

**Keeping Kids in School: An LA's BEST Example
A Study Examining the Long-Term Impact of LA's BEST
on Students' Dropout Rates**

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EXECUTIVE SUMMARY

The high school graduation rate of the Los Angeles Unified School District (LAUSD) is alarming. There are more than 745,000 students enrolled in LAUSD; of those students, a third will not graduate from high school. In fact, during the 2003-2004 academic year, only 66.4% of high school students within the district graduated, while the remaining were not retained. This figure is well below the Los Angeles County graduation rate (79.3%), as well as the state graduation rate (85.3%; California Basic Educational Data System [CBEDS], 2001–2004). It is no surprise, then, that these students would be considered “at-risk.” According to California Department of Education (CDE) statistics, 90.9% of the students within the district are members of ethnic minority groups, 76.5% qualify for the free or reduced lunch program, and close to half (43.8%) are English Language Learners. However, despite compounding risk factors, many students have managed to successfully navigate the education pipeline and have graduated from high school. With these resilient students in mind, it is our intention to determine whether and how LA’s BEST can serve as a resource for improving the dropout rate of at-risk youth.

In 2004, the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) conducted a long-term effect study of LA's BEST (Huang et al., 2004). The descriptive results revealed positive student attitudes and experiences with the program, maintenance of academic performance levels, opportunities to establish positive relationships with adults, and the encouragement of parents’ involvement in their children’s schooling. These are all crucial elements of after-school programs that could inherently lead to stronger resiliency and enhanced academic achievement, thus facilitating school retention. In addition, a review of the past 16 years of research on the LA’s BEST program demonstrates the benefits of after-school extracurricular activities.

This pilot investigation builds upon previous studies by examining the long-term impact of LA’s BEST participation. Specifically, this study compared the dropout rates of students who had participated in the LA’s BEST program from 1 to 3 years or more and those who had not participated. The findings of a study such as this will inform public and private organizations that are interested in promoting educational resiliency in students. Policymakers can use the results as evidence on the effects of after-school programs and can aid law

enforcement agencies in their quest to reduce juvenile delinquency and crime by keeping students in school. This current study represents a pilot study for another CRESST research study in progress, which is funded by a grant from the Department of Justice. The follow-up study will utilize more controlled matching and more sophisticated statistical techniques to explore the questions of interest in further depth.

Building Resiliency: The After-School Model

At-risk students face multiple and daily obstacles that may hinder their academic and social development. These obstacles are related to school factors (e.g., lack of school resources, low teacher or administrative support, safety concerns, lack of after-school programs or extracurricular activities) and to factors in the local community (e.g., exposure to crime, drug use, unsafe neighborhoods) and students' home life (e.g., lack of parental support) (Johnson, 1997). Additional obstacles that at-risk students face include trauma, poverty, lack of positive peer and adult interactions (Masten & Coatsworth, 1998). The research literature indicates that individuals who can overcome such obstacles share common properties of resiliency, such as high self-esteem, positive life attitudes, and high future aspirations (Krovetz, 1999; Rouse, Bamaca-Gomez, & Newman, 2001). They achieve resiliency in part because they have had opportunities to develop affirming personal relationships, to learn about the importance of school, and to gain a sense of well-being, among other positive attributes (Scott-Little, Hamann & Jurs, 2002). Quality after-school programs that focus on building resiliency in children can provide such opportunities (Johnson, 1997).

After-school programs have been found to benefit students in three critical ways:

- First, they provide children with supervision during a time when they might normally fall prey to deviant or anti-social behaviors—research has revealed that the rates for both juvenile crimes and the victimization of juveniles peak in the after-school hours (U.S. Department of Education & U.S. Department of Justice, 2000).
- Secondly, they provide experiences that may benefit students' social skills and work habits (Johnson, 1997; Scott-Little, Hamann & Jurs, 2002).

- Finally, after-school programs may help to improve academic achievement through tutoring and enrichment activities (Fashola, 1998).

These three major factors are important in contributing to and sustaining the resiliency of students who are at-risk of academic failure and dropping out.

The Experiences of LA's BEST

A review of LA's BEST evaluations conducted over the past 16 years illustrates the program's impact on participants' resiliency. This review of earlier analyses suggests that LA's BEST fosters positive student attitudes and behavior, higher academic performance levels, and the opportunity to establish positive relationships with adults in a safe and nurturing environment, among other critical findings. These findings are outlined below and categorized according to safety, social development, and academic enrichment. In addition to effects on LA's BEST participants, perceptions of parents and staff effects are also provided. These key findings highlight the crucial elements of after-school programs that could inherently lead to improved academic achievement and resiliency and thus facilitate school retention.

Student Effects

Safety

- LA's BEST participants reported feeling safer in the program than in their neighborhoods.
- Parents and guardians were very positive about their children's LA's BEST experience and reported that they felt comfortable leaving their children in the program's warm and nurturing environment.

Social Development

- LA's BEST participants felt that they could easily talk to staff and that the staff cared about them.
- Nearly all LA's BEST participants believed they worked well with other students, helped each other with schoolwork, and solved problems with fellow students without resorting to fighting.
- LA's BEST participants had relatively high self-esteem and self-efficacy.

- LA's BEST was especially helpful for female students and for students who scored low in self-efficacy, as well as work habits, attitudes towards LA's BEST, and conflict resolution.
- Teachers noted positive changes in social skills, classroom behavior, discipline, and social interactions as a result of the program.
- Former LA's BEST participants said the program had a positive impact because it helped them maintain friendships, develop social skills, and receive opportunities for mentoring.
- LA's BEST participants reported enjoying the opportunity to participate in field trips, sports and games.

Academic Enrichment

- Over the program's 16-year span, LA's BEST participants either improved or maintained their California Standards Test (CST) scores for English language arts and math.
- Higher levels of participation in LA's BEST led to better school attendance, which, in turn, resulted in higher academic achievement on standardized tests.
- LA's BEST participants reported that they were doing better on homework assignments because they received help at LA's BEST.
- LA's BEST participants noted that LA's BEST helped them get better grades and become better students.
- LA's BEST participants most in need (i.e., low scores on attitude towards school, low-performing, limited English proficient [LEP]) gained the most, in terms of social competencies and academic development, from participating in LA's BEST.
- Former LA's BEST participants said the program had a positive impact on them because it helped to stress the importance of education and develop academic skills.

Effects Reported by Parents

- LA's BEST parents believed the program helped their children's grades and social skills.

- LA's BEST parents reported that the program helped their children think about college.

Reported Staff Effects

- LA's BEST participants reported that staff taught them the importance of getting good grades and paying attention in school.
- LA's BEST participants reported that staff taught them to care about how well they did in school and that it is important to try hard on tests.
- Staff encouraged LA's BEST participants to work hard in class and get their homework done on time.

These findings suggest that LA's BEST is providing a structure in which students can develop resiliency. Not only did students feel safe at LA's BEST; they also received opportunities for social development and academic enrichment by building relationships with trusted mentors. These opportunities are all essential elements for strengthening students' resiliency.

Purpose of the Study

Given these positive findings from previous investigations, are there any long-term effects that can result from students' participation in LA's BEST? The goal of this study was to examine whether participating in LA's BEST improves school retention. The primary research questions were:

- Does participation in the LA's BEST program have an impact on former participants' long-term educational behaviors, such as staying in school?
- What is the minimum number of years of participation in LA's BEST needed to see an effect on dropout rates?
- Does participation in the LA's BEST program have a varying effect on dropout rates for different gender, language, income level, and ethnic groups?

Methodology

In this study, four cohorts of students were examined, comprising both LA's BEST participants and a comparison group of LAUSD student non-participants. Using descriptive statistics, chi-square statistical analyses, and Cox

survival analysis the impact of participation in the after-school program on reducing dropout rates was examined.

Data Sources

For attendance and dropout measures, the study drew from the LAUSD longitudinal student database with the assistance of the LAUSD.¹ LA's BEST program attendance records were used to identify the program participants within the LAUSD databases. Longitudinal data were then linked to the program's attendance records to gather further data on the LA's BEST students' regular school dropout rates.

Sample

All LA's BEST students were included in the LA's BEST sample. Three participation levels (1 year, 2 years, and 3+ years of participation) were identified for this investigation. Additionally, a stratified random sample of non-participants within the LAUSD database was selected to match the characteristics of the LA's BEST students. These two samples served as comparison groups to examine the difference in dropout rates associated with participation in the LA's BEST program. The three participation levels and the comparison group included students from four grade-level cohorts (from 6th through 9th grade) in the 1998-1999 academic year who were followed through to the 2002-2003 academic year when they would have been 10th, 11th, or 12th graders. The one-year participation level includes 2,967 LA's BEST participants and 2,963 non-participants. The 2-year participation level includes 1,636 LA's BEST participants and 1,634 non-participants. The 3-or-more-years participation level consists of 1,224 LA's BEST participants and 1,219 non-participants. Students were counted as participating for the year only if they attended the program for a minimum of 20 days. Both the treatment (LA's BEST) and control (non-participant) groups approximated each other with regard to academic grade level, gender, ethnicity, income, and achievement level.

¹ CRESST thanks the Los Angeles Unified School District for its cooperation in providing access to its longitudinal database.

Key Definitions

For purposes of this study, the definition of “dropout” is anyone who is no longer in the LAUSD database without a plausible leave code. As such, a real dropout rate for LAUSD would be slightly lower than our results suggest because the students absent from the LAUSD database could possibly include students who had transferred out of LAUSD into another school district or out of the state altogether without formally informing the district. These transient students, then, are captured within the dropout rates reported here. However, the resulting elevation in dropout rates is assumed to be similar for both the LA’s BEST participants and the non-participants and thus should not have influenced the results. Dropout indicators were calculated for each of the 4 years analyzed. Because a student may not be in the LAUSD database a given year but may return the next year, a student may be classified as a dropout in one year but not the next.

As previously noted, students were classified as participating in the LA’s BEST program for the year if they attended a minimum of 20 days during the academic year. Therefore, a student in the 3-year participation group would have had to be in attendance at the program for a minimum of 20 days in each of 3 or more different academic years.

Statistical Approach

Descriptive statistics were used to provide demographic profiles of the LA’s BEST participants and non-participants. In order to examine whether the difference between the dropout rates of participants and non-participants in the sample was statistically significant, chi-square analyses were also performed. Chi square is the most frequently used statistical technique to test the statistical significance of results presented in bivariate table format. Bivariate tables provide a summary of intersection of independent and dependent variables and can be used when we try to examine the relationship, if any, between those variables. In addition, a Cox survival analysis was also conducted to examine the effect of the intensity of participation, gender, ethnicity, low-income status, and LEP status.

Sample Demographics

The LA's BEST participants and non-participants in our student sample shared very similar demographic characteristics. The majority of participants in each cohort were female. The ethnic breakdowns were also similar: Most students were Hispanic, followed by African American, Asian/Pacific Islander, and White students and students identifying as "Other." As for the socio-economic proxy, free and reduced-price lunch, the majority (at least 84% or more) of LA's BEST participants and non-participants received a free or reduced-price lunch. Finally, in each of the four cohorts, at least a third or more of LA's BEST participants and non-participants were LEP students.

Results

Dropout Rates

First, the entire sample of LA's BEST participants was compared to the sample of non-participants in order to test for program effect. It was found that, overall, LA's BEST participants were less likely to drop out of school than non-participants. Summary Table 1 below shows the chi-square value comparing dropout rates for all three treatment levels combined (from 1 year of LA's BEST participation to 3+ years of participation) to the control group of non-participants. As the table indicates, the differences in student dropout rates were statistically significant for each year included in the study (from 1999 to 2003).

Summary Table 1
Chi-Square Statistics of Dropout Rates (3 Years or More of Participation)

Chi-square Value				
98-99	99-00	00-01	01-02	02-03
n/a	9.665**	9.665**	9.862**	5.331*

* Significant at .05 level. ** Significant at .01 level. *** Significant at .001 level.

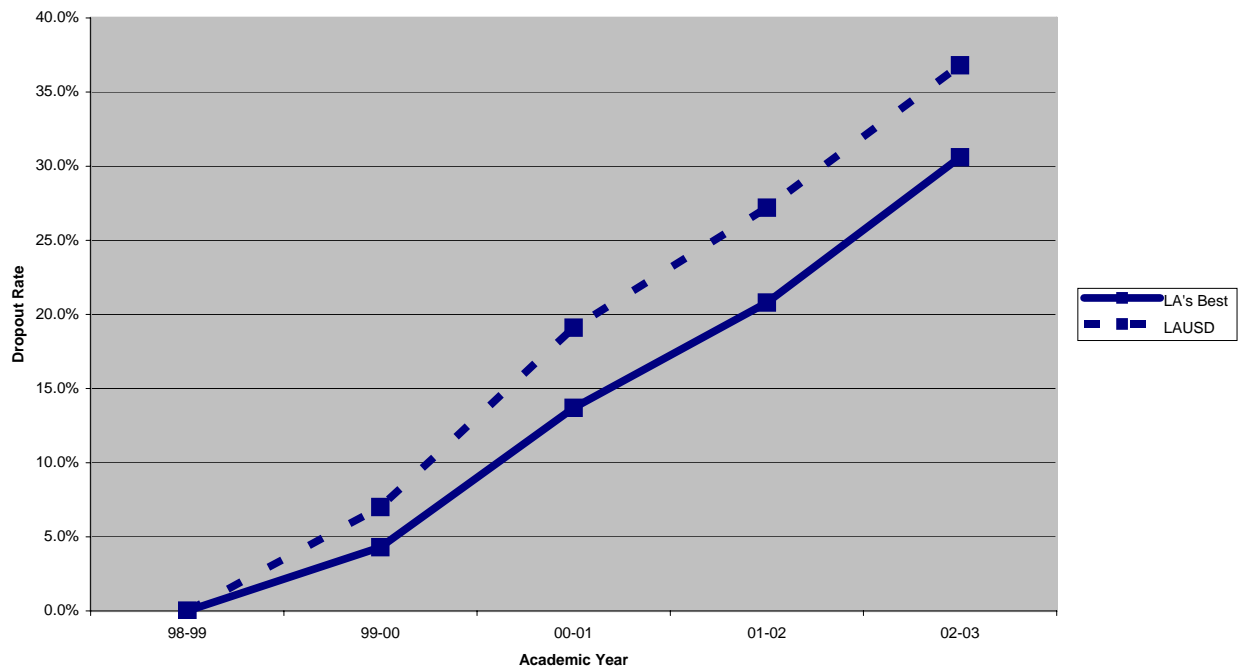
Next, the data were analyzed to examine the minimum number of years of participation required in order to see an effect on dropout rates. The analysis indicated that there was no difference found for any of the four cohorts based on 1 year of participation. However, it is important to note that participation for 1

year is defined as attending the program on at least 20 days during one academic year. With this definition, the LA's BEST participant group may contain students with relatively little exposure to the program (20 days) as well as those who attended the program on more than 150 days. Thus, our definition of participation may have weakened the effects in some of the analyses.

Statistical significance for 2-year participants was found only with the cohort beginning the ninth grade in 1998. Dropout rates for participants in this cohort were significantly lower than those of non-participants for each year analyzed in the study. By this cohort's senior year of high school, the difference in dropout rates between LA's BEST participants and non-participants was almost 14%.

The difference was strongest for the group participating in the after-school program for at least 3 years. Taken as a whole, the non-participants had a significantly higher percentage of dropouts than the LA's BEST participants in the academic years 1999-2000 ($p < .01$), 2000-2001 ($p < .001$), 2001-2002 ($p < .001$), and 2002-2003 ($p < .01$). As suggested by these data, students in the non-participant group were more likely to drop out of school than the LA's BEST participants.

Summary Figure 1 shows the dropout rates for LA's BEST participants attending the program for at least 3 years and their matched non-participants from 1998-1999 to 2002-2003. As the figure indicates, dropout rates were lower for LA's BEST participants. The difference between the two groups increases in the academic years when most of the cohorts are in high school.



Summary Figure 1: Comparison of dropout rates for LA's BEST vs. LAUSD non-participants (3+ Years).

In summary, the analyses revealed that the ninth-grade cohort of the LA's BEST participants who had attended the program for 2 years had a significantly lower dropout rate than the non-participants. However, the difference was strongest for the group participating in the after-school program for at least 3 years. Taken as a whole, the non-participants had a significantly higher percentage of dropouts than the LA's BEST participants.

As a result of these findings, more specific questions were explored. For example, does program participation have differential effects based on intensity of participation, gender, ethnicity, and language status?

A Cox survival analysis was conducted to test these effects. As expected, the analysis has revealed that male students, Black and Hispanic students, and LEP students were more likely to drop out than their counterparts. But more importantly, the analysis supported the chi-square analyses indicating that participation in LA's BEST can significantly reduced the LAUSD students' dropout rates. Further more, the Cox analysis showed that this effect is compounded with the intensity of participation rate; in another word, the more regularly the students attended the program, the higher the reduction of the

hazard of dropping out of school. Most interestingly, LA's BEST participation also appeared to have a significant effect in reducing the hazard of dropping out for low-income students; that is, the greater the low-income status at the baseline, the longer participation in LA's BEST will keep these students in school. Since LA's BEST has specifically designed the program to serve low-income students, it is encouraging to see the program has a significant effect on the targeted population.

Conclusion

A review of previous LA's BEST evaluations revealed positive student attitudes and experiences with the program, the maintenance of academic performance levels, opportunities to establish positive relationships with adults, and the encouragement of parents' involvement in their children's schooling. These are crucial elements of the program that may increase student resiliency, thereby keeping at-risk students in school and improving high school graduation rates.

Similarly, results from the study *Exploring the Long-Term Impact of LA's BEST on Students' Social and Academic Development* (Huang et al., 2004) supported the importance of after-school extracurricular activities. This study offered evidence that participation in LA's BEST increases high school attendance, thereby improving achievement scores in SAT-9 math and reading. This finding is particularly noteworthy since it supports the results of the previous report, *A Decade of Results* (Huang, Gribbons, Kyung, Lee, & Baker, 2000), in which participation in LA's BEST was found to increase school attendance and improve academic performance. Results also suggest that LA's BEST participants continued to have better school attendance even seven years after they left the program.

Given this evidence, it appears that the LA's BEST experience has provided a support structure for at-risk students that helps keep them in school. As revealed in the current study, the LA's BEST students who had participated in the program for 3 or more years had significantly lower dropout rates than the non-participant control group. More importantly, Cox survival analysis has shown that participation in LA's BEST has significantly reduced the hazard of dropping out of school for low-income students. After-school programs that focus on fostering meaningful and substantive after-school activities could lead

to positive social and academic development, thereby increasing the likelihood of high school completion and long-term success. Provided with these opportunities, students may be better equipped to improve academic achievement, develop positive extracurricular interests, stay in school, and acquire basic life skills. In September 2004, the Department of Justice funded CRESST to conduct a long-term study to examine the relationships between participation in LA's BEST and subsequent juvenile crime rates, academic behaviors (such as staying in school), and citizenship. This study, now in progress, will concentrate on establishing a more precise definition and classification of students that are designated as "dropouts." Further, policymakers, funding agencies, and law enforcement officials would benefit from CRESST's examination of the relationship between participation in after-school programs and the reduction of costs for society in terms of keeping students in school and away from crime. Finally, additional future studies on the relationships between factors contributing to resiliency and dropout results would benefit educators and youth development agencies.

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