WWC EVIDENCE REVIEW PROTOCOL FOR DROPOUT PREVENTION INTERVENTIONS

Topic Area Focus

Dropping out of school continues to be an issue of national concern because of its links with poor labor market prospects, higher rates of public assistance receipt, and higher rates of substance use and incarceration. Recent estimates indicate that 10.5 percent of youth age 16 to 24 are not attending and have not completed high school (having earned neither a high school diploma nor a certificate of general educational development (GED)), and the rate is 11.3 percent and 25.7 percent for African American and Hispanic youth, respectively. The rate has been remarkably constant in the last two decades, even as other indicators of risky teen behavior such as pregnancy have declined.

The What Works Clearinghouse (WWC) review of dropout prevention interventions will examine secondary school (middle school, junior high school, and high school) as well as community-based interventions designed to help students stay in school, progress in school, and/or complete school. A systematic review of evidence in this topic area will address the following questions:

- Which dropout prevention programs are effective in keeping students in school or getting them to return to school?
- Which dropout prevention programs are effective in helping youth progress in school?
- Which dropout prevention programs are effective in helping youth complete high school by either earning a diploma or a GED certificate?

Key Definitions

Dropout Prevention Programs. Dropout prevention programs are interventions designed to keep students in school and ultimately improve their likelihood of completing high school. These interventions can include services and activities such as incentives, counseling, monitoring, school restructuring, curriculum design, literacy support, or community-based services to mitigate factors impeding progress in school. They can operate in a public or private school setting, postsecondary institutions, or in a community facility such as a youth center or community-based organization.

The interventions can target middle school students, junior high students, high school students, or youth who have dropped out of school. For middle school students, program goals might be to keep students in middle school or encourage them to complete middle school. For high school students, program goals might be to keep students in high school or encourage them to complete high school either by receiving a diploma or GED certificate. For dropouts, program

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¹ National Center for Education Statistics (2005). "The Condition of Education 2005: Indicator 19 — Status Dropout Rates by Race/Ethnicity." NCES 2005-094. Washington, DC: U.S. Government Printing Office.

goals might be to get students to return to school and work toward a high school diploma or GED certificate.

The key outcomes are staying in school, progressing in school, or completing school. The success of a dropout prevention intervention will be examined by comparing program participants (an intervention group) and a control or comparison group, to assess whether the intervention group was more likely to stay in school, progress in school, or complete school. Staying in school will be measured by school enrollment. Progressing in school will be measured by credit accumulation, grade promotion, or highest grade completed. Completing school will be measured by whether the participant has earned a high school diploma or GED certificate.

General Inclusion Criteria and Populations To Be Included

The general target population of interest includes students who attend middle school, junior high school, or high school, or who are at the age when they could be attending these schools but are not (that is, they have dropped out of school). In addition, programs must serve students considered "at risk" of dropout. The research literature has identified risk factors for dropping out, including being behind grade level, having dropped out in the past, being a member of a racial or ethnic minority, being an English language learner, being a teen parent, growing up in a poverty household, having low grades or poor attendance, and receiving special education services.

Types of Interventions That May be Included

The interventions to be included will be determined after a search of the published and unpublished literature as well as a review of the nominations submitted to the WWC. To be included in the review, the intervention must focus on dropout prevention or high school completion. Interventions whose primary purpose is to affect behaviors that are correlated with staying in school or completing school—such as violent behavior, drug use, or teen pregnancy—will not be included in the review. The intervention must operate in the United States, or its territories or tribal regions.

Examples of the types of interventions to be included are:

Programs: Alternative middle schools and high schools

Schools within schools (including freshman and career academies)

After-school and enrichment Peer tutoring and mentoring

College preparation

Community service and service learning

GED preparation

Practices or Strategies: Counseling and case-management

School restructuring

Policies: Driver license suspension

Welfare payment reductions

Financial incentives

Inclusion and Exclusion Criteria for Studies Collected for Review

The Dropout Prevention literature search focuses on studies involving programs, practices, and policies for students in middle school, junior high school, or high school, as well as those for youth who have dropped out of school. To be included in the review, a study must meet several relevancy criteria:

- *Topic relevance*. The study should examine the intervention's effects on whether participants stay in school, progress in school, or complete school. The study should not be a correlational study examining relationships between school attendance or dropout behavior and other characteristics.
- *Timeframe relevance*. The study has to be published in 1988 or later.
- Sample relevance. The sample must include students in middle school, junior high, or high school, or when they are at the age they could be attending these schools, but are not (that is, they have dropped out of school).
- Study design relevance. The study design and focus is limited to manuscripts that are empirical studies, using quantitative methods and inferential statistical analyses, and that take the form of a randomized control trial, a regression-discontinuity design, a quasi-experimental design, or a single subjects design.
- *Outcome relevance*. The study must focus on outcomes related to staying in school, progressing in school, or completing school.

II. SPECIFIC TOPIC PARAMETERS

- 1. Commonly-shared or theoretically derived characteristics of the intervention that should be reflected in its definition and implementation.
 - Suitable interventions for the review will have as their primary purpose an increase in high school completion rates or a reduction of dropout rates.
 - The intervention targets students in middle school, junior high, or high school, or out-of-school youth who are the age of students in middle, junior high, or high school.
- 2. Important characteristics of the intervention that must be known in order to reliably replicate it with different participants, in other settings, at other times.
 - Services provided and activities that are part of the intervention;
 - Duration of the intervention;
 - Characteristics and training of those administering the intervention;

In addition to these criteria, the study must describe:

- The target population;
- The institutional setting in which the intervention is implemented

These two additional criteria reflect the fact that dropout prevention programs can target a range of students and be implemented in a range of institutional settings, and some information about the types of students and institutions is needed to replicate the program appropriately.

3. Outcome Domains Relevant For This Review.

To be considered relevant for this review, studies must examine outcomes in one of the three domains listed below:

- 1. **Staying in school.** This domain includes measures such as: whether the student has dropped out of school and the number of days the student was enrolled in school.
- 2. **Progressing in school.** This domain includes measures such as: the number of high school course credits the student has earned, whether the student was promoted to the next grade, and the highest grade the student has completed.
- 3. **Completing school**. This domain includes measures such as whether the student has earned a high school diploma or GED or whether he or she has graduated from a district high school.

For measures to be considered appropriate for this review, they should be defined for all study participants (including dropouts) and should not be examined only for those students who have remained enrolled in school. On this basis, the review does not examine measures of school performance (such as grades, standardized test scores, and school attendance), because they are

not defined for students who have dropped out of school. In addition, this review does not examine intervention effects on behavioral outcomes associated with dropping out, such as delinquency, drug use, or teenage pregnancy.

4. Evidence sufficient for an outcome measure to demonstrate each type of reliability (internal consistency, temporal stability/test-retest, and inter-rater).

The outcomes of interest for the WWC dropout prevention reviews are not psychometric measures. Thus, these criteria do not apply.

5. Interval of time within which studies should have been conducted to be appropriate for an intervention report.

To be included in this review, studies must have been published or released in the period from 1988 to present.

6. Characteristics defining the target population.

For a study to be included in this review, study participants must meet the following criteria:

- Be enrolled in middle, junior, or high school or be between the ages 12 to 21;
- Reside in the U.S.;
- Be "at risk" for dropout based on characteristics such as class performance (e.g., grades), attendance, grade level retention, contact with law enforcement or the legal system, or contact with social services, teen parent status, low-income status, Hispanic or African-American students, students from single-parent households, students classified for special education services.

7. Important characteristics of participants that might be related to the intervention's effect that must be equated if a study does not employ random assignment.

Studies that do not employ random assignment must demonstrate the initial equivalence of the comparison groups, with regard to the following characteristics:

- Age, race/ethnicity, sex, and socioeconomic status
- Prior academic achievement
- Attendance levels and frequency of school discipline issues
- Dropout status
- Special education and English language learner classification

8. Relevant subgroups of interest for this review are:

Sex

- Age at program entry
- Race/ethnicity
- Initial school enrollment status
- Overage or previously retained in grade
- Low attender or truant
- Low SES family background
- Low prior academic achievement
- Special education status

9. Appropriate interval for measuring the intervention's effect relative to the end of the intervention.

For the purposes of the review, the minimum length of the follow-up period will be six months after program entry. For example, a program that examines whether students have stayed in school using data collected less than six months after entry (a follow-up period of less than six months from baseline) will be dropped from consideration. The length of the intervention itself is not a factor.

10. Amount of differential attrition from the intervention and control groups assumed to be problematic.

For the WWC dropout prevention reviews, differential attrition is defined as a differential loss of greater than 5%. If differential attrition is less than or equal to 5%, the associated bias will be assumed minimal.

11. Amount of overall attrition from the study sample assumed to be severe.

For the WWC dropout prevention reviews, severe overall attrition is defined as a loss of more than 30% of the sample assigned to the relevant study conditions. If overall attrition is less than or equal to 30%, the associated bias is assumed to be minimal.

III. METHODOLOGY

Literature Search Strategies

The What Works Clearinghouse (WWC) literature search is comprehensive and systematic. The search is designed to identify the population of published and unpublished relevant studies. This section contains elements of the literature search specific to the dropout prevention topic area, including search terms, electronic databases, research organizations, dropout prevention organizations, and previously reviewed interventions.

Key Word List

The following key word list guides searches of electronic databases, journals, and other media. The key words include general concepts likely to appear in studies of dropout prevention, as well as key words derived from outcomes that have been identified in earlier WWC dropout prevention reviews. In addition, the list includes a set of key words designed to identify articles that deal with evaluation studies, including randomized and quasi experimental designs. Searches of electronic databases are typically based on combinations of these key words using Boolean terms such as AND and OR.

Dropout prevention Highest grade completed
Dropout program Total credits earned
Dropout recovery Credit accumulation
Dropout reduction Completing school
Reduce dropout Earned high school diploma

Decrease dropout Earned GED

Increase high school graduation Evaluation
Increase high school completion Evidence
Staying in school Effectiveness
Continued enrollment Impact

School persistence Comparison group
School retention Control group
School withdrawal Treatment group
Progressing in school Random assignment

On track to graduate

Electronic Databases

The following electronic databases are searched using the key word list.

Academic Search Premier Education Research Complete

Business Source Corporate EJS E-Journals

Dissertation Abstracts International ERIC

Google Scholar OCLC WorldCat

EconLit SocINDEX with Full Text

Research Organizations

The websites of the research organizations conducting studies related to dropout prevention will be reviewed to identify studies for this review. Examples of these research organizations include:

Abt Associates American Institutes for Research Mathematica Policy Research MDRC RAND Research Triangle Institute SRI International Urban Institute

Organizations with Links to Dropout Prevention

The websites of organizations with links to dropout prevention work will be reviewed to identify studies for this review and to identify dropout prevention interventions on which studies of effectiveness may have been conducted. Examples of these organizations include the National Dropout Prevention Centers, and the National Center on Secondary Education and Transition.

Searches Related to Earlier Intervention Reports

We will seek to identify new research related to interventions included in earlier waves of WWC Dropout Prevention intervention reports. We will identify new studies by searching the websites of the intervention developers and conducting author searches using the authors of studies identified in earlier intervention reports.

Research Conference Programs

We will search electronically available conference programs from the annual meetings of prominent research organizations. Examples of these organizations include:

Association of Public Policy Analysis and Management American Educational Research Association Society for Research on Educational Effectiveness

Personal Contacts

We will solicit studies directly from experts in the field of education who work on dropout prevention interventions. The PI, deputy PI, and PC will identify these experts.