and include computer-assisted instruction, practical exercises, journal writing, and sustained silent reading. *STEP* life skills and opportunities classes meet twice a week and focus on topics such as decision making, sexual behavior, drug use, careers, and community involvement. *STEP* participants are paid both for the time they spend in the classroom and on the job, so that participants' wages are equivalent to those earned by participants in the regular summer jobs program. During the school year following *STEP*'s first summer, the program also offers a small, voluntary component consisting of recreation and other non-educational activities. This component is designed to encourage participants to return for *STEP*'s second summer.

### Cost

Researchers estimate the per-participant cost of one summer spent in *STEP* to be \$2,455—about 60% higher than the per-participant cost in the standard federal summer jobs program (estimated to be \$1,535).<sup>6</sup>

## Research

Three studies reviewed by the WWC investigated the effects of *STEP*. One of these studies (Grossman & Sipe, 1992) meets WWC evidence standards. The other two studies (Private Industry Council of San Francisco, 1995; Walker & Vilella-Velez,

1992) do not meet either WWC evidence standards or eligibility screens.

The Grossman and Sipe (1992) study was a randomized controlled trial in which students were randomly assigned either to the intervention group that was offered admission to *STEP* or

6. See Walker and Vilella-Velez (1992). The WWC converted costs to 2008 dollars using the consumer price index.

## Research *(continued)*

to a control group that was offered summer jobs in the federally funded Summer Youth Employment and Training Program (SYETP). The study included 3,226 eligible students who applied to *STEP* in either 1986 or 1987. These applicants came from five research sites in four states.<sup>7</sup>

### Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or medium to large (see the What Works Clearinghouse

Extent of Evidence Categorization Scheme). The extent of evidence takes into account the number of studies and the total sample size across the studies that meet WWC evidence standards with or without reservations.<sup>8</sup>

The WWC considers the extent of evidence for *STEP* to be small for the staying in school and progressing in school domains. No studies of *STEP* that meet WWC evidence standards with or without reservations include evidence in the completing school domain that could be used to rate the intervention's effectiveness.<sup>9</sup>

## Effectiveness Findings

The WWC review of interventions for Dropout Prevention addresses student outcomes in three domains: staying in school, progressing in school, and completing school. The study included in this report covers the staying in school and progressing in school domains. The findings below present the authors' estimates and WWC-calculated estimates of the size and the statistical significance of the effects of *STEP* on students.<sup>10</sup>

*Staying in School.* The study found no statistically significant differences between *STEP* and control group youth in their self-reported dropout rates about four years after random assignment. In addition, the effect sizes were not large enough (at least 0.25) to be considered substantively important according to WWC criteria.

*Progressing in School.* The study found no statistically significant differences between *STEP* and control group youth in

their highest grade completed about four years after random assignment. However, the WWC is not able to calculate effect sizes in the progressing in school domain because the study authors did not provide standard deviations of the outcomes.

### Rating of effectiveness

The WWC rates the effects of an intervention in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

7. The Grossman and Sipe study (1992) examined three cohorts of *STEP* applicants. The authors conducted the analyses of each of these cohorts separately. The study's Cohort 1 analysis did not meet evidence standards because of a high level of attrition for that cohort and because the authors did not demonstrate that their analysis sample was equivalent at baseline. The Cohort 2 and Cohort 3 analyses meet WWC evidence standards. The WWC combines Cohort 2 and Cohort 3 results when presenting program effects.
8. The extent of evidence categorization was developed to tell readers how much evidence was used to determine the intervention rating, focusing on the number and size of studies. Additional factors associated with a related concept—external validity, such as the students' demographics and the types of settings in which studies took place—are not taken into account for the categorization. Information about how the extent of evidence rating was determined for *STEP* is in Appendix A6.
9. The Grossman and Sipe (1992) study examined outcomes in the completing school domain (high school graduation). However, these findings did not meet WWC evidence standards because of high attrition and because the authors did not provide evidence that their research groups were initially equivalent within this analysis sample. Therefore, this evidence could not be used to rate *STEP*'s effectiveness in the completing school domain. These results are reported in Appendix A4.
10. The level of statistical significance was reported by the study authors or, when necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation, see the WWC Tutorial on Mismatch. For the formulas the WWC used to calculate the statistical significance, see Technical Details of WWC-Conducted Computations. For the *STEP* study summarized here, no corrections for clustering or multiple comparisons were needed.

**The WWC found *STEP* to have no discernible effects on either staying in school or progressing in school.**

**Improvement index**

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study and an average improvement index across studies (see Technical Details of WWC-Conducted Computations). The improvement index represents the difference between the percentile rank of the average student in the intervention condition versus the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is entirely based on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analysis. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.

The average improvement index for staying in school is -2 percentile points in the study covered in this report, with a range of -7 to +2 percentile points across findings. The WWC is not able to calculate an improvement index for the progressing in school domain because the study that examined this domain did not include standard deviations for the relevant outcomes.

**Summary**

The WWC reviewed three studies of *STEP*. One of these studies meets WWC evidence standards; the remaining two studies do not meet either WWC evidence standards or eligibility screens. Based on the one study, the WWC found the intervention to have no discernible effects on either staying in school or progressing in school. The conclusions presented in this report may change as new research emerges.

**References**

**Meets WWC evidence standards**

Grossman, J. B., & Sipe, C. L. (1992). Summer Training and Education Program (STEP): *Report on long-term impacts*. Philadelphia, PA: Public/Private Ventures.

**Additional sources:**

Branch, A. Y., Milliner, J. A., & Bumbaugh, J. (1986). Summer Training and Education Program (STEP): *Report on the 1985 summer experience*. Philadelphia, PA: Public/Private Ventures.

Sipe, C. L. (1988). Summer Training and Education Program (STEP): *Report on the 1987 experience*. Philadelphia, PA: Public/Private Ventures.

Sipe, C. L., Grossman, J. B., & Milliner, J. A. (1987). Summer Training and Education Program (STEP): *Report on the 1986 experience*. Philadelphia, PA: Public/Private Ventures.

**Studies that fall outside the Dropout Prevention protocol or do not meet WWC evidence standards**

Private Industry Council of San Francisco. (1995). STEP, Summer Training and Education Program: *Evaluation report, STEP II students 1990-1995, current students 1992-1995*. San Francisco, CA: Author. The study is ineligible for review because it does not use a comparison group.

Walker, G., & Vilella-Velez, F. (1992). *Anatomy of a demonstration: The Summer Training and Education Program (STEP) from pilot through replication and postprogram impacts*. Philadelphia, PA: Public/Private Ventures. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention.