



EIGHTH GRADE PREDICTORS OF DROPOUT RESEARCH BRIEF

June, 2010

INTRODUCTION

The purpose of the report on which this brief is based was to determine the strongest predictors of high school dropout and to determine which student characteristics could be used in the development of an early warning system to alert teachers, principals, and other administrators about which 8th-grade students are most at risk of dropping out.

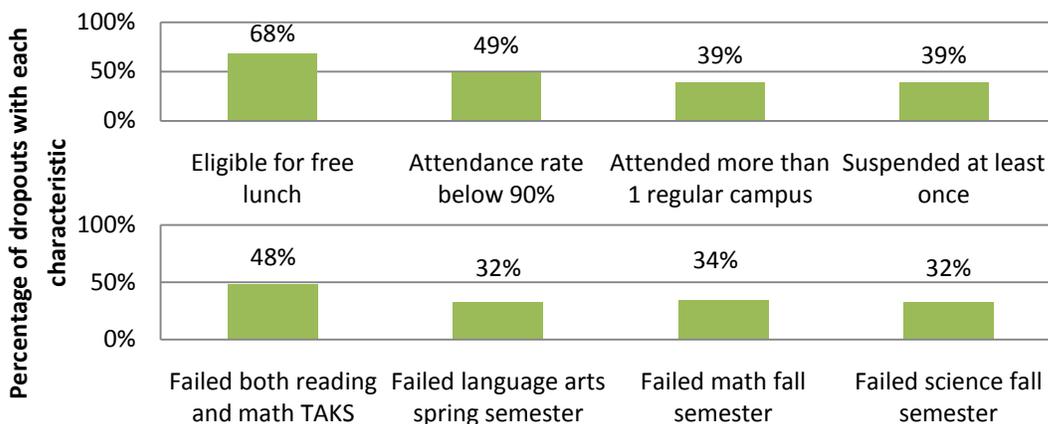
Department of Program Evaluation (DPE) staff examined predictors of dropout risk among first-time 8th-grade students from the 2004–2005 school year (i.e., students who would have been members of the graduating class of 2009 if they proceeded through high school at the recommended pace). Separate analyses were conducted to estimate overall dropout risk and the risk of early dropout (i.e., during the 2005–2006 school year).

8TH-GRADE PREDICTORS OF OVERALL DROPOUT RISK

The 8th-grade characteristics that best predicted overall student dropout risk after controlling for the presence of other risk factors were: (a) qualifying for free lunch, (b) an attendance rate of less than 90%, (c) intra-district mobility, (d) 1 or more suspensions, (e) failing both the reading and math Texas Assessment of Knowledge and Skills (TAKS) tests, (f) failing an English course in the second semester, (g) failing a math course in the first semester, and (h) failing a science course in the first semester.

Of these, the most powerful predictors of overall dropout risk were having an 8th-grade attendance rate of less than 90% and failing both the 8th-grade reading and math TAKS tests. Figure 1 shows the percentages of dropouts with each of the most powerful dropout risk predictors.

Figure 1. Overall Percentage of Dropouts with each 8th-grade Characteristic (n = 495)



Source. AISD student records



Quick Facts

- **The overall risk of dropout for the Class of 2009 in their 8th-grade year was 8.4%.**
- **Students whose 8th-grade attendance rate was less than 90% were 2.3 times more likely to drop out than were students with attendance rates at or above 90%.**
- **Students who failed both 8th grade reading and math TAKS tests were 2.8 times more likely to drop out than were students who passed both exams.**
- **Students who failed math in the fall semester were 1.8 times more likely to drop out than were students who passed math.**

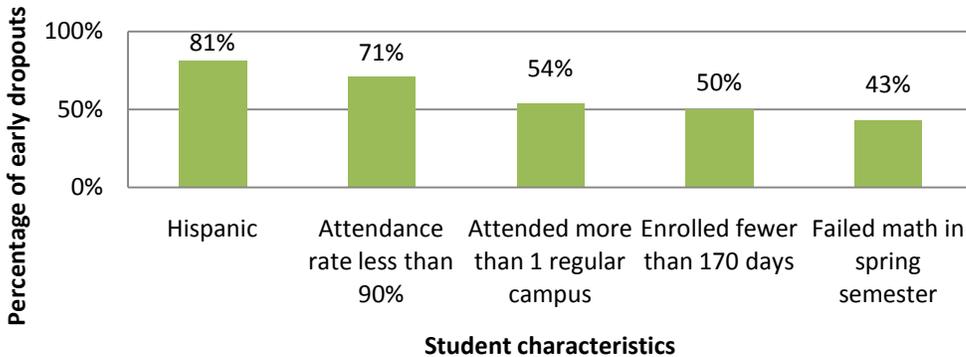
The complete report is available online at <http://www.austinisd.org/inside/accountability/evaluation/reports/phtml>

8TH GRADE PREDICTORS OF EARLY DROPOUT

The likelihood of early dropout (i.e., during 2005–2006 academic year) was significantly higher for students who (a) were of Hispanic origin, (b) had attendance rates below 90%, (c) exhibited intra-district mobility, (d) were enrolled fewer than 170 days, or (e) failed a math course in the spring semester.

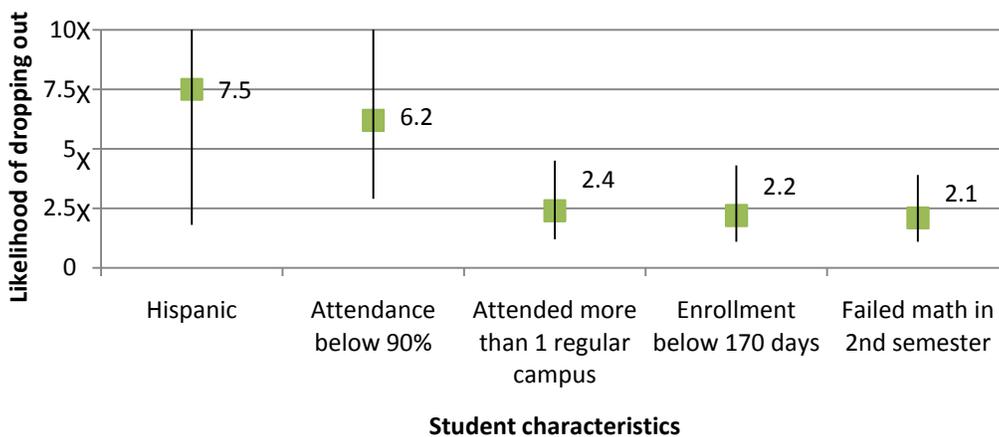
Students with 8th-grade attendance rates below 90% were 6.2 times more likely to drop out of school in 2005–2006 than were students whose attendance was above 90%.

Figure 2. Percentage of Early Dropouts with each 8th-grade Characteristic (n = 68)



Source. AISD student records

Figure 3. Students' Likelihood of Early Dropout in 2005-2006 by 8th-grade Characteristic



Source. AISD student records

Note. Likelihoods are in comparison to students who are not in the category. Estimates statistically control for each of the other characteristics. The vertical axis shows the number of times more likely a student is to dropout ranging from 1X (1 time) to 10X (ten times) more likely. The line through each regression estimate indicates the width of the 95% confidence interval.

RECOMMENDED INDICATORS FOR AN EARLY WARNING SYSTEM

- Poor attendance, especially if less than 90%
- Switching campuses during the year
- Enrolled fewer than 170 days of the school year (e.g., transfer students)
- Failing both the reading and math TAKS tests
- Core course failure, especially in math
- Suspension from school

SUGGESTION FOR FUTURE RESEARCH

We recommend replicating these analyses with a cohort of high school students to determine if the risk predictors change after the transition to high school

Research from another urban school district found that students entering the district during their 9th grade year or later were more likely to dropout than students who were enrolled in the district in 8th grade (Celio & Leveen, 2007).