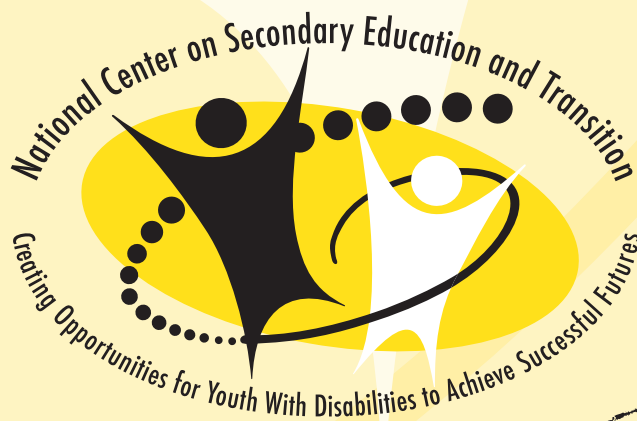


# ESSENTIAL TOOLS

**Increasing Rates of  
School Completion:  
Moving From Policy  
and Research to  
Practice** **A Manual for Policymakers,  
Administrators, and Educators**



The College of Education  
& Human Development

UNIVERSITY OF MINNESOTA



U.S. Office of Special  
Education Programs



# ESSENTIAL TOOLS

## **Increasing Rates of School Completion: Moving From Policy and Research to Practice**

**A Manual for Policymakers,  
Administrators, and Educators**

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*May 2004*

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NCSET was established to *create opportunities for youth with disabilities to achieve successful futures*. Headquartered at the Institute on Community Integration, University of Minnesota, NCSET provides technical assistance and disseminates information focused on four major areas of national significance for youth with disabilities and their families:

- Providing students with disabilities with improved access and success in the secondary education curriculum.
- Ensuring that students achieve positive postschool results in accessing postsecondary education, meaningful employment, independent living, and participation in all aspects of community life.
- Supporting student and family participation in educational and postschool decision-making and planning.
- Improving collaboration and system linkages at all levels through the development of broad-based partnerships and networks at the national, state, and local levels.

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# Introduction

The graduation rate for students with disabilities and other student populations continues to be far below the national average. According to the 23rd Report to Congress, only 57% of youth with disabilities graduated with regular diplomas during the 1998-1999 school year (U.S. Department of Education, 2001). Other student populations who have disproportionately high rates of dropout include those from low socio-economic circumstances or single-parent families and those who are identified as Native American or Hispanic/Latino (National Center for Education Statistics, 2002; Rosenthal, 1998). The problem of dropout can no longer be ignored, given the associated negative impact on individuals and society.

The No Child Left Behind Act of 2001 has focused recent attention on the problem of dropout and is driving efforts to increase graduation rates for all students. This law holds schools accountable for student progress using indicators of adequate yearly progress (AYP), including measures of academic performance and rates of school completion. Educators, administrators, and policymakers at district and state levels are in need of interventions that will increase high school graduation for all students, especially those at risk of school failure. With the recent emphasis on accountability, personnel from local and state education agencies are charged with developing programs that engage students in school and learning, ensure acquisition of academic and social skills necessary for adulthood, and result in high rates of school completion.

Programs and practices designed to prevent dropout have been implemented in schools across the country for decades. These practices vary and include counseling services, mentoring programs, tutoring, attendance monitoring, and after-school programs. Unfortunately, the extent to which these interventions are systematically targeted for disengaged learners is unclear, and closer examination suggests many of these programs and practices lack research or evaluation data documenting effectiveness (Lehr, Hansen, Sinclair, & Christenson, 2003). The resources required for program implementation in terms of time, staff, and dollars point to the need for clear evidence of effectiveness. Additionally, the current federal administration has drawn increased attention to the need for educational decisions grounded in scientifically based evidence (Feuer, Towne, & Shavelson, 2002).

This *Essential Tool* provides a synthesis of research-based dropout prevention and intervention and offers examples of interventions that show evidence of effectiveness. This has proven to be a difficult task because the intervention research on dropout and school completion that can be used to inform practice is incomplete (Dynarski & Gleason, 2002; Lehr et al., 2003; Sutherland & MacMillan, 2001). Although there is not yet a solid foundation of research on dropout intervention and prevention from which to make strong conclusions, there is information that educators, administrators, and policymakers can use to help make informed decisions. This tool is intended as a base of current knowledge that can be built upon as additional interventions are implemented and empirically validated.

### **Key Question:**

**What do we know about effective dropout prevention and intervention that is research-based, and how can that information be used to inform practice?**

### **Intended Audience**

This *Essential Tool* manual is intended for state- and district-level education agencies to assist in developing and implementing interventions that will effectively decrease the rate of dropout and improve school completion for students with and without disabilities. The intended audience includes state education agency personnel, district superintendents, special education directors and their staff, principals, and those managing a wide range of alternative education programs. It is hoped that this *Essential Tool* will enhance dissemination of this information to other organizations and individuals through the intended audience. This document is also available online at <http://www.ncset.org>.

### **Format**

This manual is intended to bridge research and practice and was designed with ease of use as a guiding set of strategies. The *Essential Tool* includes practical information to improve educational outcomes for youth with and without disabilities. The text is concise; important points are bulleted or highlighted for easy use and reference. In addition, reproducible handouts are provided.

### **Outcomes**

This manual is intended to assist in producing the following outcomes.

- Increase awareness and knowledge of current theory and research on dropout prevention and intervention.
- Increase awareness and knowledge of data-based interventions that show evidence of effectiveness.
- Improve programming addressing dropout prevention and intervention for students with and without disabilities, resulting in increased rates of school completion.

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# Getting Started

## **How is this Manual Organized?**

This manual has four parts, each designed to provide information about various aspects of dropout prevention and intervention. It is designed so that it is not necessary to start at the beginning. Instead, you can scan the summaries below, decide what part will be of most help to you, and begin there.

## **Part I: What Do We Know About Dropout Prevention?**

This section provides answers to questions such as:

- Why is preventing dropout important?
- How are dropout rates measured?
- Who drops out and why?
- What should we do about the situation?
- What elements should be included in dropout prevention programs?

## **Part II: How Were Sample Intervention Programs Selected?**

This section describes the process that was used to select the sample programs and strategies that are included in Part III.

## **Part III: What Works in Dropout Prevention?**

If you're looking for information about research-based interventions, this part contains detailed information about 11 programs and strategies.

## **Part IV: Where Else Can I Go for More Information?**

This part provides information on dropout prevention and related materials for presentations or handouts.



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# **Part I**

## **What Do We Know About Dropout Prevention?**

- **Why is Preventing Dropout a Critical and Immediate National Goal?**
- **How are Dropout Rates Measured? What are Associated Issues?**
- **What Do We Know About Who Drops Out and Why?**
- **What Does Current Thinking Tell Us About How to Address Dropout?**
- **What are Key Components of Dropout Prevention Programs?**



## **Why is Preventing Dropout a Critical and Immediate National Goal?**

### **National Statistics on Dropout and School Completion**

Today, nearly all students are expected to graduate from high school. Yet, hundreds of thousands of students in the United States leave school early each year without a diploma (National Center for Education Statistics, 2002). The expectation stated in *Goals 2000* was to reach a 90% school completion rate by the year 2000. The most recent report indicates only 17 states have reached this goal (NCES, 2002). Other recent statistics indicating the percentage of eighth-grade students who graduate five years later range from a low of 55% in Florida to a high of 87% in New Jersey (Greene, 2002). Other data point to the severity of the problem across the nation and for various student populations (Children's Defense Fund, 2001):

- Approximately 1 in 8 children in the United States never graduate from high school.
- Based on calculations per school day (180 days of seven hours each), one high school student drops out every nine seconds.

Some groups of students are at greater risk of dropping out of school due to circumstance or ability. Consider the following statistics:

- Young adults of Hispanic descent are more likely to have dropped out of school than Black or White young adults (64% Hispanic, 84% Black, and 92% White; ages 18-24 who completed school) (NCES, 2002).
- On average, students from low-income families are at increased risk of not completing school (dropout rate is 10% for low income, 5.2% for middle income, and 1.6% high income) (NCES, 2002).

On average, students with disabilities are at greatest risk of dropping out of school.

- According to the 23rd Report to Congress, only 57% of youth with disabilities graduated with regular diplomas during the 1999-2000 school year (U.S. Department of Education, 2001).
- The dropout rate for students with emotional/behavioral disabilities is approximately twice that of general education students (Wagner, 1995).
- Of youth with disabilities who drop out of school, the highest proportions are students with learning disabilities (32%) and students with emotional/behavioral disabilities (50%) (Wagner et al., 1991).

### **Significant Costs to Individuals and Society When Youth Do Not Complete School**

The number of students in our nation who are not completing school is particularly alarming in today's society because there are few employment opportunities that pay living wages and benefits for those who have neither completed a high school education nor acquired necessary basic skills. On average, youth who drop out are more likely than others to experience negative outcomes such as unemployment, underemployment, and incarceration. High school dropouts are less likely to be employed than high school graduates (U.S. Department of Labor, 2003). Nearly 80% of individuals in prison do not have a high school diploma (Office of Juvenile Justice and Delinquency Prevention, 1995). According to the National Longitudinal Transition Study of special education students, the arrest rates of youth with disabilities who dropped out were significantly higher than for those who had graduated (Wagner et al., 1991). Three to five years after dropping out, the cumulative arrest rate for youth with serious emotional disturbance was 73% (Wagner, 1995).

Students who do not complete school cost taxpayers billions of dollars in lost revenues, welfare, unemployment, crime prevention, and prosecution (Joint Economic Committee, 1991). Approximately 47% of high school dropouts are employed compared to 64% of high school graduates not in college (National Center for Education Statistics, 1995). Students who graduate from high school earn an average of \$9,245 more per year than students

who do not complete school (Employment Policy Foundation, 2001). In light of the negative consequences of dropout for society and individuals, facilitating school completion for all students must be a priority for educators, administrators, and policymakers across the country.

### **Legislative Impetus to Focus on Increasing School Completion for All Students**

Recent legislation has focused national attention on increasing the rate of school completion. The No Child Left Behind Act (NCLB, 2001) holds schools accountable for student progress using indicators of adequate yearly progress (AYP) including measures of academic performance and rates of school completion. Schools are identified as needing improvement if their overall performance does not annually increase, or if identified subgroups do not meet specified criteria.

The use of statewide assessments is one of the primary ways to measure student performance. The *Individuals with Disabilities Education Act* (IDEA, 1997) requires the participation of students with disabilities in standards-based reform and accountability systems. State and local school districts have identified what students should know and be able to do, and have implemented assessments to ensure that students have attained the identified knowledge and skills. In addition, 27 states have implemented or are implementing high stakes assessments, which are used to determine whether students will graduate from school with a regular diploma (Johnson & Thurlow, 2003). The impact of these requirements on the rate of school completion is uncertain, but it is clear that pressure is mounting to develop educational programs that engage students in school and learning, ensure acquisition of academic and social skills necessary for adulthood, and result in high rates of school completion.



## **How are Dropout Rates Measured? What are Associated Issues?**

### **Finding a Common Definition of Dropout: Are We All Talking About the Same Thing?**

The calculation of dropout rates varies according to how the concept is defined. Studies show that a variety of definitions are used (Hammack, 1986; MacMillan, Balow, Widaman, Borthwick-Duffy, & Hendrick, 1990, Thurlow, Johnson, & Sinclair, 2002). Areas contributing to definitional confusion include:

- Variation in grade levels or age of students who can be classified as dropouts. For example, some figures include only tenth through twelfth grades, whereas others include data from ninth through twelfth grades.
- Variation in the length of time that a student is required to miss school before they are considered a dropout (ranges from 15 to 45 days of unexcused absence).
- Variation in the length of the accounting period during which dropout is calculated.
- Exclusion of some groups of students from the calculation of dropout rates (e.g., those who receive special education services).
- Variation in defining which programs count toward enrollment. Some calculations include students enrolled in GED programs, night school, or other alternative programs, and some only include those enrolled in traditional day schools.

In addition, clerical problems and accounting procedures for students as they transfer in and out of programs add to the difficulty of obtaining an accurate picture of the dropout rate. The lack of effective communication and tracking procedures between public and private schools, and within school districts and across districts, leads to misidentification and inaccurate calculations. For students with emotional/behavioral disabilities who change schools often, accurate documentation of exit and entrance into schools over time may be especially challenging (Sinclair, Christenson, Thurlow, & Evelo, 1994).

### **Various Methods of Calculating Dropout Rates**

School districts, states, and national databases also vary in the formulas they use to calculate dropout rates (Coley, 1995; MacMillan, 1991). There are three kinds of dropout rate statistics. These are (a) event, annual, or incidence rate; (b) status or prevalence rate; and (c) cohort or longitudinal rate. Each has a different definition and produces a different rate and slightly different picture of the magnitude of the problem (see Table 1, page 10).

### **Implications of Inconsistency in Defining and Calculating Dropout**

There have been numerous attempts to identify the best way to calculate the dropout rate (National Center for Education Statistics, 2000). When the definition of dropout and the manner in which it is calculated are not consistent, comparisons are difficult to make, and when comparisons are made, interpretations may be faulty. Currently, many states are revising their definitions and methods of calculating dropout, which limits comparability across time. Declines or increases in the longitudinal or cohort dropout rate must be carefully examined to determine whether legitimate comparisons have been made.

Comparing the progress of students with disabilities to their peers without disabilities is especially complicated because the definition of dropout and calculation differ between the Office of Special Education Programs (OSEP) and the National Center for Education Statistics (NCES) Common Core of Data. For example, current OSEP publications (see, for example, US Department of Education, 2001) calculate the dropout rate by dividing the number of students aged 14 and older by the total number of students in the same age group who are known to have left school (i.e., graduated with a standard diploma, received a certificate of completion, reached maximum age for services, died, or dropped out). NCES calculates the dropout rate by dividing the number of 9<sup>th</sup>-12<sup>th</sup> grade dropouts

**Table 1: Calculating Dropout Rates**

Type of Dropout Statistic	Definition	Example	Relative Value
<b>Event Rate</b> (may also be referred to as the annual rate or incidence rate)	Measures the proportion of students who drop out in a single year without completing high school.	Five out of every 100 young adults (ages 15-24 in grades 10-12) enrolled in high school in October 1999 left school before October 2000 without successfully completing a high school program (NCES, 2002).	Typically yields the smallest rate.
<b>Status Rate</b> (may also be referred to as the prevalence rate)	Measures the proportion of students who have not completed high school and are not enrolled at one point in time, regardless of when they dropped out.	In October 2000, 3.8 million young adults were not enrolled in a high school program and had not completed high school. These youth accounted for 10.9% of youth ages 16-24 in the U.S. in 2000 (NCES, 2002).	Yields a rate that typically falls between event and cohort rates.
<b>Cohort Rate</b> (may also be referred to as the longitudinal rate)	Measures what happens to a single group (or cohort) of students over a period of time.	The district percentage of ninth graders in Minneapolis who were reported as dropouts four years later was 35.2% (Minnesota Department of Children, Families and Learning, 2000).	Typically yields the largest rate of dropout.

Source: Adapted from Thurlow, Sinclair, & Johnson, 2002.

by the number of 9<sup>th</sup> -12<sup>th</sup> grade students who were enrolled the year before (NCES, 2002). Although both calculations yield an annual or event dropout rate, NCES specifies that counts be conducted on October 1 (i.e., October 1, 1997 – October 1, 1998) while OSEP allows states to choose their twelve-month reporting period.

**Calculating Graduation Rates**

To complicate matters, dropout rates do not simply or directly translate to an accurate graduation rate. Multiple methods and definitions can result in what appears to be conflicting information. For example, it is possible to have a low rate of dropout based on event or status calculations, and to have a low rate of graduation as well. The formula and parameters (e.g., age, grade, accountability period) used to determine the rate must be carefully considered and explained.

NCLB requires states to define graduation rates in a rigorous and standardized manner (e.g., the percentage of ninth graders who graduate from high school four years later). Furthermore, alternative graduation certificates, such as the General Education Development (GED) program, cannot be counted as equivalent to graduating from high school. Graduation rates must be reported annually to the U.S. Department of Education. In addition, those rates must steadily increase each year, reaching proficient levels by spring 2014. NCLB defines “graduation rate” as the percentage of students, measured from the beginning of high school, who graduated with a regular diploma in the standard number of years (Joftus & Maddox-Dolan, 2003). Variation from this definition must be explained in state accountability plans.

A focus on measuring graduation rates is conceptually linked to recent increased emphasis on the importance of promoting student engagement to enhance school completion. However, due to lack of standardized definitions and methods for computing dropout rates and graduation rates, interpretation must be carefully considered. Until a standard procedure is established and used across districts, states, and national reporting agencies, reports of dropout and graduation rates can be interpreted accurately only when accompanied by explanations of how the numbers were derived.

**Example of an Approved Accountability Plan: New York**

**How graduation rate is defined.** The graduation rate is defined as the percentage of students who have completed high school within four years of their first entry into ninth grade as measured by annual cohort, or for students with disabilities not in a specific grade level, by age 21. Students graduating from state-approved, five-year high school programs that result in a receipt of industry certification in addition to a high school diploma will be counted in the graduation rate. Any student who dropped out or entered a high school equivalency preparation program will be counted as a high school noncompleter.

**How graduation rate is measured.** The graduation rate is measured as the percentage of students who have completed high school within four years of the first entry into ninth grade as measured by annual cohort or, for underage students with disabilities, by age 21. To make AYP, schools must meet or exceed the performance standard or decrease the difference between the previous year's performance and the standard by a set percentage.

Source: Jofus & Maddox-Dolan, 2003.

### What Do We Know About Who Drops Out and Why?

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#### Who Drops Out of School?

Many studies have identified predictors and variables associated with dropout. In recent years, these variables have been categorized according to the extent to which they can be influenced to change the trajectory leading to dropout. Status variables (e.g., socioeconomic standing [SES], disability or ability level, family structure) are difficult and unlikely to change. On the other hand, alterable variables (e.g. attendance, identification with school) are easier to change and can usually be influenced by students, parents, educators, and community members. Alterable variables are the focus of efforts to increase school completion.

*Overview of Status Variables Associated with Dropout* (Macmillan, 1991; Rosenthal, 1998; Rumberger, 1995; Wolman, Bruininks, & Thurlow, 1989). These statements apply to groups of students on average.

- **Age.** Students who drop out tend to be older compared to their grade-level peers.
- **Gender.** Students who drop out are more likely to be male. Females who drop out often do so due to reasons associated with pregnancy.
- **Socioeconomic background.** Dropouts are more likely to come from low-income families.
- **Ethnicity.** The rate of dropout is higher on average for Black, Hispanic, and Native American youth.
- **Native language.** Students who come from non-English speaking backgrounds are more likely to have higher rates of dropout.
- **Region.** Students are more likely to drop out if they live in urban settings as compared to suburban or non-metropolitan areas. Dropout rates are higher in the South and West than in the Northeast region of the U.S.
- **Mobility.** High levels of household mobility contribute to increased likelihood of dropping out.
- **Ability.** Lower scores on measures of cognitive ability are associated with higher rates of dropout.
- **Disability.** Students with disabilities (especially those with emotional/behavioral disabilities) are at greater risk of dropout.
- **Parental employment.** Dropouts are more likely to come from families in which the parents are unemployed.
- **School size and type.** School factors that have been linked to dropout include school type and large school size.
- **Family structure.** Students who come from single-parent families are at greater risk of dropout.

*Overview of Alterable Variables Associated with Dropout* (Macmillan, 1991; Rosenthal, 1998; Rumberger, 1995; Wolman et al., 1989). These statements apply to groups of students on average.

- **Grades.** Students with poor grades are at greater risk of dropout.
- **Disruptive behavior.** Students who drop out are more likely to have exhibited behavioral and disciplinary problems in school.
- **Absenteeism.** Rate of attendance is a strong predictor of dropout.
- **School policies.** Alterable school policies associated with dropout include raising academic standards without providing supports, tracking, and frequent use of suspension.

- **School climate.** Positive school climate is associated with lower rates of dropout.
- **Parenting.** Homes characterized by permissive parenting styles have been linked with higher rates of dropout.
- **Sense of belonging.** Alienation and decreased levels of participation in school have been associated with increased likelihood of dropout.
- **Attitudes toward school.** The beliefs and attitudes (e.g., locus of control, motivation to achieve) that students hold toward school are important predictors of dropout.
- **Educational support in the home.** Students whose families provide higher levels of educational support for learning are less likely to drop out.
- **Retention.** Students who drop out are more likely to have been retained than students who graduate. Using National Education Longitudinal Study data, being held back was identified as the single biggest predictor of dropping out.
- **Stressful life events.** Increased levels of stress and the presence of stressors (e.g., financial difficulty, health problems, early parenthood) are associated with increased rates of dropout.

### **Predictors and Factors Associated with Dropout for Students with Disabilities**

The number of research studies examining correlates and predictors of dropout for students with disabilities is much smaller than the number examining dropout for the general school population. However, the research that has been conducted points to status variables associated with dropout that are similar for both groups of students. Status variables associated with greater likelihood of dropout for students with disabilities on average include low SES, non-English speaking, or Hispanic home background (Wagner et al., 1991). Additionally, students with emotional/behavioral disorders who drop out tend to be older and are more likely to have parents who are unemployed and have less education (Lehr, 1996).

*Alterable variables* associated with dropout have also been identified for students with disabilities, and many are similar to findings for students without disabilities. Alterable variables associated with increased risk of dropout include high rates of absenteeism and tardiness (Zigmond & Thornton, 1985), low grades and a history of course failure (Thompson-Hoffman & Hayward, 1990), limited parental support, low participation in extracurricular activities, alcohol or drug problems (Jay & Padilla, 1987), and negative attitudes toward school (MacMillan, 1991). High levels of school mobility (Sinclair et al., 1994) and retention in grade are also associated with dropout for students with disabilities. One study found that 90% of students with learning disabilities who repeated a grade dropped out (Zigmond & Thornton, 1985).

The level of services received (e.g., amount of time designated for special education service), the way services are delivered (e.g., pull-out or mainstream) and the kinds of services being provided (e.g., counseling, vocational guidance) have also been studied and associated with dropout for students with disabilities (Wagner, 1995). Students with emotional/behavioral disorders were less likely to drop out if they spent more time being mainstreamed, received tutoring services, and were in schools that maintained high expectations of special education students. Lower rates of dropout are also associated with receipt of instruction emphasizing independent-living skills and training for competitive employment (Bruininks, Thurlow, Lewis, & Larson, 1988). In addition, high numbers of school transfers (mobility) and frequent changes in the level of services received have been associated with increased likelihood of dropout (Edgar, 1987; Wagner, 1995).

### **Implications for Designing Interventions**

Despite the extensive list of variables and predictors associated with dropout, none is a reliable predictor of whether a particular student will leave school early. However, the presence of multiple risk factors does increase

the risk of dropout. The challenge lies in using this information to help those students who are most in need of intervention based on efficient and accurate predictors. In a review of 41 interventions, over half based participant selection on two or more criteria associated with dropout (Lehr et al., 2003). The most common referral criterion for eligible participants was history of academic performance, followed by attendance. Referral criteria relying on a small number of predictors is likely to lead to underidentification of students placed at risk of dropping out, and overidentification of other students on track to graduate (Dynarski & Gleason, 2002). Targeting students who are most likely to drop out for intervention is complex. In fact, analysis shows

*[t]he majority of dropouts are not those who seem to be most at risk. That is, although the dropout rate for Blacks is 50 percent higher than for Whites, and twice as high for Hispanics, 66 percent of the actual dropouts are White, while just 17 percent are Black and 13 percent are Hispanic. Moreover, most dropouts are not from broken homes, not poor, and not pregnant. Consequently, if our graduation rate is to climb to 90 percent, it will have to be achieved by putting greater emphasis on retaining students whose background and behavior are not generally thought of as the defining characteristics of students who drop out. (U.S. Department of Education, 2000, p. 1; as cited in Schargel & Smink, 2001)*

Recognizing the difference between variables that educators and others can influence and those that are relatively static is important when designing and implementing interventions to enhance school completion for students with and without disabilities. It makes sense to develop strategies for reducing dropout based on information about alterable variables linked to increased rates of school completion. Promising strategies include targeting dropout-prone students before high school, providing additional support (e.g., guidance, counseling), tutoring, and monitoring indicators of risk to guide intervention. School-related factors positively associated with school performance and completion rates include (a) providing direct, individualized tutoring and support to complete homework assignments, attend class, and stay focused on school; (b) participation in vocational education classes; and (c) participation in community-based work experience programs (Wagner, Blackorby, & Hebbeler, 1993). Factors that are related to better outcomes for students with emotional/behavioral disorders include permitting flexibility in course selection (e.g., offering vocational courses), supporting social integration (e.g., participation in school-affiliated groups), and collaborating with mental health agencies to meet the needs of students (Wagner, 1995).

### **Reasons for Dropping Out and for Staying in School**

Many researchers have used surveys and interviews to gather information about why students drop out of school. These studies typically identify reasons students give for leaving school; these reasons have been characterized as “push” effects and “pull” effects (Jordan, McPartland, & Lara, 1999). Push effects include situations or experiences within the school environment that intensify feelings of alienation, failure, and the desire to drop out. Pull effects include factors that are external to the school environment that divert students from the path leading towards school completion. Reasons for leaving school that have been identified in the literature include problems getting along with teachers, suspension and expulsion, low grades, pregnancy, financial responsibilities, disliking school, caretaking responsibilities, and employment. Students most often cite push factors as reasons for dropping out of school. The decision to drop out most often involves multiple factors (Kortering & Brazier, 1999).

Fewer studies have been conducted on students’ reasons for staying in school. However, the following list has been developed based on a synthesis of information from a variety of studies (Christenson, Sinclair, Lehr, & Hurley, 2000).

- Supportive, nurturing family and home environment
- Interaction with and the involvement of committed, concerned educators and other adults
- Development of perseverance and optimism
- Improved attitude toward school and increased motivation to obtain a diploma
- Positive, respectful relationships between staff and students

- Satisfaction with the learning experience (e.g., social climate, instructional climate, school course offerings, and school rules)
- Relevance of curriculum
- Fair discipline policies

**For Students with Disabilities**

Information from interviews with students with disabilities who have dropped out can be used to increase the holding power of schools. When asked, students with disabilities indicated a desire for instruction in a challenging and relevant curriculum to prepare them for life after school. Lack of a relevant high school curriculum appears repeatedly as a main reason given by students with and without disabilities for dropping out of school or pursuing alternative education services (Guterman, 1995; Lichtenstein, 1993). In addition, student comments from individual interviews suggest factors that might facilitate staying in school. These include changes in personal attitude or effort, changes in attendance and discipline policies, and more support from teachers (Kortering & Braziel, 1999). Recommendations based on student perspectives with respect to keeping students in school included increased positive attitudes toward students from teachers and administrators and improvements in curriculum and instruction (e.g., additional assistance, better teaching, more interesting classes, better textbooks). Students also indicated that their own attitudes play an important role in the decision to remain in school or exit early.



## What Does Current Thinking Tell Us About How to Address Dropout?

### Dropping Out of School is a Process of Disengagement that Begins Early

The decision to leave school is typically not an instantaneous event (Finn, 1993). Many students who drop out are expressing an extreme form of disengagement from school that has been foreshadowed by indicators of withdrawal (e.g., poor attendance) and unsuccessful school experiences (e.g., academic or behavioral difficulties) (Rumberger, 1995). These overt indicators of disengagement are generally accompanied by feelings of alienation, a poor sense of belonging, and general dislike for school (Ekstrom, Goertz, Pollack, & Rock, 1986). The path leading toward school withdrawal begins early. Retrospective studies show the identification of dropouts can be accomplished with reasonable accuracy based on review of school performance (behavior, attendance, academics) during the elementary years (Barrington & Hendricks, 1989).

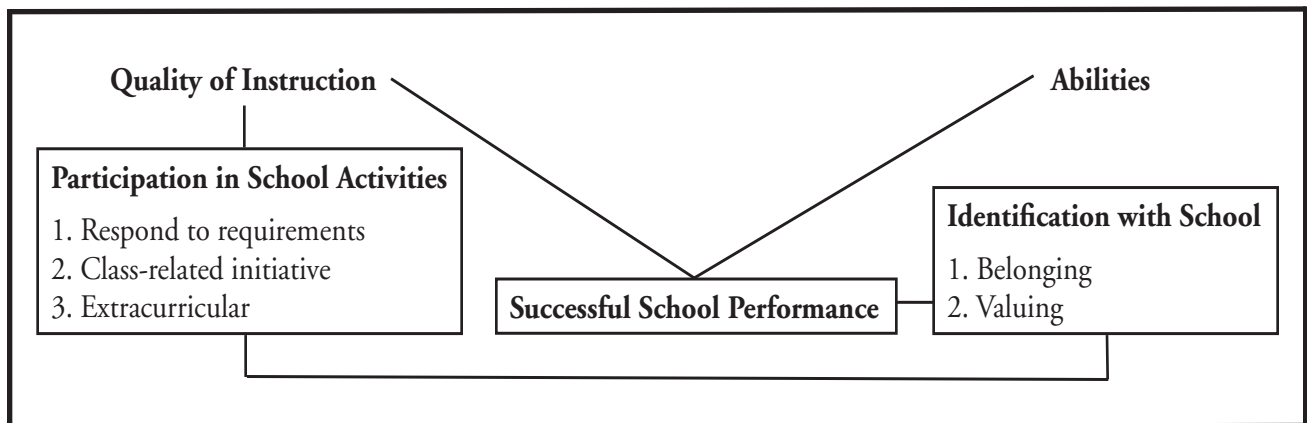
### Influential Theories

Theoretical conceptualizations have helped elucidate the important role of student engagement in school and learning and have drawn attention to key elements of engagement such as student participation, identification, social bonding, and personal investment in learning (Finn, 1993; Maehr & Midgley, 1996; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Many theories have contributed significantly to the development of interventions aimed at preventing dropout and promoting school completion. Finn's (1993) theory has been extremely influential in supporting the notion that school engagement is integral to school completion. His model of dropout prevention suggests students must both actively participate in school and have a feeling of identification with school in order for them to remain in school and graduate (see Figure 1). Student participation includes behavioral indicators such as attending school, being prepared for work, and being involved in extracurricular activities. The psychological indicators of identification with school include the feelings and sense of belonging associated with school engagement. Finn's theory suggests that student participation in activities is directly related to successful school performance, which promotes identification with school.

### Preventing Dropout or Enhancing School Completion?

Although dropout and school completion can be viewed as two sides of a single issue, there are differences in meaning, orientation, and implications for intervention research and practice.

**Figure 1. Finn's Participation-Identification Model of School Engagement**



Source: Christenson et al., 2000.

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*Conceptually, school completion encompasses more than preventing dropout. It is characterized by a strength-based orientation (vs. a deficit orientation), a comprehensive interface of systems (vs. a narrowly defined intervention), implementation over time (vs. implementation at a single period in time) and creating a person-environment fit (vs. a programmatic “one size fits all” orientation). School completion is oriented toward a longitudinal focus, whereby interventions aim to promote a “good” outcome, not simply prevent a “bad” outcome for students and society. (Christenson et al., 2000, p. 472)*

Rather than using a surface approach to increase attendance and temporarily stem the tide of dropout, interventions designed to enhance school completion address the core issues associated with student alienation and disengagement from school. These kinds of interventions address underlying problems and teach strategies and skills students can use to successfully meet academic, behavioral, and psychological demands of the school environment—and complete school.

### **Importance of Student Engagement in School and Learning**

In the past decade, engagement of alienated youth in school and learning has emerged as a key component of prevention and intervention efforts (Grannis, 1994). Interventions supporting student engagement help students develop connections with the learning environment across a variety of domains. Christenson (2002) defines engagement as a multi-dimensional construct involving four types of engagement and associated indicators.

- Academic engagement refers to time on task, academically engaged time, or credit accrual.
- Behavioral engagement includes attendance, avoidance of suspension, classroom participation, and involvement in extracurricular activities.
- Cognitive engagement involves internal indicators including processing academic information or becoming a self-regulated learner.
- Psychological engagement includes identification with school or a sense of belonging.

These indicators of engagement are influenced by the contexts of home, school, and peers. For example, school policies and practices such as a positive school climate or the quality of a teacher-student relationship can affect the degree to which a student is engaged in school. Similarly, the provision of academic or motivational support for learning by parents or family members can enhance students' connection with school and increase success in school. A focus on factors that facilitate engagement is a promising approach to guide the development of effective interventions promoting school completion. More and more studies are recognizing the complex interplay between student, family, school, and community variables in shaping students' paths toward early school withdrawal or successful school completion (Hess & Copeland, 2001; Valez & Saenz, 2001; Worrell & Hale, 2001).

### **What are Key Components of Dropout Prevention Programs?**

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Programs that have been designed to prevent dropout vary widely. Based on an integrative review of effective interventions designed to address dropout (and associated variables) described in the professional literature, Lehr et al. (2003) found that most of these interventions could be categorized according to the following types.

- Personal/affective (e.g., retreats designed to enhance self-esteem, regularly scheduled classroom-based discussion, individual counseling, participation in an interpersonal relations class);
- Academic (e.g., provision of special academic courses, individualized methods of instruction, tutoring);
- Family outreach (e.g., strategies that include increased feedback to parents or home visits);
- School structure (e.g., implementation of school within a school, re-definition of the role of the homeroom teacher, reducing class size, creation of an alternative school); and
- Work related (e.g., vocational training, participation in volunteer or service programs).

The majority of the interventions (71%) included a personal/affective focus. Nearly half (49%) included an academic focus. Most of the intervention programs (73%) included more than one type of intervention. These findings and other research suggest that preventing dropout can be achieved in a variety of ways. Given the vast array of program types, it becomes clear that there is not one right way to intervene. Rather than searching for the perfect program, identification of components that facilitate the effectiveness of interventions may prove to be a more valuable endeavor. Identification of these key components may help to guide the development of interventions, improve the likelihood of successful implementation, and serve as a useful framework for evaluating outcomes.

Researchers note that several components appear to be key to intervention success. Lists of critical components have been generated based on experience, literature syntheses, descriptive retrospective analyses of program implementation, and data-based approaches. However, these components require continued research and systematic implementation to determine the extent to which empirical data accumulates supporting them as essential intervention components (Dynarski, 2001; Lehr et al., 2003). The table below lists key components from several highly regarded sources and shows a significant amount of overlap. The extent to which interventions include these components in their design should be carefully considered.

**Table 2: Key Components of Interventions Designed to Decrease Dropout/Increase School Completion**

The following are based on findings from an evaluation of 20 programs funded by the School Dropout Demonstration Assistance Program (Dynarski, 2001).

- Creating small schools with smaller class sizes;
- Allowing teachers to know students better (building relationships, enhanced communication);
- Provision of individual assistance (academic and behavioral);
- Focus on helping students address personal and family issues through counseling and access to social services; and
- Oriented toward assisting students in efforts to obtain GED certificates.

*Fashola & Slavin (1998)*. Based on a review of six dropout prevention and college attendance programs for students placed at risk.

- Incorporating personalization by creating meaningful personal bonds between students and teachers and among students;
- Connecting students to an attainable future;
- Providing some form of academic assistance to help students perform well in their coursework; and
- Recognizing the importance of families in the school success of their children's achievement and school completion.

*Hayward & Tallmadge (1995)*. Based on evaluation of dropout prevention and reentry projects in vocational education funded under the Cooperative Demonstration Program (CDP) of the Carl D. Perkins Vocational Education Act.

- Smaller, more personal environment;
- Vocational education that has an occupational concentration;
- A formal counseling component that incorporates attention to personal issues along with career counseling and life-skills instruction;
- Formal, ongoing coordination of the academic and vocational components of participants' high school programs;
- A structured environment that includes clear and equitably enforced behavioral expectations; and
- Personal, supportive attention from adults, through mentoring or other strategies.

*McPartland (1994)*. Based on review of dropout prevention programs and interview data from students who dropped out of school.

- Providing opportunities for success in schoolwork (e.g., intensive reading instruction in early grades, tutoring, curriculum modification to increase relevance);
- Creating a caring and supportive environment (e.g., use of adult mentors, expanding role of homeroom teachers, organizing extracurricular activities);
- Communicating the relevance of education to future endeavors (e.g., offering vocational and career counseling, flexible scheduling, and work-study programs); and
- Helping students with personal problems (e.g., on-site health care, availability of individual and group counseling).

*Schargel & Smink (2001)*. Based on a body of work and program database generated by the National Dropout Prevention Center.

- *Early intervention* includes comprehensive family involvement, early childhood education, and strong reading and writing programs.
- *Basic core strategies* promote opportunities for the student to form bonding relationships and include mentoring/tutoring, service learning, alternative schooling, and out-of-school enhancement programs.
- *Making the most of instruction* includes providing opportunities for professional development, exploring diverse learning styles, using technology to deliver instruction, and providing individualized learning.
- *Making the most of wider communities* includes linking with the wider community through systemic renewal, community collaboration, career education and school-to-work programs, and conflict resolution and violence prevention programs to enhance effective interpersonal skills.

*Thurlow, Christenson, Sinclair, Evelo, & Thornton (1995)*. Based on identification of key components across three interventions designed to increase engagement and school completion for middle school youth with learning and emotional/behavioral disabilities funded by the Office of Special Education Programs.

- Persistence plus (persistence in maintaining a focus on student educational progress and engagement with school; continuity in recognizing and attending to student needs across years via a person connected with the student; consistency in delivery of a message across adults—do the work, attend classes, be on time, express frustration in a constructive manner, stay in school);
- Monitoring (target the occurrence of risk behaviors, regularly collect data and measure effects of timely interventions);
- Relationships (building a variety of relationships to strengthen student success in school; adult-student, as well as home-school-community);
- Affiliation (fostering students' connections to school and sense of belonging to the community of students and staff); and
- Problem-solving skills (developing capacity of students to solve problems and enhancing skills to meet the demands of the school environment).

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## **Part II**

### **How Were Sample Intervention Programs Selected?**

- **The Need for Examples of Effective Interventions**
- **Search Process & Initial Criteria**
- **Raising the Bar**
- **Final Parameters for Selection**
- **Abstracts: Coding & Definitions**



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## **The Need for Examples of Effective Interventions**

The need for examples of effective interventions that can be used as guides to assist educators, administrators, and policymakers in implementing school-based dropout interventions is clear. While there have been many reports describing promising dropout interventions, only a small portion of these offer conclusions that are based on methodologically sound analysis. It is from this list that examples of interventions were selected for inclusion in this document. It is important to note that *this is not a comprehensive list of effective interventions*. The interventions described serve as examples that show some evidence of effectiveness and meet criteria (described below) for inclusion in this document. Given the nature of applied research and the number of variables that cannot be controlled, exact replication of any program is difficult. The reader is encouraged to carefully consider the population for whom each intervention was successful and the contextual variables that may have influenced effectiveness. Each of the examples must be considered in relation to the needs, demographics, resources, and other circumstances of local schools or districts. Rather than rate the merits of each intervention, information is intended to facilitate critical review of the intervention programs/strategies by those implementing such programs. References and contact information are provided for those wanting more detailed information.

### Search Process & Initial Criteria

The identification process for strategies and programs to include as examples in this NCSET *Essential Tool* occurred in two stages. First, an initial list of programs to review was generated from a search that relied on information from four sources. Programs were included in the initial pool if they

- Focused on dropout prevention;
- Appeared to include evidence of effectiveness using a research or evaluation design; and
- Results were published (or the study was completed) between 1988 and 2003.

The sources used to conduct the initial search are described below.

1. *Integrative review of prevention and intervention studies addressing dropout described in professional journals* (Lehr et al., 2003). Authors of this review conducted computerized searches of an in-house database of more than 600 documents and online databases including Educational Resources Information Center (ERIC), Psychological Abstracts, and Education Abstracts. Search terms linked to dropout and school completion included “dropout prevention” along with the descriptors “school engagement,” “school completion,” “achievement,” and “disabilities.” A list of more than 300 unduplicated citations from 1980 to 2001 was compiled.

The list of articles was further refined using the following criteria: (a) was published in a professional journal, (b) focused on a dropout prevention or intervention program, and (c) included impact data on the described program. Studies with an intervention focus and an emphasis on impacting truancy or dropout were included. General summaries of the literature, nonexperimental studies, and policy reports were omitted. Additional articles were collected through a review of references cited in rejected articles and a computer search (using the same key terms) to identify articles published during the coding period. Forty-five studies were included in the final review.

2. *Literature search conducted by What Works Transition Research Synthesis Project*. This current project (funded by OSEP) is engaged in a review and synthesis of research conducted in the past 20 years. The project, based at the University of Colorado, works in collaboration with the Evidence for Policy and Practice Information Co-ordination Centre at the University of London and the Campbell Collaboration at the University of Pennsylvania. *What Works* plans to produce several research-based syntheses in the context of transition for youth with disabilities including academic outcomes, dropout prevention (“risk and resiliency”), and transition outcomes.

After conducting a systematic search of the literature using ERIC, Psych Info, and Medline databases for studies on dropout prevention and students with disabilities, *What Works* provided a list of 232 references and associated abstracts. A review of the abstracts from this list yielded 10 articles that were selected for further review.

3. *Web-based search for documents on dropout intervention and prevention produced by the Office of Special Education Programs (OSEP), Employment and Training Administration (ETA), and the Institute of Education Sciences (IES, formerly the Office of Educational Research and Improvement, or OERI)*. Project staff conducted a Web-based search for dropout intervention and prevention programs funded by OSEP, ETA, and IES. The key terms “dropout intervention,” “dropout prevention,” and “dropout program” were employed to search each of these federal government Web sites. This search collected additional relevant documents describing empirical studies of dropout intervention. Titles and/or abstracts of nearly 200 documents were reviewed to determine their relevance for further review. Abstracts referring to intervention programs and data on effectiveness were obtained for further examination.

4. *A search of ERIC documents for reviews of dropout interventions*. The authors of this document also conducted a search of ERIC documents for comprehensive reviews of dropout intervention and prevention programs



completed between 1988 and 2003. A search was conducted using the key terms “dropout program,” “review,” and “data,” yielding 69 documents. The abstracts of these reviews were carefully considered. Several promising reviews that appeared relevant were obtained. These documents were then examined to determine if they included evidence of effectiveness and, if so, were added to the list of initial references for further consideration.

### Raising the Bar

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After generating a pool of interventions that met initial selection criteria, additional criteria for inclusion in this document were applied. Use of these additional criteria “raises the bar” by selecting only those interventions clearly supported by empirical evidence (see Table 3 on page 29 for desirable components). Many publications describe and recommend effective or model programs. However, upon closer examination, many of these interventions were not supported by research or evaluation data and/or did not measure enrollment status. Furthermore, quality research must be conducted in an objective manner, and results should be tested by other researchers.

Policies directed at implementing large scale programming with significant associated costs ought to be based on research that is conceptually and methodologically sound. Sometimes, programs are promoted despite a lack of supporting data. This project’s review of the literature yielded, for example, that a program was mandated despite the fact that data showed an *increase* in truancy for high school students who were in the program and *no evidence of improved graduation rates* ([http://www.edpriorities.org/Pubs/Opinion/Letters95/Let95\\_Lernfare.html](http://www.edpriorities.org/Pubs/Opinion/Letters95/Let95_Lernfare.html)). It is the responsibility of educators, administrators, and policymakers to require that claims of success be supported by adequate research before adopting those strategies or interventions. We used rigorous criteria to select interventions for inclusion in this document because the implications of the decisions being made to address school completion for students at risk of school failure are important. The stringent criteria excluded some *promising* (but not proven) programs. The selection process may also have unintentionally excluded some programs that would have met the criteria because the available documents did not include the necessary information.

## **Final Parameters for Selection**

The second stage of the identification process further refined the list of programs to be included as examples of intervention programs. Final criteria for selection are listed below.

- Focus on dropout prevention/intervention (manipulation of independent variable).
- Measurement of an outcome variable tied to enrollment status (e.g., graduation, current attendance in school, dropout rate).
- Evidence of effectiveness using a research design (preferably randomized control or trial—but not exclusively) that yields statistically significant results in favor of the intervention on one or more dependent variables, including enrollment status.
- Results published in a professional journal or comprehensive government report (to ensure critical review of the intervention and its accessibility to interested users).

### **Abstracts: Coding & Definitions**

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The categories for describing interventions were selected based on a review of coding manuals including the *Procedural and Coding Manual for Identification of Evidence-based Interventions* (Kratochwill et al., 2002), and guidelines for examining the conceptual and methodological quality of intervention (Crane, 1998). In addition, compilations of other evidence-based programs (e.g., *Safe and Sound: An Educational Leader's Guide to Evidence-Based Social and Emotional Learning Programs*, CASEL, 2002) were examined. Coding areas from these sources were considered and used to derive categories suitable for this document. The categories selected and subsequent coding is intended to be descriptive rather than evaluative.

This document includes an abstract of each sample intervention and a chart summarizing information across interventions. The contact person listed for each intervention reviewed the chart and relevant abstract for accuracy. Table 3 lists the information that is included in the abstract and/or the summary chart.

**Table 3: Abstracts: Coding & Definitions**

<b><i>Intervention Program or Strategy.</i></b> The title of the program is listed. In cases where the intervention did not have a formal title, the type of program is listed using summary descriptors.
<b><i>Background.</i></b> History and purpose of the intervention is briefly described.
<b><i>Intervention Description.</i></b> The intervention is briefly described.
<b><i>Outcome Variables.</i></b> Outcome variables that were significantly impacted are listed.
<b><i>Population and Setting.</i></b> The population intended for the intervention is briefly described with regard to grade level and any targeted subgroups (e.g., students with disabilities). In addition, the setting in which the intervention has been implemented is described (e.g., urban).
<p><b><i>Evidence of Effectiveness.</i></b> Research showing evidence of effectiveness is described. The availability of the following information is noted.</p> <ul style="list-style-type: none"> <li>• <b><i>Research design.</i></b> Three types of research design are identified. These include: (a) studies incorporating random selection and assignment of participants to two or more groups; (b) studies incorporating random assignment of participants (no random selection) to treatment or control groups; and (c) pre-post studies including measures and comparisons of outcome data before and after an intervention with a single group.</li> <li>• <b><i>Statistical significance.</i></b> A mathematical determination that indicates the presence of an effect that is unlikely to have resulted from chance alone. When key outcomes are statistically significant, the intervention/program is assumed to have had an effect.</li> <li>• <b><i>Effect size.</i></b> This indicator of effectiveness measures the amount of impact attributed to the program or intervention, and is not influenced by sample size.</li> <li>• <b><i>Durability of effects.</i></b> Evidence indicating program effects persisted after the termination of the intervention.</li> <li>• <b><i>Treatment integrity.</i></b> Information indicating whether the treatment or intervention was implemented as specified.</li> <li>• <b><i>Sample size.</i></b> The sample size used in the research studies is specified.</li> <li>• <b><i>Use of an external evaluator.</i></b> The use of an evaluator external to program development and implementation is noted.</li> <li>• <b><i>Multiple sites or studies.</i></b> Implementation of the program in more than one setting or more than one evaluative study is noted.</li> </ul>
<b><i>Implementation Considerations.</i></b> Practical considerations for implementation are described in terms of support personnel required, training, additional resources, and the estimated duration of the intervention. In addition, information about the availability of a manual or training is provided. When available, information about cost is also included.
<b><i>Contact Information.</i></b> Names and contact information of individuals associated with the interventions (and in some cases Web addresses) are listed.
<b><i>References.</i></b> Additional references regarding the interventions are included.



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# Part III

## What Works in Dropout Prevention?

- **Summary Chart of Sample Dropout Intervention Programs**
- **The Decision-Making Process**
- **Sample Dropout Intervention Programs: Abstracts**
  - Achievement for Latinos through Academic Success (ALAS)
  - Career Academies
  - Check & Connect
  - Coca-Cola Valued Youth Program
  - Interpersonal Relations/Personal Growth Class
  - Ninth Grade Dropout Prevention Program (NGP)
  - Preventing School Dropout Beginning in Elementary Grades
  - Project COFFEE
  - School Transitional Environment Project (STEP)
  - Support Center for Adolescent Mothers (Family Growth Center)
  - Teen Outreach Program (TOP)

**Summary Chart of Sample Dropout Intervention Programs**

<i>Intervention Program/ Strategy</i>	<i>Intervention Description Outcome Variables</i>
<b>Achievement for Latinos through Academic Success (ALAS)</b>	A collaborative approach involving the student, family, school, and community. Strategies include problem-solving training, counseling, attendance monitoring, increased feedback to parents, parent training in school participation, and increased awareness and use of community resources. <b>Outcomes:</b> dropout, absenteeism, on track to graduate, credit accumulation, achievement
<b>Career Academies</b>	Employs a combination of career and academic training for students considered at-risk. The focus of career academies varies (e.g., health, technology). <b>Outcomes:</b> grade point average, attendance, credits, retention, courses passed
<b>Check &amp; Connect</b>	Promotes student engagement via a monitor/mentor who maintains regular contact with the student, family, and teachers. Students receive basic or intensive interventions based on monitoring risk factors. <b>Outcomes:</b> student engagement, credit load, enrollment status, assignment completion, on track to graduate
<b>Coca Cola Valued Youth Program</b>	Helps to build the self-esteem and self-concept of at-risk youth by giving them the responsibility of being tutors to younger children. <b>Outcomes:</b> reading grades, self-esteem, attitude/school, self-concept, dropout
<b>Interpersonal Relations/ Personal Growth Class</b>	Focuses on both drug use and dropout. Emphasizes study- and decision-making skills training as well as utilizing peer tutors and experiential learning. <b>Outcomes:</b> drug use, grade point average, self-esteem, peer relations, school bonding, achievement, dropout, credits earned, attendance
<b>Ninth Grade Dropout Prevention Program (NGP)</b>	Schools design interventions to meet academic needs, create a caring atmosphere, and provide relevant and challenging curriculum. Utilizes strategies such as an orientation program, peer tutoring, and small class size and builds relationships between home and scho <b>Outcomes:</b> dropout, attendance

Note. See page 24 for definitions of terms. See individual program abstracts for additional information.

<sup>a</sup> School level: E = elementary; M/J = middle school/junior high; HS = high school

<sup>b</sup> Subgroup: H/L = Hispanic/Latino; SD = students with disabilities; AR = at risk; M = male; F = female; NA = Native American; NS = Not specified

<sup>c</sup> Setting: U = urban, R = rural, S = suburban



Population/ Setting			Evidence of Effectiveness									Implementation					FFI	
School level <sup>a</sup>	Subgroups <sup>b</sup>	Setting <sup>c</sup>	Research design <sup>d</sup>	Statistical significance <sup>e</sup>	Effect size <sup>f</sup>	Durability of effects <sup>g</sup>	Treatment integrity <sup>h</sup>	Sample size	Use of external evaluator	Multiple sites or studies	Support personnel required	Teacher/staff training	Additional resources	Duration requirement	Manual or training available	Cost information available	Contact information	References
M/J	H/L SD AR	U S	NRA	Y	N	Y	N	286	N	Y	Y	Y	Y	2 yrs	Y	N	Y	Y
HS	AR	U	NRA	Y	Y	Y	Y	27,490	Y	Y	Y	Y	Y	3 yrs	Y	Y	Y	Y
E M/J HS	SD AR	U S	RA	Y	N	Y	N	94 366 149 363	N	Y	Y	Y	N	2 yrs	Y	Y	Y	Y
M/J HS	H/L AR	U S	NRA	Y	N	Y	N	133	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
HS	AR	U	NRA	Y	Y	N	Y	264/ 259	N	N	Y	Y	N	½ yr	Y	Y	Y	Y
HS	N	R	NRA	Y	N	Y	Y	375	Y	Y	Y	Y	Y	1 yr	N	N	Y	Y

<sup>d</sup> Research design: RA = comparisons groups with random assignment; NRA = comparison groups without random assignment (e.g., matched); PREPO = pre-post comparisons

<sup>e</sup> Statistical significance: Y = Key outcomes are statistically significant and relevant statistics are reported.

<sup>f</sup> Effect size: Y = Effect sizes are calculated and reported.

<sup>g</sup> Durability of effects: Y = Program effects have been measured at least one year after termination of the intervention.

<sup>h</sup> Treatment integrity: Y = Procedures for measuring integrity of implementation are reported.

## NCSET Essential Tools

<i>Intervention Program/ Strategy</i>	<i>Intervention Description Outcome Variables</i>
<b>Preventing School Dropout Beginning in Elementary Grades</b>	Seeks to reduce student disruptiveness through social and problem-skills training to prevent later dropout. Incorporates a parent training component as well. <b>Outcomes:</b> level of disruptiveness, grade retention, dropout
<b>Project COFFEE</b>	Offers individualized instruction through an alternative occupational education program. Addresses the academic, social, emotional, and occupational needs of students at high risk for dropout. <b>Outcomes:</b> attendance, grade point average, dropout
<b>School Transitional Environment Project (STEP)</b>	Intended to help students during the transition period from one school to another. Alters the environment of the school, modifies the role of the homeroom teacher, and works to enhance communication between home and school. <b>Outcomes:</b> dropout, grade point average, absenteeism, academic environment
<b>Support Center for Adolescent Mothers (Family Growth Center)</b>	Created for first-time mothers to decrease dropout and discourage repeat teen pregnancies. Incorporates a significant community component. <b>Outcomes:</b> dropout, pregnancy
<b>Teen Outreach Program (TOP)</b>	Designed to prevent dropout and teen pregnancy through volunteer and educational experiences and discussion of life-skills topics using the Teen Outreach Curriculum. <b>Outcomes:</b> suspension, dropout, pregnancy, problem behaviors, course failure

Note. See page 24 for definitions of terms. See individual program abstracts for additional information.

<sup>a</sup> School level: E = elementary; M/J = middle school/junior high; HS = high school

<sup>b</sup> Subgroup: H/L = Hispanic/Latino; SD = students with disabilities; AR = at risk; M = male; F = female; NA = Native American; NS = Not specified

<sup>c</sup> Setting: U = urban, R = rural, S = suburban

Population/ Setting			Evidence of Effectiveness								Implementation						FFI	
School level <sup>a</sup>	Subgroups <sup>b</sup>	Setting <sup>c</sup>	Research design <sup>d</sup>	Statistical significance <sup>e</sup>	Effect size <sup>f</sup>	Durability of effects <sup>g</sup>	Treatment integrity <sup>h</sup>	Sample size	Use of external evaluator	Multiple sites or studies	Support personnel required	Teacher/staff training	Additional resources	Duration requirement	Manual or training available	Cost information available	Contact information	References
E	M AR	U	RA	Y	Y	Y	Y	149	N	Y	Y	Y	N	2 yrs	Y French	N	Y	Y
HS	NA AR	U S R	RA	Y	N	Y	N	NA	Y	Y	Y	T B D	Y	4 yrs	N	N	Y	Y
M/J HS	NS	U S R	NRA	Y	N	Y	Y	1,965	N	Y	Y	Y	N	1 yr	N	Y	Y	Y
M/J HS	F AR	U	NRA	Y	Y	Y	Y	88	N	N	Y	Y	Y	NS	Y	Y	Y	Y
M/J HS	AR	U	NRA	Y	N	Y	Y	1,487	N	Y	Y	Y	Y	1 yr	N	Y	Y	Y

<sup>d</sup> Research design: RA = comparisons groups with random assignment; NRA = comparison groups without random assignment (e.g., matched); PREPO = pre-post comparisons

<sup>e</sup> Statistical significance: Y = Key outcomes are statistically significant and relevant statistics are reported.

<sup>f</sup> Effect size: Y = Effect sizes are calculated and reported.

<sup>g</sup> Durability of effects: Y = Program effects have been measured at least one year after termination of the intervention.

<sup>h</sup> Treatment integrity: Y = Procedures for measuring integrity of implementation are reported.

### **The Decision-Making Process**

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Improving the graduation rate for students at risk of school failure is receiving national attention. The No Child Left Behind Act has raised expectations and added new accountability requirements that must now be addressed. Information on effective research-based interventions and practices must be systematically used to help improve the graduation rate of all students. The following sample interventions represent diverse approaches to addressing the problem of dropout and promoting school completion. Many of the interventions target alterable variables, and many focus on addressing the protective factors that can enhance school completion. For example, the interventions in this section focus on increasing students' sense of belonging in school, fostering the development of relationships, improving academic success, addressing personal problems through counseling, providing skill-building opportunities in behavior, teaching social skills, etc. The diversity of successful approaches reflects the complexity of the dropout problem and the need to tailor approaches to local circumstances.

As McPartland (1994) cautions, implementing proven models, programs, or strategies is not a simple procedure. Those who are considering implementing existing programs must consider the degree to which basic tenets of the intervention program are compatible with the underlying philosophy, needs, and resources in the school or district where the program will be implemented (Stringfield, 1994). Additionally, the need for support with regard to implementation is critical to the success of any intervention program or strategy. Training, staff development, and planning time must be carefully considered. It is also critical to conduct ongoing evaluations of intervention effectiveness and make modifications as needed.

This manual provides sample solutions to the problem of dropout that have been evaluated and show evidence of success. The examples are intended to stimulate thinking and help guide intervention efforts. For more specific information on each intervention, consult the references or follow up with the contact provided at the end of each summary.

## Sample Dropout Intervention Programs: Abstracts

### ACHIEVEMENT FOR LATINOS THROUGH ACADEMIC SUCCESS (ALAS)

**Background:** Achievement for Latinos through Academic Success (ALAS) was one of three projects that received funding in 1990 from the Office of Special Education Programs to address the problem of dropout for students with disabilities. The project focused on preventing dropout in high-risk middle school and junior high Latino students through involvement with students and their families, the school, and the community.

**Intervention Description:** ALAS was developed to prevent high-risk Latino students with and without disabilities from dropping out of school. The model uses a collaborative approach involving the student, family, school, and community. Fundamental aspects of the program in each of four areas are listed below.

- Students receive social problem-solving training, counseling, increased and specific recognition of academic excellence, and enhancement of school affiliation.
- Schools are responsible for providing frequent teacher feedback to students and parents and attendance monitoring. In addition, schools are expected to provide training for students in problem-solving and social skills.
- Parents of program participants receive training in school participation, accessing and using community resources, and how to guide and monitor adolescents.
- Collaboration with the community is encouraged through increased interaction between community agencies and families. Efforts to enhance skills and methods for serving the youth and family are also implemented.

**Participants & Setting:** This program targeted Latino middle or junior high students who were considered to be at high risk of school failure. The program particularly focused on Mexican-American students from high-poverty neighborhoods who had learning and emotional/behavioral disabilities. Students selected for participation were either (a) students with active Individual Education Programs (IEPs) and an identified learning disability or severe emotional/behavioral disability, or (b) students who did not have IEPs, but who exhibited characteristics placing them at-risk for dropping out of school. Students were required to be able to speak English to participate in the program. ALAS has been used in urban and suburban settings.

**Implementation Considerations:** Leaders of training sessions for parents and students are required, as are teachers willing to provide extensive and frequent feedback to families. Community liaisons are also necessary to facilitate communication between school, families, and community resources. A program coordinator is used to oversee all aspects of the program and ensure that everything is running smoothly.

**Cost:** No information was identified in the available material.

**Evidence of Effectiveness:** Three cohorts of students began receiving the ALAS intervention in seventh grade. The first cohort of students received the intervention for three years. Treatment outcomes for students in ninth grade indicated program participants who had IEPs had significantly lower dropout rates compared to the IEP control group. In addition, students who received the intervention and who were in the program longer had lower dropout rates than IEP participants who began in the second year of implementation. When comparing the high-risk, non-IEP program participants to high-risk, non-IEP nonparticipants, the ALAS students had much lower dropout rates (2.2% compared to 16.7%). In general, this study also found that program participants had lower rates of absenteeism, lower percentages of failed classes, and a higher proportion of credits (on track to graduate) when compared to nonparticipants.

Follow-up data were also collected for a cohort of students in eleventh grade. Results showed a higher proportion of students were enrolled in school as compared to students who were not in ALAS. In order for optimal re-

sults, the authors of the study advocate for sustained intervention over time (perhaps until graduation), especially given the risk characteristics of this population targeted for intervention.

**Manual or Training Available:** A bi-lingual trainer is available who can provide on-site training to school and community personnel. Please contact Magda Neil at (818) 957-2742.

**References:**

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## CAREER ACADEMIES

**Background:** The first career academy was created in 1969 in Philadelphia and was called the *Electrical Academy*. It was implemented at the Thomas Edison High School, which at the time had the highest dropout rate in the city. By the mid-1990s, there were 29 academies in the Philadelphia schools and several in Pennsylvania. In the early 1980s, the idea of career academies was adopted in California, where there are now nearly 300 programs supported by state grants and hundreds of others operating through local support. In California, the state-supported career academies are known as California Partnership Academies.

Since their original implementation in Philadelphia, career academies have been replicated in many places. Experts estimate there are between 2,000 and 3,000 nationally. While the model was originally geared toward lower income students, it is now widely used with a cross section of students in high school, and as opposed to simply preventing dropouts, it is intended to promote both college and career preparation.

Variations on the model have been developed since the first career academy was established. For example, a similar model was implemented in Michigan in which students spent half the day at their home high school for academic classes and half the day in a vocation-technical center. Results of the longitudinal study on program effectiveness indicated that participants had a significant decrease in dropout rates.

**Intervention Description:** The purpose of the career academy model is to restructure schools in a way that dropout rates will be reduced, student performance will improve, and students will gain better skills for college and careers. Fundamental elements of the model include the incorporation of academic and technical skills, small-size classes, and collaboration among teachers. Other important features include creating a close, family-like atmosphere and establishing employer and community partnerships. Parental involvement and support is also strongly encouraged.

The three-year program begins with students applying to an academy their freshman year. The academies are designed as schools-within-schools, with participants attending several academic- and career-themed classes (e.g., English, social studies, science) together. Each academy has a specific career focus (e.g., media, business technology, health) that it pursues through both academic and career classes. Cohorts are typically small, with only 50-100 students admitted each year. Students in academy classes may hear guest speakers from local businesses or participate in field trips to nearby workplaces and colleges. During their junior year, students are matched with mentors from local employers who serve as career-related “big brothers and sisters.” After their junior year, students who are performing well enough to be on track for graduation are placed in summer or part-time school-year jobs. Students must submit résumés, complete applications, and participate in interviews, just as would any other candidate. Participating companies are responsible for hiring decisions.

**Participants & Setting:** The targeted population is typically urban high school students in grades 10-12, although some schools extend the program to students in grades 9-12 and some limit it to grades 11-12. Although a few high schools aim for low- or high-performing students, those who participate usually represent a cross section of the high school. In typical inner-city settings many program participants are African-American and Latino, are often from low-income families, and are likely to have poor attendance and grades. Students are recruited for participation, but must apply and voluntarily attend. In the California state-supported academies, half the participants must meet at least three of the following criteria: irregular attendance, past record of underachievement, low motivation, and/or economic disadvantage. The other half do not have to meet these criteria.

**Implementation Considerations:** Teachers typically request to participate in the program and must be willing to work with other teachers and a group of students interested in the career field. The teachers in each academy should have the same planning period and meet regularly to work on program activities and curriculum, coordinate with employer partners, meet with parents, and discuss student progress. Each academy is headed by a lead teacher in addition to having a steering committee involving employers and higher education partners who oversee the program. The partners also provide speakers, field trip sites, mentors, and internships.

**Cost:** There are no firm estimates for the cost of implementing a career academy. Estimates vary depending on which elements of the approach are included. One estimate in California was that it adds approximately \$600 per student per year. Support for career academies typically comes from several sources: outside grants, the state (in California and a few other states), the district, and participating employers and community agencies. It has been estimated that the lifetime social *benefit* of saving each student dropout (in terms of welfare and unemployment costs) is about \$86,000 while the social *cost* is \$41,000, for a net benefit of \$45,000 per student.

**Evidence of Effectiveness:** Several studies have examined the effectiveness of career academies. Overall, the findings of these studies indicate that on average career academies reduce the rate of school dropout and increase attendance, credits earned, grade-point averages, and graduation rates. One study also indicated increased college attendance and completion rates, in comparison with similar students from the same district when matched prior to academy entry.

One longitudinal study that examined outcomes for 11 academy programs in California found that academy participants performed better overall than nonacademy students (although three of the 11 sites produced inconclusive results). The next year, a follow-up study examined the same 11 programs and found that high school outcomes (e.g., grade-point average, credits earned, and courses passed) were generally positive for academy students when compared to matched comparison groups. It was also noted that academy students experience their biggest academic gains in their first year of the program.

Another study looked at the effectiveness of Junior Reserve Officers Training Corps (JROTC) programs, which utilize the traditional career academy model with the addition of requiring students to enroll in the JROTC program. Results indicated that program participants had significantly higher grade-point averages and significantly lower rates of absenteeism when compared to comparison subjects.

Additionally, data provided for 42 of the 43 state-supported academies in California for the 1995-96 school year show program participants had lower rates of school dropout and higher rates of attendance than nonparticipants.

A national longitudinal study of ten academies using a control group design failed to find many of these positive outcomes. It did, however, find a more positive learning climate that both academy students and teachers preferred to the regular high school structure. It also found statistically significant gains in employment outcomes four years after high school. But it did not find statistically significant gains in attendance, credits, grades, graduation rates, or test scores.

Overall, most studies have shown that career academies improve student motivation, some types of academic performance, and employment outcomes.

**Manual or Training Available:** There are several organizations that provide support for career academies, including:

- The Career Academy Support Network (CASN) at the University of California, Berkeley
- The Center for Research on the Education of Students Placed At-Risk (CRESPAR) at Johns Hopkins University in Baltimore
- The National Academy Foundation (NAF) in New York City
- The National Career Academy Coalition (NCAC) in Philadelphia and Washington, D.C.

Each of these organizations offers a variety of conferences, materials, and professional development services.

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California Partnership Academies (CPA)  
Web site: <http://www.cde.ca.gov/ci/gs/hs/cpagen.asp>

The Web site for the Career Academy Support Network (CASN) at the University of California, Berkeley (<http://casn.berkeley.edu>) offers a national directory of career academies, a variety of free handbooks and guides, an online inquiry service, and information on the other organizations listed above (and many others).

### CHECK & CONNECT

**Background:** Check & Connect was developed in 1990 at the University of Minnesota's Institute on Community Integration with input from researchers, practitioners, parents, and students. The model was originally funded by the U.S. Department of Education, Office of Special Education Programs and was part of three projects addressing the problem of dropout for students with emotional/behavioral disabilities.

**Intervention Description:** Check & Connect is a model designed to encourage student engagement in school and learning through a comprehensive approach. Fundamental elements of the model include relationship building, routine observation of warning signs of withdrawal, individualized intervention, promotion of problem-solving skills, and encouragement of students' participation in school activities. These key features are carried out through an individual referred to as a monitor, who serves essentially as a mentor, case manager, and advocate.

As the name of the model suggests, Check & Connect consists of two main components: checking and connecting. The *check* component of the model involves checking on indicators of student engagement such as attendance, social/behavioral performance, and educational progress. These variables are observed and recorded regularly on a monitoring sheet. The *connect* component incorporates both basic and intensive interventions designed to maximize limited resources. All targeted students obtain basic intervention, which includes providing information about the Check & Connect model to students and families. It also involves conversations with each student about his/her progress in school and use of problem-solving strategy to address problems. Intensive interventions, on the other hand, are provided for students identified as exhibiting signs of withdrawal and may include providing tutoring services, facilitating meetings between home and school, linking with community resources, or assisting with the development and implementation of behavioral interventions.

In addition, family outreach is utilized in the Check & Connect model to encourage communication and collaboration between the home and school. Monitors implement a variety of strategies, such as telephone calls, home visits, and meetings to build relationships with families and increase parental participation in the education process.

**Participants & Setting:** While Check & Connect was first created for urban middle school youth with behavioral and learning challenges, it has been replicated for students with and without disabilities in grades K-12. Students are referred to the program based on alterable warning signs of school withdrawal, such as academic performance, attendance, and emotional/behavioral problems. Schools in urban and suburban settings have utilized Check & Connect.

**Implementation Considerations:** Monitors are key to the Check & Connect model and work to promote student engagement. They are responsible for assessing student levels of engagement and implementing student-focused interventions. Preferably, monitors work with the same students over a period of several years. Qualifications for a monitor include: determination, belief that all children have abilities, readiness to work with families employing a nonblaming method, advocacy and organizational skills, and the capability to work independently in various settings. Individuals who serve as monitors characteristically possess a bachelor's degree in a human-services area and have some experience working with children and families. Weekly supervision of monitors and staff development is provided by project personnel.

**Cost:** Estimates suggest the cost of implementing the Check & Connect model is approximately \$1,100 per student.

**Evidence of Effectiveness:** Four longitudinal research studies have been conducted on Check & Connect. Overall outcomes have yielded decreases in truancy and dropout rates, as well as increases in accrual of credits and school completion.

The original pilot was carried out from 1992 to 1995 and involved students with learning and emotional/behavioral disabilities from grades 7 to 9. Results from this research indicated that at the end of ninth grade, more youth in the treatment group were in school and on track to graduate than similar students assigned to the control group.

Another Check & Connect project began in 1996 and concluded in 2001. Participants included youth with emotional and behavioral disabilities in grades 9 to 12. Outcomes from the study revealed that more students in the participant group were in school as of June 2000 than students in the control group. In addition, more students in the participant group completed school or were within one year of completing as of June 2000 than students in the control group.

Check & Connect was also implemented with students in grades K through 6 from 1997 to 2002, and these youth were followed up through the secondary grades. Individuals with and without disabilities and their families were involved in the research project. After two years with Check & Connect, the percent of students present and arriving to school on time increased dramatically.

Additionally, the School Success Truancy Intervention project implemented Check & Connect for youth with and without disabilities from ages 11 to 17. Outcome indicators of the project's impact include a reduction of student absences and an increase in the percentage of students who were present in school at least 95% of the time after two years with Check & Connect.

*Manual or Training Available:* A manual, *Keeping Kids in School: Using Check & Connect for Dropout Prevention*, describes the program and provides sample monitoring sheets. It is available through the Institute on Community Integration, University of Minnesota, 150 Pillsbury Drive S.E., Minneapolis, MN, 55455, 612-624-4512.

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## COCA-COLA VALUED YOUTH PROGRAM

**Background:** The Coca-Cola Valued Youth Program (VYP) was created in 1984 by the Intercultural Development Research Association with funding from Coca-Cola USA. It was originally used in five school districts in San Antonio, Texas, from 1984 to 1988. The model is currently being replicated nationally and internationally through support from the Coca-Cola Foundation, various other foundations, and through funds provided through a district's own initiative.

**Intervention Description:** By carrying out the VYP creed that "all students are valuable; none are expendable," VYP has helped more than 14,000 students stay in school. The premise of the program is that secondary students at risk of dropping out serve as tutors of elementary students who have also been identified as being in at-risk situations. Through this tutoring process, VYP seeks to increase the self-esteem and school success of middle and high school students and, in turn, decrease the likelihood of dropout.

VYP is based on seven key tenets that articulate the philosophy of the project. Among these tenets are that all students can learn, the school values all students, and all students can actively contribute to their own and others' education. These tenets provide strength for the program elements, which include both instructional and support strategies. The instructional strategies consist of classes for tutors, tutoring sessions, field trips, role models, and student recognition. Support strategies are comprised of curriculum, coordination, staff enrichment, family involvement, and education.

While students are tutors in the program, they participate in a special tutoring class that serves to improve their basic academic and tutoring skills. Each student works with three elementary students at one time for a minimum of four hours each week. The student tutors are paid a minimum-wage stipend for their work and attend functions held to honor and recognize them as role models to the younger students. At these functions, the student tutors receive gifts such as t-shirts, hats, and certificates of merit for their accomplishments. By helping to increase the students' sense of pride and self-awareness, students have fewer discipline problems and fewer absences. This, in turn, creates a positive impact on school success and lowers school dropout rates.

**Participants & Setting:** The students who participate in this program are middle and high school students (grades 7 to 12) who are considered to be at-risk. Most of the participants in the San Antonio programs were Latino with limited English proficiency. Many of these participants also qualified for free and reduced lunch prices and/or had been retained a grade in school.

During the 2002-03 school year, 108 schools in 24 cities in the United States (Arizona, California, New Mexico, New York, and Texas) and Brazil participated in the Coca-Cola VYP. These schools have been in both urban and suburban settings. The program has also been implemented in Great Britain.

**Implementation Considerations:** Once a district decides to implement VYP, a program administrator (district level representative) is needed to oversee its progress. A secondary and elementary school are then selected to participate in the project. An implementation team is organized and comprised of the secondary and elementary principals, a teacher coordinator (secondary teacher), an elementary teacher representative, an evaluation liaison, and parent liaison.

Teacher coordinators aid the tutors in developing tutoring skills, self-awareness, and pride, as well as increasing literacy skills. The evaluation liaison serves to monitor the program's progress and to assess its outcomes. Lastly, a family liaison connects the school and home to support the student and to advance the program in the community.

**Cost:** The cost of implementing the program, based on 25 tutors and 75 tutees, ranges from \$150 to \$250 per student. This cost incorporates staff training, technical assistance, tutor stipends, recognition awards, and evaluation.

**Evidence of Effectiveness:** VYP implements a comprehensive evaluation design for assessing the program's effectiveness and impact. Both qualitative and quantitative measures are used in the evaluation of the program. The primary goal of VYP is to reduce the school dropout rate of students who are at-risk of dropping out of school. Since the

program's inception, less than 2% of participating students have dropped out of school. In addition, the program has had a positive impact on other indicators for students. Improvements in grades, achievement test scores, attendance, discipline action, self-concept, and attitudes toward school have been found in those participating in VYP.

In a longitudinal study of San Antonio-area programs, the dropout rates for participants were significantly lower than the comparison group and national rates. For example, participants had a much lower rate of school dropout two years after the program was implemented. While 12% of the comparison students had dropped out in that time, only 1% of VYP participants had dropped out. It was also discovered that reading grades were significantly higher for program participants, as were scores for self-esteem and attitude toward school.

**Manual or Training Available:** Materials that include implementation guides are available for the program administrator, secondary principal, elementary principal, teacher/coordinator, evaluation liaison, and the elementary receiving teachers. Training, technical assistance, and evaluation are provided by the Intercultural Development Research Association.

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## INTERPERSONAL RELATIONS/PERSONAL GROWTH CLASS

**Background:** The Interpersonal Relations Class (IPR), also called the Personal Growth Class, was created to address the problem of drug use and dropout among adolescents. This model was originally funded by a High Motivation/School Retention Grant from the Superintendent of Public Instruction in the state of Washington, and by grants from the National Institute of Mental Health and the National Institute on Drug Abuse.

**Intervention Description:** The IPR/Personal Growth Classes are designed to prevent drug use and school dropout among high school students identified as at high risk of school failure. The classes use an intensive school-based social network prevention approach. A key component of the program is the avoidance of openly labeling targeted students as “high-risk” in an effort to reduce the possibility of self-fulfilling prophecies. Fundamental elements of the classes include experiential learning opportunities, study-skills training, peer tutoring, resistance skills training, and systematic decision-making skills training. These elements are implemented by both peers and teachers.

Students identified as high-risk are given the option of taking the IPR/Personal Growth classes for credit in their high school curriculum. Parental permission is also required. The classes are small, with the teacher-student ratio at or below 1:10. Classes meet daily for 55 minutes for a full semester and are based on a psycho-educational counseling approach. The goals (i.e., improved school achievement and attendance, decreased drug involvement) of the class are discussed with students at the beginning of the semester and are restated several times throughout the program. A section of the class is offered for students returning from drug treatment, while other sections are offered to those students who are at risk of dropping out or who are known drug users.

Cognitive/behavioral changes are encouraged through reinforcement, skills training, and engaging, experiential learning opportunities. Four days per week are devoted to student discussions of their current psycho-social problems and concerns as well as skills training in problem solving, decision making, and self-management. One day each week is devoted to reviewing students’ attendance and progress in other classes as well as journal writing, goal development, and supervised study and peer tutoring. This day is also used for planning drug-free weekend activities. Two half days each month are devoted to visiting educational sites in the community such as colleges and vocational programs and recreational activities of the students’ choice (e.g., bowling, horseback riding).

**Participants & Setting:** This model is intended for use with high school students (grades 9-12) identified as at high risk for drug use and school dropout. Criteria used to identify targeted students include previous dropout status, below average school performance, and chronic absenteeism. Teacher and counselor recommendations are also used to identify students for the program. This program has been implemented in urban high schools in the Northwest, serving predominantly middle-class students.

**Implementation Considerations:** The program is implemented by a program monitor (e.g., school counselor) who ensures the program is properly implemented. This person is assisted by a program manager (e.g., a school nurse). These individuals conduct a weekly half-hour meeting with teachers of the classes in addition to frequent, random classroom observations. The teachers selected to teach the classes must meet several criteria. Teachers must express an interest in working with high-risk students and have a history of acceptance and respect toward students who drop out and use drugs. Teacher support is a key element of the program. Teachers and the program manager participate in training workshops at the beginning of the program and also attend a workshop at the end of the first semester after the class has been implemented in the school.

**Cost:** The cost of implementing the program is approximately \$634 per student for a 90-day semester. This is considerably less expensive than the cost of daily outpatient or inpatient drug treatment, which can range from \$5,000 to \$15,000 for the same amount of time.

**Evidence of Effectiveness:** Two research studies have been completed regarding the effectiveness of IPR/Personal Growth Classes. Overall outcomes from these studies indicate that students tend to decrease their drug use and are less likely to drop out of school after participating in the intervention.

One study evaluating the impact of IPR/Personal Growth Classes found that students who participated in the program were significantly less likely to become school dropouts. The program participants also showed significant differences in school achievement, decreases in truancy, and significant changes in drug use compared to the control students.

Another study focused on measuring the effectiveness of the IPR/Personal Growth Classes yielded results showing a significant improvement in grade point average but not in class absences for participants as compared to nonparticipants. Students showed no change in truancy while the control subjects increased in truancy. Self-esteem scores of participants steadily increased compared to students in the control group. There was some evidence that this intervention helped high-risk adolescents curb drug use as indicated by limited use of illicit drugs such as cocaine, opiates, and amphetamines. However, decrease in drug use was not statistically significant.

**Manual or Training Available:** The National Educational Service (phone: 800-733-6786, fax: 812-336-7790) is the publisher of a full curriculum. In addition, a curriculum entitled *Reconnecting Youth* (a related program) can be obtained at <http://www.son.washington.edu/departments/pch/ry>

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## **NINTH GRADE DROPOUT PREVENTION PROGRAM (NGP)**

**Background:** The Ninth Grade Dropout Prevention Program (NGP) was first used in six high schools in the Pasco County School District in Florida during the 1987-88 school year. Ninth grade was selected based on literature indicating that most students who ultimately drop out of school do so during their first two years of high school.

**Intervention Description:** As the name indicates, NGP focuses on preventing school dropout. Fundamental goals of the program include meeting students' academic needs, creating a caring atmosphere for students, and providing relevant and challenging curriculum. Strategies for meeting these goals are carried out mainly by teachers, but also with the help of administrators and peer tutors.

Each school designs an intervention plan to achieve the goals of the program. A summary of services offered across the district showed plans focused on academics, study skills, socialization, and attendance, and offered an orientation component. Creating a positive school climate and promoting feelings of belonging to the school environment via positive relationships with teachers and peers are key foundational constructs.

To promote academics, several strategies such as tutorial services (e.g., homework hotline, teacher assistance, peer tutoring program), teaming/cooperative planning (e.g., establishing ninth-grade teams, regular team meetings, paraprofessionals used to assist teams), and staff development (e.g., teacher in-service on NGP and dropout research, regular faculty meetings) are utilized. Other academic components may include adjustment for classroom characteristics (e.g., ability grouping, smaller class sizes, freshmen-only classes), program monitoring (e.g., feedback from students, teachers, and teams to program administrator; morning parent conferences; surveys of parents, teachers, and students), administrative support (e.g., program monitoring by assistant principal), and facilities support (e.g., common locker locations for freshmen, phone available for parent contact).

The orientation program component of the model includes services for students (e.g., NGP information during registration, buddy system, freshmen class meeting at the beginning of the year), parents (e.g., letters and phone calls describing NGP, quarterly newsletters), and staff (e.g., overview of NGP program before the start of the school year). Teachers and administrators are expected to attend these events to help with the promotion of positive teacher and staff relationships with students.

Study skills are emphasized through the use of a reading specialist (e.g., emphasis on reading skills in each course, assistance for ninth graders to prepare for academic contests), peer involvement (e.g., peer teachers available before and after school, NGP newsletter with study skills hints), and team involvement (e.g., writing enhancement programs).

Socialization is addressed by attending to student concerns (e.g., teachers as advisors, awards for academic success and appropriate behavior, club and/or newsletter, regular freshmen class meetings) and parent concerns (e.g., NGP newsletter, open house and conference night).

Finally, attendance is emphasized in a variety of ways and may include teaming/cooperative planning (e.g., early identification of potential dropouts, referral to social worker, motivation posters and films, awards for good attendance) and parental involvement (e.g., automated calling for attendance, parent letters sent for student absences). School staff are expected to react quickly to indications of poor attendance, and parents are notified when students are truant.

**Participants & Setting:** The program is specifically intended for students entering ninth grade. Students are selected for participation through a random drawing from the school population. Those students who are already in programs such as Compensatory Education or Exceptional Student Education have typically been excluded from participation in the program. NGP has been implemented in a rural district in Florida.

**Implementation Considerations:** Teachers are the primary staff for the program. Teachers are organized into ninth-grade teams to plan lessons and discuss intervention strategies. These teams are also expected to meet with the assistant principal of the school to discuss how the program is functioning. An in-service session on NGP and dropout research is provided; teachers participating in the program are expected to attend. The assistant principal of the

school monitors program implementation and works with the teachers, as well as obtains feedback from students and parents about how well the program is functioning. Peer tutors and mentors are also utilized in this program.

*Cost:* No information was identified in the available material.

*Evidence of Effectiveness:* The original purpose of this program was to prevent school dropout and promote academic success. One study that examined the effectiveness of NGP was conducted, and results indicated a significant increase in student attendance across three years of implementation. The effect of NGP was strongest on student attendance. Students who participated in the program had an increase in attendance from 89.6% in the baseline year to 95.6% in the third year of the program. Results also showed the proportion of students who continued in school increased over three years, while the proportion of students who dropped out significantly decreased. The rate of dropout was significantly less among program participants as compared to data for nonparticipants.

*Manual or Training Available:* No information was identified in the available material.

*References:*

Pearson, L. C., & Banerji, M. (1993). Effects of a ninth-grade dropout prevention program on student academic achievement, school attendance, and dropout rate. *Journal of Experimental Education*, 61(3), 247-256.

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## PREVENTING SCHOOL DROPOUT BEGINNING IN ELEMENTARY GRADES

**Background:** This prevention program was developed by researchers at the University of Montréal to decrease the rate of dropout by specifically addressing disruptive behavior of boys in elementary grades. The model was originally funded by the Social Sciences and Humanities Research Council of Canada, the Conseil Québécois de la Recherche Sociale, and the Quebec Government's Fonds Concerté pour l'Aide à la Recherche.

**Intervention Description:** This program is designed to reduce student disruptiveness in the elementary grades that could lead to non-age-appropriate regular classroom placement (being held back in a grade or retained) and subsequent dropping out of school. Fundamental elements of the model include social-skills training, problem-solving skills training, and social-cognitive skills training provided within the school setting. A training component for parents simultaneously focuses on building and enhancing management skills in the home.

The elementary social-skills training model has two main components. The first component involves the students. Boys who have been designated at-risk (based on teacher-reported scores on a behavior measure) participate in an intervention program over a period of two years. The students work on social and problem-solving skills in small groups of five to eight students. Four to six of the boys in the group are teacher-nominated individuals considered to be pro-social, while one or two of the boys are targeted for intervention. The intent is to provide positive role models who exhibit appropriate behavior for students who are targeted for the intervention. In addition, the inclusion of pro-social individuals is intended to ensure that the targeted individuals are not labeled by classmates as receiving special services. These small groups meet two times a week for two years during school hours (generally November through April), with each session lasting 45 minutes. During these sessions, positive reinforcement, verbal instructions, and modeling are used to teach specific skills. In addition, there are regular meetings between the professionals implementing the sessions and the classroom teachers. These meetings are meant to facilitate communication, monitor progress in the classroom, and create reinforcement opportunities to help increase positive behavior.

The second component of the model is a curriculum for working with parents on management skills. Parents of the boys identified as at-risk for dropout received training sessions in their homes. The same individuals who conduct the sessions at school conduct these home sessions. Some of the lessons include information about how to set appropriate behavioral expectations and clear objectives for their children, how to recognize problem behaviors, how to use reinforcement to encourage appropriate behaviors, and how to manage or provide consequences for inappropriate behaviors. Problem-solving skills for addressing family crises were also taught. In addition, parents were encouraged to provide support and supervise their children's schoolwork and behavior outside of the home.

**Participants & Setting:** The social-skills training model was created for use with boys from low socioeconomic status (SES) families. The intervention portion of the program was created for implementation during the second and third grades (typically ages seven to nine), while data collection and follow-up occurred beginning in kindergarten and continued until age 17. Students were referred to the program based on information gathered using the Social Behavior Questionnaire (SBQ), which was completed by their kindergarten teachers. The boys who participated scored at the 70<sup>th</sup> percentile or above on the SBQ. All of the parents who participated were French-speaking and had less than 14 years of schooling. The model has been used with Caucasian boys from low-SES areas of Montréal.

**Implementation Considerations:** The individuals who conducted the school sessions with the children and the parent trainings were professionals such as child-care workers, social workers, and psychologists. They were responsible for conducting the group sessions, speaking with the students' teachers concerning progress in the classroom, and conducting the parental management-skills training sessions in the boys' homes.

**Cost:** No information was identified in the available material.

**Evidence of Effectiveness:** Studies of effectiveness examined whether the social-skills program for students used along with the parent component could reduce disruptive behaviors in the short term and non-age-appropriate

classroom placement and subsequent dropout in the long term. Results from one study that examined the impact of this model on prevention of later school dropout indicated the program had an indirect effect on later dropout. Children who had received the intervention services were less disruptive than the control group and showed a decreased likelihood of being retained or placed in a special education classroom. Results suggested the program had an indirect effect on later school dropout through its impact on grade retention. In fact, the risk of dropout decreased by more than half for program participants, and the odds of dropout in late adolescence were more than four times higher for children who were retained.

*Manual or Training Available:* A manual that explains the parent component and social-skills training is available in French.

*References:*

Vitaro, F., Brendgen, M., & Tremblay, R. E. (1999). Prevention of school dropout through the reduction of disruptive behaviors and school failure in elementary school. *Journal of School Psychology, 37*(2), 205-226.

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## PROJECT COFFEE

**Background:** Project COFFEE (Co-Operative Federation For Educational Experience) was created in 1979 in Massachusetts with the purpose of meeting the academic, occupational, social, emotional, and employability needs of high school students considered at-risk. It is typically described as an alternative occupational education program that integrates academic and vocational instruction to increase the likelihood that participants will complete school and obtain employment. Project COFFEE has been funded by the U.S. Department of Education.

Project COFFEE has been replicated in many areas across the country. Project JOBS (Joining Occupational and Basic Skills) is an offshoot of Project COFFEE created for use in grades 6-8. Project JOBS is intended to address the needs of students who have emotional/behavioral problems early and prevent later problems by helping them to become engaged in their schooling. Another offshoot of Project COFFEE is the Lifelong Options Program (LOP), which is modeled on the same basic concepts and has similar components, but also includes employability skills training.

**Intervention Description:** This model was designed to prevent school dropout by providing services addressing students' academic, social, emotional, and occupational needs. The program seeks to balance cognitive achievement, skills training, and occupational education with services meant to provide for students' developmental needs. Project COFFEE offers individualized instruction structured as a half day of academic coursework and a half day in occupational instruction. Fundamental aspects of the program include five main components: academic, life-coping skills, occupational, guidance and counseling, and physical education. These five components are integrated with the help of numerous individuals such as teachers, counselors, administrators, and employers.

Project COFFEE participants attend classes together in a separate building from other district high schools. The low teacher-to-student ratio (no more than eight to ten students in each class), emphasis on the occupational component, individualized instruction in basic skills, and focus on credits needed for graduation help to ensure that the students who participate in the program reduce their risk of dropping out of school. As part of the program, students participate in roleplays and mock interviews to enhance their life-coping skills. As part of the occupational component, students receive skills training in the classroom as well as a work-study placement that begins during their first year of the program and continues until graduation. For the guidance and counseling component of the program, participants meet for individual and group counseling sessions to discuss social, emotional, academic, and career planning issues. The physical education component consists of different activities each week, sometimes on school grounds and other times in local facilities.

**Participants & Setting:** This model is intended for use with high school students (grades 9 to 12) who have been identified as at-risk. The initial program included students from 21 different school districts within a 30-mile radius in central Massachusetts; it has since been replicated in rural, urban, and suburban areas. Project COFFEE was originally created to serve students with severe emotional/behavioral disabilities.

**Implementation Considerations:** Many individuals are involved in the implementation of Project COFFEE. Among these are teachers who address the academic and life-coping skills components of the model and counselors who address the guidance and counseling component. The counselors also act as the program's primary liaisons with social services and youth agencies as well as with the students' home school districts. Both academic teachers and occupational instructors provide the physical education component of the model. The occupational component is addressed by occupational instructors in the classroom as well as through the implementation of a work-study experience at a community site (e.g., business, nursing home) involving community members and employers.

**Cost:** No information was identified in the available material.

**Evidence of Effectiveness:** Four longitudinal studies have examined Project COFFEE since 1989. In addition, Project COFFEE was included in a government-funded investigation of programs using evidence-based dropout pre-

vention methods. In the government investigation, seven sites replicated Project COFFEE. Overall, results showed that there was some impact on dropout prevention as well as positive changes in students' academic achievement.

Project COFFEE was implemented at four different sites in North Dakota during the years 1989-92. The target population was Native American youth. Results from an evaluation conducted at one site showed a significant effect on dropping out (i.e., fewer students in the treatment group dropped out compared to the control group). Results from another site indicated a higher rate of dropout for the first wave of students to receive the intervention compared to the treatment group, but the second wave of participants had a lower rate of dropout than students in the control group. The third and fourth sites had numerically lower rates of dropout among participants, but these differences were not statistically significant.

A separate study examined the effectiveness of a program modeled after Project COFFEE: OASIS Alternative School. There were minor differences between the two programs. For example, OASIS did not follow the same sort of schedule as Project COFFEE and focused more on at-risk youth with histories of truancy and suspension rather than students with emotional/behavioral disabilities. The study found that after two years, OASIS participants showed significant improvements in school attendance and grade-point averages. It was also noted that participants showed almost immediate improvement in their attitudes toward school and the school environment.

*Manual or Training Available:* No information was provided in the available material.

### *References:*

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Hayward, B. J., & Tallmadge, G. K. (1995). *Strategies for keeping kids in school: Evaluation of dropout prevention and reentry projects in vocational education*. Washington DC: U.S. Government Printing Office.

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Carty, K. (1996, April). *Project COFFEE is still considered a model*. Retrieved December 17, 2003, from [http://www.mma.org/news/news\\_files/innovations/mass\\_innov\\_97-99/project\\_coffee.html](http://www.mma.org/news/news_files/innovations/mass_innov_97-99/project_coffee.html)

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## SCHOOL TRANSITIONAL ENVIRONMENT PROJECT (STEP)

**Background:** The School Transitional Environment Project (STEP) is designed to enhance the experience of students during school transitions by restructuring the school environment. STEP was created in 1989 by researchers at the University of Illinois and was funded in part by a grant from the Carnegie Corporation of New York.

**Intervention Description:** STEP is a model designed to ease students' school transitions and enhance healthy school adjustment by providing a supportive environment. Fundamental elements of the program include developing students' perceptions of school as a safe, cohesive, and well organized environment in which to learn and grow. Strategies are also employed to reduce student anonymity, increase student accountability, and clarify students' understanding of school rules and expectations. These key features are implemented through the homeroom teacher's interaction with the students and their families.

Students in this program are assigned to student cohort groups, each of which has a homeroom teacher. These cohorts remain together for homeroom as well as core classes (e.g., mathematics, English). Cohort classrooms are purposely grouped together in the larger school in an effort to create a feeling of community and to decrease the likelihood that participating students will engage in conflicts with older students. Homeroom teachers take on the roles of teacher, counselor, and administrator in their relations with the students. These teachers keep track of attendance and follow up with parents about any absences. They also talk with students in their homerooms about class schedules and any personal problems the students may be having.

Homeroom teachers also are responsible for working with students' families, explaining STEP, following up with parents concerning absences, and enhancing communication between families and the school. Teachers also meet with other homeroom teachers to discuss potential student problems as well as students who may need counseling or extra attention.

**Participants & Setting:** The STEP model, originally created for use in urban high school populations, has since been used in both rural and suburban communities. The original targeted population was of low socioeconomic status (SES), but the model has since been expanded to include all SES levels. The model has also been implemented for transition to junior high and middle school settings. Students who are considered to be well-suited for the STEP program are those who are considered to be at-risk for behavioral problems and who reside in communities that have large junior or senior high schools with multiple feeder schools. STEP has been used in urban, suburban, and rural settings.

**Implementation Considerations:** Teachers provide the majority of the support for students in STEP. Homeroom teachers are assigned to 20-30 STEP students and serve as the primary link between home, student, and school. These teachers perform many of the guidance and administrative tasks such as helping students select classes and talking with students about personal problems. STEP homeroom teachers meet several times a week to discuss students who may be having problems and other concerns arising in their classrooms. They also consult with school guidance staff and attend trainings for team-building and to improve their student advisory skills.

**Cost:** Implementation costs are relatively low. Costs for this program include required training for homeroom teachers to enable them to perform the expanded job roles of STEP. Other potential costs include staff salaries that may need to be adjusted to reflect teachers' new job roles.

**Evidence of Effectiveness:** Four research studies on STEP are described below. Overall, outcomes indicated that STEP students had increased positive feelings toward the school environment and better school performance than non-STEP students.

The original study was conducted in a large, urban high school in which students who participated in the program were generally from low SES and/or minority backgrounds. Results showed STEP aided short-term social and academic adjustment as well as promoting academic performance, attendance, and self-concept. STEP students perceived the school environment as more stable, understandable, and well-organized than the non-STEP students.

A follow-up study was undertaken five years later. Students' school records were utilized to obtain information regarding their progress following the program. Students who participated in STEP showed long-lasting effects in the area of improved academic achievement and improved attendance. This study also showed that students who had been involved in STEP were less likely to have dropped out of school than a comparison group of non-STEP students.

A third study employed the STEP model in two high schools and three junior high schools serving rural and urban populations. The SES of these communities was predominantly lower to middle class. This study expanded the scope of outcomes by looking at indices of depression, self-concept, delinquency, substance abuse, grades, and achievement test scores. Researchers found that STEP students were more likely to avoid significant declines in grades and self-concept and were less likely than control students to exhibit behavioral/emotional problems.

The fourth study was a two-year longitudinal effort examining outcomes for students entering high school as well as those entering junior high school. The schools in the study represented a wide range of geographic, demographic, and structural characteristics. No students receiving special education services were included in this study. Results indicated students who participated in the intervention appeared better adjusted and showed improved academic performance compared to non-STEP students. The STEP students reported lower feelings of transition stress as well as better adjustment in relation to school and family and on measures of overall self-esteem. Indices of depression, anxiety, and delinquent behavior were also lower for STEP students. Grades and attendance for STEP students were higher than for non-STEP participants.

*Manual or Training Available:* No information was identified in the available material.

*Reference:*

Felner, R. D., Brand, S., Adan, A. M., Mulhall, P. F., Flowers, N., Sartain, B., & DuBois, D. L. (1993). Restructuring the ecology of the school as an approach to prevention during school transitions: Longitudinal follow-ups and extensions for the School Transitional Environment Project (STEP). *Prevention in Human Services, 10*(2), 103-136.

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### **SUPPORT CENTER FOR ADOLESCENT MOTHERS (Family Growth Center)**

**Background:** The support center for adolescent mothers (known as the Family Growth Center and the Program Archive on Sexuality, Health, and Adolescence [PASHA]) was created to address the needs of the growing number of adolescent mothers. With core ideas from an ecological model, the program sought to provide supports that would aid in the prevention of repeat pregnancies and dropouts. The Family Growth Center was funded by grants from the Maternal and Child Health Bureau, the American Academy of Pediatrics, and foundations, businesses, and community organizations in Pittsburgh.

**Intervention Description:** The Family Growth Center was created to address the needs of adolescent mothers in the Pittsburgh area by using a family support center approach. The program was implemented in the hope that by providing social supports and parenting education to first-time, unmarried adolescent mothers, repeat pregnancies and school dropout would be prevented. Fundamental elements of the program include the provision of social and educational supports and parenting education. Four key components of the program include: establishing early contact with the mothers (prenatal and in the hospital), involving families of the adolescent mother, implementing parenting groups, and involving the community. These key features are implemented by a team of individuals who work with the mothers in various ways.

As the name of the model suggests, family is of vital importance in this program. Many of the interventions that are a part of the program involve not only the new mothers, but also their families (e.g., grandmothers, mothers, aunts, siblings). Young mothers are recruited by a prenatal counselor when they visit a hospital clinic for a prenatal visit or when they are in the hospital just after giving birth. Mothers recruited during the prenatal visits are followed through home visits by social workers. A perinatal coach also visits the mothers and their families to collect baseline information. During the home visits, the new mothers' families are encouraged to ask questions and be involved in the process. While the mothers are in the newborn nursery, they received perinatal counseling that is meant to educate and enhance parents' interaction skills with their newborns and as well as the newborns' sensory abilities. After mothers go home from the hospital, they receive home visits from program social workers and are also offered services at the Family Growth Center. Bimonthly parenting classes are also offered, as are services for finding housing, schooling, day care, and health care. The Family Growth Center also offers short-term and emergency day care, recreational activities, and transportation services. The importance of establishing relationships with the mothers and families served is critical (and may occur over a period of months).

The community is involved in the program in a number of ways. The Family Growth Center director receives advice and guidance from several community groups, including a youth advisory board and a community advisory board made up of neighborhood members and community leaders. The goal is to offer integrated and comprehensive neighborhood-based and family-centered social support programming.

**Participants & Setting:** Urban adolescent mothers who live in low socioeconomic status (SES) neighborhoods of Pittsburgh were targeted participants for this program. Young mothers were recruited to the program from a prenatal clinic or newborn nursery at a local hospital. Participants are required to be first-time mothers who lived in certain areas identified (by zip code) as the high-risk neighborhoods served by the Family Growth Center. The Family Growth Center program was designed for use in urban, low SES regions.

**Implementation Considerations:** There are many individuals involved in the program. One of the first individuals to come in contact with program participants is the perinatal counselor. This individual is a community member who has been trained to recruit new mothers. There are also several social workers who conduct home visits, provide general parenting information, and are available for crisis counseling as well as providing general social support. Staff members at the Family Growth Center help run parenting classes, provide day-care services, provide transportation, and organize and supervise recreational activities. The director of the center is also involved in all aspects of the services provided. Community leaders, neighborhood members, and community youth are also involved as advisors to the director of the Family Growth Center.

**Cost:** The cost per year for each family participating in the Family Growth Center is about \$3,000-\$3,500. This includes the cost of staff salaries and training, transportations for families, home visits, day care, recreational activities, and materials for classes.

**Evidence of Effectiveness:** The original purpose of this program was to decrease the rate of adolescent pregnancies by providing social support and other services in order to prevent repeat pregnancies and school dropout. An extensive longitudinal study was conducted examining the effectiveness of the program. This longitudinal study occurred over a period of three years and gathered data on the occurrence of repeat pregnancies and school status (i.e., attendance, dropout). Data were collected at three points in time over the course of the study. Results indicated participants had significantly lower rates of repeat pregnancies as well as a significantly higher rate of school completion (lower dropout rate) when compared to adolescent mothers who had not received any intervention.

**Manual or Training Available:** A manual is available from the National Institutes of Health (NIH).

**Reference:**

Solomon, R., & Liefeld, C .P. (1998). Effectiveness of a family support center approach to adolescent mothers: Repeat pregnancy and school drop-out rates. *Family Relations*, 47, 139-144.

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## TEEN OUTREACH PROGRAM (TOP)

**Background:** The Teen Outreach Program (TOP) was created in 1978 in St. Louis to help prevent teen pregnancy and school dropout. The project was originally funded by grants from the Charles Stewart Mott Foundation, the Lila Wallace Reader's Digest Fund, and other sources. The Association of Junior Leagues has also played an important role in the creation and implementation of TOP.

**Intervention Description:** TOP is designed to prevent teen pregnancy and school dropout for both males and females by having students volunteer in their communities and participate in classroom discussions and educational sessions for one school year. Fundamental elements of the program include learning life skills, understanding social and emotional issues important to teens, discussing feelings and attitudes about a variety of subjects, and participating in volunteer opportunities in the community. These elements are implemented through the help of program facilitators, who teach classes, and organization facilitators, who help organize the volunteer experiences.

TOP can be implemented in a variety of ways. Some sites offer TOP classes for credit, as part of the school curriculum, while other sites offer TOP as an after-school program. Regardless of whether the program is during or after school, participants attend classes and discussions on a wide variety of topics. The topics are part of the *Changing Scenes* curriculum, which was originally created by the Association of Junior Leagues (1988) and revised by the Cornerstone Consulting Group in 1996. The curriculum is delivered via interactive group activities and exercises. Classes meet at least once a week throughout the school year and discuss topics such as communication skills, dealing with family stress, parenting, and understanding self and values. Although pregnancy prevention is a main focus of the program, less than 10% of the curriculum would be considered sex education, and material is incorporated into more general discussions of how to make good life decisions. Discussions about volunteer experiences are also included, to tie the classroom and volunteer service aspects of the program together.

The volunteer service component of the program also varies from site to site. All students are required to volunteer for a minimum of 20 hours per year, although some sites require more. Types of volunteer experiences also vary from site to site, but each program must ensure that the experience is appropriate both for the needs of the students and the needs of the community they are serving. Volunteer experiences include working as aides in hospitals and nursing homes, peer tutoring, and volunteer work in schools.

**Participants & Setting:** This intervention can be used across a range of grades and ages. Typically, high school students are the primary participants, but participants have included students ages 11 to 19 and in grades 7 through 12. Students are placed in the program in several ways, varying across sites. Some participate voluntarily while others are referred because they have been designated as at-risk for school dropout or teen parenthood. Both males and females are encouraged to participate. Program participants are more likely to come from single-parent homes and are more likely to have fathers with less education in comparison to students who did not participate in any intervention.

TOP has been implemented in many sites across the U.S., but primarily in large, urban areas (including New York and New Orleans). During the 2001-02 school year, TOP was being used in 16 states across the U.S., reaching more than 13,000 young people.

**Implementation Considerations:** The classroom/group facilitators have the most contact with the students. The facilitators are typically teachers (for in-school programs) or youth workers (for out-of-school programs) who have been trained to facilitate the discussions outlined in the curriculum. Community service coordinators are typically staff and/or volunteers experienced in helping youth design effective community service projects. Most sites also have a program coordinator overseeing all aspects of the program. This position may be voluntary or paid. Access to classrooms or other suitable space is also required.

**Cost:** Program costs vary depending on modes of implementation. Costs incurred can include staff salaries, training, classroom supplies, transportation, recreational activities, program evaluation, administrative costs, and family involvement activities. Each program site decides what services it will offer and whether it will be an integrated

or stand-alone program. These decisions affect cost. Annual cost per student for programs across the country has ranged from \$100 to \$600. Lower costs result when TOP is integrated as part of existing service delivery and the various resources needed to implement it are in-kind donations. While a cost/benefit analysis is not available for TOP, it is worth noting that society pays an estimated \$6.9 billion annually for services related to teen pregnancy and parenthood.

**Evidence of Effectiveness:** Several research studies have examined the effectiveness of TOP. The program has also received numerous awards from various agencies recognizing its effectiveness. In 1987, the Committee on Community-Level Programs for Youth of the National Research Council identified TOP as one of only three methods having documented effectiveness in reducing teen pregnancies. In 1998, the National Campaign to Prevent Teen Pregnancy honored TOP as the only program to qualify as an “Effective Program.” Overall findings concerning the effectiveness of this program show that it has a significant impact on the rate of teen pregnancies, school dropout, and course failure.

One study of TOP participants across several sites found they had significantly lower levels of suspension, school dropout, and pregnancy. This was despite variation among sites in program implementation. Program participants, who initially had significantly more problem behaviors than the control group, had significantly less by the end of the program. This study found no significant relationship between participant outcomes and grade level, child-rearing environment, or demographic variables. Program sites were most successful when they worked with older students and when the volunteer service component was more intensive (i.e., more hours were required).

Results from another study examining TOP’s effectiveness also showed participants had significantly lower rates of pregnancy, course failure, and school suspension as compared to nonparticipants. This study also found that TOP was not significantly more or less effective in preventing pregnancy for students of different grades, genders, or racial/ethnic minority groups.

Another study, conducted over a five-year period in 25 sites, found that TOP participants were about 40% less likely to become pregnant or cause a pregnancy, to be suspended from school, or to fail a class, compared to similar nonparticipants.

**Manual or Training Available:** Information on training and program resources can be obtained by contacting Gayle Waden (see contact information below).

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# **Part IV**

## **Where Else Can I Go for More Information?**

- **Related Resources & Organizations**
- **Journal Articles & Related Publications**
- **Web Sites Providing Data on Dropout Rates**



## Related Resources & Organizations

### **The Alliance for Excellent Education**

*<http://www.all4ed.org>*

The Alliance for Excellent Education seeks to ensure that at-risk middle and high school students achieve high standards and graduate prepared for college and success in life. This organization promotes the adoption of four research-based initiatives constituting a framework of excellence. These initiatives address adolescent literacy, teacher and principal quality, college preparation, and small learning communities.

### **Center for Education of Students Placed at Risk (CRESPAR)**

*<http://crespar.law.howard.edu>*

CRESPAR's mission is research, development, evaluation, and dissemination of school- and community-based programs and practices aimed at ensuring that each child reaches his or her full potential, regardless of family circumstances or other risk factors. CRESPAR's work is organized into four programs of study: early and elementary education; middle schools and high schools; school, family, and community partnerships; and systemic supports for school reform. CRESPAR is a collaborative effort of Johns Hopkins University and Howard University.

### **National Center on Secondary Education and Transition (NCSET)**

*<http://www.ncset.org>*

NCSET seeks to create opportunities for youth with disabilities to achieve successful futures. NCSET coordinates national resources, offers technical assistance, and disseminates information in four major areas: providing improved access to the secondary education curriculum; ensuring positive postschool results in postsecondary education, employment, independent living and participation in community life; supporting student and family participation in decision making and planning; and improving collaboration and system linkages.

### **National Center on Educational Outcomes (NCEO)**

*<http://education.umn.edu/nceo>*

NCEO focuses on assuring the participation of students with disabilities in national and state assessments, standards-setting efforts, and graduation requirements. Topics addressed by NCEO include accommodations, accountability, alternate assessments, graduation requirements, Limited English Proficiency students, out-of-level testing, participation, reporting, standards, and universal design.

### **National Dropout Prevention Center/Network (NDPC/N)**

*<http://www.dropoutprevention.org>*

A clearinghouse for information on dropout prevention, NDPC/N conducts research, produces publications, and offers a variety of professional development activities. NDPC/N also compiles a database of promising programs designed to prevent dropout that can be accessed via its Web site. Program Assessment and Review is a professional service provided by NDPC/N to promote student achievement and increase graduation rates.

### **National Longitudinal Transition Study – 2 (NLTS2)**

*<http://www.nlts2.org>*

NLTS2 is a study designed to document, over the next several years, the experiences of a national sample of students with disabilities as they make the transition from high school into adult roles. NLTS2 focuses on a range of topics including high school coursework, extracurricular activities, academic performance, postsecondary education and training, employment, independent living, and community participation. NLTS2 provides access to data tables online and produces reports, brochures, and newsletters of interest to many audiences.

### **Office of Special Education Programs (OSEP)**

*<http://www.ed.gov/offices/OSERS/OSEP>*

OSEP is a federal office that assists states and local school districts in improving results for infants, toddlers, children, and youth with disabilities. OSEP offers IDEA-authorized formula grants to states and also makes available discretionary grants to colleges, universities, and other nonprofit organizations to support research, demonstrations, technical assistance and dissemination, technology, personnel development and parent training and information centers.

### **What Works Clearinghouse (WWC)**

*<http://www.w-w-c.org>*

WWC, established in 2002, seeks to become a central, independent, trusted source of evidence of what works in education. Through Web-based databases, the WWC will provide decisionmakers with information based on high-quality scientific research. This information will include reviews of potentially replicable interventions to enhance student outcomes, information about evaluation studies of interventions, scientifically rigorous reviews of test instruments used to assess educational effectiveness, and lists of individuals and organizations willing to conduct evaluations of educational interventions.



## Journal Articles & Related Publications

- Christenson, S. L., Sinclair, M. F., Lehr, C. A., & Hurley, C. M. (2000). Promoting successful school completion. In K. M. Minke & G. C. Bear (Eds.), *Preventing school problems - Promoting school success* (pp. 211-257). Bethesda, MD: National Association of School Psychologists.
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## Books

- Rossi, R. J. (Ed.). (1994). *School and students at risk: Context and framework for positive change*. New York: Teachers College Press.

This book includes 13 chapters written by various authors with expertise in dropout and addressing the needs of students placed at-risk. Topics that are addressed include the context and history of reform efforts, culture and cultural conflict in the school, reforms and interventions to promote school success for students placed at-risk, and frameworks for change.

- Schargel, F. P., & Smink, J. (2001). *Strategies to help solve our school dropout problem*. Larchmont, NY: Eye on Education.

This book focuses on the problem of dropout in the context of both primary and secondary schools. The book includes 20 chapters that provide information on the problem of dropout, who drops out of school and why, and the problem of dropout in other countries outside of the U.S. In addition, 15 strategies for preventing dropout are discussed.

### Web Sites Providing Data on Dropout Rates

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#### **National Center for Education Statistics**

*<http://nces.ed.gov>*

The National Center for Education Statistics collects and analyzes data related to education in the United States and other countries. NCES develops annual reports including Condition of Education and Digest of Education Statistics. NCES also has several survey and program areas, including High School and Beyond (a longitudinal study) and the National Assessment of Educational Progress.

#### **National Education Goals Report**

*<http://www.ed.gov/pubs/goals/summar>*

The National Education Goals Report (also known as Goals 2000) was released in 1993. A series of reports describes the status of education in the United States. A summary of information for each state is provided for eight national goals including Goal 2, focused on school completion. Additional information on Goals 2000 legislation and related items may be found at *<http://www.ed.gov/G2K>*

#### **23rd Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act**

*<http://www.ed.gov/offices/OSERS/OSEP/Products/OSEP2001AnlRpt>*

This report includes a section describing trends since 1993-94 in dropout and graduation rates for students with disabilities. Graduation rates vary by disability category and by race/ethnicity. Annual reports from prior years are also available online.

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# **Appendix**

## **Reproducible Handouts**

- **Preventing Dropout: A Critical and Immediate National Goal**
- **What Do We Know About Who Drops Out and Why?**
- **Preventing Dropout and Promoting School Completion**



## **Preventing Dropout: A Critical and Immediate National Goal**

### **National Statistics on Dropout and School Completion**

***Today, nearly all students are expected to graduate from high school with a diploma. Yet hundreds of thousands of students in the United States leave school early each year without successfully completing school (National Center for Education Statistics, 2002).***

- The percentage of 8th grade students who graduate five years later range from a low of 55% in Florida to a high of 87% in New Jersey (Greene, 2002).
- Approximately one in eight children in the United States never graduates from high school (Children's Defense Fund, 2001).
- Based on calculations per school day (180 days of seven hours each), one high school student drops out every nine seconds (Children's Defense Fund, 2001).

***Some groups of students are at greater risk of dropping out of school.***

- The rate of school completion is lower for students of Hispanic descent as compared to other young adults (64% of Hispanic youth vs. 84% of Black youth vs. 92% of White youth ages 18-24 who completed school) (National Center for Education Statistics, 2002).
- On average, students from low socio-economic backgrounds are at increased risk of not completing school (rate of dropout is 10% for low income vs. 5.2% for middle income vs. 1.6% for high income) (National Center for Education Statistics, 2002).
- According to the 23rd Report to Congress, only 57% of youth with disabilities graduated with regular diplomas during the 1999-2000 school year (U.S. Department of Education, 2001).

***Youth who drop out are more likely to experience negative outcomes such as unemployment, underemployment, or incarceration.***

- High school dropouts are 72% more likely to be unemployed as compared to high school graduates (U.S. Department of Labor, 2003).
- Nearly 80% of individuals in prison do not have a high school diploma (Office of Juvenile Justice and Delinquency Prevention, 1995).
- According to the National Longitudinal Transition Study of special education students, the arrest rates of youth with disabilities who dropped out were significantly higher than those who had graduated (Wagner et al., 1991).

***Additionally, the costs associated with the incidence of dropout for society are immense.***

- Approximately 47% of high school dropouts are employed, compared to 64% of high school graduates not in college (National Center for Education Statistics, 1995).
- Students who graduate from high school earn an average of \$9,245 more money per year than students who do not complete school (Employment Policy Foundation, 2001).

***Recent legislation has focused national attention on increasing the rate of school completion. The No Child Left Behind Act holds schools accountable for student progress using indicators of adequate yearly progress including measures of academic performance and rates of school completion.***

***Pressure is mounting to develop educational programs that engage students in school and learning, ensure acquisition of academic and social skills necessary for adulthood, and result in high rates of school completion.***

## **What Do We Know About Who Drops Out and Why?**

***Many studies identify predictors and variables associated with dropout. In recent years, these variables have been categorized according to the extent to which they can be influenced to change the trajectory leading to dropout.***

- Status variables are difficult and unlikely to change (e.g., socioeconomic standing, disability or ability level, family structure).
- Alterable variables are more amenable to change and can be influenced by students, parents, educators, and community members (e.g., attendance, identification with school, support services). Addressing alterable variables associated with dropout is encouraging because this approach has the potential to increase school completion.

### ***Predictors and Factors Associated with Dropout for Students with Disabilities***

- Many status variables associated with dropout are similar for students with and without disabilities (e.g., low socio-economic background, Hispanic background).
- Alterable variables associated with dropout identified for students with disabilities include high rates of absenteeism and tardiness, low grades and a history of course failure, limited parental support, low participation in extracurricular activities, alcohol or drug problems, negative attitudes toward school, high levels of mobility, and retention. In contrast, more time being mainstreamed, provision of tutoring services, training for competitive employment, and attending schools that maintained high expectations of special education students are associated with greater likelihood of school completion for students with emotional/behavioral disorders.

### ***Reasons for Dropping Out of and Staying in School***

Many researchers have gathered information using surveys and interviews about why students drop out of school. These explanations have been categorized as “push” or “pull” effects (Jordan, McPartland, & Lara, 1999).

- Push effects include situations or experiences within the school environment that aggravate feelings of alienation, failure, and dropout.
- Pull effects include factors that are external to the school environment that weaken and distract from the importance of school completion.

Students most often cite push factors as reasons for dropping out of school. In contrast to the identification of one primary reason for dropping out of school, the decision often appears to involve a host of factors (Kortering & Braziel, 1999).

### ***Implications for Designing Interventions***

Despite the extensive list of variables and predictors associated with dropout, the presence of one or more of these factors does not guarantee that a student will leave school early. However, the presence of multiple factors does increase the risk of dropout. The challenge is in using this information to target students who are in need of intervention based on efficient and accurate predictors. Targeting students who are most likely to drop out for intervention is complex.

Additionally, focusing on variables that educators and others can influence is important when thinking about designing and implementing interventions to enhance school completion for students with and without disabilities.

## **Preventing Dropout and Promoting School Completion**

***Dropping out of school is a process of disengagement that begins early.***

- The decision to leave school is typically not an instantaneous event (Finn, 1993).
- Many students who drop out of school are expressing an extreme form of disengagement from school preceded by indicators of withdrawal (e.g., poor attendance) and unsuccessful school experiences (e.g., academic or behavioral difficulties).
- Retrospective studies show the identification of potential dropouts can be accomplished with reasonable accuracy in the elementary years (Barrington & Hendricks, 1989).

***Theoretical conceptualizations have helped us understand the important role of student engagement in school and learning and have drawn attention to key ingredients including student participation, identification, social bonding, and personal investment in learning.***

- Student engagement in school and learning is integral to school completion. Finn's (1993) model of dropout prevention suggests students must actively participate in school and have a simultaneous feeling of identification with school in order for them to remain in school and graduate.

***School completion encompasses a broader view than simply preventing dropout (Christenson, Sinclair, Lehr, & Hurley, 2000). Promoting school completion implies***

- A strength-based orientation (vs. a deficit orientation),
- A comprehensive interface of systems (vs. a narrowly defined system of operation),
- Implementation over time (vs. implementation at a single period in time),
- Creating a person-environment fit (vs. a programmatic "one size fits all" orientation), and
- A longitudinal focus, whereby interventions aim to promote a "good" outcome, not simply prevent a "bad" outcome for students and society.

***In the past decade, engagement of alienated youth in school and learning has emerged as one of the most important variables addressed in prevention and intervention efforts.***

Christenson (2002) defines engagement as a multi-dimensional construct that involves four types of engagement and associated indicators.

- **Academic engagement** refers to time on task, academic engaged time, or credit accrual.
- **Behavioral engagement** includes attendance, suspension, and class participation.
- **Cognitive engagement** refers to internal indicators including processing academic information or becoming a self-regulated learner.
- **Psychological engagement** includes identification with school and sense of belonging.

These indicators of engagement are influenced by contextual factors across the home, school, and peers. A focus on facilitators of engagement is a promising approach to guiding the development of effective interventions promoting school completion.

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