

# What Works Clearinghouse



## Check & Connect

### Program description

*Check & Connect* is a dropout prevention strategy that relies on close monitoring of school performance, as well as mentoring, case management, and other supports. The program has two main components: “Check” and “Connect.” The Check component is designed to continually assess student engagement through close monitoring of student performance and progress indicators. The Connect component involves program staff giving individualized attention to students, in partnership

with school personnel, family members, and community service providers. Students enrolled in *Check & Connect* are assigned a “monitor” who regularly reviews their performance (in particular, whether students are having attendance, behavior, or academic problems) and intervenes when problems are identified. The monitor also advocates for students, coordinates services, provides ongoing feedback and encouragement, and emphasizes the importance of staying in school.

### Research

One study of *Check & Connect* met the What Works Clearinghouse (WWC) evidence standards, and a second study met WWC standards with reservations. The two studies included a total of more than 200 students attending Minneapolis high schools. In

both studies the students entered the program at the beginning of the ninth grade. The studies examined the program’s effects in three dropout prevention domains considered by the WWC: staying in school, progressing in school, and completing school.<sup>1</sup>

### Effectiveness

*Check & Connect* was found to have positive effects on staying in school and potentially positive effects on progressing in school. It was found to have no discernible effects on completing school within four years of entering the program.

	<i>Staying in school</i>	<i>Progressing in school</i>	<i>Completing school</i>
<b>Rating of effectiveness</b>	Positive effects	Potentially positive effects	No discernible effects
<b>Improvement index<sup>2</sup></b>	Average: +25 percentile points Range: +18 to +31 percentile points	Average: +30 percentile points Range: +30 percentile points	Average: +1 percentile point Range: +1 percentile point

1. To date, there are only a few studies of the effectiveness of *Check & Connect*. Findings and conclusions may change as new research becomes available.  
 2. These numbers show the average and range of improvement indices for findings in the two studies within the three domains.

### Additional program information

#### Developer and contact

*Check & Connect* was developed by the Institute on Community Integration at the University of Minnesota, as a partnership of researchers, practitioners, parents, and students. More information and additional references to research about the program can be found at <http://ici.umn.edu/checkandconnect>, or by sending an email to [info@icimail.education.umn.edu](mailto:info@icimail.education.umn.edu).

#### Scope of use

The *Check & Connect* model has been used in Minneapolis public schools with middle and high school students who have learning, emotional, and behavioral disabilities. The model has been replicated in eight school districts in Dakota County, Minnesota as part of an initiative targeted at chronically truant youth. The model also has been used in three school districts in Dakota County in an effort to reduce truancy among elementary school students.

#### Description of intervention

*Check & Connect* has two main components: “Check” and “Connect.” The Check component is designed to continually assess student engagement through close monitoring of student performance and progress indicators (including the student’s attendance, incidence of suspensions, course grades, and credits). The Connect component involves program staff giving individualized attention to students, in partnership with school personnel, family members, and community service providers.

These program components are implemented by the *Check & Connect* “monitor,” who functions as the student’s mentor and

case worker. Monitors provide basic intervention for all students on their caseload, as well as intensive intervention—which is more frequent and individualized—for students as needed. Basic interventions involve regular structured discussions between the monitor and student—at least twice a month for secondary students and weekly for elementary and middle school students—about their progress in school and problem-solving steps to resolve conflict and cope with challenges. When intensive interventions are required because of particularly poor attendance or school performance, they are tailored to students’ specific circumstances. Intensive interventions focus on three areas of support: problem-solving (including mediation and social skills development), academic support (through homework assistance, schedule changes, and tutoring), and recreational and community service exploration. In addition, the program focuses on family outreach, with frequent contact and collaboration between home and school.

In the *Check & Connect* programs described in this intervention report, monitoring positions were staffed by graduate students and community members with either bachelors degrees in human services-related fields or equivalent experience. Program coordinators, who oversaw the program and supervised the monitors, were typically special education coordinators, school psychologists, or special education resource teachers.

#### Cost

Program developers report that implementing *Check & Connect* in secondary schools cost about \$1,400 a student per year in the 2001–02 school year.<sup>3</sup>

### Research

Six studies reviewed by the WWC investigated the effects of the *Check & Connect* program. One study met WWC evidence standards, and a second study met evidence standards with reservations. Two studies did not meet WWC relevance screens—one

did not focus on the relevant student age range (middle and high school) and the other did not examine outcomes from the three domains relevant for the review. The two remaining studies

3. See Sinclair, M., & Kaibel, C. (2002). *Dakota County: School success Check and Connect program evaluation, 2002 final summary report*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

## Research (continued)

did not meet WWC evidence screens because they lacked an equivalent comparison group.

The study that met WWC evidence standards (Sinclair, Christenson, Evelo, & Hurley, 1998) was a randomized controlled trial that included 94 high school students from the Minneapolis public schools with learning, emotional, or behavioral disabilities. Students were randomly assigned at the beginning of ninth grade, with 47 students assigned to the treatment group and 47 students assigned to the control group. In this study, both treatment and control group students received *Check & Connect* services in seventh and eighth grade, but only treatment group students continued to receive these services in ninth grade.

The study that met evidence standards with reservations (Sinclair, Christenson, & Thurlow, 2005) was a randomized controlled trial with a relatively large attrition rate—slightly more than 30% of those originally assigned.<sup>4</sup> The post-attrition sample included 144 ninth-grade students from Minneapolis public schools with emotional or behavioral disabilities, including 71 students randomly assigned to the treatment group and 73 students randomly assigned to the control group. In this study, treatment group students received *Check & Connect* services throughout high school, while the control group received no *Check & Connect* services.

## Effectiveness Findings

The WWC review of dropout prevention programs addresses student outcomes in three domains: staying in school, progressing in school, and completing school.

*Staying in school.* The Sinclair and colleagues (1998) study reported that ninth grade students enrolled in *Check & Connect* were significantly less likely than similar control group students to have dropped out of school at the end of the first follow-up year (corresponding to the end of the freshman year)—9% compared with 30%. The Sinclair, Christenson, & Thurlow (2005) study reported that *Check & Connect* students were significantly less likely to have dropped out of school at the end of the fourth follow-up year (corresponding to the senior year for students making normal progress)—39% compared with 58%.

*Progressing in school.* The Sinclair and colleagues (1998) study reported that students in *Check & Connect* earned significantly more credits toward high school completion during ninth grade than did students in the control group. The Sinclair, Christenson, & Thurlow (2005) study did not report on high school credit outcomes.

*Completing school.* The Sinclair, Christenson, & Thurlow (2005) study examined *Check & Connect*'s effect on whether students completed school “on time” (within four years of entering the ninth grade). The study indicated that there was no statistically significant or substantially important effect on on-time high school completion. At the end of the four-year follow-up period, combining receipt of high school diplomas and GED certificates, rates of on-time completion were about the same for *Check & Connect* and control group students—30% compared with 29%. (At this point, 31% of intervention students and 14% of control students were still enrolled in school but had not yet graduated.) Because of its short follow-up period, the Sinclair and colleagues (1998) study did not examine impacts on school completion.

### Rating of effectiveness

The WWC rates interventions 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

4. In this study, 206 students were randomly assigned, with random assignment occurring prior to receiving parental permission. Of those originally assigned, 26 refused to participate either before or after signing permission forms. An additional 36 students were dropped from the sample because, during the first year of the study, they moved out of district, entered a correctional institution, or could not be located. This represents a total loss of sample of 62 students—30.1% of those originally assigned.

**The WWC found *Check & Connect* to have positive effects on staying in school, potentially positive effects on progressing in school, and no discernible effects on school completion**

findings, the size of the difference between participants in the intervention condition and comparison condition, and the consistency in findings across studies (see the [WWC Intervention Rating Scheme](#)).

#### Improvement index

For each outcome domain, the WWC computed an improvement index based on the average effect size (see the [Technical Details of WWC-Conducted Computations](#)). This 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 type of analysis. The improvement index can take on values between -50 and +50, with positive numbers denoting favorable results. The average improvement index for staying in school is +25 percentile points, with a range of +18 to +31 percentile points across the two studies. The improve-

ment index for progressing in school is +30 percentile points. The improvement index for completing school is +1 percentile point.

#### Summary

The WWC reviewed six studies on *Check & Connect* that were designed to assess the program's effectiveness. Four of these studies passed WWC relevance screens—they focused on the program's effectiveness among middle and high school students and examined outcomes from at least one of the three relevant domains: staying in school, progressing in school, and completing school. Of these four studies, one met WWC evidence standards and another met WWC evidence standards with reservations. These two studies found positive effects on staying in school and potentially positive effects on progressing in school. The studies found no discernible effects on completing school on time (within four years of entering ninth grade). The conclusions presented in this report may change as new research on *Check & Connect* emerges.

#### References

##### Met WWC evidence standards

Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children, 65*(1), 7–21.

##### **Additional sources:**

Christenson, S. L., Sinclair, M. F., Thurlow, M. L., & Evelo, D. (1999). Promoting student engagement with school using the *Check & Connect* model. *Australian Journal of Guidance & Counseling, 9*(1), 169–184.

Sinclair, M. F., Christenson, S. L., Lehr, C. A., & Anderson, A. R. (2003). Facilitating student engagement: Lessons learned from *Check & Connect* longitudinal studies. *The California School Psychologist, 8*(1), 29–42.

##### Met WWC evidence standards with reservations

Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children, 71*(4), 465–482.

##### **Additional sources:**

Sinclair, M. F., Christenson, S. L., Evelo, D. L., Hurley, C. M., Kau, M. Y., Logan, D. T., Thurlow, M. L., & Westberry, D. (2001). Persistence Plus: Using *Check & Connect* procedures to improve service delivery and positive post-school outcomes for secondary students with serious emotional disturbance. (CDFR No. 84.237H). Minneapolis, MN: University of Minnesota, Institute on Community Integration.

## References *(continued)*

### Did not meet WWC relevance screens

Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check & Connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*, 95–113.<sup>5</sup>

Lehr, C. A., Sinclair, M. F., & Christenson, S. L. (2004). Addressing student engagement and truancy prevention during the elementary school years: A replication study of the Check & Connect model. *Journal of Education for Students Placed At-Risk, 9*(3), 279–301.<sup>6</sup>

#### **Additional sources:**

Sinclair, M. F. & Lehr, C. A. (2001). Dakota County: Elementary Check & Connect programs. Program evaluation 2001 summary report. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Sinclair, M. F. & Lehr, C. A. (2000). Dakota County: Elementary Check & Connect programs. Annual summative program evaluation report. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

### Did not meet WWC evidence screens

Sinclair, M. F. & Kaibel, C. (2002). Dakota County: Secondary Check & Connect programs. Program evaluation 2002 final summary report. Minneapolis, MN: University of Minnesota, Institute on Community Integration.<sup>7</sup>

Thorton, H. E. (Ed.). (1995). Staying in school: A technical report of three dropout prevention projects for middle school students with learning and emotional disabilities. Technical report 1990–1995. ABC dropout prevention and intervention series. Washington, DC: U.S. Department of Education.<sup>8</sup>

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**For more information about specific studies and WWC calculations, please see the [WWC Check & Connect Technical Appendices](#).**

5. The outcome measures are not relevant to this review.

6. The sample is not appropriate this review: the study did not include middle school or high school students.

7. Does not use a strong causal design: the study did not use a comparison group.

8. Does not use a strong causal design: the study used a nonequivalent comparison group.