



Getting Ready to Pay for College



What Students and Their Parents Know About the Cost of College Tuition and What They Are Doing to Find Out

U.S. Department of Education
Institute of Education Sciences
NCES 2003-030

Statistical Analysis Report





Getting Ready to Pay for College



What Students and Their Parents Know About the Cost of College Tuition and What They Are Doing to Find Out

U.S. Department of Education
Institute of Education Sciences
NCES 2003-030

Statistical Analysis Report

September 2003

Laura J. Horn
Xianglei Chen
MPR Associates, Inc.

Chris Chapman
National Center for
Education Statistics

U.S. Department of Education

Rod Paige
Secretary

Institute of Education Sciences

Grover G. Whitehurst
Director

National Center for Education Statistics

Val Plisko
Associate Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Institute of Education Sciences
U.S. Department of Education
1990 K Street NW
Washington, DC 20006-5574

September 2003

The NCES World Wide Web Home Page is: <http://nces.ed.gov>

The NCES World Wide Web Electronic Catalog is: <http://nces.ed.gov/pubsearch/>

Suggested Citation

U.S. Department of Education. National Center for Education Statistics. *Getting Ready to Pay for College: What Students and Their Parents Know About the Cost of College Tuition and What They Are Doing to Find Out*, NCES 2003-030, by Laura J. Horn, Xianglei Chen, and Chris Chapman. Washington, DC: 2003.

For ordering information on this report, write:

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794-1398

or call toll free 1-877-4ED-PUBS; or order online at: <http://www.edpubs.org>

Content Contact:

Chris Chapman
(202) 502-7414
nhes@ed.gov
<http://nces.ed.gov/nhes>

Executive Summary

Findings from surveys of adults in general (Ikenberry and Hartle 1998) and of parents of college-age children (Miller 1997) suggest that Americans place a high value on obtaining a college education, but that they have difficulty estimating college costs. This study uses data from the Parent and Youth Surveys of the 1999 National Household Education Surveys Program (NHES: 1999) to investigate how much “college-bound”¹ students in grades 6 through 12 and their parents know about the cost of attending college, and the relationships between their knowledge of college costs and how they go about preparing for college.² It examines whether parents had started to save for their children’s education, gathered information on financial aid, and knew about various tax credits to help offset costs. Students were asked about discussions they had with parents or teachers/counselors to learn about college costs, academic requirements, and financial aid availability.

The base sample of this report consists of 7,910 6th- through 12th-grade students who participated in the Youth Survey of NHES:1999. Parent data used in this report were collected through the Parent Survey of NHES:1999 from the parents of these students. Because of this sample design, the data can be used to analyze both students’ own plans and their parents’ plans for students’ postsecondary education. Findings can be generalized to all 6th- through 12th-graders, but

¹This term is applied to all students who reported plans to attend any type of postsecondary institution.

²Parent reports are limited to information provided by parents of the sampled 6th- through 12th-grade students interviewed for the survey.

not to all parents of 6th- through 12th-graders. Student and parent cost estimates are compared against price data collected directly from postsecondary institutions.

Almost All Plan to Attend College

In 1999, the vast majority of 6th- through 12th-graders (94 percent) and their parents (96 percent) responded “yes” to the question “Do you think (you/your child) will attend school after high school?” Ninety-one percent of *both* students and their parents agreed that the students would attend college or some other type of postsecondary institution. Among students and parents who reported such plans, 45 percent of students and roughly one-half of parents thought the students would attend a 4-year college, while 17 percent of students and one-quarter of parents reported plans for students to attend a 2-year institution. The remainder (39 percent of students and 25 percent of parents) were undecided about the kind of postsecondary institution the student would attend.³

Acquiring Cost Information

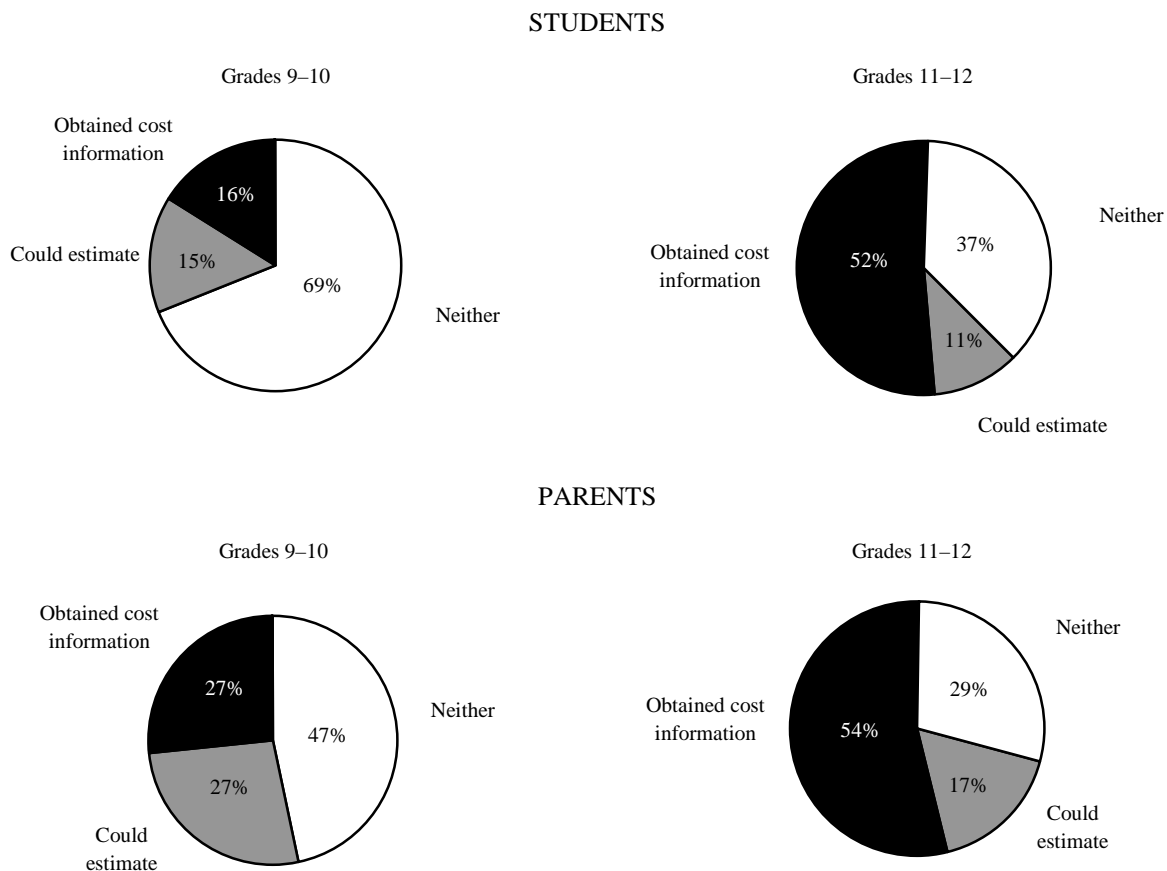
High school students (in 9th through 12th grades) with plans to attend college and parents of 6th- through 12th-graders who also reported postsecondary plans for their children were asked if they had obtained information about what it would cost to attend. Eighteen percent of students and 30 percent of parents had done so. While

³Readers should keep in mind that the data collected from parents are representative of parents of the sampled students and not of all parents.

students in 11th and 12th grades were more likely to have acquired cost information than their 9th- and 10th-grade counterparts, just 52 percent of 11th- and 12th-graders had acquired such information (figure A). A similar picture emerges when looking at the responses of their parents,

with students in 11th and 12th grade more likely to have parents who had acquired cost information than students in 9th and 10th grades. An additional 11 percent of students in grades 11 and 12 thought they could accurately estimate tuition and fees, and an additional 17 percent of 11th- and 12th-

Figure A.—Among 9th- through 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to whether they had obtained college cost information, could estimate the costs, or could do neither: 1999



NOTE: Detail may not sum to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

graders had parents who thought they could accurately estimate tuition and fees. Considering both students and their parents jointly, about 38 percent of 11th- and 12th-grade students had either acquired information about college prices or thought they could estimate costs, and had parents who reported the same.

The likelihood of having knowledge of college prices increased with household income and parents' education for both students and parents. In addition, parents of White students were more likely than parents of either Black or Hispanic students, and White students more likely than Hispanic students, to report knowledge of college costs. Those individuals who are potentially least able to afford college were also most likely to lack information about the cost of attending.

How Well Students and Parents Estimate 1 Year's College Tuition

Students and parents who reported that they had either obtained college cost information or that they could accurately estimate the cost of tuition were then asked to provide an estimate of "1 year's tuition and mandatory fees" at the type of college the students planned to attend.⁴ Overall, both students and parents substantially overestimated tuition amounts, especially for public institutions.⁵ For example, the average

yearly tuition that in-state undergraduates were charged at public 4-year institutions in 1998–99 was \$3,247 (The College Board 1999).⁶ On average, students close to the age of enrollment (i.e., 11th- and 12th-graders) who planned to attend public 4-year institutions in-state and their parents estimated the yearly tuition to be between \$5,000 and \$6,000 (\$5,799 for students and \$5,366 for their parents) (figure B).

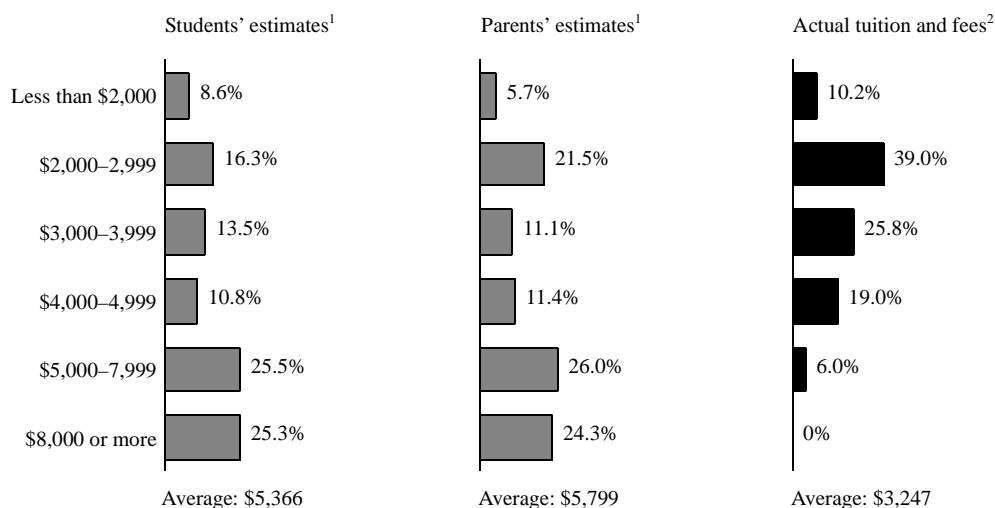
The distribution of tuition levels (also shown in figure B) illustrates how students and their parents overestimate tuition costs. While less than one-tenth of 1 percent of all students enrolled in public 4-year institutions (in-state) were charged \$8,000 per year or more in tuition, approximately one-quarter of 11th- and 12th-grade students and their parents expected they would have to pay this much for a college education at 4-year in-state public institutions. The vast majority of students attending such institutions paid less than \$5,000 in tuition per year. Similar patterns, but more modest differences, were found for private 4-year institutions (figure C). While 20 percent of undergraduates were charged \$20,000 or more in annual tuition, 38 percent of 11th- and 12th-graders and 27 percent of their parents thought it would cost at least \$20,000 annually to attend. However, when looking only at the overall average, no difference could be detected between parents' estimates (\$14,506) and the actual average tuition for private 4-year colleges (\$14,709). Thus, parents of children who planned to attend private 4-year institutions appeared to be more aware of the costs at these institutions than their counterparts whose

⁴The use of the terms "tuition" or "fees" is arbitrary. Some institutions only charge tuition, some only fees, and some both. For simplicity, the term "tuition" was used in the text to refer to tuition and/or fees.

⁵If undecided about 2- or 4-year institutions (about 39 percent of students and 25 percent of parents), estimates of public 4-year institutions were requested. If undecided about attending a public or private institution (about 14 percent of students and 10 percent of parents), estimates of public institutions were requested. If undecided about in-state or out-of-state attendance (about 4 percent of students and 3 percent of parents), estimates of in-state tuition were requested.

⁶The average yearly tuition reported does not take into account any financial aid students may have received that offset tuition. At the time the analyses were done for this report, data were not available from the 1998 Integrated Postsecondary Education Data System (IPEDS). Data from IPEDS are typically used for analysis of college costs. The equivalent estimate from the 1998 IPEDS is \$3,229.

Figure B—Among 11th- and 12th-graders and their parents who reported plans for the student to attend a public in-state 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99



¹Does not include those who reported room and board in their estimates. Includes respondents who were undecided about where to attend but estimated tuition and fees for public 4-year institutions in their state.

²Does not include room and board costs.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

children planned to attend comparable public colleges.

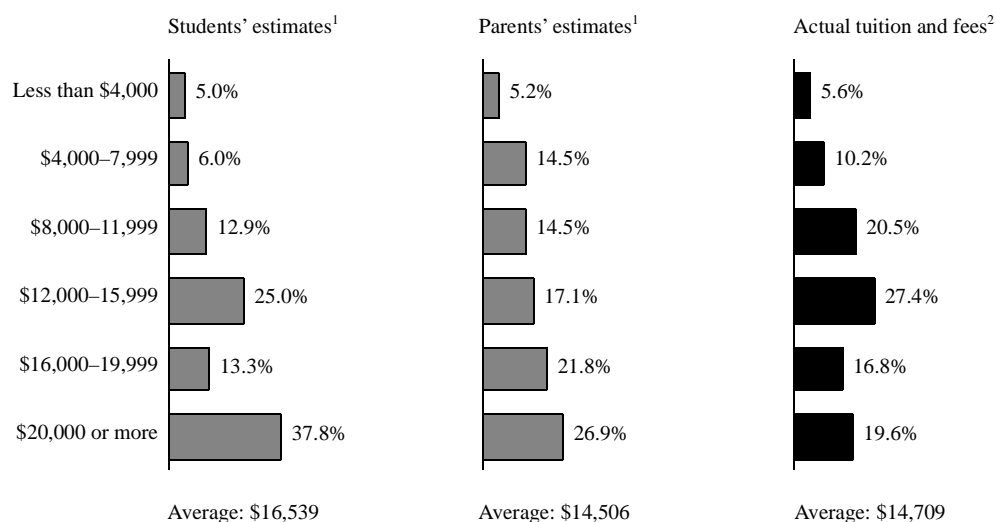
Because college tuition varies substantially from state to state (U.S. Department of Education 2002), further analyses were conducted to determine how accurately students and their parents could estimate tuition for the type of institution students planned to attend within their state of residence. Accurate estimates were defined as those within 25 percent of the actual state average.⁷ As shown in figure D, one-quarter of 11th- and 12th-graders and about one-third (31 percent) of their parents were able to provide accurate estimates.

⁷The analysis also included accuracy levels at 15 percent and 50 percent of actual amounts with similar results (see appendix C).

Moreover, both students and their parents were much more likely to overestimate than to underestimate tuition. Finally, 37 percent of 11th- and 12th-graders and 29 percent of their parents could not estimate yearly tuition for the type of college the students hoped to attend.

In looking at all students included in the survey (i.e., 6th- through 12th-graders) who were planning to attend postsecondary education, the likelihood of being able to estimate tuition accurately increased with household income. For their parents, both household income and parents' education level (i.e., the higher the level, the more likely they were to estimate accurately) were associated with the ability to estimate tuition and fees.

Figure C—Among 11th- and 12th-graders and their parents who reported plans for the student to attend a private 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99



¹Does not include those who reported room and board in their estimates.

²Does not include room and board costs.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

Getting Ready for College

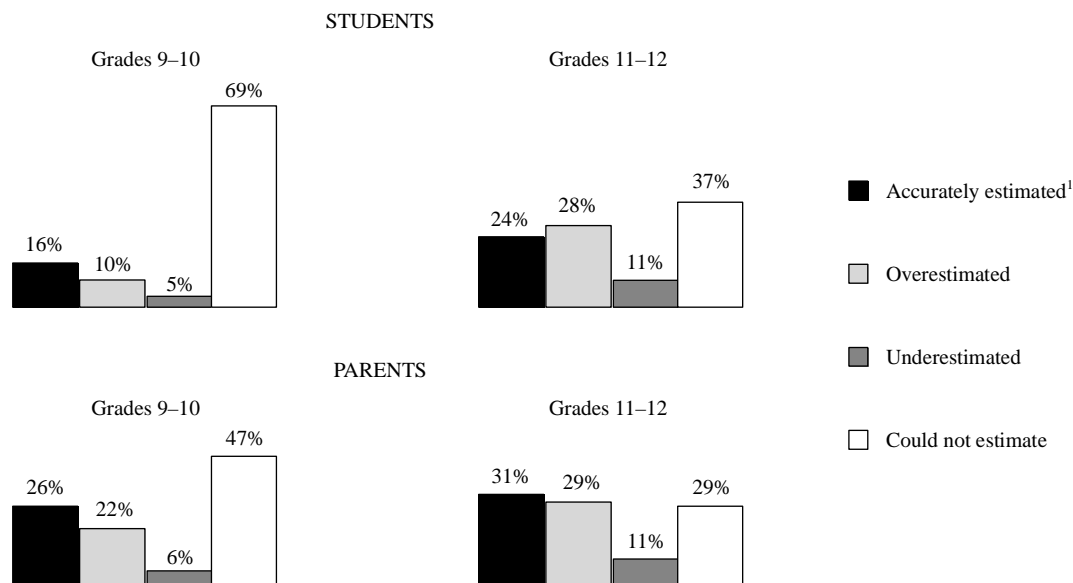
Students and parents were asked separate questions in NHES:1999 about their preparations for college. Their responses provide information about parents' plans for paying for their children's college education and how actively students acquired information about the academic and financial requirements for attending college.

Parents' Plans to Pay for Their Children's College Education

Parents were asked if they had started saving for their child's postsecondary education or making other financial plans, if they had gathered information about financial aid, and whether they knew about the Lifelong Learning and/or HOPE Scholarship tax credits. The

likelihood of parents reporting that they had begun saving or making other financial preparations to pay for their child's college education increased with household income. Parental planning was also related to students' academic standing in school: as grade-point average increased, so did the likelihood that parents reported saving money, gathering information about financial aid, and knowing about college tax credits. No relationship was detected between the proximity of a student starting postsecondary education and their parents' plans to pay for it. Focusing on students who intended to go to college, 63 percent of 11th- and 12th-graders and 59 percent of 9th- and 10th-graders had parents who had made some financial preparations. The apparent difference was not statistically significant.

Figure D—Among 9th- through 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to the accuracy of tuition estimates for 1 year’s tuition and fees at the type of college the student planned to attend: 1999



¹An accurate estimate was defined as one within 25 percent of the average for the type of institution the student planned to attend in their state of residence.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Similarly, there was not a detectable difference between the percentage of college-bound 9th- and 10th-graders (59) and the percentage of college bound 6th- through 8th-graders (57) with parents who had made financial preparations.

A similar percentage (58 percent) of college-bound 11th- and 12th-graders’ parents had sought information about financial aid availability, and about one-third (34 percent) were aware of the Lifelong Learning and/or HOPE Scholarship tax credits. Awareness of at least one of the tax credits increased with household income and parents’ education levels.

Students’ Discussions With Parents and Teachers/Counselors⁸

Students were asked if they had discussed with their parents or teachers (including counselors) the type of college to attend and the academic and cost requirements of that college. Students were also asked if they had sought information about the availability of financial aid. Nearly three-quarters of students (74 percent) reported that they had discussed the academic requirements of attending college with

⁸Students were asked if these discussions had occurred during the 1998–99 school year.

parents or teachers/counselors. And just over two-thirds (69 percent) reported having conversations about the type of college they expected to attend. However, half or fewer reported discussing college costs or financial aid with parents or teachers/counselors. As might be expected, the likelihood of reporting such discussions increased as students approached college age. By 11th and 12th grade, over 90 percent of students reported having discussions about academic requirements or the type of college to attend, and about three-quarters (71 to 75 percent) reported discussions about college costs and financial aid.

Students' discussions about aspects of college had little relationship to either household income or parents' education levels. However, there was a positive relationship between students knowing what type of institution they wanted to attend and the likelihood of a student discussing college cost requirements with their parents or their teachers/counselors. A positive relationship was also found between students assuming a role in family decisionmaking and the likelihood of students discussing college cost requirements with their parents or their teachers/counselors. In other words, as the likelihood of students' knowing where they wanted to attend college or how involved they were in family decisionmaking increased, so did their likelihood of discussing college cost requirements. On the other hand, no association between student discussions of college cost requirements and either their household income or their parents' education was detected.

Factors Related to Information Gathering and College Cost Awareness and Estimates

To determine what factors independently related to students' and parents' awareness of college costs, a multivariate analysis was conducted. "Cost awareness" used in the context of this report means students or parents had either obtained college cost information or reported that they thought they could estimate the cost of tuition and fees.

The multivariate analysis of students' and parents' cost awareness controlled for interrelated variables, that reflected student characteristics, family background, students' high school experiences (including GPA), and parents' involvement in their children's school. After applying such controls, a number of variables remained significantly related to cost awareness (figure E).

For instance, there were positive relationships between students' and parents' cost awareness and students' grade level (11th- and 12th-graders and their parents were more aware than 9th- and 10th-graders and their parents); parents' education levels (college graduates were more aware than others); and reporting plans to attend private 4-year colleges or universities (compared with public 4-year institutions).

In some cases, results differed for students and parents. For example, Black students were more likely than White students to report cost awareness, while for parents the opposite was true: parents of Black students were less likely to be knowledgeable about costs than parents of White students. Although cost awareness among students was not associated with household income, there was a positive relationship between cost awareness and household income

Figure E.—Among 6th- through 12th-graders and their parents, factors associated with increased cost awareness or the ability to estimate accurately tuition and fees: 1999

	Cost awareness ¹		Accurate estimates of tuition ²	
	Student	Parent	Student	Parent
Grade in school 11th- and 12th-graders (vs. lower grades)	✓	✓	✓	✓
Students' gender Males (vs. females)	✓		✓	
Students' race/ethnicity Blacks (vs. whites)	✓		✓	
Whites (vs. blacks)		✓		✓
Whites (vs. Hispanics)				✓
Parents' education Bachelor's degree (vs. less education)	✓	✓		✓
Household income \$75,000+ (vs. <=\$50,000)		✓		✓
\$75,000+ (vs. <=\$25,000)			✓	
Type of institution planning for 4-year private (vs. 4-year public)	✓	✓	✓	✓
Parent involvement in school High (vs. low)		✓		
Student talked with parents or teachers about college cost requirements	✓	†	✓	†
Student talked with parents or teachers about financial aid	✓	†		†
Parents talked to someone/read information about financial aid	†	✓	†	✓
Parents knew of Lifelong Learning or HOPE Scholarship tax credits	†	✓	†	✓

† Not applicable.

¹Had either obtained college cost information or reported they could estimate tuition and fees.

²An accurate estimate was defined as one within 25 percent of average for the type of institution the student planned to attend in the state of residence.

NOTE: Sample includes students and their parents who reported plans for student to attend postsecondary education. Each check indicates an attribute associated with increased cost awareness or the ability to accurately estimate tuition. For example, in the first line under "students' race/ethnicity" Black students were more cost aware and were more likely than White students to provide an accurate tuition estimate. The opposite was found for parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

among their parents: those with household incomes over \$75,000 were more likely to be knowledgeable about the costs than households with incomes of \$50,000 or less. In addition, male students were more cost aware than female students, but students' sex was not associated with parents' cost awareness. Parents' level of involvement in the schools was associated with their cost awareness, but not with students' awareness.

Finally, some variables pertained only to students or parents. If students had talked with their parents or with teachers/counselors about college cost requirements or about financial aid, they were more likely to be aware of college costs. Similarly, if parents had talked to someone or read financial aid materials, or if they knew about the availability of either the Lifelong Learning or HOPE Scholarships, they were more likely to be aware of college costs.

If cost awareness were high, one would expect a corresponding ability to accurately estimate tuition for the type of institution the student planned to attend. In fact, nearly identical results were found for students' and parents' cost awareness and ability to estimate the costs. That is, most variables related to cost awareness also were related to the ability to estimate 1 year's tuition accurately.

In the end, even after applying statistical controls, the results indicate that the level of awareness students and parents possess about the costs of attending college is positively related to either household income or parents' education levels (or both). However, it is important to note that, regardless of family background, if parents had sought information about financial aid availability or if they knew about other means of offsetting costs (through

tax credits), they were much more likely to know what it would cost to send their child to the college the child planned to attend. Similarly, if students had talked to parents or teachers/counselors about college costs, they too were better able to estimate the tuition of the college they planned to attend.

Conclusions

The public places a high premium on getting a college education (Ikenberry and Hartle 1998; Miller 1997). However, recent media attention on rising college costs (“Paying for College” 2002), combined with a general lack of knowledge about the affordability of many colleges (e.g., the average tuition at public 4-year colleges was \$3,000 a year in 1998), may unnecessarily discourage some students and their parents from preparing for college.

The results of this analysis reveal that many middle and high school students and to a lesser extent, their parents, do not have an accurate idea of what it costs to attend college. Even among 11th- and 12th-graders who intended to enroll in college, roughly half of both students and their parents reported having knowledge of college costs. When asked to estimate 1 year’s tuition, more students and their parents overestimated than underestimated the average amount. Furthermore, nearly 40 percent of 11th- and 12th-graders and nearly 30 percent of their parents could not estimate the cost of 1 year’s tuition.

Not surprisingly, the younger the students were, the less aware they or their parents were of college costs. At a time when students still have the opportunity to plan for college and take requisite college preparatory courses (i.e., 9th- and 10th-grade), 69 percent of 9th- and 10th-

graders and 47 percent of their parents could not estimate what it would cost to attend. It is possible that many students, with the encouragement of their parents, plan to attend no matter what the cost. However, the findings of this study also demonstrated a significant knowledge gap between lower and higher income families and between parents who ended their education at high school graduation and those who were college graduates.⁹ Thus, the students and parents who can least afford college and who would be most affected by the financial burden were also the least aware of how much it costs to attend.

On the other hand, regardless of parents’ education and household income, students who were involved in family decisionmaking were more likely to seek out information about college academic requirements and financial aid through discussions with parents and teachers/counselors.

Similarly, regardless of income and education levels, parents who were involved in their children’s school were more likely to have begun saving for their college education. In addition, compared with parents who reported low involvement in their children’s school, highly involved parents were more aware of college costs.

⁹Parents’ education levels and household income are often highly correlated, and families where neither parent attended college are disproportionately represented among lower income groups. For example, in NHES:1999, 89 percent of students whose parents did not attend college were from families where the household income was \$25,000 or less, whereas 69 percent of students with college-educated parents were from families where the household income was above \$75,000.

Foreword

This study uses data from the Parent and Youth Surveys of the 1999 National Household Education Surveys Program (NHES:1999) to investigate how much college-bound students in grades 6 through 12, and their parents, know about the cost of attending college, and the relationships between their knowledge of college costs and how they go about preparing for college. It examines whether parents had started to save for their children's education, gathered information on financial aid, and knew about various tax credits to help offset costs. Students were asked about discussions they had with parents or teachers/counselors to learn about college costs, academic requirements, and financial aid availability. The base sample of this report consists of 7,910 6th- through 12th-grade students who participated in the Youth Survey of NHES:1999. Parent data were collected through the Parent Survey of NHES:1999 from the parents of these students.

Acknowledgments

The authors would like to thank Val Plisko, Marilyn Seastrom, Jerry West, Shelley Burns, Bruce Taylor, Jim Griffith, and John Wirt from the National Center for Education Statistics, and David Miller and Leslie Scott of the Education Statistics Services Institute for their thoughtful reviews of this report. We would also like to thank the following reviewers of the final report for their constructive comments and insightful recommendations: Daniel Goldenberg (Policy and Program Studies Service), David Bergeron (Office of Postsecondary Education), Melissa Clinedinst (Institute of Higher Education Policy), and Eric Smith (Superintendent of Schools, Ann Arundel County Public Schools).

Table of Contents

	Page
Executive Summary	iii
Foreword	xii
Acknowledgments	xiii
List of Tables	xvi
List of Figures	xx
Introduction	1
Data and Methods	5
Study Sample and Methods.....	5
Expectations for College	7
Where Students Will Attend	7
Reasons for Not Planning to Attend.....	13
What Students and Parents Know About the Cost of Postsecondary Education Tuition..	17
Acquiring Information About College Costs	17
How Well Students and Parents Estimate 1 Year’s College Tuition	23
Making Preparations for College	41
Parents’ Plans to Pay for Their Children’s College Education	41
Students’ Preparations.....	48
Summary and Conclusions	55
Bibliography	57
Appendix A—Glossary	61
Appendix B—Technical Notes and Methodology	73
Appendix C—Supplemental Tables	79
Appendix D—Standard Error Tables	93

List of Tables

Table		Page
Text Tables		
1	Number and percentage of 6th- through 12th-graders and percentage of their parents who reported plans for the student to attend postsecondary education, by selected student, family, and parent characteristics: 1999	8
2	Number and percentage distribution of students according to the postsecondary institution type students plan to attend as reported by students and parents: 1999.....	10
3	Number and percentage distributions of 6th- through 12th-graders according to the postsecondary institution students plan to attend as reported by students and parents, by selected student, family, and parent characteristics: 1999	11
4	Number of students and percentage of consistent and inconsistent reports between 6th- through 12th-graders and their parents regarding the level of institution students plan to attend, by selected student, family, and parent characteristics: 1999	14
5	Percentage distributions of 6th- through 12th-graders and their parents according to the various reasons given for student not continuing education: 1999	16
6	Number and percentage of 6th- through 12th-graders and their parents who reported that they had obtained cost information or could accurately estimate tuition and fees at the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999.....	18
7	Number and percentage of 6th- through 12th-graders and their parents who reported they had either obtained cost information or could estimate tuition and fees, by selected student, family, and parent characteristics: 1999	20
8a	Sixth- through 12th-graders' and their parents' estimates of the amount of tuition and mandatory fees and tuition and fees plus room and board, according to students' grade level, and the actual average tuition and fees paid in 1998–99 by type of institution students planned to attend, by selected student, family, and parent characteristics: 1999.....	24
8b	Ninth- through 12th-graders' and their parents' average estimates for tuition and mandatory fees according to whether they had obtained information or could estimate costs, by type of institution students planned to attend: 1999.....	26

Table	Page
9	Number and percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999 29
10	Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999 34
11	Number and percentage of 6th- through 12th-graders' parents who reported having taken various steps to prepare to pay for their children's postsecondary education, by selected student, family, and parent characteristics: 1999 42
12	Logistic regression results (in odds ratios) of parents' preparations to pay for their children's postsecondary education: 1999 46
13	Number and percentage of 6th- through 12th-graders who reported discussing various issues relating to postsecondary education with their parents or school teacher/counselors, by selected student, family, and parent characteristics: 1999 49
14	Logistic regression results (in odds ratios) of 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999 52

Appendix Tables

C1	Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999 80
C2	Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999 83
C3	Logistic regression coefficients and standard errors for table 10: 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999 86
C4	Logistic regression coefficients and standard errors for table 12: Parents' preparations to pay for their children's postsecondary education: 1999 89

Table	Page
C5	Logistic regression coefficients and standard errors for table 14: 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999..... 91
D1	Standard errors for table 1: Percentage of 6th- through 12th-graders and percentage of their parents who reported plans for the student to attend postsecondary education, by selected student, family, and parent characteristics: 1999 94
D2	Standard errors for table 2: Percentage distributions of students according to the postsecondary institution type students plan to attend as reported by students and parents: 1999 96
D3	Standard errors for table 3: Number and percentage distributions of 6th- through 12th-graders according to the postsecondary institution students plan to attend as reported by students and parents, by selected student, family, and parent characteristics: 1999..... 97
D4	Standard errors for table 4: Number of students and percentage of consistent and inconsistent reports between 6th- through 12th-graders and their parents regarding the level of institution students plan to attend, by selected student, family, and parent characteristics: 1999..... 99
D5	Standard errors for table 5: Percentage distributions of 6th- through 12th-graders and their parents according to the various reasons given for student not continuing education: 1999 101
D6	Standard errors for table 6: Percentage of 6th- through 12th-graders and their parents who reported that they had obtained cost information or could accurately estimate tuition and fees at the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999 102
D7	Standard errors for table 7: Percentage of 6th- through 12th-graders and their parents who reported they had either obtained cost information or could estimate tuition and fees, by selected student, family, and parent characteristics: 1999..... 104
D8a	Standard errors for table 8a: Sixth- through 12th-graders' and their parents' estimates of the amount of tuition and mandatory fees and tuition and fees plus room and board, according to students' grade level, and the actual average tuition and fees paid in 1998–99 by type of institution students planned to attend, by selected student, family, and parent characteristics: 1999 106
D8b	Standard errors for table 8b: Ninth- through 12th-graders' and their parents' average estimates for tuition and mandatory fees according to whether they had obtained information or could estimate costs, by type of institution students planned to attend: 1999..... 107

Table	Page
D9 Standard errors for table 9: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999	108
D10 Standard errors for table 10: Logistic regression results (in odds ratios) of 6th-through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999.....	111
D11 Standard errors for table 11: Percentage of 6th- through 12th-graders' parents who reported having taken various steps to prepare to pay for their children's postsecondary education, by selected student, family, and parent characteristics: 1999.....	114
D12 Standard errors for table 12: Logistic regression results (in odds ratios) of parents' preparations to pay for their children's postsecondary education: 1999.....	116
D13 Standard errors for table 13: Percentage of 6th- through 12th-graders who reported discussing various issues relating to postsecondary education with their parents or school teacher/counselors, by selected student, family, and parent characteristics: 1999.....	118
D14 Standard errors for table 14: Logistic regression results (in odds ratios) of 6th-through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999	120
DC1 Standard errors for table C1: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999	122
DC2 Standard errors for table C2: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999	125

List of Figures

Figure	Page
Executive Summary Figures	
A	Among 9th- through 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to whether they had obtained college cost information, could estimate the costs, or could do neither: 1999..... iv
B	Among 11th- and 12th-graders and their parents who reported plans for student to attend a public in-state 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid, by undergraduates in 1998–99 vi
C	Among 11th- and 12th-graders and their parents who reported plans for the student to attend a private 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition paid, by undergraduates in 1998–99 vii
D	Among 9th- through 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to the accuracy of tuition estimates for 1 year’s tuition and fees at the type of college the student planned to attend: 1999..... viii
E	Among 6th- through 12th-graders and their parents, factors associated with increased cost awareness or the ability to estimate accurately tuition and fees: 1999..... x
Text Figures	
1	Among 11th- and 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to their knowledge of college costs: 1999 22
2	Among 11th- and 12th-graders and their parents who reported plans for the student to attend a public in-state 4-year institution, and who provided an estimate of tuition and fees, the percentage distribution of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99..... 27

Figure	Page
3	28

Appendix Figures

DA	128
DB	129
DC	130
DD	131
D1	132
D2	133
D3	134

Introduction

In a national survey of 2,000 randomly selected adults conducted by The College Board in 1997, a majority of respondents (58 percent) agreed with the statement: “A college education is so important that, regardless of how much it costs, I am going to make sure that my children go to college” (Ikenberry and Hartle 1998). A similar survey reported that 84 percent of parents with college-bound children believed that a college education is either indispensable (34 percent) or very valuable (50 percent) (Miller 1997). In addition, the Miller study reported that nearly all parents (97 percent) agreed with the statement: “A college education will enrich the quality of my child’s life.” Judging from the findings of these studies Americans place a premium on obtaining a college education. Correspondingly, college enrollment has increased substantially over time. Between 1981 and 2002, for example, the proportion of high school graduates who enrolled in college right after graduation increased from 54 percent to 65 percent (U.S. Department of Education 2001; U.S. Department of Labor 2003).

Over the last 20 years, the cost of attending higher education has risen considerably, outpacing growth in median household income as well the cost of most other goods and services (Davis 1997; U.S. Department of Education 2002). In 1977 the total cost of a public 4-year education represented roughly 13 percent of the median household income. By 1992, it had increased to 16 percent, and by 1995, it was 17 percent. Similarly, over the same time period, the cost of attending a private 4-year college was 34 percent, 41 percent, and 43 percent of median household income, respectively (Davis 1997). More recent data indicate that in the 10-year period ending in 2002, average tuition at both public and private 4-year institutions rose 38 percent after adjusting for inflation (The College Board 2003).

Rising college costs have received much media attention.¹ However, the media tends to focus on the cost of high priced selective colleges and universities.² This may help explain why, according to The College Board study, nearly three-quarters (71 percent) of respondents believed a “4-year college is not affordable for most Americans” (Ikenberry and Hartle 1998, p. 7). Paradoxically, 85 percent believed they could meet the price of a public 4-year college and 70 percent reported that it was likely that they would be able to meet the price of a private 4-year college. When asked to estimate the average cost of college tuition, respondents overestimated

¹For example, “Paying for College” (2002).

²For example, “The \$35,000 Question” (2002).

the cost of tuition at a public 4-year college by 212 percent and the cost of a private 4-year college by 31 percent. Even parents with children in college overestimated tuition and fees at public 4-year colleges. Parents in the Miller (1997) study also had difficulty estimating college costs. However, there was no relationship between the ability to accurately estimate the cost and the value placed on a college education. The findings of these studies suggest that Americans in general and even parents of college-age children are uninformed about the cost of higher education. In addition, disadvantaged families—those in which neither parent had attended college or those with low incomes—tended to be the least informed about college costs (Ikenberry and Hartle 1998).

Using the Parent and Youth Surveys of the 1999 National Household Education Surveys Program (NHES:1999), a nationally representative study of American households, this report examines how much both students and their parents know about the cost of a college education. Students in grades 6 through 12 and their parents were asked the same questions regarding whether or not they had obtained information about college costs and, if not, whether they could accurately estimate the cost of 1 year's tuition and fees. Those who had obtained information or who believed they could estimate the price of tuition were then asked to provide an estimate of 1 year's tuition and fees for the type of institution the student expected to attend. Verification questions were asked to determine if respondent estimates included costs besides tuition and fees in their estimates.

Not only do the NHES surveys allow for comparisons between students' and parents' awareness of college costs but parents also reported whether they were financially preparing for their children's education and whether they knew about the various tax credits and scholarships available to help offset the cost of college. Students were asked about their discussions with parents or teachers/counselors about college requirements and financial aid information. Using the NHES data, this report analyzes students' and their parents' knowledge of college costs and examines their college preparation activities. The report addresses the following questions.

- 1) What were students and their parents' expectations for students pursuing college and how well do they agree? What reasons did students and parents give for the students not planning to attend college?
- 2) Among 6th- through 12th-graders who planned to attend postsecondary education, what did students and their parents know about the cost of tuition and fees? How did students and parents acquire information on college costs? What student, family, and parent characteristics were associated with greater awareness of college costs?
- 3) Among 6th- through 12th-graders who planned to attend postsecondary education, what plans were students and their parents making for postsecondary education? Were parents preparing financially to pay for their children's education? How knowledgeable were they about available tax credits? Were students seeking

information in preparation to attend college, such as discussing college academic requirements, costs, and financial aid with parents or teachers? What student, family, and parent characteristics were associated with taking these steps to prepare for college?

Data and Methods

The data for this report are drawn from the Youth and Parent Surveys of the 1999 National Household Education Surveys Program (NHES:1999), a data collection system of the National Center for Education Statistics (NCES). Surveys in the NHES program collect data on education-related topics that are best gathered from individuals or families rather than educational institutions (see appendix B for a detailed description of the surveys).

The Parent Survey was conducted between January and April 1999. Interviews were completed with parents or guardians of 24,600 children from birth through 20 years old.³ The interview items covered a variety of educational topics, each appropriate for certain age groups of children. This report focuses on the section pertaining to parents' plans for their children's postsecondary education, expectations of the related education and costs, and preparation for paying for their children's education after high school.

The Youth Survey was conducted with children in grades 6 through 12 whose parents had completed a Parent Survey. A total of 7,913 children completed the interview. This report focuses on the interview items that are related to youth's plans for postsecondary education. Some interview items on the Youth Survey are identical to those on the Parent Survey, which allows for comparisons of students' and parents' responses.

In all tables presenting student and parent responses, the estimated student population of interest, based on a weighted N of survey respondents, is presented in the first column "Number of Students (in thousands)."

Study Sample and Methods

The base sample of this report consists of all students who participated in the Youth Survey.⁴ As described above, these students are 6th- through 12th-graders whose parents completed the Parent Survey (a total of 7,910 students), and therefore, can be used to analyze

³The respondents who participated in the Parent Survey of NHES:1999 were the parents/guardians who were most knowledgeable about the education of the sampled children. Although most respondents were parents (95 percent), some were brothers, sisters, grandparents, aunts, uncles, cousins, or other relatives. Since these nonparental guardians represent such a small percentage of the sample, there are not enough cases to analyze these groups separately. They were included in the group identified as children's parents in this report.

⁴Three students whose grade level could not be determined were excluded from the analysis.

both students' own plans and their parents' plans for students' postsecondary education. For this report, if both students and their parents expected the students to attend postsecondary education after high school in 1999, they were included in the analysis sample used to examine knowledge about college costs and preparation activities (a total of 7,285 students). Families in which either students or parents reported no college expectations (a total of 625 students) were excluded because they were not asked any further questions on postsecondary education.

Key variables used in the report included student demographic characteristics (sex, race/ethnicity, household income, and language spoken most at home by student); educational experiences of students (grade in school, school type, average GPA [grade-point average], and whether a student has been held back any grades); parents' education level; and language parents speak most in the home. In addition, two composite variables were created to measure students' participation in family decisions, and level of parent involvement in children's school. All of the variables used in the analysis are described in the glossary in appendix A.

In addition to providing descriptive tabular comparisons, this report includes multivariate analyses to determine which of the above factors were independently related to students' and parents' college cost awareness. In other words, holding all background and educational characteristics constant, which factors were related to students' and parents' awareness of college costs and their ability to estimate accurately the cost of attending?

Expectations for College

Obtaining some type of postsecondary education was a common goal for most students and parents in 1999.⁵ A large majority—94 percent of 6th- through 12th-graders and 96 percent of their parents—responded “yes” to the question: “Do you think (you/your child) will attend school after high school” (table 1). There was little disagreement between students and their parents on whether or not the students would pursue postsecondary education after high school: 91 percent of both students and parents agreed that the students would attend. These students, sometimes identified as “college bound” in this report, are the focus of the subsequent analyses.^{6,7}

Where Students Will Attend

Students in grades 6 through 12 and their parents who reported postsecondary education plans for the students were asked which type of postsecondary institution they expected the students to attend. Both students and parents expressed a greater interest in 4-year colleges and universities than either 2-year or vocational/technical institutions. For example, in 1999, 45 percent of college-bound students in grades 6 through 12 reported that they expected to attend a 4-year college after high school, compared with 17 percent who planned to attend a 2-year or vocational/technical institution (table 2). Among students’ parents, 50 percent expected their children to attend a 4-year college, compared with about one-quarter who expected their children to attend a 2-year or vocational/technical institution.

Both students and parents expressed greater interest in a public 4-year institution than a comparable private college. Among students, 24 percent of those planning to attend college thought that they would attend a public 4-year institution, compared with 7 percent who expected to attend a comparable private institution. Similarly, 29 percent of their parents expected their

⁵It should be noted that students may have siblings who had attended or were attending college, which would affect parents’ and students’ knowledge of costs. However, siblings’ college attendance could not be determined from the data.

⁶Excluded were students for whom either the student or the parent reported no postsecondary education plans (9 percent). Excluded students were more likely to be male, non-English speaking, Hispanic, home schooled, or attending a public school. They were also somewhat disadvantaged in terms of their schooling experiences (e.g., more likely to have had lower GPAs and repeated a school grade) and family backgrounds (e.g., more likely to have come from low-income families, non-English-speaking families, and families with parents with low educational attainment). These results are not presented in the report and are available from the authors.

⁷Approximately 4 percent of these students planned to attend noncollegiate vocational or technical institutions.

Table 1.—Number and percentage of 6th- through 12th-graders and percentage of their parents who reported plans for the student to attend postsecondary education, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Postsecondary education expected by				
		Student	Parent	Both	Student but not parent	Parent but not student
Total	27,286	93.6	95.8	90.9	2.7	4.9
Grade in school						
6 through 8	11,793	94.9	96.7	92.4	2.5	4.3
9 and 10	8,081	91.5	94.3	88.3	3.3	6.0
11 and 12	7,412	93.7	96.1	91.5	2.2	4.6
Student's sex						
Male	13,817	91.3	94.4	87.7	3.7	6.7
Female	13,470	95.9	97.3	94.3	1.6	3.1
Student's race/ethnicity						
White, non-Hispanic	18,100	94.0	96.0	91.7	2.3	4.3
Black, non-Hispanic	4,167	93.9	95.9	90.7	3.2	5.3
Hispanic	3,528	90.1	94.0	86.0	4.1	8.0
Other, non-Hispanic	1,490	95.5	98.0	93.5	2.1	4.5
Language spoken most at home by student						
English	25,257	93.7	95.9	91.2	2.6	4.7
Other	2,029	91.5	95.1	87.6	3.9	7.6
Average GPA across all subjects ¹						
Mostly F/D's	1,423	66.2	85.9	59.3	7.0	26.6
Mostly C's	5,689	86.5	92.1	81.5	5.0	10.6
Mostly B's	10,452	96.4	96.8	94.1	2.3	2.7
Mostly A's	9,366	98.9	99.0	98.3	0.6	0.8
Repeated any grades since kindergarten ¹						
Yes	3,748	80.9	87.8	74.0	6.9	13.8
No	23,182	95.6	97.3	93.8	1.8	3.5
School type						
Public	24,623	93.3	95.8	90.6	2.7	5.2
Private	2,308	96.9	98.6	96.0	0.9	2.6
Home school ²	356	93.8	83.6	82.0	11.8	#

See footnotes at end of table.

Table 1.—Number and percentage of 6th- through 12th-graders and percentage of their parents who reported plans for the student to attend postsecondary education, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Postsecondary education expected by				
		Student	Parent	Both	Student but not parent	Parent but not student
Parents' education						
Less than high school	2,514	81.9	91.3	77.3	4.7	14.0
High school only	7,245	90.4	94.7	87.3	3.1	7.3
Some postsecondary education	8,228	95.8	96.1	92.8	3.0	3.3
College graduate	4,375	96.9	97.9	95.2	1.7	2.7
Graduate school	4,924	97.6	97.7	96.3	1.3	1.4
Household income						
\$25,000 or less	8,220	89.3	93.8	85.2	4.1	8.6
\$25,001 to \$50,000	8,503	94.0	95.4	91.0	2.9	4.3
\$50,001 to \$75,000	5,079	95.5	97.1	93.8	1.7	3.3
More than \$75,000	5,484	97.7	98.4	96.7	1.0	1.7
Language most spoken at home by parents						
English	25,226	93.8	95.9	91.2	2.6	4.7
Other	2,061	91.0	95.3	87.5	3.5	7.8

#Too few sample cases.

¹This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

²Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Sample in table includes 6th- through 12th-graders and their parents among whom the student and/or parent reported plans for the student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table 2.—Number and percentage distribution of students according to the postsecondary institution type students plan to attend as reported by students and parents: 1999

Institution type	Reported by student		Reported by parent	
	Number (in thousands)	Percent	Number (in thousands)	Percent
Total	24,811	100.0	24,811	100.0
4-year institution				
Total	11,076	44.6	12,408	50.0
Public	5,988	24.1	7,248	29.2
Private	1,677	6.8	2,626	10.6
Undecided, 4-year	3,412	13.8	2,534	10.2
2-year	4,101	16.5	6,303	25.4
Undecided for the type of institution	9,634	38.8	6,100	24.6

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both the student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

children to attend a public 4-year institution, compared with 11 percent who expected their children to attend a comparable private institution.

The type of institution that students planned to attend varied considerably depending on the characteristics and background of students. In general, students with higher GPAs and no history of grade retention (i.e., being held back a grade) were more likely than their counterparts to choose a 4-year college and less likely to choose a 2-year institution (table 3). Both students and their parents were more likely to make plans for a 4-year college and less likely to choose a 2-year college as household income and parents' education increased.

Thirty-nine percent of students with plans to attend postsecondary education were undecided about the type of institution they hoped to attend. However, students' expectations became more definite as they approached college age. Among college-bound 6th- through 8th-graders, 58 percent reported that they were undecided about the type of institution they would attend (table 3). This percentage declined to 34 percent for 9th- and 10th-graders and even further to 14 percent for 11th- and 12th-graders. A similar pattern was observed among parents:

Table 3.—Number and percentage distributions of 6th- through 12th-graders according to the postsecondary institution students plan to attend as reported by students and parents, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Reported by student			Reported by parent		
		4-year	2-year	Undecided	4-year	2-year	Undecided
Total	24,811	44.6	16.5	38.8	50.0	25.4	24.6
Grade in school							
6 through 8	10,896	33.8	8.3	57.9	47.6	17.7	34.7
9 and 10	7,133	49.4	17.0	33.6	48.6	29.7	21.7
11 and 12	6,782	57.0	29.3	13.7	55.3	33.2	11.5
Student's sex							
Male	12,113	42.7	17.6	39.7	46.4	28.4	25.3
Female	12,698	46.5	15.5	38.0	53.5	22.6	23.9
Student's race/ethnicity							
White, non-Hispanic	16,605	45.7	16.4	38.0	52.3	26.9	20.8
Black, non-Hispanic	3,777	45.8	15.4	38.9	50.9	23.3	25.8
Hispanic	3,035	35.7	19.5	44.8	33.1	24.3	42.6
Other, non-Hispanic	1,393	49.1	15.2	35.7	57.3	15.4	27.3
Language spoken most at home by student							
English	23,034	45.3	16.3	38.4	†	†	†
Other	1,777	36.2	19.4	44.5	†	†	†
Average GPA across all subjects ¹							
Mostly F/D's	844	26.3	19.9	53.9	27.1	37.5	35.4
Mostly C's	4,638	32.7	24.3	43.1	31.3	41.0	27.8
Mostly B's	9,835	42.4	18.3	39.3	46.8	26.7	26.5
Mostly A's	9,202	55.2	10.4	34.4	65.4	14.5	20.1
Repeated any grades since kindergarten ¹							
Yes	2,774	32.7	25.2	42.2	32.1	38.2	29.8
No	21,745	46.4	15.4	38.3	52.5	23.5	24.0
School type							
Public	22,304	43.9	17.3	38.8	48.2	26.2	25.7
Private	2,215	54.0	8.7	37.4	70.3	15.5	14.2
Home school ²	292	30.8	18.9	50.3	35.6	43.4	21.0

See footnotes at end of table.

Table 3.—Number and percentage distributions of 6th- through 12th-graders according to the postsecondary institution students plan to attend as reported by students and parents, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Reported by student			Reported by parent		
		4-year	2-year	Undecided	4-year	2-year	Undecided
Parents' education							
Less than high school	1,942	34.1	20.5	45.5	24.8	17.7	57.5
High school only	6,328	36.7	20.0	43.2	35.0	32.0	33.1
Some postsecondary education	7,635	41.9	18.9	39.3	47.0	32.0	21.1
College graduate	4,165	51.8	12.8	35.5	66.9	18.4	14.7
Graduate school	4,741	57.8	9.8	32.4	70.5	15.4	14.2
Household income							
\$25,000 or less	7,002	37.6	19.8	42.6	35.8	27.4	36.8
\$25,001 to \$50,000	7,742	42.3	17.5	40.2	46.8	27.3	26.0
\$50,001 to \$75,000	4,764	47.5	16.9	35.7	55.1	28.0	17.0
More than \$75,000	5,304	54.7	10.5	34.8	68.9	17.8	13.3
Language most spoken at home by parents							
English	23,007	†	†	†	51.4	26.0	22.7
Other	1,803	†	†	†	32.5	18.4	49.2

†Not applicable.

¹This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

²Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

35 percent of 6th- through 8th-graders' parents were undecided about the type of institution their child would attend, compared to 22 percent of 9th- and 10th-graders' parents and 12 percent of 11th- and 12th-graders' parents.

Whether or not students and parents were undecided about where students would attend postsecondary education varied with their family background and income. As household income and parents' education increased, the likelihood of students and parents being undecided about where the students would attend college declined. In addition, Hispanic students were more likely than White students to be undecided, as were non-English-speaking students compared to their English-speaking counterparts.

Students' academic standing in school was also related to the uncertainty about where they would attend postsecondary education. Specifically, as students' grade-point average (GPA) increased, the likelihood of students and parents being undecided about where students would attend declined.

Agreement Between Students and Parents

While most students and parents agreed about students' plans to attend postsecondary education, they often disagreed about whether students would attend a 4-year or 2-year institution. Roughly half (53 percent) of students and parents agreed on the type of institution (table 4). Among students and parents who disagreed, parents tended to have higher expectations. Twenty-nine percent of students had parents who thought the student would attend a 4-year institution when the student reported plans to attend a 2-year institution. The estimate of paired student and parent reports that disagreed in the other direction was smaller. Eighteen percent of students had parents who thought the student would attend a 2-year institution when the student reported plans to attend a 4-year institution.

Student/parent disagreement, however, decreased with the students' grade level; 54 percent of students in grades 6 to 8 disagreed with parents with respect to the level of institution they would attend. This percentage declined to 49 percent among students in grades 9 and 10 and 34 percent among students in grades 11 and 12.

The consistency between students' and parents' expectations also varied across different student groups. In particular, White students were more likely to agree with parents than Hispanic students. Student/parent agreement increased as GPA, household income, and parents' education increased; agreement also was higher for students who had not repeated a grade.

Reasons for Not Planning to Attend

The small percentage of students (6 percent) and parents (4 percent) who did not report postsecondary education plans for the students were asked their main reason why they did not plan to attend college after high school. Among various reasons, "lack of interest in school" was one of the most frequently cited reasons by both students and parents (37 percent of students and 48 percent of parents) (table 5).⁸ The next most common reasons cited by students were "needing or wanting to work" (20 percent) and "other" (17 percent). Few differences were detected among other reasons provided by parents.

⁸There were two exceptions to this pattern: the proportion of students reporting "lack of interest" (37 percent) was not significantly different from the proportion reporting "needs to work" (20 percent) or "other" reasons (17 percent) for not continuing their education.

Table 4.—Number of students and percentage of consistent and inconsistent reports between 6th- through 12th-graders and their parents regarding the level of postsecondary institution students plan to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Percent of consistent reports				Percent of inconsistent reports		
		Total	4-year	2-year	Undecided	Total	Parents 4-year/ students 2-year	Students 4-year/ parents 2-year
Total	24,811	53.2	30.2	9.6	13.3	46.8	29.2	17.6
Grade in school								
6 through 8	10,896	46.5	21.0	3.1	22.4	53.6	37.8	15.8
9 and 10	7,133	50.8	30.9	10.2	9.7	49.2	27.7	21.5
11 and 12	6,782	66.4	44.5	19.6	2.4	33.6	17.0	16.5
Student's sex								
Male	12,113	52.3	28.2	10.7	13.4	47.7	29.7	18.0
Female	12,698	54.0	32.2	8.6	13.2	46.0	28.8	17.3
Student's race/ethnicity								
White, non-Hispanic	16,605	54.7	32.4	10.5	11.8	45.3	29.7	15.6
Black, non-Hispanic	3,777	49.9	30.5	6.8	12.6	50.1	30.6	19.5
Hispanic	3,035	48.8	16.2	9.5	23.1	51.2	25.9	25.3
Other, non-Hispanic	1,393	53.3	34.7	7.1	11.5	46.7	27.1	19.6
Language spoken most at home by student								
English	23,034	53.1	31.1	9.9	12.2	46.9	29.8	17.1
Other	1,777	53.6	19.8	6.6	27.3	46.4	21.5	24.9
Average GPA across all subjects ¹								
Mostly F/D's	844	42.4	9.7	11.4	21.3	57.7	36.1	21.6
Mostly C's	4,638	44.7	15.2	14.8	14.7	55.3	32.9	22.5
Mostly B's	9,835	52.2	26.9	10.6	14.7	47.8	28.7	19.1
Mostly A's	9,202	59.7	43.5	5.8	10.3	40.3	26.9	13.5
Repeated any grades since kindergarten ¹								
Yes	2,774	47.6	16.8	15.1	15.8	52.4	31.4	21.0
No	21,745	54.0	32.1	8.9	13.0	46.1	28.8	17.3
School type								
Public	22,304	52.6	28.8	10.1	13.7	47.4	28.9	18.5
Private	2,215	59.4	45.5	4.5	9.4	40.6	30.6	10.1
Home school ²	292	47.8	21.5	12.3	14.0	52.2	40.0	12.2

See footnotes at end of table.

Table 4.—Number of students and percentage of consistent and inconsistent reports between 6th- through 12th-graders and their parents regarding the level of postsecondary institution students plan to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Percent of consistent reports				Percent of inconsistent reports		
		Total	4-year	2-year	Undecided	Total	Parents 4-year/2-year	Students 4-year/parents 2-year
Parents' education								
Less than high school	1,942	50.3	12.8	6.8	30.6	49.7	18.4	31.4
High school only	6,328	48.5	19.0	12.0	17.4	51.5	28.9	22.6
Some postsecondary education	7,635	50.4	26.6	12.2	11.7	49.6	31.9	17.8
College graduate	4,165	56.2	41.6	6.6	8.1	43.8	32.1	11.7
Graduate school	4,741	62.5	48.4	6.2	7.9	37.5	27.1	10.4
Household income								
\$25,000 or less	7,002	48.9	19.3	10.3	19.4	51.1	27.4	23.7
\$25,001 to \$50,000	7,742	52.6	27.5	10.6	14.5	47.4	29.2	18.2
\$50,001 to \$75,000	4,764	55.2	35.1	11.2	8.9	44.8	30.1	14.7
More than \$75,000	5,304	57.8	44.4	6.0	7.5	42.2	30.8	11.4
Language most spoken at home by parents								
English	23,007	53.6	31.4	9.8	12.4	46.4	29.7	16.6
Other	1,803	47.2	15.8	7.2	24.3	52.8	22.5	30.3

¹This question was not asked of homeschooled children who attended public or private school less than 9 hours per week.

²Homeschooled children include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-grade students and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Among students and parents who reported no plans for postsecondary education, some expressed concern about the cost of higher education. For example, 10 percent of students and 11 percent of parents thought that “the high cost of college tuition and fees” was the major reason that students would not continue their education after high school. Several other reasons were cited, including “poor grades” (3 percent of students and 5 percent of parents), “joining the military” (10 percent of students and 6 percent of parents), and “not sure of future plans” (2 percent of students and 1 percent of parents).

Table 5.—Percentage distributions of 6th- through 12th-graders and their parents according to the various reasons given for student not planning to continue education beyond high school: 1999

Reasons for not continuing education beyond high school	Reported by student	Reported by parent
Total	100.0	100.0
Main reason		
Not interested/tired of going to school	37.4	47.5
Needs/wants to work	19.7	7.3
Joining the military	9.9	6.0
Cost too high/cannot afford	9.8	10.9
Poor grades/unable to get in	3.1	5.0
Not sure of future plans	2.0	1.4
Has a disability	#	10.4
Other	17.3	11.6

#Too few sample cases.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom either the student or parent did not expect the student to enroll in postsecondary education after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

What Students and Parents Know About the Cost of Postsecondary Education Tuition

Acquiring Information About College Costs

This section includes only students and their parents who reported postsecondary education plans for the students (91 percent of the sample). These students and their parents were asked if they had obtained information about the cost of tuition and fees at the type of institution the student planned to attend. Eighteen percent of students and 30 percent of parents had done so (table 6). For those students and their parents who said they had not obtained information about costs, a follow-up question was asked to determine if they thought they could estimate the cost of a year's tuition at the type of institution the student planned to attend. In addition to those who said they had obtained information, another 15 percent of students said they thought they could estimate the tuition and another 24 percent of parents thought they could do the same. Combined, 33 percent of students had either obtained information about tuition costs or thought they could estimate the cost of tuition where they planned to attend school. These respondents are sometimes referred to as being cost aware. Fifty-four percent of their parents had obtained such information or thought they could estimate tuition costs.⁹

Students in grades 11 and 12 were more likely than students in grades 9 and 10 to have obtained cost information or to think they could estimate 1 year's tuition. A similar pattern was observed among parents, with students in higher grades more likely than students in lower grades to have parents who had obtained cost information or thought they could estimate tuition costs. Roughly half of 11th- and 12th-graders (52 percent) and their parents (54 percent) had obtained cost information, and an additional 11 percent of the students and 17 percent of their parents thought they could estimate the costs. When analyzing students paired with their parents, about one-half of 11th- and 12th-grade students who had gathered information about costs at the type of institution students planned to attend or could estimate costs also had parents who had done the same (table 7).

At each grade level, students' parents were more likely to have gathered cost information or to be able to estimate the tuition of their children's higher education than the students themselves. By the 11th- and 12th-grades, 63 percent of students and 71 percent of their parents

⁹The combined percentages are shown in table 7.

Table 6.—Number and percentage of 6th- through 12th-graders and their parents who reported that they had obtained cost information or could accurately estimate tuition and fees at the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Have obtained information about cost of tuition and fees			Could estimate cost of tuition and fees		
		Students	Parents	Both	Students	Parents	Both
Total	24,811	18.4	29.7	11.1	14.9	24.4	4.6
Grade in school							
6 through 8	10,896	(¹)	16.5	(¹)	16.4	27.6	4.8
9 and 10	7,133	15.0	27.0	5.8	16.3	26.5	5.7
11 and 12	6,782	51.7	53.9	34.6	11.2	17.2	3.0
Student's sex							
Male	12,113	17.6	27.6	9.9	17.3	25.1	5.6
Female	12,698	19.2	31.8	12.3	12.7	23.9	3.6
Student's race/ethnicity							
White, non-Hispanic	16,605	19.4	33.0	12.4	14.3	28.0	5.2
Black, non-Hispanic	3,777	17.6	25.2	8.8	17.9	16.8	3.1
Hispanic	3,035	11.7	18.1	5.3	14.5	14.8	2.4
Other, non-Hispanic	1,393	23.5	28.9	14.8	14.7	24.3	5.9
Language spoken most at home by student							
English	23,034	19.0	30.9	11.6	14.9	25.3	4.8
Other	1,777	11.5	15.0	4.7	15.1	12.7	2.3
Average GPA across all subjects ²							
Mostly F/D's	844	8.1	20.7	2.9	13.8	15.0	2.4
Mostly C's	4,638	16.7	24.7	8.5	13.2	23.0	3.5
Mostly B's	9,835	17.8	28.8	10.0	15.0	24.4	4.9
Mostly A's	9,202	21.1	34.1	14.5	16.1	26.2	5.2
Repeated any grades since kindergarten ²							
Yes	2,774	16.3	25.0	9.1	12.4	20.0	3.0
No	21,745	18.8	30.4	11.4	15.4	25.0	4.8
School type							
Public	22,304	18.4	29.2	10.9	14.9	23.8	4.4
Private	2,215	19.3	35.4	13.4	15.8	31.0	7.2
Home school ³	292	13.5	29.1	8.6	6.0	22.1	#
Type of college student planned to attend							
4-year	11,076	29.8	37.1	18.8	17.4	25.5	5.9
2-year	4,101	31.1	34.1	16.5	11.3	18.6	2.0
Undecided	9,634	#	19.4	#	13.7	25.8	4.2

See footnotes at end of table.

Table 6.—Number and percentage of 6th- through 12th-graders and their parents who reported that they had obtained cost information or could accurately estimate tuition and fees at the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999
—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Have obtained information about cost of tuition and fees			Could estimate cost of tuition and fees		
		Students	Parents	Both	Students	Parents	Both
Student plays role in family decisions							
Hardly ever	1,025	17.8	21.9	9.8	14.6	21.3	4.0
Sometimes	11,662	15.3	24.7	8.1	14.7	23.8	4.0
Often	12,124	21.5	35.2	14.2	15.2	25.4	5.2
Parents' education							
Less than high school	1,942	10.8	8.4	3.4	14.6	6.1	0.9
High school only	6,328	17.6	19.9	8.1	12.8	16.6	3.0
Some postsecondary education	7,635	17.4	30.7	10.4	13.9	25.4	3.9
College graduate	4,165	20.0	37.8	13.7	16.8	34.1	6.7
Graduate school	4,741	23.1	42.9	17.2	17.8	32.5	7.5
Household income							
\$25,000 or less	7,002	15.3	20.1	6.8	14.1	14.7	2.1
\$25,001 to \$50,000	7,742	17.8	28.3	10.7	14.4	21.9	4.4
\$50,001 to \$75,000	4,764	21.2	32.9	12.5	14.7	33.0	5.8
More than \$75,000	5,304	21.0	41.8	16.3	17.0	33.2	7.1
Language most spoken at home by parents							
English	23,007	19.1	31.1	11.6	15.1	25.4	4.8
Other	1,803	10.6	12.9	4.9	12.9	12.1	2.1
Parent involvement in school²							
Low level	4,471	20.6	24.9	9.8	13.9	19.3	3.6
Medium level	13,600	17.8	29.1	11.3	15.0	25.5	4.8
High level	6,448	17.5	38.6	12.6	16.8	29.0	5.6
Type of college parents reported the child planned to attend							
4-year	12,408	23.0	41.5	16.7	16.6	27.3	5.6
2-year	6,303	21.1	35.3	11.0	12.3	18.7	2.8
Undecided	6,100	6.5	#	#	14.2	24.5	4.4

#Too few sample cases.

¹This question was asked only of students in grades 9 to 12, but it was asked of 6th- through 8th-graders' parents.

²This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

³Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table 7.—Number and percentage of 6th- through 12th-graders and their parents who reported they had either obtained cost information or could estimate tuition and fees, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Have obtained information about or could estimate the cost of tuition and fees		
		Students	Parents	Both ¹
Total	24,811	33.4	54.2	22.9
Grade in school				
6 through 8	10,896	16.4	44.1	8.0
9 and 10	7,133	31.3	53.5	19.9
11 and 12	6,782	62.8	71.1	50.1
Student's sex				
Male	12,113	34.9	52.6	23.6
Female	12,698	31.9	55.6	22.4
Student's race/ethnicity				
White, non-Hispanic	16,605	33.8	60.9	25.6
Black, non-Hispanic	3,777	35.5	41.9	18.4
Hispanic	3,035	26.2	32.9	12.4
Other, non-Hispanic	1,393	38.2	53.2	27.2
Language spoken most at home by student				
English	23,034	33.9	56.2	23.8
Other	1,777	26.6	27.7	11.3
Average GPA across all subjects ²				
Mostly F/D's	844	21.9	35.7	7.8
Mostly C's	4,638	29.9	47.7	18.3
Mostly B's	9,835	32.7	53.2	22.2
Mostly A's	9,202	37.2	60.3	27.8
Repeated any grades since kindergarten ²				
Yes	2,774	28.7	45.0	17.2
No	21,745	34.1	55.4	23.9
School type				
Public	22,304	33.4	53.0	22.5
Private	2,215	35.1	66.3	28.7
Home school ³	292	19.4	51.1	10.5
Type of college student planned to attend				
4-year	11,076	47.1	†	35.1
2-year	4,101	42.4	†	26.6
Undecided	9,634	13.7	†	7.5

See footnotes at end of table.

Table 7.—Number and percentage of 6th- through 12th-graders and their parents who reported they had either obtained cost information or could estimate tuition and fees, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Number of students/parents (in thousands)	Have obtained information about or could estimate the cost of tuition and fees		
		Students	Parents	Both ¹
Student plays role in family decisions				
Hardly ever	1,025	32.5	43.1	18.5
Sometimes	11,662	30.0	48.5	18.9
Often	12,124	36.7	60.6	27.2
Parents' education				
Less than high school	1,942	25.4	14.5	7.3
High school only	6,328	30.4	36.5	15.6
Some postsecondary education	7,635	31.3	56.1	21.1
College graduate	4,165	36.8	71.9	30.2
Graduate school	4,741	40.9	75.4	35.8
Household income				
\$25,000 or less	7,002	29.5	34.8	13.7
\$25,001 to \$50,000	7,742	32.2	50.2	21.7
\$50,001 to \$75,000	4,764	35.9	65.9	26.8
More than \$75,000	5,304	37.9	75.0	33.4
Language most spoken at home by parents				
English	23,007	34.1	56.5	24.0
Other	1,803	23.4	25.0	10.2
Parent involvement in school²				
Low level	4,471	34.4	44.2	20.2
Medium level	13,600	32.8	54.6	22.9
High level	6,448	34.4	67.6	27.8
Type of college parents expected the child to attend				
4-year	12,408	†	68.9	32.1
2-year	6,303	†	54.0	20.8
Undecided	6,100	†	24.5	6.6

†Not applicable.

¹This column includes cases where the parent and student responded differently (i.e., parent obtained information and student estimated cost or vice versa) so will not match the sum of columns 3 and 6 in table 6 which only includes cases where students and parents responded the same.

²This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

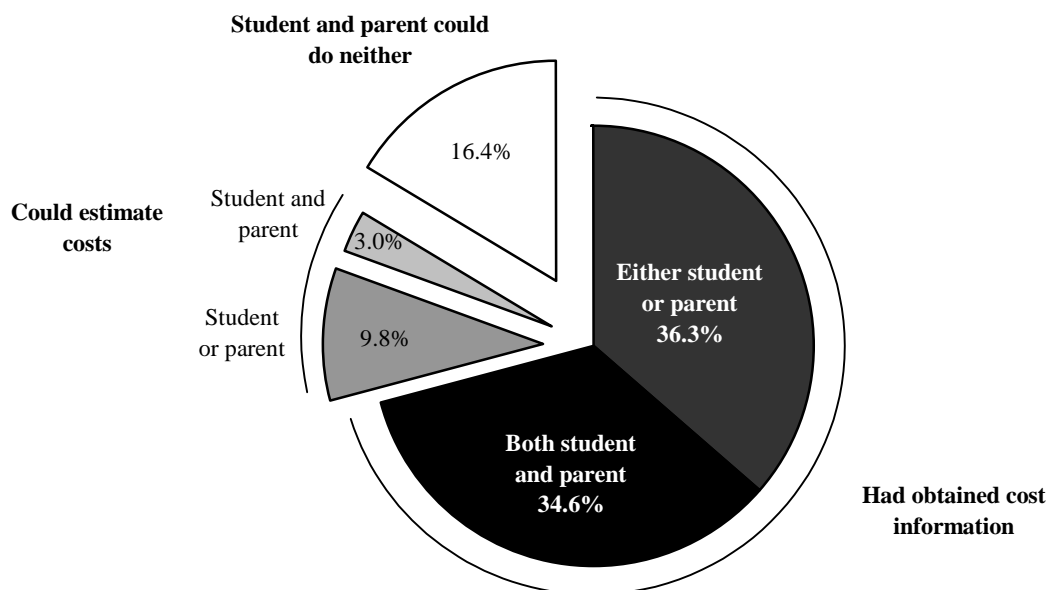
³Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

had either obtained information about college costs or could estimate them. Figure 1 displays the combined college cost awareness of 11th- and 12th-graders and their parents. Nearly three-quarters of students and/or their parents had knowledge of college costs: 36 percent of either students or parents, plus 35 percent of both students and parents had obtained college cost information. An additional 13 percent reported that either the student or parent could estimate college costs. The remaining 16 percent of students and parents could neither estimate costs nor had obtained cost information.¹⁰ With respect to the relationship between subsequent college enrollment and cost awareness, these data cannot indicate whether it is more important for

Figure 1.—Among 11th- and 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to their knowledge of college costs: 1999



NOTE: Detail may not sum to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

¹⁰The percentage of 11th- and 12th-grade students and their parents shown in figure 1 where both had obtained information (35 percent) or both could estimate costs (3 percent) does not add to the percentage shown in the “both” column of table 7 (50 percent). In table 7, if a student reported obtaining cost information and his or her parent did not, but his or her parent reported the ability to estimate cost, that was counted as both respondents having some source of cost knowledge. In figure 1, this student-parent pair response would not have been counted since they reported having different sources of cost knowledge.

students or their parents to be knowledgeable. Nor is it possible to disentangle the timing of knowledge, that is, whether students inform parents or vice-versa. Presumably, information travels in both directions. Therefore, the analysis examining factors that are associated with college cost awareness is done separately for parents and students.

For both students and their parents, the percentage with knowledge of college costs was higher among those households with higher incomes and among those households with higher levels of parent education (table 7). Racial/ethnic group differences were also apparent, with parents of White students more likely to have such knowledge than parents of either Black or Hispanic students. Among students, Whites (34 percent) also were more likely than Hispanic students (26 percent) to be aware of college costs, but no difference was detected between Black students and White students in their likelihood of reporting knowledge of college costs. These results taken together, suggest that those individuals who are more disadvantaged socioeconomically, and potentially least able to afford college, are also those most likely to lack information about the price of attending.¹¹

How Well Students and Parents Estimate 1 Year's College Tuition

Students in grades 6 through 12 and their parents who reported that they had either obtained college cost information or that they could accurately estimate the cost of tuition were then asked to provide an estimate of “1 year's tuition and mandatory fees” at the type of college the students planned to attend.¹² About one-half of the students (48 percent) and just under one-half their parents (44 percent) provided estimates that included room and board in addition to tuition and fees (estimates not shown in tables). For comparisons with student and parent estimates, price data provided by postsecondary institutions were used to develop two sets of estimates, one for tuition and fees only, and one that included room and board (see the glossary in appendix A for a detailed description of the variables).

On the whole, both students and parents overestimated tuition and fee amounts. This was especially apparent for those planning to attend public institutions. For example, the average yearly in-state tuition and fees that undergraduates were charged at public 4-year institutions in 1998–99 was \$3,247 (The College Board 1999; table 8a).¹³ Yet, students close to the age of

¹¹Minority individuals and those from families where neither parent attended college are disproportionately represented in lower income groups (Horn, Peter, and Rooney 2002) and are therefore considered disadvantaged.

¹²Those who were undecided were asked to provide an estimate of 1 year's tuition at a public institution at the level (4-year or 2-year) they thought the student would attend. If they were undecided about the level of institution to attend, they were asked to give an estimate of tuition and fees at public 4-year colleges in their state.

¹³This amount represents published tuition and fees and does not take into consideration any financial aid or tuition discounts provided to students by the institution. The value is weighted by student enrollment so that schools with large enrollments are weighted more heavily than schools with smaller enrollments.

Table 8a.—Sixth- through 12th-graders' and their parents' estimates of tuition and mandatory fees and tuition and fees plus room and board, according to students' grade level, and the actual average tuition and fees paid in 1998–99 by type of institution students planned to attend, by selected student, family, and parent characteristics: 1999

Institution type	Tuition and fees reported by students in				Tuition and fees reported by parents of				Actual tuition and fees in 1998–99 ¹
	Grades 6 through 12	Grades 6 through 8	Grades 9 and 10	Grades 11 and 12	Students in grades 6 through 12	Students in grades 6 through 8	Students in grades 9 and 10	Students in grades 11 and 12	

Tuition and fees only

4-year									
Public (in-state)	\$5,642	\$4,955	\$7,192	\$5,366	\$6,241	\$6,873	\$6,032	\$5,799	\$3,247
Private	18,843	#	18,142	16,539	16,421	17,255	17,336	14,506	14,709
Undecided, 4-year ²	14,593	10,649	17,260	#	9,100	9,160	8,992	#	3,247
2-year ³	4,652	4,110	3,043	5,276	3,621	3,642	3,214	3,933	1,554
Undecided for any ²	9,231	10,039	8,030	#	8,306	8,373	7,706	9,561	3,247

Tuition, fees, and room and board⁴

4-year									
Public (in-state)	11,006	9,871	12,783	10,562	9,847	10,033	10,907	9,148	7,789
Private	20,928	#	21,582	21,436	22,546	22,128	23,471	22,218	20,463
Undecided, 4-year ²	13,315	13,776	13,211	12,896	12,476	13,791	11,208	10,892	7,789
2-year ³	6,996	#	#	7,650	5,692	4,587	#	6,778	—
Undecided for any ²	10,800	10,288	11,253	11,952	13,103	13,900	11,656	12,682	7,789

#Too few sample cases.

—Not available.

¹Weighted by student enrollment so that schools with large enrollments are weighted more heavily than those with small enrollments.

²Asked to estimate tuition and fees for public 4-year institutions in their state.

³Includes respondents who indicated they would attend a 2-year institution, including a community college, junior college, or vocational/technical institution. Because 91 percent of students enrolled in 2-year institutions attend a public 2-year college (Kojaku and Nuñez 1998) the actual amount of tuition and fees listed is for public 2-year institutions.

⁴Forty-eight percent of students and 44 percent of parents included room and board in their estimates.

NOTE: Sample in table includes 6th- through 12th-graders and their parents who reported that the student planned to attend postsecondary education and who were able to estimate tuition and fee amounts at the institution student planned to attend.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1999), *Trends in College Pricing*.

college enrollment (i.e., 11th- and 12th-graders) who planned to attend public 4-year institutions estimated the yearly tuition to be notably higher at \$5,366, as did their parents at \$5,799. Similarly, for 2-year institutions, 11th- and 12th-graders' average estimate for tuition and fees was \$5,276 and their parents' was \$3,933, compared to the actual average of \$1,554.

In table 8b, tuition estimates for high school students only (9th- through 12th-graders) and their parents who had obtained information are compared to tuition estimates of those who had not obtained such information. Due to small sample sizes, the only comparisons that could be made for both students and parents were for public institutions. Parents who had obtained cost information reported lower tuition estimates for public 4-year in-state tuition (\$5,183) than did parents who had not obtained information (\$7,930). The same was not found for students. Paradoxically, students who had obtained cost information among those planning to attend a 2-year institution estimated higher tuition amounts (\$5,037) than those who estimated the amount without having obtained information (\$3,131). It is possible that some students planned to attend a private for-profit vocational institution (which are relatively costly to attend compared to public 2-year institutions) and these students may have been more likely than those planning to attend public institutions to have obtained cost information. On the other hand, the tuition estimates of parents who had obtained cost information about 2-year institutions did not differ significantly in the amount of tuition reported from those of parents who estimated the amount without having obtained cost information.

The distribution of tuition levels, as shown in figure 2, illustrates how students and their parents overestimate tuition costs by comparing price information provided by public 4-year institutions for in-state tuition and fees to cost estimates provided by students who planned to attend such institutions and their parents. While less than one-tenth of 1 percent of all students were enrolled in public 4-year institutions where in-state tuition and fees totaled \$8,000 or more in 1998–99, 25 percent of 11th- and 12th-grade students and 24 percent of their parents expected they would have to pay this much for a 4-year in-state public university education. In 1998–99, over 90 percent of students attended institutions where tuition totaled less than \$5,000 per year. Similar patterns, but more modest differences, were found for private 4-year institutions among students (figure 3). For example, while 20 percent of undergraduates attended private 4-year institutions with tuition and fees of \$20,000 or more in 1998–99, 38 percent of 11th- and 12th-graders thought it would cost at least \$20,000 annually to attend. However, when looking at the overall average cost estimates, no difference was detected between the parents' tuition and fee cost estimate of \$14,506 and the average tuition and fee price of \$14,709 charged by private 4-year colleges. Thus, parents of children who planned to attend private 4-year institutions provided an accurate tuition and fee estimate while their counterparts whose children planned to attend public 4-year institutions overestimated this cost.

Table 8b.—Ninth- through 12th-graders' and their parents' average estimates for tuition and mandatory fees according to whether they had obtained information or could estimate costs, by type of institution students plan to attend: 1999

Institution type	Tuition and fees reported by			Tuition and fees reported by		
	All students	Students who obtained information	Students who could estimate	All parents	Parents who obtained information	Parents who could estimate
Tuition and fees only						
4-year						
Public (in-state)	\$5,736	\$5,709	\$5,901	\$5,896	\$5,183	\$7,930
Private	17,073	17,013	#	15,732	16,480	#
Undecided, 4-year ¹	17,366	#	17,366	9,023	#	9,023
2-year	4,703	5,037	3,131	3,614	3,706	3,405
Undecided for any ¹	8,268	#	8,268	8,210	#	8,210
Tuition, fees, and room and board ²						
4-year						
Public (in-state)	11,148	11,184	10,936	9,776	9,682	10,085
Private	21,478	21,436	#	22,737	22,754	22,672
Undecided, 4-year ¹	13,071	#	13,071	11,102	#	11,102
2-year	7,290	7,562	#	6,231	7,059	4,902
Undecided for any ¹	11,547	#	11,547	12,056	#	12,056

#Too few sample cases.

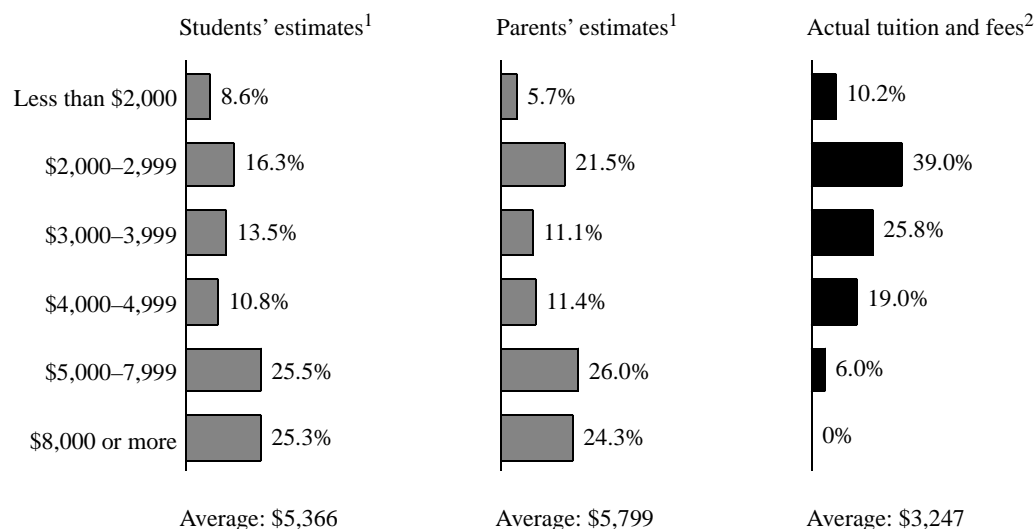
¹Asked to estimate tuition and fees for 4-year public institutions in their state.

²Forty-eight percent of students and 44 percent of parents included room and board in their estimates.

NOTE: Sample in table includes 9th- through 12th-graders and their parents who reported that the student planned to attend postsecondary education and who were able to estimate tuition and fee amounts at the institution student planned to attend.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Figure 2—Among 11th- and 12th-graders and their parents who reported plans for the student to attend a public in-state 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99



¹Does not include those who reported room and board in their estimates. Includes respondents who were undecided about where to attend but estimated tuition and fees for public 4-year institutions in their state.

²Does not include room and board costs.

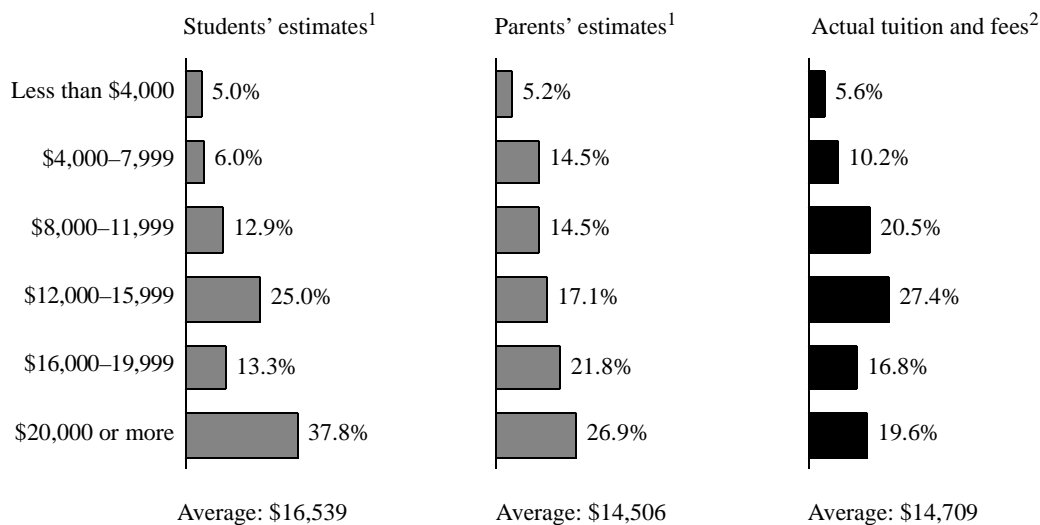
NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

Because college tuition and fees vary substantially from state to state, students' and parents' tuition estimates were compared to the average tuition and fees for the type of institution they planned to attend *within* their state of residence. If students or parents were undecided about the type of institution, they were asked to provide an estimate for a public institution at the level students were planning to attend (4-year or 2-year). If undecided on the level, they were asked to provide an estimate of tuition and fees at public 4-year colleges in their state (see the glossary in appendix A for a full description of how the accuracy estimates were constructed).¹⁴

¹⁴Actual average out-of-state fees were not available so students and parents of students who planned to attend out-of-state public 4-year institutions were excluded from this part of the analysis. However, when determining overall accuracy of estimates in the next section (i.e., who estimated within 25 percent of actual), out-of-state tuition was estimated by doubling the in-state

Figure 3—Among 11th- and 12th-graders and their parents who reported plans for the student to attend a private 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99



¹Does not include those who reported room and board in their estimates. Includes respondents who were undecided about where to attend but estimated tuition and fees for public 4-year institutions in their state.

²Does not include room and board costs.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

Accurate estimates were identified as those that fell within 25 percent of the actual state average.¹⁵ As shown in table 9, 16 percent of 6th- through 12th-graders and 26 percent of their parents provided accurate estimates. Both students and parents were more likely to overestimate than underestimate tuition amounts. The same was found for students approaching college age: about one-quarter (24 percent) of 11th- and 12th-graders and about one-third (31 percent) of their parents were able to provide estimates within 25 percent of the actual tuition. Similarly, both

tuition for the students' or parents' state of residence. This is a rough approximation of out-of-state fees based on College Board data (The College Board 2000, Table 6).

¹⁵In addition to using the 25 percent threshold, tests were also conducted using a 15 percent and 50 percent threshold to determine if tightening or loosening the range of responses considered to be accurate had notable effects on the results. For the most part, patterns in the data found using the 25 percent threshold were also found using the alternative thresholds. Tables showing 15 percent and 50 percent thresholds are presented in appendix C.

Table 9.—Number and percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students plan to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Student				Parent			
		Estimated tuition within 25% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 25% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Total	24,811	16.3	11.9	5.2	66.6	26.0	21.0	7.1	45.8
Grade in school									
6 through 8	10,896	11.4	2.9	2.2	83.6	22.9	15.6	5.7	55.9
9 and 10	7,133	16.4	10.4	4.5	68.7	26.2	21.6	5.7	46.5
11 and 12	6,782	24.0	28.1	10.7	37.2	31.0	29.1	11.1	28.9
Student's sex									
Male	12,113	17.2	12.4	5.3	65.1	25.9	20.0	6.7	47.4
Female	12,698	15.3	11.5	5.1	68.1	26.2	22.0	7.5	44.4
Student's race/ethnicity									
White, non-Hispanic	16,605	16.7	11.8	5.3	66.2	30.0	23.2	7.7	39.1
Black, non-Hispanic	3,777	18.6	11.5	5.5	64.5	19.3	14.6	8.0	58.1
Hispanic	3,035	12.3	9.6	4.3	73.8	14.0	15.4	3.6	67.1
Other, non-Hispanic	1,393	13.8	19.2	5.2	61.8	23.4	23.9	6.0	46.8
Language spoken most at home by student									
English	23,034	16.6	12.1	5.1	66.1	†	†	†	†
Other	1,777	11.3	9.4	5.8	73.4	†	†	†	†
Average GPA across all subjects ²									
Mostly F/D's	844	13.0	5.8	3.1	78.1	13.8	15.5	6.4	64.3
Mostly C's	4,638	12.6	10.9	6.5	70.1	20.6	18.7	8.4	52.3
Mostly B's	9,835	16.2	11.8	4.8	67.3	25.8	20.3	7.1	46.8
Mostly A's	9,202	18.6	13.4	5.2	62.8	30.0	23.6	6.7	39.7
Repeated any grades since kindergarten ²									
Yes	2,774	12.1	11.4	5.2	71.4	20.0	17.8	7.1	55.0
No	21,745	16.8	12.1	5.2	65.9	26.7	21.5	7.2	44.6
School type									
Public	22,304	16.0	12.1	5.3	66.6	24.9	21.0	7.1	47.0
Private	2,215	19.1	11.4	4.7	64.9	36.8	21.7	7.8	33.7
Home school ³	292	12.6	3.6	3.3	80.6	33.4	13.6	4.2	48.9

See footnotes at end of table.

Table 9.—Number and percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students plan to attend, by selected student, family, and parent characteristics: 1999
—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Student				Parent			
		Estimated tuition within 25% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 25% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Type of college student planned to attend									
4-year public	5,988	16.6	26.1	9.3	48.0	†	†	†	†
4-year private	1,677	29.7	26.1	17.6	26.6	†	†	†	†
Undecided, 4-year	3,412	25.7	#	#	74.3	†	†	†	†
2-year	4,101	8.6	23.3	10.5	57.6	†	†	†	†
Undecided for any	9,634	13.7	#	#	86.3	†	†	†	†
Student plays role in family decisions									
Hardly ever	1,025	15.2	11.6	5.7	67.5	†	†	†	†
Sometimes	11,662	15.0	10.2	4.8	70.1	†	†	†	†
Often	12,124	17.6	13.6	5.5	63.3	†	†	†	†
Talked with parent/teacher about the cost									
Yes	12,522	21.7	18.1	7.4	52.8	†	†	†	†
No	12,288	10.8	5.7	2.9	80.6	†	†	†	†
Talked with parent/teacher about financial aid									
Yes	10,638	20.9	18.4	7.8	52.9	†	†	†	†
No	14,173	12.9	7.2	3.2	76.8	†	†	†	†
Parents' education									
Less than high school	1,942	13.6	7.5	4.3	74.6	7.2	5.0	2.2	85.5
High school only	6,328	14.7	10.6	5.1	69.6	17.5	13.8	5.1	63.5
Some postsecondary education	7,635	14.8	11.0	5.5	68.7	23.9	24.0	8.2	43.9
College graduate	4,165	17.9	13.3	5.6	63.2	37.5	24.9	9.4	28.1
Graduate school	4,741	20.3	15.8	4.8	59.1	38.4	28.8	8.2	24.6
Household income									
\$25,000 or less	7,002	13.7	9.7	6.1	70.5	14.9	14.4	5.5	65.2
\$25,001 to \$50,000	7,742	15.4	11.3	5.5	67.8	23.7	19.3	7.2	49.8
\$50,000 to \$75,000	4,764	17.0	14.0	4.9	64.1	32.9	24.4	8.6	34.1
More than \$75,000	5,304	20.2	13.9	3.8	62.1	38.1	29.1	7.8	25.0

See footnotes at end of table.

Table 9.—Number and percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students plan to attend, by selected student, family, and parent characteristics: 1999
—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Student				Parent			
		Estimated tuition within 25% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 25% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Language most spoken at home by parents									
English	23,007	†	†	†	†	27.2	21.8	7.4	43.5
Other	1,803	†	†	†	†	10.9	10.8	3.3	75.0
Parent involvement in school									
Low level	4,471	15.6	13.7	5.1	65.6	20.5	17.1	6.7	55.8
Medium level	13,600	16.3	11.2	5.3	67.2	26.9	20.5	7.2	45.4
High level	6,448	17.3	12.2	4.9	65.7	31.1	28.8	7.8	32.4
Talked to someone/read materials on financial aid									
Yes	9,448	†	†	†	†	33.7	28.1	10.0	28.2
No	15,363	†	†	†	†	21.3	16.6	5.4	56.7
Heard of Lifetime Learning and/or HOPE Scholarship tax credit									
Yes	7,314	†	†	†	†	32.7	25.0	8.5	33.8
No	17,497	†	†	†	†	23.3	19.3	6.6	50.9
Type of college parent expected student to attend									
4-year public	7,248	†	†	†	†	25.2	35.3	9.9	29.6
4-year private	2,626	†	†	†	†	40.3	29.6	16.9	13.2
Undecided, 4-year	2,534	†	†	†	†	46.0	#	#	54.0
2-year	6,303	†	†	†	†	14.6	29.7	9.7	46.1
Undecided for any	6,100	†	†	†	†	24.5	#	#	75.5

#Too few sample cases.

†Not applicable.

¹An accurate estimate was defined as one within 25 percent of the actual average cost for the type of postsecondary institution the students intended to attend in their state of residence.

²This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

³Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

students and parents were more likely to overestimate than to underestimate tuition. Perhaps of greater concern was the relatively large percentage—37 percent of 11th- and 12th-graders and 29 percent of parents—who could not estimate the yearly tuition for the type of college the students hoped to attend. For both students and parents, as household income and parents' education levels increased, so did the likelihood that cost estimates within 25 percent of actual costs would be reported.

Multivariate Analysis Results

The above analyses showed that students' and parents' awareness of college costs was associated with many student, parent, and family characteristics. The patterns of relationships raise a number of questions about the factors related to students' and parents' knowledge about the cost of college tuition and fees. For example, were students from families with higher incomes more aware of college costs because their parents were more likely to be better educated (therefore better informed about the cost of college) or because they were more likely to be high academic achievers (therefore better prepared for college)? Were White students more likely than Black and Hispanic students to have parents who were aware of college costs because they were in families with higher incomes and therefore potentially more able to afford college? Did parents of students who planned to attend private 4-year institutions provide more accurate college estimates than parents of students who planned to attend public 4-year institutions because they were more likely to seek information about the cost (e.g., talked to someone or read materials on financial aid)? To take into account the interrelationship of the independent variables posed by these questions, two parallel logistic regression equations were developed to determine the association between each factor and the outcomes of interest. The first equation explores the likelihood of either obtaining cost information or being able to provide an estimate of college tuition costs (referred to as "cost awareness"). The first equation, therefore, indicates the likelihood of students or parents being cost aware (yes/no). The second equation explores the likelihood of providing an accurate estimate of tuition at the institution the student planned to attend. An accurate estimate was defined as an estimate within 25 percent of the actual cost. Both regression equations included independent variables that reflected student characteristics (e.g., grade in school, sex, race/ethnicity), family background (e.g., parent's education, household income), students' high school experiences (e.g., average GPA, had they repeated grades), parents' involvement in children's school, and students' and parents' expectations for types of college attended. The regression equations show the relationship between each individual variable in the equation and the outcome of interest, after taking into account the variation of other variables in the equation. Equations for students and parents were run separately.

The results are shown in table 10. The numbers displayed in the table are odds ratios, which indicate the relative odds of having knowledge of costs (columns 1 and 2) or providing accurate estimates of tuition (columns 3 and 4) in relation to a comparison group (in italics). Asterisks indicate statistically significant differences. An odds ratio that is less than 1.0 means the odds of a particular group are lower than the odds of the comparison group, while those that are greater than 1.0 mean the opposite. Take, for example, the first row representing “Grade in school” and the first column representing students’ knowledge of college costs. The odds ratio for students in grades 6 to 8 is 0.22. This means that the odds of 6th- through 8th-graders having knowledge about tuition costs are 22 percent of the odds for 11th- and 12th-graders; in other words, the odds of 6th- through 8th-graders having knowledge of college costs were 78 percent lower than the odds of 11th- and 12th-graders.

Equation 1: Knowledge of College Costs¹⁶

While students’ grade level was associated with increased odds of reporting knowledge of college costs (i.e., 11th- and 12th-graders and their parents had higher odds than their counterparts in lower grades and their parents), other variables also had clear relationships with cost awareness. For both students and parents, one of the factors clearly related to cost awareness was having plans to attend a private 4-year college (versus a public 4-year college). Students and parents who reported plans for students to attend a private 4-year institution had more than double the odds of being knowledgeable about college costs than their counterparts planning to

¹⁶The logistic regression for students’ knowledge of college costs can be expressed in the following equation:

$$\text{Log} [Y / (1-Y)] = B_0 + B_1X_1 + \dots + B_{14}X_{14}$$

Where Y is whether the student had knowledge about college costs. X₁ through X₁₄ are the student’s grade in school, the student’s sex, the student’s race/ethnicity, the language spoken most at home by the student, the student’s average letter grade across all subjects, if the student had repeated any grades since kindergarten, the control of the school attended by the student (public or private), the type of postsecondary institution the student expected to attend, the extent to which the student played a role in family decisions, if the student had talked with a parent or teacher about the cost of attending a postsecondary institution, if the student had talked with a parent or teacher about financial aid, the highest level of education attained by the student’s parents, the income of the student’s household, and the level of involvement in the student’s school by the student’s parents. B_i is the regression coefficient for the corresponding independent variable X_i.

The logistic regression for parents’ knowledge of college costs can be expressed in the following equation:

$$\text{Log} [Y / (1-Y)] = B_0 + B_1X_1 + \dots + B_{13}X_{13}$$

Where Y is whether the student’s parents had knowledge about college costs. X₁ through X₁₃ are the student’s grade in school, the student’s sex, the student’s race/ethnicity, the language spoken most at home by the student’s parents, the student’s average letter grade across all subjects, if the student had repeated any grades since kindergarten, the control of the school attended by the student (public or private), the type of postsecondary institution the parents expected the student to attend, if the student’s parents had talked to someone or read about financial aid, if the student’s parents had heard of the Lifetime Learning and/or HOPE Scholarship tax credits, the highest level of education attained by the student’s parents, the income of the student’s household, and the level of involvement in the student’s school by the student’s parents. B_i is the regression coefficient for the corresponding independent variable X_i.

Table 10.—Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999

Student, family, or parent characteristic	Odds ratio of having knowledge about cost		Odds ratio of estimating accurately	
	Student	Parent	Student	Parent
Grade in school				
6 through 8	0.22*	0.40*	0.41*	0.56*
9 and 10	0.39*	0.56*	0.62*	0.80*
11 and 12	1.00	1.00	1.00	1.00
Student's sex				
Male	1.45*	0.91	1.28*	1.03
Female	1.00	1.00	1.00	1.00
Student's race/ethnicity				
Other, non-Hispanic	1.13	0.88	0.72	0.62*
Hispanic	0.91	0.83	0.86	0.71*
Black, non-Hispanic	1.35*	0.65*	1.33*	0.75*
White, non-Hispanic	1.00	1.00	1.00	1.00
Language spoken most at home by student				
Other	0.86	†	0.78	†
English	1.00	†	1.00	†
Average GPA across all subjects				
Mostly A's	1.20	1.02	1.11	1.24
Mostly B's	1.01	1.03	1.02	1.31
Mostly C's	0.92	1.02	0.81	1.20
Mostly F/D's	1.00	1.00	1.00	1.00
Repeated any grades since kindergarten				
Yes	0.78*	1.08	0.74*	1.08
No	1.00	1.00	1.00	1.00
School type ¹				
Public	1.15	1.14	1.04	0.89
Private	1.00	1.00	1.00	1.00

See footnotes at end of table.

Table 10.—Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999—Continued

Student, family, or parent characteristic	Odds ratio of having knowledge about cost		Odds ratio of estimating accurately	
	Student	Parent	Student	Parent
Type of college student expected to attend				
Undecided for any	0.27*	†	1.49*	†
2-year	0.66*	†	0.49*	†
Undecided, 4-year	0.40*	†	2.40*	†
4-year private	2.45*	†	1.99*	†
4-year public	1.00	†	1.00	†
Student plays role in family decisions				
Often	0.95	†	0.85	†
Sometimes	0.89	†	0.79	†
Hardly ever	1.00	†	1.00	†
Talked with parent/teacher about the cost of college				
Yes	2.01*	†	1.86*	†
No	1.00	†	1.00	†
Talked with parent/teacher about financial aid				
Yes	1.21*	†	1.17	†
No	1.00	†	1.00	†
Parents' education				
Less than high school	0.67*	0.18*	1.07	0.23*
High school only	0.80*	0.36*	0.99	0.51*
Some postsecondary education	0.80*	0.66*	0.93	0.68*
College graduate or graduate school	1.00	1.00	1.00	1.00
Household income				
\$25,000 or less	0.87	0.48*	0.76*	0.58*
\$25,001 to \$50,000	0.90	0.54*	0.83	0.75*
\$50,001 to \$75,000	0.86	0.77*	0.84	0.99
More than \$75,000	1.00	1.00	1.00	1.00
Language most spoken at home by parents				
Other	†	0.80	†	0.78
English	†	1.00	†	1.00

See footnotes at end of table.

Table 10.—Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999—Continued

Student, family, or parent characteristic	Odds ratio of having knowledge about cost		Odds ratio of estimating accurately	
	Student	Parent	Student	Parent
Parent involvement in school				
High level	1.03	1.51*	0.96	0.99
Medium level	1.02	1.17	0.97	1.04
Low level	1.00	1.00	1.00	1.00
Type of college parents reported child planned to attend				
Undecided for any	†	0.25*	†	1.99*
2-year	†	0.62*	†	0.61*
Undecided, 4-year	†	0.39*	†	3.51*
4-year private	†	2.38*	†	1.73*
4-year public	†	1.00	†	1.00
Parents talked to someone/read materials on financial aid				
Yes	†	2.08*	†	1.53*
No	†	1.00	†	1.00
Parents heard of Lifetime Learning and/or HOPE Scholarship tax credits				
Yes	†	1.34*	†	1.25*
No	†	1.00	†	1.00

*p<.05.

†Not applicable.

¹Homeschoolers who attended public or private schools less than 9 hours per week were not asked school related items. They were excluded from this analysis. Those who attended school 9 or more hours per week were assigned to the kind of school they attended.

NOTE: Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education. The numbers displayed in the table are odds ratios, which indicate the relative odds of a comparison group to a control group of being cost aware. Odds ratios less than 1 mean the odds of the comparison group (e.g., 6th- through 8th-graders) are lower than the odds of the control group (e.g., 11th- and 12th-graders) of either having knowledge of costs (columns 1 and 2) or accurately estimating costs (columns 3 and 4), while odds ratios greater than 1 mean the opposite.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts are from the 1998 Integrated Postsecondary Education Data System (IPEDS).

attend a public 4-year institution. Similarly, both students and parents who talked to someone or read materials about financial aid also increased their odds of being aware of costs.

Parents' educational attainment and parents' involvement in children's school also played a role in cost awareness. Students who had college-educated parents were more knowledgeable about college costs than those who had parents with lower levels of educational attainment. College-educated parents were also more likely to report knowledge of costs than their counterparts with lower levels of educational attainment. In addition, parents who were highly involved with their children's school (as reported by parents) were more likely to be knowledgeable about college costs than those with low levels of involvement. There was no relationship detected between the level of parental involvement and student's knowledge, however.

Results differed for students and parents in other respects. For example, household income was positively related to parents' awareness of college costs, but not to students' awareness. Conversely, while male students were more likely than female students to report knowledge of college costs, students' sex had no relationship with parents' likelihood of doing so. Different results were found with respect to students' race/ethnicity. Specifically, the odds that Black students had some knowledge of costs were about one-third higher than for White students, though the odds that the parents of Black students had some knowledge of costs were lower than those of parents of White students.

Some items were asked only of students or parents but not both. If students talked with their parents or with teachers/counselors about what it costs to go to college, they were more likely to be aware of the costs of the type of college they planned to attend. Similarly, if parents knew about the availability of either the Lifelong Learning or HOPE Scholarships (see appendix A for definition), they were more likely to have acquired cost information.

Equation 2: Estimating the Cost of 1 Year's Tuition¹⁷

The results for the second equation were nearly identical to those in the first. Most variables related to whether or not students and parents reported either acquiring cost information or having knowledge of college costs were similarly related to students' and parents' ability to accurately estimate 1 year's tuition. However, there was one notable reversal for students with respect to parents' education and household income. Parents' education was strongly associated with students' knowledge of costs, but was not associated with their ability to estimate 1 year's tuition at the type of college they planned to attend. Conversely, household income was not related to students' cost awareness, but was somewhat related to their ability to estimate 1 year's tuition. In particular, the odds that students from households with relatively low incomes (\$25,000 or less) could accurately estimate 1 year's tuition were 24 percent lower than those for students from households with relatively high incomes (more than \$75,000). For parents, on the other hand, both parental education and household income were associated with their likelihood of having knowledge about college costs and their ability to accurately estimate college costs. Compared with parents with lower levels of education and lower incomes, those with college educations and high incomes were more knowledgeable about college costs and able to accurately estimate the costs.

In summary, after applying statistical controls for the associations with all variables included in the analysis, the results indicate that the awareness students and parents have about the costs of attending college and their ability to accurately estimate tuition amounts are

¹⁷The logistic regression for whether the student accurately estimated the cost of tuition can be expressed in the following equation:

$$\text{Log} [Y / (1-Y)] = B_0 + B_1X_1 + \dots + B_{14}X_{14}$$

Where Y is whether the student accurately estimated the cost of tuition. X₁ through X₁₄ are the student's grade in school, the student's sex, the student's race/ethnicity, the language spoken most at home by the student, the student's average letter grade across all subjects, if the student had repeated any grades since kindergarten, the control of the school attended by the student (public or private), the type of postsecondary institution the student expected to attend, the extent to which the student played a role in family decisions, if the student had talked with a parent or teacher about the cost of attending a postsecondary institution, if the student had talked with a parent or teacher about financial aid, the highest level of education attained by the student's parents, the income of the student's household, and the level of involvement in the student's school by the student's parents. B_i is the regression coefficient for the corresponding independent variable X_i.

The logistic regression for the student's parents accurately estimated the cost of tuition can be expressed in the following equation:

$$\text{Log} [Y / (1-Y)] = B_0 + B_1X_1 + \dots + B_{13}X_{13}$$

Where Y is whether the student's parents had knowledge about college costs. X₁ through X₁₃ are the student's grade in school, the student's sex, the student's race/ethnicity, the language spoken most at home by the student's parents, the student's average letter grade across all subjects, if the student had repeated any grades since kindergarten, the control of the school attended by the student (public or private), the type of postsecondary institution the parents expected the student to attend, if the student's parents had talked to someone or read about financial aid, if the student's parents had heard of the Lifetime Learning and/or HOPE Scholarship tax credits, the highest level of education attained by the student's parents, the income of the student's household, and the level of involvement in the student's school by the student's parents. B_i is the regression coefficient for the corresponding independent variable X_i.

positively related to either household income or parents' education levels (or both). However, regardless of family background, if parents had sought information about financial aid availability or if they knew about other means of offsetting costs (through tax credits), they were more likely to estimate accurately the cost of tuition. Similarly, if students had talked to parents or teachers/counselors about college costs, they too were better able to estimate the tuition at the college they planned to attend.

Making Preparations for College

In the Youth Survey and Parent Survey of NHES:1999, students in grades 6 through 12 and their parents were asked separate questions to determine how actively they were preparing for students to attend college. Parents were asked if they had been saving or making other financial preparations to send their children to college. These same parents were also asked if they had sought information about financial aid and whether they knew about tax incentives—in particular, the Lifelong Learning and HOPE Scholarships—designed to help send their children to college. Students were asked if they had discussed with parents or teachers (including counselors) which colleges to attend, the academic requirements for admission, college costs, and financial aid availability.

Parents' Plans to Pay for Their Children's College Education

Not all parents who expected their children to go to college after high school had begun planning for how to pay for college; 59 percent reported that they had begun to save money or make other financial plans for their children's postsecondary education, and 38 percent had talked with someone or read materials about financial aid (table 11).¹⁸ Three-in-ten parents (30 percent) were aware of the Lifetime Learning and/or the HOPE Scholarship tax credits designed to help families pay for their children's college education. Even among parents of students who were nearing college enrollment (i.e., 11th- and 12th-graders), 63 percent reported that they had started saving, 58 percent had talked with someone or read materials about financial aid, and 34 percent had heard about the Lifetime Learning and/or the HOPE Scholarship tax credit.

The type of institution parents expected their children to attend was associated with whether or not parents had begun planning to pay for college. Compared with their counterparts who expected their children to attend a 2-year institution, and compared to those who were undecided about the type of institution, parents who expected their children to attend a 4-year institution were more likely to have saved or made other financial preparations. They were also more likely to have sought financial aid information and to know about tax credits.

¹⁸It is important to keep in mind that the unit of analysis in the 1999 NHES is the student and not the parent. For example, the statement, "..., 59 percent reported that they had begun to save money or make other financial plans for their children's postsecondary education, ..." should actually be stated as, "..., 59 percent of 6th- through 12th-grade students whose parents expected them to go to college had parents who had begun to save money or make other financial plans for their children's postsecondary education,..." Parent or parents is used for ease of presentation.

Table 11.—Number and percentage of 6th- through 12th-graders' parents who reported having taken various steps to prepare to pay for their children's postsecondary education, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Have started saving money/making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE Scholarship tax credits
Total	24,811	59.4	38.1	29.5
Grade in school				
6 through 8	10,896	57.4	27.4	27.8
9 and 10	7,133	59.4	35.4	28.2
11 and 12	6,782	62.5	58.1	33.5
Student's sex				
Male	12,113	59.8	36.5	28.4
Female	12,698	59.0	39.6	30.5
Student's race/ethnicity				
White, non-Hispanic	16,605	64.5	39.8	31.8
Black, non-Hispanic	3,777	52.3	41.3	24.1
Hispanic	3,035	37.7	23.9	21.5
Other, non-Hispanic	1,393	64.4	40.1	33.8
Average GPA across all subjects ¹				
Mostly F/D's	844	38.5	25.1	19.2
Mostly C's	4,638	51.1	34.1	24.6
Mostly B's	9,835	58.6	38.0	28.7
Mostly A's	9,202	66.1	41.7	33.2
Repeated any grades since kindergarten ¹				
Yes	2,774	46.0	35.3	20.8
No	21,745	61.0	38.6	30.4
School type				
Public	22,304	58.6	37.8	28.9
Private	2,215	67.1	42.2	32.7
Home school ²	292	62.3	29.7	46.2
Student plays role in family decisions				
Hardly ever	1,025	51.2	30.0	21.7
Sometimes	11,662	56.9	37.0	29.4
Often	12,124	62.4	39.8	30.3

See footnotes at end of table.

Table 11.—Number and percentage of 6th- through 12th-graders' parents who reported having taken various steps to prepare to pay for their children's postsecondary education, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Have started saving money/making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE Scholarship tax credits
Parents' education				
Less than high school	1,942	27.2	15.9	17.8
High school only	6,328	47.5	31.3	21.3
Some postsecondary education	7,635	58.4	39.9	29.5
College graduate	4,165	73.4	45.0	38.1
Graduate school	4,741	77.7	47.2	37.6
Household income				
\$25,000 or less	7,002	38.3	31.7	20.8
\$25,001 to \$50,000	7,742	57.2	38.4	28.0
\$50,001 to \$75,000	4,764	69.5	43.0	33.3
More than \$75,000	5,304	81.2	41.7	39.7
Language most spoken at home by parents				
English	23,007	62.0	39.9	30.1
Other	1,803	26.2	14.9	21.6
Parent involvement in school¹				
Low level	4,471	44.2	30.2	24.4
Medium level	13,600	61.6	38.4	30.7
High level	6,448	74.2	49.0	31.8
Type of college parents expected the child to attend				
4-year	12,408	68.6	45.9	34.5
2-year	6,303	54.7	36.8	26.2
Undecided	6,100	45.4	23.4	22.7

¹This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

²Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Sample in table includes 6th- through 12th-graders' parents for whom both students and parents reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Both parents' education and household income were positively related to whether they prepared financially. The higher the level of parents' education, or household income, the more likely students' parents were to report saving or making other financial preparations.

Parents who reported saving or making plans to pay for college also varied with student race/ethnicity, language spoken in the home, and whether students attended private or public schools. Specifically, compared with parents of White students, parents of Black students and parents of Hispanic students were less likely to have started saving money or to have made other financial plans for their children's postsecondary education. Both groups also were less likely than parents of White students to have heard of one or both of the tax credits. Parents of Hispanic students were less likely than parents of White students to have talked to someone or read materials on financial aid. Non-English-speaking parents were less likely to be aware of one or both of the tax credits than their English-speaking counterparts and to have saved or made any financial preparations for their children's postsecondary education. Finally, parents of private school students were more likely than parents of public school students to report saving money or making other financial plans for their children's postsecondary education.

Parents' saving or making plans to pay was also related to students' academic standing in school. Parents of students with higher grades and students who had never been held back a grade were more likely than parents of lower performing students or retained students to have started saving or making other financial plans to send their children to college.

Finally, how involved parents were in their children's school was associated with their likelihood of saving or making plans to pay for their children's college education. Highly and moderately involved parents were more likely than those who reported low involvement to have started saving money or making other financial plans for their children's postsecondary education; they were also more likely to have talked with someone or read materials about financial aid, and to have heard of one or both of the tax credits that might be used to offset college costs.

Findings From the Multivariate Analysis¹⁹

The multivariate results for exploring parents’ financial preparation activities are displayed in table 12. After all other factors were taken into account, students’ grade level in school remained significantly related to parents’ planning activities. Specifically, parents of 11th- and 12th-graders had higher odds of acquiring financial aid information or being aware of tax credits than did their counterparts with children in grades 6 through 8 or grades 9 and 10. Parents of 11th- and 12th-graders also had higher odds of saving or making other plans for their children’s education than parents of 6th-through 8th-graders, but no difference was detected between parents of 6th-through 8th-graders and parents of 9th- and 10th-graders in the odds of such saving or planning.

The odds of parents reporting that they had begun to save or make other financial preparations to pay for their child’s college education increased with the resources available to them. Both household income and parents’ education levels were positively related to all three indicators of parents’ planning. Parents with lower levels of education (e.g., high school or below) and lower incomes (e.g., \$25,000 or less) were less likely than their college-educated or high-income counterparts to have begun saving money for their children’s postsecondary education or to have heard of the Lifetime Learning and/or the HOPE Scholarship tax credits.²⁰ Conversely, presumably related to their greater need, parents with incomes of \$75,000 or less were more likely than those whose incomes exceeded \$75,000 to have sought financial aid information.

Whether parents had started saving or planning for how to pay for college was also related to the language parents spoke at home and how involved they were in their children’s school. The higher the level of involvement, the higher the odds that parents had begun saving money or making other financial plans and had sought information about financial aid. Non-English-speaking parents were less likely than their English-speaking counterparts to have begun saving

¹⁹In table 12, there are three separate logistic regressions with a common set of independent variables. Each regression can be expressed in the following equation:

$$\text{Log} [Y / (1-Y)] = B_0 + B_1X_1 + \dots + B_{11}X_{11}$$

Where Y is whether the student’s parents started to save money or make other financial plans (first regression), whether the student’s parents talked with someone or read materials about financial aid (second regression), or whether the student’s parents heard of Lifetime Learning and/or HOPE Scholarship tax credits (third regression). X₁ through X₁₁ are student’s grade in school, the student’s sex, the student’s race/ethnicity, the student’s average letter grade across all subjects, if the student had repeated any grades since kindergarten, the control of the school attended by the student (public or private), the highest level of education attained by the student’s parents, the income of the student’s household, the language spoken most at home by the student’s parents, the level of involvement in the student’s school by the student’s parents, and the type of postsecondary institution the parents expected the student to attend. B_i is the regression coefficient for the corresponding independent variable X_i.

²⁰However, there was no significant difference between parents with some college or postsecondary vocation/technical education and those who were college graduates with respect to seeking financial aid information.

Table 12.—Logistic regression results (in odds ratios) of parents preparations to pay for their children’s postsecondary education: 1999

Student, family, or parent characteristic	Have started saving money/ making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE Scholarship tax credits
Grade in school			
6 through 8	0.79*	0.25*	0.82*
9 and 10	0.92	0.39*	0.82*
<i>11 and 12</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Student’s sex			
Male	1.08	0.91	0.94
<i>Female</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Student’s race/ethnicity			
Other, non-Hispanic	1.31	1.16	1.18
Hispanic	0.98	1.05	0.83
Black, non-Hispanic	1.07	1.30*	0.92
<i>White, non-Hispanic</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Average GPA across all subjects			
Mostly A’s	1.50*	1.24	1.26
Mostly B’s	1.38	1.19	1.18
Mostly C’s	1.17	1.08	1.09
<i>Mostly F/D’s</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Repeated any grades since kindergarten			
Yes	0.85	1.02	0.79*
<i>No</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
School type¹			
Public	1.40*	1.14	1.10
<i>Private</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parents’ education			
Less than high school	0.44*	0.36*	0.61*
High school only	0.57*	0.62*	0.62*
Some postsecondary education	0.69*	0.87	0.85*
<i>College graduate or graduate school</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

See footnotes at end of table.

Table 12.—Logistic regression results (in odds ratios) of parents preparations to pay for their children’s postsecondary education: 1999—Continued

Student, family, or parent characteristic	Have started saving money/ making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE Scholarship tax credits
Household income			
\$25,000 or less	0.29*	1.35*	0.60*
\$25,001 to \$50,000	0.45*	1.27*	0.74*
\$50,001 to \$75,000	0.63*	1.22*	0.83*
<i>More than \$75,000</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Language most spoken at home by parents			
Other	0.47*	0.40*	1.14
<i>English</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parent involvement in school			
High level	2.25*	2.28*	1.04
Medium level	1.58*	1.52*	1.16
<i>Low level</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Type of college parents expected the child to attend			
Undecided for any	0.67*	0.57*	0.73*
2-year	0.80*	0.72*	0.78*
Undecided, 4-year	0.98	0.71*	0.72*
4-year private	1.07	1.28*	1.06
<i>4-year public</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

*p<.05.

¹Homeschoolers who attended public or private schools less than 9 hours per week were not asked school related items. They were excluded from this analysis. Those who attended school 9 or more hours per week were assigned to the kind of school they attended.

NOTE: Sample in table includes 6th- through 12th-graders’ parents who reported plans for student to attend postsecondary education. The numbers displayed in the table are odds ratios, which indicate the relative odds of a comparison group to a control group of making financial preparations. Odds ratios less than 1 mean the odds of the comparison group (e.g., parents of 6th- through 8th-graders) are lower than the odds of the control group (e.g., parents of 11th- and 12th-graders) of being financially prepared while odds ratios are greater than 1 mean the opposite.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

or making other financial plans and to have talked with someone or read materials about financial aid.

The type of college that parents expected their children to attend also made a difference. Compared with parents who expected their children to attend a public 4-year institution, those who were undecided about the type of college their children would attend had lower odds of engaging in any of the three planning activities with one exception. There was no measurable difference in terms of saving money or making other financial plans between parents expecting their children to attend a public 4-year institution and those who were either undecided about what type of 4-year institution their children would attend or those who expected their children to attend a private 4-year college. However, the odds that parents sought information about financial aid were 28 percent higher for parents planning to send their children to a private 4-year institution than for parents planning to send their children to a public 4-year institution. Logically, this might be expected because of the higher tuition of private 4-year colleges.

Students' Preparations

Indicators of students' preparations for college included whether or not students reported having discussions during the school year with parents or teachers/counselors regarding college academic requirements, where to attend, the costs, and financial aid availability. Nearly three-quarters (74 percent) of college-bound students in grades 6 through 12 reported having discussions either with their parents or with their teachers/counselors about the academic requirements for college, and 69 percent had discussions regarding the type of postsecondary institution they might attend (table 13). Roughly half (51 percent) of 6th- through 12th-graders had sought information about college costs, and 43 percent reported discussing financial aid availability with parents or teachers/counselors.

As students approached the end of high school, the likelihood of reporting such discussions with parents or teachers/counselors increased. Among 11th- and 12th-graders, 93 percent reported discussing academic requirements for college, and 91 percent reported discussing where they expected to attend with their parents or teachers/counselors, compared with about 57 percent of 6th- through 8th-graders in each case. Similarly, three-quarters (75 percent) of college-bound 11th- and 12th-graders had talked with their parents or teachers/counselors about college costs, and 71 percent had discussed financial aid availability, compared with 36 and 27 percent, respectively, of 6th- through 8th-graders.

Female students were more likely than male students to discuss various topics with their parents or teachers/counselors. Students who had decided which type of college to attend also

Table 13.—Number and percentage of 6th- through 12th-graders who reported discussing various issues relating to postsecondary education with their parents or school teacher/counselors, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Number of students (in thousands)	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Total	24,811	73.7	69.3	50.5	42.9
Grade in school					
6 through 8	10,896	56.7	56.4	36.0	27.4
9 and 10	7,133	81.1	68.7	49.7	39.6
11 and 12	6,782	93.3	90.6	74.6	71.1
Student's sex					
Male	12,113	72.2	67.5	49.1	40.8
Female	12,698	75.2	71.0	51.8	44.9
Student's race/ethnicity					
White, non-Hispanic	16,605	72.4	69.5	49.0	41.1
Black, non-Hispanic	3,777	77.2	70.2	53.9	47.9
Hispanic	3,035	75.4	64.8	52.9	45.8
Other, non-Hispanic	1,393	76.2	74.1	53.2	44.7
Language spoken most at home by student					
English	23,034	73.4	69.5	50.3	42.3
Other	1,777	78.0	66.7	52.2	50.4
Average GPA across all subjects ¹					
Mostly F/D's	844	68.1	60.9	39.1	36.4
Mostly C's	4,638	74.6	68.2	46.2	37.4
Mostly B's	9,835	73.4	68.0	50.7	44.1
Mostly A's	9,202	74.1	72.3	53.7	45.1
Repeated any grades since kindergarten ¹					
Yes	2,774	72.1	66.3	46.3	43.6
No	21,745	73.9	69.8	51.1	42.9
School type					
Public	22,304	74.0	69.2	50.7	43.1
Private	2,215	70.8	71.6	49.5	41.7
Home school ²	292	74.0	59.2	43.0	36.6
Type of college student expected to attend					
4-year	11,076	83.8	82.0	61.2	52.7
2-year	4,101	83.7	76.9	56.8	49.8
Undecided	9,634	57.9	51.5	35.4	28.6

See footnotes at end of table.

Table 13.—Number and percentage of 6th- through 12th-graders who reported discussing various issues relating to postsecondary education with their parents or school teacher/counselors, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Number of students (in thousands)	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Student plays role in family decisions					
Hardly ever	1,025	63.1	57.2	37.0	33.2
Sometimes	11,662	70.2	65.9	47.0	38.6
Often	12,124	78.0	73.6	54.9	47.8
Parents' education					
Less than high school	1,942	75.7	62.8	51.6	48.7
High school only	6,328	72.3	66.7	48.5	42.8
Some postsecondary education	7,635	72.1	68.2	49.3	42.6
College graduate	4,165	75.5	72.5	54.2	43.0
Graduate school	4,741	75.9	74.4	51.2	41.0
Household income					
\$25,000 or less	7,002	74.2	66.1	49.7	46.1
\$25,001 to \$50,000	7,742	70.7	67.9	49.4	42.4
\$50,001 to \$75,000	4,764	75.9	72.1	51.9	43.2
More than \$75,000	5,304	75.5	73.0	51.7	39.0
Parent involvement in school ¹					
Low level	4,471	76.2	66.7	49.5	45.8
Medium level	13,600	73.1	69.8	50.7	41.8
High level	6,448	71.7	72.2	51.8	42.4

¹This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

²Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Sample in tables includes students who reported plans to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

were more likely than their undecided counterparts to report such discussions. Students' perception of their role in family decisionmaking also was positively related to the likelihood that they had discussions with parents or teachers/counselors. Students who were often active in family decisions were more likely to discuss various issues with their parents or teachers/counselors than those who reported participating sometimes or hardly ever.

Some characteristics were associated with the likelihood of discussing a particular topic but not others. For example, Hispanic and Black students were more likely than White students to

discuss financial aid availability with their parents or teachers/counselors, but there were no such differences detected with respect to discussions about cost of tuition and fees. Non-English-speaking students were more likely than their English-speaking counterparts to discuss issues of academic requirements and financial aid, but no differences were detected with respect to discussions about costs or the type of institution to attend. Students with higher grades were more likely than those with lower grades to consult parents or teachers/counselors about the type of postsecondary institution to attend, about the cost of tuition, and about the availability of financial aid, but the same pattern did not hold for discussions of academic requirements. Students from higher income families or whose parents had more education were more likely than students from lower income families or from those whose parents had less education to consult parents or teachers/counselors about the type of postsecondary institution to attend. Similar patterns with respect to income and parents' education were not found for discussions concerning academic requirements or cost of tuition and fees.

Findings From the Multivariate Analysis²¹

Three factors were consistently related to students' discussions concerning college preparation. After holding related variables constant, student's grade level in school, expectations for the type of postsecondary institution to attend, and perceived role in family decisions all influenced the likelihood of students reporting such discussions (table 14). Consistent with previously reported findings, 11th- and 12th-graders were more likely than 6th-through 10th-graders to discuss various issues either with their parents or with teachers/counselors. This strongly suggests that students at the end of high school with plans to attend college feel a greater need to plan for postsecondary education than their younger peers. Information about academic requirements, college type, costs, and financial aid is important for planning.

²¹In table 14, there are four separate logistic regressions with a common set of independent variables. Each regression can be expressed in the following equation:

$$\text{Log} [Y / (1-Y)] = B_0 + B_1X_1 + \dots + B_{12}X_{12}$$

Where Y is whether the student discussed the academic requirements for college with parents or school teachers/counselors (first regression), whether the student discussed the type of college to attend (second regression), whether the student discussed the cost of tuition and fees (third regression), or whether the student discussed financial aid (fourth regression). X₁ through X₁₂ are the student's grade in school, the student's sex, the student's race/ethnicity, the language spoken most at home by the student, the student's average letter grade across all subjects, if the student had repeated any grades since kindergarten, the control of the school attended by the student (public or private), the type of postsecondary institution the student expected to attend, the extent to which the student played a role in family decisions, the highest level of education attained by the student's parents, the income of the student's household, and the level of involvement in the student's school by the student's parents. B_i is the regression coefficient for the corresponding independent variable X_i.

Table 14.—Logistic regression results (in odds ratios) of 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999

Student, family, or parent characteristic	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Grade in school				
6 through 8	0.13*	0.18*	0.23*	0.17*
9 and 10	0.35*	0.26*	0.37*	0.28*
<i>11 and 12</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Student's sex				
Male	0.90	0.90	0.98	0.93
<i>Female</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Student's race/ethnicity				
Other, non-Hispanic	1.22	1.26	1.15	0.99
Hispanic	1.24	0.99	1.44*	1.13
Black, non-Hispanic	1.45*	1.18	1.40*	1.37*
<i>White, non-Hispanic</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Language spoken most at home by student				
Other	1.41*	1.18	1.00	1.39*
<i>English</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Average GPA across all subjects				
Mostly A's	0.95	0.95	1.31	1.12
Mostly B's	0.93	0.84	1.18	1.06
Mostly C's	1.08	0.96	1.01	0.79
<i>Mostly F/D's</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Repeated any grades since kindergarten				
Yes	0.86	0.92	0.82	0.97
<i>No</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
School type ¹				
Public	1.18	1.05	1.14	1.00
<i>Private</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Type of college student expected to attend				
Undecided for any	0.37*	0.29*	0.46*	0.50*
2-year	0.72*	0.58*	0.69*	0.65*
Undecided, 4-year	0.74*	0.63*	0.66*	0.69*
4-year private	1.06	1.70*	1.37*	1.20
<i>4-year public</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

See footnotes at end of table.

Table 14.—Logistic regression results (in odds ratios) of 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999—Continued

Student, family, or parent characteristic	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Student plays role in family decisions				
Often	2.26*	2.05*	2.07*	1.92*
Sometimes	1.73*	1.72*	1.72*	1.45*
<i>Hardly ever</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parents' education				
Less than high school	1.00	0.79	1.09	1.23
High school only	0.92	0.91	1.00	1.10
Some postsecondary education	0.89	0.92	1.02	1.10
<i>College graduate or graduate school</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Household income				
\$25,000 or less	0.91	0.91	0.99	1.41*
\$25,001 to \$50,000	0.80*	0.91	1.00	1.28*
\$50,001 to \$75,000	0.96	0.96	1.01	1.17
<i>More than \$75,000</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parent involvement in school				
High level	1.09	1.52*	1.36*	1.17
Medium level	1.12	1.38*	1.27*	1.07
<i>Low level</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

*p<.05.

¹Homeschoolers who attended public or private schools less than 9 hours per week were not asked school related items. They were excluded from this analysis. Those who attended school 9 or more hours per week were assigned to the kind of school they attended.

NOTE: Sample in tables includes students who reported plans to attend postsecondary education. The numbers displayed in the table are odds ratios, which indicate the relative odds of a comparison group to a control group of making financial preparations. Odds ratios less than 1 mean the odds of the comparison group (e.g., 6th- through 8th-graders) are lower than the odds of the control group (e.g., 11th- and 12th-graders) of discussing college matters with parents or teachers/counselors, while odds ratios greater than 1 mean the opposite.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Students who were undecided about the type of college they would attend or who planned to attend a 2-year institution had lower odds of discussing college issues with parents or teachers/counselors than those who expected to attend a public 4-year institution. Students' role in family decisions and parental involvement in students' school were also important influences on whether students discussed postsecondary education when controlling for all other related variables. Students who were often or sometimes involved in family decisionmaking were more

likely than those who were rarely involved to discuss various issues relating to postsecondary education with their parents or teachers/counselors. Similarly, students whose parents were highly involved in their schooling had greater odds of discussing what type of college to attend and the costs of college with their parents or teachers/counselors, compared with students with parents who reported low involvement. Also, students from lower income families were more likely than those from high-income families to report having discussions about financial aid with parents or teachers/counselors.

Finally, students' race/ethnicity remained a significant variable even after controlling for related variables. Black students were more likely than White students to discuss such issues as academic requirements, college costs, and financial aid with their parents or teachers/counselors. Hispanic students were more likely than White students to discuss college costs with their parents or teachers.

Summary and Conclusions

The results of this study suggest that many college-bound students and their parents do not have an accurate idea of what it costs to attend college. In this study, even among students close to college age (11th- and 12th-graders) with intentions of enrolling in college, roughly one-half of the students (52 percent) and their parents (54 percent) had not obtained information about what it costs to attend college. When asked to estimate 1 year's college tuition at the type of institution the student planned to attend, large proportions of both students (28 percent) and their parents (29 percent) overestimated the amount. Furthermore, 37 percent of 11th- and 12th-graders and 29 percent of their parents could not estimate the amount of 1 year's tuition.

Not surprisingly, the younger the students were, the less aware they or their parents were of college costs. Yet in 9th and 10th grade, when students who expect to attend college should be taking requisite college preparatory courses, 69 percent of students and 46 percent of their parents could not estimate what it would cost to attend college.

Tabular findings of this study also demonstrated that for both students and their parents, the percentage with knowledge of college costs was higher among those in households with higher incomes and among those from households with higher levels of parent education. However, while the association between socioeconomic status indicators (i.e., household income and parents' education) and cost awareness was significant and consistent for parents of 6th- through 12th-graders, it was less so for students. After holding key variables constant,²² household income was not associated with students' college cost awareness. Specifically, household income was not associated with students' likelihood of reporting they had either obtained college cost information or could estimate tuition and fees. Similarly, parents' education did not influence students' ability to provide accurate estimates of tuition. For parents, on the other hand, both indicators of socioeconomic status were related to parents' cost awareness and their ability to accurately estimate tuition and fees.

In addition, the results showed that regardless of parents' education and household income, students who were involved in family decisionmaking were much more likely to seek out information about college including where to attend, academic requirements, and cost, as well as

²²Including students' grade in school, sex, race/ethnicity, language spoken most at home, average GPA, repeating a grade, school type, type of college expected to attend, role in family decisionmaking, talking with parents or teachers or counselors about various issues on postsecondary education, parents' education, parent involvement in school.

financial aid availability through discussions with parents and teachers/counselors. Students who had discussions about college costs and financial aid availability were also more aware of college costs (i.e., they had obtained cost information about the type of college they would attend or they could estimate tuition accurately). Similarly, regardless of income and education levels, parents who were very involved in their children's school were more likely to have made financial preparations to pay for their children's college education and to have sought information about financial aid. Involved parents were also more aware of college costs though they were not more likely to estimate tuition amounts accurately.

Bibliography

- The College Board. (1998). *Trends in College Pricing*. Washington, DC: The College Entrance Examination Board.
- The College Board. (1999). *Trends in College Pricing*. Washington, DC: The College Entrance Examination Board.
- The College Board. (2000). *College Cost and Financial Handbook*. Washington, DC: The College Entrance Examination Board.
- The College Board. (2003). *Trends in College Pricing*. Washington, DC: The College Entrance Examination Board.
- Davis, J. (1997). *College Affordability, A Closer Look at the Crisis*. Washington, DC: Sallie Mae Education Institute.
- Hochberg, Y. and Tamhane, A. (1987). *Multiple Comparisons Procedures*. New York: John Wiley and Sons.
- Horn, L., Peter, K., and Rooney, K. (2002). *Profile of Undergraduates in U.S. Postsecondary Education: 1999–2000* (NCES 2002–168). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Ikenberry, S.O., and Hartle, T. (1998). *Too Little Knowledge Is a Dangerous Thing, What the Public Knows and Thinks About Paying for College*. Washington, DC: American Council on Education.
- Kalton, G., and Kasprzyk, D. (1986). The Treatment of Missing Data. *Survey Methodology*, 12: 1–16.
- Menard, S. (1995). *Applied Logistic Regression Analysis*. Sage University Paper series on Quantitative Applications in the Social Sciences, 07-106. Thousand Oaks, CA: Sage.
- Miller, E.I. (1997). Parents' Views on the Value of a College Education and How Much They Will Pay for It. *Journal of Student Financial Aid*, 27(1): 7–20.

- Nolin, M.J., Montaquila, J., Lennon, J., Kleiner, B., Kim, K., Chapman, C., Chandler, K., Creighton, S., and Bielick, S. (2000a). *National Household Education Survey of 1999: Data File User's Manual, Volume I* (NCES 2000–076). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Nolin, M.J., Montaquila, J., Lennon, J., Kleiner, B., Kim, K., Chapman, C., Chandler, K., Creighton, S., and Bielick, S. (2000b). *National Household Education Survey of 1999: Data File User's Manual, Volume II* (NCES 2000–081). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Nolin, M.J., Montaquila, J., Lennon, J., Kleiner, B., Kim, K., Chapman, C., Chandler, K., Creighton, S., and Bielick, S. (2000c). *National Household Education Survey of 1999: Data File User's Manual, Volume III* (NCES 2000–082). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Nolin, M.J., Montaquila, J., Nicchitta, P., Kim, K., Kleiner, B., Lennon, J., Chapman, C., Creighton, S., and Bielick, S. (2000d). *National Household Education Survey of 1999: Methodology Report* (NCES 2000–078). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Paying for College. (2002, September 30). *U.S. News & World Report*, 133: 82–106.
- Shah, B., Barnwell, B., Hunt, P., and LaVange, L. (1995). *SUDAAN Users Manual*. Research Triangle Park, NC: Research Triangle Institute.
- The \$35,000 Question Why Does One Year of College Cost So Much, and What Does a Student Get? (2002, May 5). *Boston Globe*.
- U.S. Department of Education, National Center for Education Statistics. (2000). *Digest of Education Statistics 1999* (NCES 2000–031). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education, National Center for Education Statistics. (2001). *The Condition of Education 2001* (NCES 2001–072). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education, National Center for Education Statistics. (2002). *Digest of Education Statistics 2001* (NCES 2002–130). Washington, DC: U.S. Government Printing Office.

U.S. Department of Labor, Bureau of Labor Statistics. (2003). *College Enrollment and Work Activity of 2002 High School Graduates*. Washington DC: Author. Available at <http://www.bls.gov/news.release/hsgec.nr0.htm> [September 5, 2003].

Wolter, K. (1985). *Introduction to Variance Estimation*. New York: Springer-Verlag.

Appendix A—Glossary

This glossary describes the variables used in this report. In the index below, the variables are organized by general topic and, within topic, listed in the order they appear in the report. The glossary is organized in similar fashion.

Glossary Index

SURVEY VARIABLES

EXPECTATIONS FOR COLLEGE

Postsecondary education expected by parent SEAFTRHS
 Postsecondary education expected by student.....FCPOSTHS
 Student-reported reasons for not attending postsecondary education YSNOTREA
 Parent-reported student reasons for not attending postsecondary educationPSNOTREA

STUDENT CHARACTERISTICS

SexSEX
 Language spoken most at home by student.....CSPEAK
 Repeated any grade since kindergarten.....SEREPEAT

FAMILY/PARENT CHARACTERISTICS

Household incomeHINCOME

PARENTS’ FINANCIAL PREPARATIONS AND KNOWLEDGE

Talked to someone/read materials on financial aid PSFINAID
 Saving for child’s postsecondary educationPSAVMON

DERIVED VARIABLES

STUDENT CHARACTERISTICS

Average GPA across all subjectsSTGPA
 School type SCHLKIND
 Student role in family decisions..... STROLE
 Students’ grade in school..... ALLGRADE
 Race/ethnicity RACEETHN

DERIVED VARIABLES, CONTINUED

EXPECTATIONS FOR COLLEGE

Level of institution student expected to attendSTPSER
 Level of institution parent expected student to attend.....PARSER

KNOWLEDGE ABOUT COST

Parents’ knowledge about the cost of tuition and feesPARKWTUI
 Students’ knowledge about the cost of tuition and fees STKWUI
 Tuition and fees estimated by students.....STESTUI
 Tuition and fees estimated by parentsPARESTUI
 Accuracy of parents’ estimate of college tuition PARTUI25
 Accuracy of students’ estimate of college tuition STTUI25

FAMILY/PARENT CHARACTERISTICS

Parents’ education PARGRADE
 Parents’ level of involvement in child’s schoolPARINV
 Language spoken most at home by parent.....LANGUAGE

STUDENTS’ DISCUSSION OF VARIOUS POSTSECONDARY EDUCATION TOPICS

Academic requirements for college.....TALKACA
 Type of college planning to attend TALKTYPE
 Cost of tuition and fees..... TALKCOS
 Financial aid TALKAID

PARENTS’ KNOWLEDGE OF TAX CREDITS

Knowledge of HOPE Scholarship and/or Knowledge of Lifetime Learning tax credit.....PSTAXCD

SURVEY VARIABLES

Postsecondary education expected by parent

SEAFTRHS

Indicates response to the question “Do you think (CHILD) will attend school after high school?”

- Yes
- No

Postsecondary education expected by student

FCPOSTHS

Indicates response to the question, “Do you think you will attend school after high school?”

- Yes
- No

Student-reported reasons for not attending postsecondary education

YSNOTREA

Student response to the question “There are many reasons why young people decide not to attend school after high school. What is your main reason?”

- Cost too high/cannot afford
- Needs/wants to work
- Poor grades/unable to get in
- Not interested/tired of going to school/bored with school/dislikes school
- Has a disability (physical/learning/emotional)
- Joining the military
- Not sure of future plans
- Other

Parent-reported student reasons for student not attending postsecondary education

PSNOTREA

Parent’s response to the question “There are many reasons why young people decide not to attend school after high school. What is the main reason for [child]?”

- Cost too high/cannot afford
- Needs/wants to work
- Poor grades/unable to get in
- Not interested/tired of going to school/bored with school/dislikes school
- Has a disability (physical/learning/emotional)
- Joining the military
- Not sure of future plans
- Other

Sex

SEX

Indicates student’s sex as reported in the Parent Survey.

- Male
- Female

Language spoken most at home by student **DAS Variable**
CSPEAK

Indicates response, as reported in the Parent Survey, to the question “What language does (child) speak most at home?” For this analysis, the responses were aggregated into the following categories:

English	Includes English only
Other	Includes Spanish, English and Spanish equally, English and another language equally

Repeated any grade since kindergarten **SEREPEAT**

Indicates response, as reported in the Parent Survey, to the question, “Since starting kindergarten, has (child) repeated any grades?”

Yes
No

Household income **HINCOME**

Indicates response to the following question asked in the Parent Survey, “In studies like this, households are sometimes grouped according to income. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members? Was it...” For this analysis, the responses were aggregated into the following categories:

\$25,000 or less
\$25,001 to \$50,000
\$50,001 to \$75,000
More than \$75,000

Talked to someone/read materials on financial aid **PSFINAID**

Indicates response to the following question asked in the Parent Survey, “Have you (or [child]’s [mother/step-mother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin] [or (the) other adult(s) in your household]) talked with someone or read any materials from schools or financial institutions about sources of financial aid for (child)’s education after high school?”

Yes
No

Saving for child’s postsecondary education **PSAVMON**

Indicates response to the following question asked in the Parent Survey, “Have you started saving money or making any other financial plans to pay for (child’s) education after high school?”

Yes
No

DERIVED VARIABLES

Average GPA across all subjects

STGPA

This variable was created by combining the responses from the following questions asked on the Parent Survey:

1. “Overall, across all subjects the child takes at school, does the child get mostly: A’s, B’s, C’s, D’s, F’s,” or “Does child’s school not give these grades?” (SEGRADES)
2. Those who responded “child’s” school does not give these grades were asked: “Would you describe (child’s) work at school as: excellent, above average, average, below average, or failing?” Excellent was considered equivalent to A’s; Above average to B’s; Average to C’s; Below average to D’s; and Failing to F’s. (SEGRADEQ)

For this analysis, the responses were aggregated as follows:

Mostly F/D’s
Mostly C’s
Mostly B’s
Mostly A’s

School type

SCHLKIND

This variable was created by recoding questions asked in the Parent Survey.

1. Does [child] go to a public or private school (SPUBLIC)?

Public
Private

2. Some parents decide to educate their children at home rather than send them to school. Is (child) being schooled at home (HOMESCHL)?

Yes
No

NOTE: For this analysis, responses were coded as public, private, or home schooled. Those who reported being home schooled or those who spent less than 9 hours per week at public or private school were coded as home schooled.

Students’ role in family decisions

STROLE

Students were asked the following three questions which focused on how much input they had into family issues:

1. Talk over important family decisions with you often, sometimes, or hardly ever (FEFAMDEC)?;
2. Listen to your side of an argument often, sometimes, or hardly ever (FEYRSIDE)?; and
3. Let you have a say in making up rules that concern you often, sometimes, or hardly ever (FERULES)?

All three variables had 3 categories with “1” meaning “often,” “2” meaning “sometimes,” and “3” meaning “hardly ever.” The variables were summed, and those with a score of 3 or 4 were coded as “often having a role in family

DAS Variable

decisions;” those with scores of 5, 6, or 7 were recoded as “sometimes having a role;” and those with a score of 8 or 9 were coded as “hardly ever having a role.”

Students’ grade in school**ALLGRADE**

Indicates students’ grade level as reported in the Parent Survey. The variable was derived from two variables that asked:

1. What grade or year is (child) attending (GRADE)?
2. (What grade would [child] be in if [he/she] were attending [school/a school with regular grades]/What grade or year is [child] attending) (GRADEEQ)?

For this analysis, the responses were aggregated into the following categories:

- Grades 6 through 8
- Grades 9 and 10
- Grades 11 and 12

Race/ethnicity**RACEETHN**

Indicates student’s race/ethnicity as reported in the Parent Survey. If the respondent to the Parent Interview designates the child’s ethnicity as Hispanic, RACEETHN is Hispanic regardless of whether race was classified as White, Black, or another race. RACEETHN was created using three variables that asked:

1. Is (child)...

- White
- Black
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Some other race?

2. A probe was used if the respondent answered “Some other race” with the following categories: (COTHRAC)

- Hispanic/Latino/Mexican/Spanish/Puerto Rican
- More than one race/biracial/multiracial
- Other

3. Otherwise, respondents were asked, “Is (he/she) of Hispanic origin?” (CHISPAN)

- Yes
- No

The values for RACEETHN are:

- White, non-Hispanic
- Black, non-Hispanic
- Hispanic
- All other races (American Indian or Alaska Native, Asian or Pacific Islander, biracial, multiracial), non-Hispanic

Type of institution student expected to attend**STPSER**

This variable was created by combining several questions on the type of institution students planned to attend after high school:

1. Do you think you will graduate from a 4-year college (FCGRADCO)?
2. Will you start your college education at a 2-year school or a 4-year school, or have you not thought about this yet (YSSTART)?

Students expecting to begin their education at a 2-year school were separated from those planning to begin in a 4-year school. (Students planning to attend a 2-year school were subsequently asked: Are you more likely to attend a vocational or technical school, a 2-year community college, a junior college, some other type of school, or have you not thought about this yet (YSOTHTYP). However, because they were not asked to designate public or private sector, which is most related to cost, they were grouped together into 2-year institution.)

3. Are you more likely to attend a public or private 4-year college, or have you not thought about this yet (YSCOLTYP)?

This question was used to separate those planning to attend a public 4-year institution from those planning to attend a private 4-year institution. Those who were undecided were coded separately.

The categories used in this analysis are as follows:

- 4-year institution
 - 4-year public
 - 4-year private
 - Undecided for the type of 4-year institution
- 2-year institution
 - Undecided about type of institution

Level of institution parents expected student to attend**PARSER**

This variable was created by combining the following questions on the type of institution parents expected students would attend after high school. It is equivalent to the student variable STPSER and was constructed using analogous parent variables (SECOLLEG, PSSTART, PSCOLTYP).

Students' knowledge about the cost of tuition and fees**STKWTUI**

Students expecting to attend postsecondary education were asked if they had obtained information about the cost of the college or vocational school they expected to attend after high school.

1. Students expecting to attend a 4-year institution were asked, "Have you gotten information about the cost of tuition and mandatory fees at a specific (in-state public/out-of-state public/private) college?" (YSCOLTUI)
2. Students expecting to attend a 2-year institution were asked, "Have you gotten information about the cost of tuition and mandatory fees at a specific (vocational or technical school/2-year community college/junior college/school)?" YSOTHTUI

Those who indicated that they had not obtained this information were asked if they "could or could not give a fairly accurate estimate" of the cost of a specific college they expected to attend, including the following:

DAS Variable

3. Students who knew which kind of 4-year institution they expected to attend were asked, “Do you think you could or could not give a fairly accurate estimate of the cost of 1 year’s tuition and mandatory fees at (an in-state public/an out-of-state public/a private) college that you might attend?” (YSCESTUI)
4. Students who were undecided about the type of institution (2-year or 4-year) and/or expected to attend a 4-year school but were undecided about the sector (public or private) were asked, “Do you think you could or could not give a fairly accurate estimate of the average cost of 1 year’s tuition and mandatory fees at a public 4-year college in your state?” (YS4YRTUI)
5. Students who knew which kind of 2-year institution they expected to attend were asked, “Do you think you could or could not give a fairly accurate estimate of the cost of 1 year’s tuition and mandatory fees at a (vocational or technical school/2-year community college/junior college/school) in your state that you might attend?” (YSOESTUI)
6. Students who expected to attend a 2-year institution but who were not sure which kind were asked, “Do you think you could or could not give a fairly accurate estimate of the average cost of 1 year’s tuition and mandatory fees at a 2-year community college in your state?” (YS2YRTUI)

For this analysis, responses were aggregated as follows:

- Had obtained information about the cost;
- Had not obtained information but thought they could estimate the cost; and
- Could not estimate (i.e., neither had they obtained information nor could they estimate).

For the regression analyses, this variable was recoded into a dummy with a code of “1” for students who had knowledge about the cost (i.e., either obtained information or could guess) and “0” for those who had no idea.

Parents’ knowledge about the cost of tuition and fees**PTKWUI**

This variable was created by combining the following questions on the cost of postsecondary education. It is equivalent to the student variable STKWTUI and was constructed using analogous student variables (PSCOLTUI, PSOTHTUI, PSESTUI, PS4YRTUI, PSOESTUI, and PS2YRTUI).

Tuition and fees estimated by students**STESTUI**

Indicates tuition and fees estimated by students. This composite variable was created by combining the Student Survey variables²³ listed below.

1. Students expecting to attend a 4-year institution and who had obtained information about the cost of attending the institution were asked, “What is the cost of 1 year’s tuition and mandatory fees at that college?” (YSCOLAMT)
2. Students expecting to attend a 4-year institution but who had not obtained tuition information were asked if they could estimate the cost of 1 year’s tuition and mandatory fees at that institution. Those who said they could were asked, “About how much would that be?” (YSCESAMT)
3. Students who were undecided about the type of institution (2-year or 4-year) and/or were expecting to attend a 4-year institution but were undecided about the sector (public or private), and who said they could estimate the cost of 1 year’s tuition and mandatory fees at a public 4-year in-state institution were asked, “About how much would that be?” (YS4YRAMT)

²³The estimate given by some respondents also included other fees such as room and board. These individuals were identified with a dichotomous variable that indicated whether student’s estimate included tuition and fees only or included other fees.

4. Students who expected to attend a specific 2-year institution and who had obtained information about the cost of attending the institution were asked, “What is the cost of 1 year’s tuition and mandatory fees at that school?” (YSOTHAMT)
5. Students expecting to attend a specific 2-year institution but who had not obtained tuition information were asked if they could estimate the cost of 1 year’s tuition and mandatory fees at that institution. Those who said they could were asked, “About how much would that be?” (YSOESAMT)
6. Students who were undecided about the kind of 2-year institution they would attend were asked if they could estimate the cost of 1 year’s tuition and mandatory fees at a public 2-year in-state community college. Those who said they could were asked, “About how much would that be?” (YS2YRAMT)

Tuition and fees estimated by parents**PARESTUI**

Indicates tuition and fees estimated by parents. It is equivalent to the student variable STTESTUI and was constructed using analogous parent variables (PSCOLAMT, PSCESAMT, PS4YRAMT, PSOTHAMT, PSOESAMT, and PS2YRAMT).

Accuracy of students’ estimates of college tuition**STTUI25**

This variable was developed by comparing students’ estimates of tuition and mandatory fees (and in some cases including room and board) with the average actual amount for the type of institution they planned to attend within their state of residence. The actual tuition data were obtained from the *Digest of Education Statistics 1999* (U.S. Department of Education 2000) which were based on tuition and fees from the Integrated Postsecondary Education System (IPEDS) survey. Accuracy of the estimates was determined at three levels: 15, 25, and 50 percent of the actual average. The report shows the results for 25 percent. This level was chosen to allow for variation in tuition within states. When using the within 25 percent of actual average threshold, estimates were considered accurate if within 25 percent of the actual average, an overestimate if over 25 percent higher than the actual average, and an underestimate if more than 25 percent lower than the actual average. Similar logic applies to the use of the 15 percent and 50 percent thresholds. The detailed steps for the construction of this variable were described below.

1. First, the 1998–99 average college tuitions were calculated from the 1997–98 national and state average undergraduate tuition and fees and room and board rates paid by full-time-equivalent students in institutions of higher education based on the Integrated Postsecondary Education Data System survey and published in the *Digest of Education Statistics 1999* (U.S. Department of Education 2000), taking into account the following inflation rates between 1998–99 and 1999–2000 academic school years,²⁴ which came from the College Board report in 1999.²⁵

Type of institution	Tuition & fees	Room & Board
4-year public	3.3%	2.9%
4-year private	4.3%	3.0%
2-year	3.3%	2.9%

2. If students expected to attend a public 4-year institution in their state, students’ estimates were compared with the average tuition and fees for public 4-year institutions within their state of residence. For student estimates that included room and board, the estimates were compared with the average in-state tuition and fees plus in-state room and board fees for public 4-year institutions.

²⁴The 1998–99 college tuition was not available from IPEDS 1998 at the time this report was written. Had IPEDS been available, the inflation factors for 4-year public tuition and fees would have been 3.8 percent and for room and board 5.1 percent, for 4-year private they would have been 4.7 percent and 4.0 percent (respectively), and for 2-year institutions they would have been 1.7 percent and 3.4 percent (respectively).

²⁵The release can be obtained from the College Board web site at <http://www.collegeboard.org/press>.

DAS Variable

3. If students expected to attend a public 4-year institution outside of their state, the average in-state tuition and fees for public 4-year institutions were doubled and then compared with parents' estimates. For student estimates that included room and board, the estimates were compared with the doubled average tuition and fees plus national average room and board fees for public 4-year institutions.
4. If students expected to attend a private 4-year institution, parents' estimates were compared with the average tuition and fees for private 4-year institutions within their state of residence. For student estimates that included room and board, the estimates were compared with the average in-state tuition and fees plus in-state room and board fees for private 4-year institutions.
5. If students expected to attend a 2-year institution, estimates were compared with the average tuition and fees for public 2-year institutions within their state of residence. For student estimates that included room and board, the estimates were compared with the average in-state 2-year tuition and fees plus national average room and board fees for public 4-year institutions (the only comparable data available).
6. If undecided or the student planned to attend a 4-year institution but was undecided about the specific sector, students' estimates were compared with the average tuition and fees for public 4-year institutions within their state of residence (because these individuals were asked to provide an estimation for a public 4-year institution).
7. If students expected to attend a 2-year institution but were undecided about the specific type, students' estimates were compared with the average tuition and fees for 2-year public institutions within their state of residence (because these individuals were asked to provide an estimation for a public 2-year institution).

Estimates for 4-year institution costs were derived from 6 variables: YSCOLAMT; YSCOLINC; YSCESAMT; YSCESINC; YS4YRAMT; and YS4YRINC. Estimates for 2-year institution costs were also derived from 6 variables: YSOTHAMT; YSOTHINC; YSOESAMT; YSOESINC; YS2YRAMT; and YS2YRINC. The exact wording of YSCOLAMT, YSCESAMT, YS4YRAMT, YSOTHAMT, YSOESAMT, and YS2YRAMT are provided above. YSCOLINC, YSCESINC, YS4YRINC, YSOTHINC, YSOESINC, and YS2YRINC were all questions that asked, "Is that tuition and mandatory fees only, or does that also include other fees such as room and board?"

Accuracy of parents' estimates of college tuition**PARTUI25**

Indicates the accuracy of parents' estimates of college tuition. For more information see STTUI25. Estimates for 4-year institution costs were derived from 6 variables: PSCOLAMT; PSCOLINC; PSCESAMT; PSCESINC; PS4YRAMT; and PS4YRINC. Estimates for 2-year institution costs were also derived from 6 variables: PSOTHAMT; PSOTHINC; PSOESAMT; PSOESINC; PS2YRAMT; and PS2YRINC.

Parents' education**PARGRADE**

Indicates parents' highest educational attainment as reported in the Parent Survey. PARGRADE was derived from four variables:

1. What is the highest grade or year of school that (you/(child)'s (mother/stepmother/foster mother)) completed (MOMGRADE)?

- Up through 8th grade
- 9th through 11th grade
- 12th grade but no diploma
- High school diploma/equivalent
- Vocational/technical program after high school but no vocational/technical diploma
- Vocational/technical diploma after high school
- Some college but no degree
- Associate's degree (AA, AS)
- Bachelor's degree (BA, BS)

Graduate or professional school but no degree
 Master’s degree (MA, MS)
 Doctorate degree (PhD, EdD)
 Professional degree beyond bachelor’s degree (medicine/MD; dentistry/DDS; law/JD/LLB; etc.)

2. (Do you/Does the mom) have a high school diploma or its equivalent, such as a GED (MOMDIPL)?

Yes
 No

3. What is the highest grade or year of school that (you/[child]’s [father/stepfather/foster father]) completed (DADGRADE)?

4. (Do you/Does the dad) have a high school diploma or its equivalent, such as a GED (DADDIPL)?

Yes
 No

The values for PARGRADE are:

Less than high school
 High school graduate or equivalent
 Vocational/technical degree or some college
 College graduate
 Graduate or professional school

Parents’ level of involvement in school

PARINV

This composite variable was created by combining questions from the Parent Survey that asked whether they had attended various school-sponsored activities during the school year. Those activities are as follows:

“Since (the beginning of this school year/September), have you (or [child]’s [mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin] [or (the) other adult(s) in your household])...

1. attended a general school meeting, for example, a back to school night or a meeting of a parent-teacher organization (FSMEETNG)?
2. gone to a regularly scheduled parent-teacher conference with (child)’s teacher (FSATCNFN)?
3. attended a school or class event, such as a play, sports event, or science fair because of (child) (FSSPORT)?
4. acted as a volunteer at the school or served on a committee (FSVOLNTR)?

All four variables were recoded into dummies with “0” meaning “no” and “1” meaning “yes” and then summed. For this analysis, the results were aggregated into the following categories:

Low level	Scores of 0 or 1
Medium level	Scores of 2 or 3
High level	Score of 4

Language spoken most at home by parent**DAS Variable****LANGUAGE**

This variable describes whether the language spoken most often at home by the parent(s)/guardian(s) in the household is English. LANGUAGE was created using the variables MOMLANG, MOMSPEAK, DADLANG, and DADSPEAK.

English	Both/only parent(s)/main language at home is English
Other	Including those who spoke English and another language equally

Academic requirements for college**TALKACA**

One of four composite variables that indicate whether students discussed various postsecondary topics with their parents (parents could include other adults in the household) or with teachers or counselors in the current school year. This variable indicates whether students discussed academic requirements for college or vocational school. The chart below shows the survey variables used to create the composite variables.

Discussion item	Composite variable name	Discussed with parents	Discussed with teacher/counselor
Academic requirements for college or vocational school	TALKACA	YSREQFAM	YSREQTEA
Financial aid for education after high school	TALKAID	YSAIDFAM	YSAIDTEA
Cost of postsecondary education	TALKCOS	YSCOSFAM	YSCOSTEA
Type of college or vocational school they would like to attend	TALKTYPE	YSATTFAM	YSATTTEA

For TALKACA:

1. YSREQFAM asked, “Students begin to talk about future education at different ages. This school year, have you discussed the academic requirements for college or vocational school after high school with ([your parents]/[your mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin]/[adult respondent]/[or mother/step-mother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin] [or (the) other adult(s) in your household])?”
2. YSREQTEA asked, “How about with a teacher or counselor at school?”

For TALKAID:

3. YSAIDFAM asked, “This school year, have you talked with ([your parents]/[your mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin]/[adult respondent]/[or mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin] [or (the) other adult(s) in your household]) about financial aid for education after high school?”
4. YSAIDTEA asked, “How about with a teacher or counselor at school?”

For TALKCOS:

5. YSCOSFAM asked, “This school year, have you talked with ([your parents]/[your mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin]/[adult respondent]/[or mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin] [or (the) other adult(s) in your household]) about the cost of education after high school?”
6. YSCOSTEA asked, “How about with a teacher or counselor at school?”

For TALKTYPE:

7. YSATTFAM asked, “This school year, have you discussed with ([your parents]/[your mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin]/[adult respondent]/[or mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin] [or (the) other adult(s) in your household]) which colleges or vocational schools you would like to attend after high school?”
8. YSATTTEA asked, “How about with a teacher or counselor at school?”

DAS Variable

Students who reported discussing a particular topic with at least one of these adults got a score of “1”; otherwise, they got a score of “2.”

Type of college to attend

TALKTYPE

One of four composite variables that indicate whether students discussed various postsecondary topics with their parents (parents could include other adults in the household) or with teachers or counselors in the current school year. This variable indicates whether students discussed the type of college or vocational school they would like to attend. For more information, see TALKACA.

Cost of tuition and fees

TALKCOS

One of four composite variables that indicate whether students discussed various postsecondary topics with their parents (parents could include other adults in the household) or with teachers or counselors in the current school year. This variable indicates whether students discussed the cost of postsecondary education. For more information, see TALKACA.

Financial aid

TALKAID

One of four composite variables that indicate whether students discussed various postsecondary education topics with their parents (parents could include other adults in the household) or with teachers or counselors in the current school year. This variable indicates whether students discussed financial aid for education after high school. For more information, see TALKACA.

Knowledge of HOPE Scholarship and/or Lifetime Learning Tax Credit

PSTAXCD

Combines two parent items asking if parents have heard of HOPE Scholarship (PSHOPE) or Lifetime Learning Tax Credit (PSLIFE). A positive response to either was coded as “Yes.” The HOPE Scholarship applies to students in the first two years of college (or other eligible post-secondary training). Taxpayers are eligible for a tax credit equal to 100 percent of the first \$1,000 of tuition and fees and 50 percent of the second \$1,000 (the amounts are indexed for inflation after 2001). The Lifetime Learning Tax Credit applies to students beyond the first two years of college, or taking classes part-time to improve or upgrade job skills. Through 2002, the family was eligible to receive a 20 percent tax credit for the first \$5,000 of tuition and fees, and thereafter, 20 percent of the first \$10,000. The credit is available on a per-taxpayer (family) basis. Both tax credits are phased out at the higher income levels.

Appendix B—Technical Notes and Methodology

Data Sources

The data for this report come from the Youth Survey and the Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). The NHES:1999 is a telephone survey conducted by the U.S. Department of Education, National Center for Education Statistics (NCES). Data collection took place from early January through early April of 1999. When appropriately weighted, the sample is nationally representative of all civilian, noninstitutionalized persons in the 50 states and the District of Columbia. The sample was selected using random digit dialing (RDD) methods, and the data were collected using computer-assisted telephone interviewing (CATI) technology. Three different surveys were fielded as part of the NHES:1999. Apart from the Parent and Youth surveys, there was also an Adult Education Survey. A Screener was also used to sample household members for the three surveys. As it relates here, the Screener was used to determine whether any children of the appropriate ages or grades lived in the household, to collect information on each household member, and to identify the appropriate parent respondent for the sampled child (see Nolin et al. 2000a, b, and c for more information).

In the NHES:1999 Parent Survey, data were collected about children from birth through age 20 as of December 31, 1998. In order to be eligible, children aged 7 or older had to be enrolled in school or home school in the 12th grade or below at the time of interview. The respondent for the Parent Survey was the adult living in the household who was the most knowledgeable about the child's care and education. Typically, this was the mother of the child; however, the respondent could be a father, stepparent, adoptive parent, foster parent, grandparent, another relative, or nonrelative guardian.²⁶ Subjects in the Parent Survey were routed to one of six questionnaire paths: infant, preschool, elementary school, middle/junior high, senior high, or home school. This report focused on the middle school/junior high school path, which was administered to parents of children who were attending grades 6 through 8; the senior high school path, which was administered to parents of youth attending grades 9 through 12; and the home school path, which was administered to parents of children not attending

²⁶The respondents who participated in the Parent Survey of NHES:1999 were the parents/guardians who were most knowledgeable about the education of the sampled children. Although most respondents were parents (95 percent), some were children's brothers, sisters, grandparents, aunts, uncles, cousins, or other relatives. Since these nonparental guardians account for a small percentage of the sample (5 percent), they were included in the group identified as children's parents.

school but who were in the equivalent of 6th- through 12th-grade and were being instructed at home. All these questionnaire paths collected data about plans for postsecondary education, which is the core focus of this report.

In the NHES:1999 Youth Survey, data were collected from students in grades 6 through 12, for whom there was a completed Parent Survey. Subjects were routed to one of two questionnaire paths: middle school/junior high school or senior high school. The middle school/junior high school path was administered to those students who were attending grades 6 through 8. The senior high school path was administered to those attending grades 9 through 12. Homeschoolers in the middle school/junior high school and senior high school paths skipped the questions referring to schools. More information about the survey can be found in the *National Household Education Surveys Program of 1999: Data File User's Manual, Volumes I–III* (Nolin et al. 2000a, b, c).

Response Rates

For the NHES:1999 survey, Screeners were completed by 57,278 households. A sample of 27,333 children birth through 12th grade was selected for the Parent Survey. This sample included 10,131 youth in grades 6 through 12. The response rate for the Screener was 74 percent. The completion rate for the Parent Survey, or the percent of eligible sampled children for whom interviews were completed, was 88 percent, or 24,600 interviews. Thus, the overall response rate for the Parent Survey was 65 percent (the product of the Screener response rate and the Parent Survey completion rate). An interview with a sampled youth was attempted only after the interview with his or her parent had been completed. The completion rate for youth in grades 6 through 12 was 76 percent. Thus, the overall response rate for the Youth Survey was 56 percent (the product of the Screener completion rate and the Youth Survey completion rate). This report is based on a subset of respondent households where both student and parents expected the student to attend college after high school. The unweighted number of cases included in this analysis is 7,285. Among them, 3,313 were in grades 6 through 8 and 3,972 were in grades 9 through 12.

To detect and correct for potential nonresponse bias, a nonresponse bias analysis was conducted on the Youth Survey data and on the Parent Survey data (Nolin et al. 2000d). Nonresponse bias was not detected in either data set.

For most of the data items collected in the NHES:1999, the item nonresponse (the failure to complete some items in an otherwise completed interview) was very low. Most items used in this analysis have response rates of 90 percent or more. Items in this report that have a response rate

of less than 95 percent are cost of tuition at a specific 4-year college estimated by parents, and household income. Through a procedure known as hot-deck imputation (Kalton and Kasprzyk 1986), responses were imputed for missing values (i.e., “don’t know” or “refused” for items not specifically designated to have those as legitimate response categories, or “not ascertained”). As a result, no missing values remain.

Accuracy of Estimates

The estimates in this report are derived from a survey sample and are subject to two broad classes of error—nonsampling and sampling errors. Nonsampling errors occur not only in sample surveys but also in complete censuses of entire populations. Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all students or all households in the sample (some students or households refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, sampling, and imputing missing data. Although nonsampling errors due to questionnaire and item nonresponse can be reduced somewhat by the adjustment of sample weights and imputation procedures, correcting nonsampling errors or gauging the effects of these errors is usually difficult.

Sampling errors occur because observations are made only on samples of students, not on entire populations. The sample of telephone households selected for the NHES:1999 is just one of many possible samples that could have been selected. Therefore, estimates produced from the NHES:1999 sample may differ from estimates that would have been produced from other samples. This type of variability is called sampling error because it arises from using a sample of households with telephones, rather than all households with telephones.

The standard error is a measure of the variability due to sampling when estimating a statistic. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census count would differ from the sample estimate by less than 1 standard error is about 68 percent. The chance that the difference would be less than 1.65 standard errors is about 90 percent, and that the difference would be less than 1.96 standard errors, about 95 percent. Standard errors for all of the estimates are presented in appendix C.

In addition to properly weighting the responses, special procedures for estimating the statistical significance of the estimates were used because the data were collected using a complex sample design. Complex sample designs, like that used in the NHES, result in data that violate some of the assumptions that are normally required to assess the statistical significance of

the results. Frequently, the sampling errors of the estimates from the survey are larger than would be expected if the sample was a simple random sample and the observations were independent and identically distributed random variables. The jackknife replication method was used to estimate variances that reflected the actual sample design used in the NHES:1999 (Wolter 1985).

Statistical Tests

Differences discussed in this report are significant at the 95 percent confidence level or higher, and where a lack of difference is noted, the significance of the difference is below this threshold. The Student's t statistic was used to test the likelihood that the differences between the two independent estimates were larger than would be expected due to sampling error. The Student's t values can be computed for comparisons using the estimates in the tables with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{(se_1)^2 + (se_2)^2}} \quad (1)$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. This formula is valid only for independent estimates. When the estimates are not independent (for example, when comparing any estimates that are parts of a percentage distribution to the whole), a covariance term must be added to the denominator of the t -test formula. Because the actual covariances were not known, it was assumed that the estimates were perfectly negatively correlated. Consequently, $2*(se_1 * se_2)$ was added to the denominator of the t -test formula for dependent estimates.

$$t = \frac{E_1 - E_2}{\sqrt{(se_1)^2 + (se_2)^2 + 2(se_1 * se_2)}} \quad (2)$$

Generally, whether a difference is considered statistically significant is determined by calculating a t value for the difference between a pair of proportions or means, and comparing this value to published tables of values at certain critical levels, called *alpha* levels. The *alpha* level is an *a priori* statement of the probability of inferring that a difference exists when, in fact, it does not. The *alpha* level used in this report is .05; differences discussed in the text have been tested and found significant at this level.

In order to make proper inferences and interpretations from the statistics, several points must be kept in mind. First, comparisons resulting in large t statistics may appear to merit special note. However, this is not always the case, because the size of the t statistic depends not only on

the observed differences in the two estimates being compared, but also on the standard error of the difference. Thus, a small difference between two groups with a much smaller standard error could result in a large t statistic, but this small difference is not necessarily substantively noteworthy.

Second, when multiple statistical comparisons are made, it becomes increasingly likely that a finding of a statistically significant difference is erroneous. Even when there is no difference in the population, at an *alpha* level of .05, there is still a 5 percent chance of concluding that an observed t value representing one comparison in the sample is large enough to be statistically significant. As the number of comparisons increases, so does the risk of making such an error in inference.

To guard against errors of inference based upon multiple comparisons, the Bonferroni procedure to correct significance tests for multiple contrasts was used in this report (Hochberg and Tamhane 1987). This method corrects the significance (or *alpha*) level for the total number of contrasts made with a particular classification variable. For each classification variable, there are K possible contrasts (or nonredundant pairwise comparisons), where $K=(N*(N-1)/2)$ and N is the number of categories in the variable. For example, because socioeconomic status has 3 categories ($N=3$) and there are $(3*2)/2=3$ possible comparisons among the categories. The Bonferroni procedure divides the *alpha* level for a single t test (for example, .05) by the number of possible pairwise comparisons in order to provide a new *alpha* that adjusts for all possible multiple comparisons.

Analysis of Variance (ANOVA)

When averages of a continuous variable were examined relative to a variable with ordered categories, Analysis of Variance (ANOVA) was used to test for a linear relationship between the two variables. To do this, ANOVA equations included orthogonal linear contrasts corresponding to successive levels of the independent variable. The variance between the means, and the unweighted sample sizes were used to partition total sum of squares into within- and between-group sums of squares. These were used to create mean squares for the within- and between-group variance components and their corresponding F statistics, which were then compared with published values of F for a significance level of .05.²⁷ Significant values of both the overall F and the F associated with the linear contrast term were required as evidence of a linear relationship between the two variables.

²⁷More information about ANOVA and significance testing using the F statistic can be found in any standard textbook on statistical methods in the social and behavioral sciences.

Multivariate Analysis

Many of the independent variables included in the analyses in this report are related, and to some extent, the pattern of differences found in the descriptive analyses reflects this covariation. To take into account the interrelationship of the independent variables, logistic regression was used to determine the association of each factor on the outcomes of interest. That is, a logistic regression was used to determine whether or not specific student and family characteristics were associated with parents' or student's knowledge about the college cost and steps parents or students took to make preparations for college, taking into account other characteristics. Because all outcome variables are dichotomous variables (1=yes and 0=no), a logistic regression was used to perform multivariate analysis. In order to take into account the complex sampling of NHES:1999, SUDAAN, a software application that is based on the Taylor series approximation method, was used for logistic regressions (Shah et al. 1995). Examining the correlation coefficients among all the independent variables revealed that multicollinearity did not appear to be a problem. The highest correlation observed was between parents' education levels and household income ($r=0.49$).

The odds ratio generated by a logistic regression can be used to estimate the probability of some types of people having an outcome compared to a control group of people. Odds ratios of greater than 1 mean that those in the noncontrol group are more likely to have the outcome than those in the control group and odds ratios of less than 1 mean those in the noncontrol group are less likely to have the outcome than those in the control group. For example, the first column of table 10 shows student odds ratios for having knowledge about the cost of college. In that table, male students have an odds ratio of 1.43 meaning they are more likely than those in the control group, females, to have knowledge about college costs. Another interpretation is that the odds of males having knowledge about college costs are 43 percent higher than the odds of females having knowledge about college costs (Menard 1995).

Appendix C—Supplemental Tables

Table C1.—Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 15% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 15% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Total	14.1	12.9	6.4	66.6	21.5	23.7	9.0	45.8
Grade in school								
6 through 8	10.8	3.1	2.5	83.6	20.2	17.1	6.8	55.9
9 and 10	14.5	11.0	5.8	68.7	21.5	24.4	7.6	46.5
11 and 12	19.0	30.5	13.2	37.2	23.8	33.4	13.9	28.9
Student's sex								
Male	15.2	13.3	6.4	65.1	21.4	22.7	8.6	47.4
Female	13.1	12.5	6.3	68.1	21.7	24.6	9.4	44.4
Student's race/ethnicity								
White, non-Hispanic	14.2	12.9	6.7	66.2	24.8	26.6	9.5	39.1
Black, non-Hispanic	16.3	12.6	6.6	64.5	15.4	15.6	10.9	58.1
Hispanic	11.5	9.9	4.8	73.8	11.5	16.6	4.8	67.1
Other, non-Hispanic	12.9	19.3	5.9	61.8	20.9	26.3	6.1	46.8
Language spoken most at home by student								
English	14.4	13.1	6.4	66.1	†	†	†	†
Other	10.1	9.9	6.6	73.4	†	†	†	†
Average GPA across all subjects ²								
Mostly F/D's	12.3	6.5	3.1	78.1	12.5	16.7	6.4	64.3
Mostly C's	11.1	11.5	7.3	70.1	16.6	20.6	10.5	52.3
Mostly B's	14.1	12.8	5.8	67.3	20.8	23.2	9.2	46.8
Mostly A's	15.9	14.5	6.9	62.8	25.7	26.3	8.3	39.7
Repeated any grades since kindergarten ²								
Yes	10.8	12.0	5.8	71.4	16.2	20.1	8.7	55.0
No	14.6	13.1	6.5	65.9	22.2	24.1	9.0	44.6
School type								
Public	13.9	12.9	6.5	66.6	20.7	23.5	8.8	47.0
Private	16.4	13.2	5.6	64.9	30.4	25.4	10.5	33.7
Home school ³	11.6	3.8	4.0	80.6	20.2	24.3	6.7	48.9

See footnotes at end of table.

Table C1.—Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 15% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 15% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Type of college student planned to attend								
4-year public	11.8	28.2	12.0	48.0	†	†	†	†
4-year private	20.8	30.7	21.8	26.6	†	†	†	†
Undecided, 4-year	25.7	#	#	74.3	†	†	†	†
2-year	6.2	24.1	12.1	57.6	†	†	†	†
Undecided for any	13.7	#	#	86.3	†	†	†	†
Student plays role in family decisions								
Hardly ever	14.3	11.9	6.4	67.5	†	†	†	†
Sometimes	13.3	10.9	5.8	70.1	†	†	†	†
Often	14.9	14.9	6.9	63.3	†	†	†	†
Talked with parent/teacher about the cost								
Yes	18.3	19.7	9.3	52.8	†	†	†	†
No	9.9	6.0	3.5	80.6	†	†	†	†
Talked with parent/teacher about financial aid								
Yes	17.7	19.9	9.6	52.9	†	†	†	†
No	11.5	7.7	4.0	76.8	†	†	†	†
Parents' education								
Less than high school	11.9	8.3	5.2	74.6	6.5	5.2	2.8	85.5
High school only	12.8	11.8	5.9	69.6	14.6	15.5	6.4	63.5
Some postsecondary education	12.8	11.7	6.8	68.7	19.7	26.5	9.9	43.9
College graduate	16.0	13.9	6.9	63.2	31.1	28.5	12.2	28.1
Graduate school	17.2	17.2	6.5	59.1	31.5	33.4	10.5	24.6
Household income								
\$25,000 or less	12.2	10.3	6.9	70.5	12.6	15.6	6.6	65.2
\$25,001 to \$50,000	13.6	11.9	6.7	67.8	19.6	21.5	9.1	49.8
\$50,001 to \$75,000	13.6	15.2	7.1	64.1	28.5	27.0	10.4	34.1
More than \$75,000	17.8	15.6	4.6	62.1	29.9	34.5	10.6	25.0

See footnotes at end of table.

Table C1.—Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 15% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 15% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Language most spoken at home by parents								
English	†	†	†	†	22.5	24.6	9.4	43.5
Other	†	†	†	†	9.7	11.5	3.8	75.0
Parent involvement in school								
Low level	13.6	14.2	6.6	65.6	17.2	18.5	8.5	55.8
Medium level	14.0	12.3	6.6	67.2	22.3	23.1	9.2	45.4
High level	15.5	13.3	5.6	65.7	25.6	32.9	9.1	32.4
Talked to someone/read materials on financial aid								
Yes	†	†	†	†	26.9	32.4	12.5	28.2
No	†	†	†	†	18.2	18.3	6.8	56.7
Heard of Lifetime Learning/HOPE Scholarship								
Yes	†	†	†	†	27.8	28.1	10.3	33.8
No	†	†	†	†	18.9	21.8	8.4	50.9
Type of college parent expected student to attend								
4-year public	†	†	†	†	18.2	39.6	12.7	29.6
4-year private	†	†	†	†	27.6	37.1	22.1	13.2
Undecided, 4-year	†	†	†	†	46.0	#	#	54.0
2-year or vocational/technical	†	†	†	†	10.2	32.2	11.5	46.1
Undecided for any	†	†	†	†	24.5	#	#	75.5

#Too few sample cases.

†Not applicable.

¹An accurate estimate was defined as one within 15 percent of the actual average cost for the type of postsecondary institution student intended to attend in their state of residence.

²This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

³Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Table C2.—Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 50% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 50% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Total	21.1	9.5	2.8	66.6	34.7	16.2	3.3	45.8
Grade in school								
6 through 8	12.6	2.4	1.4	83.6	28.7	12.2	3.2	55.9
9 and 10	20.9	8.4	2.0	68.7	34.3	17.4	1.8	46.5
11 and 12	35.1	22.0	5.8	37.2	44.7	21.2	5.2	28.9
Student's sex								
Male	22.2	10.0	2.7	65.1	33.8	15.4	3.4	47.4
Female	20.1	9.0	2.8	68.1	35.5	16.9	3.2	44.4
Student's race/ethnicity								
White, non-Hispanic	21.8	9.2	2.8	66.2	39.7	17.7	3.5	39.1
Black, non-Hispanic	22.6	9.8	3.1	64.5	26.6	11.4	4.0	58.1
Hispanic	16.0	8.0	2.2	73.8	18.4	13.0	1.5	67.1
Other, non-Hispanic	20.2	15.0	2.9	61.8	32.1	18.2	2.9	46.8
Language spoken most at home by student								
English	21.5	9.6	2.8	66.1	†	†	†	†
Other	16.3	7.6	2.7	73.4	†	†	†	†
Average GPA across all subjects ²								
Mostly F/D's	15.2	5.6	1.1	78.1	17.4	13.7	4.6	64.3
Mostly C's	17.1	9.1	3.7	70.1	29.5	14.4	3.8	52.3
Mostly B's	20.5	9.7	2.5	67.3	34.0	16.1	3.1	46.8
Mostly A's	24.5	10.0	2.7	62.8	39.5	17.6	3.2	39.7
Repeated any grades since kindergarten ²								
Yes	16.2	10.2	2.3	71.4	27.6	14.7	2.7	55.0
No	21.8	9.5	2.8	65.9	35.6	16.4	3.4	44.6
School type								
Public	20.9	9.7	2.8	66.6	33.4	16.3	3.4	47.0
Private	23.9	8.6	2.6	64.9	47.2	16.2	2.9	33.7
Home school ³	14.4	3.0	2.1	80.6	37.0	10.3	3.8	48.9

See footnotes at end of table.

Table C2.—Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 50% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 50% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Type of college student planned to attend								
4-year public	26.3	20.7	5.0	48.0	†	†	†	†
4-year private	51.2	13.7	8.5	26.6	†	†	†	†
Undecided, 4-year	25.7	#	#	74.3	†	†	†	†
2-year	15.0	21.6	5.9	57.6	†	†	†	†
Undecided for any	13.7	#	#	86.3	†	†	†	†
Student plays role in family decisions								
Hardly ever	20.3	8.5	3.7	67.5	†	†	†	†
Sometimes	18.8	8.4	2.8	70.1	†	†	†	†
Often	23.5	10.6	2.6	63.3	†	†	†	†
Talked with parent/teacher about the cost								
Yes	29.2	14.3	3.8	52.8	†	†	†	†
No	13.0	4.6	1.8	80.6	†	†	†	†
Talked with parent/teacher about financial aid								
Yes	28.9	14.2	4.0	52.9	†	†	†	†
No	15.4	6.0	1.8	76.8	†	†	†	†
Parents' education								
Less than high school	17.3	6.2	1.8	74.6	10.1	3.6	0.8	85.5
High school only	18.2	9.3	2.9	69.6	22.4	11.6	2.5	63.5
Some postsecondary education	19.3	8.7	3.3	68.7	33.8	18.7	3.7	43.9
College graduate	24.0	9.8	3.0	63.2	47.4	20.0	4.5	28.1
Graduate school	27.0	12.1	1.7	59.1	51.5	20.1	3.8	24.6
Household income								
\$25,000 or less	17.9	8.2	3.4	70.5	19.9	11.8	3.2	65.2
\$25,001 to \$50,000	20.5	8.9	2.8	67.8	31.7	15.4	3.1	49.8
\$50,001 to \$75,000	22.1	11.2	2.5	64.1	42.8	19.6	3.5	34.1
More than \$75,000	25.3	10.6	2.1	62.1	51.3	20.1	3.6	25.0

See footnotes at end of table.

Table C2.—Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 50% of actual ¹	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 50% of actual ¹	Over-estimated	Under-estimated	Could not estimate
Language most spoken at home by parents								
English	†	†	†	†	36.3	16.7	3.5	43.5
Other	†	†	†	†	14.1	9.5	1.4	75.0
Parent involvement in school								
Low level	20.8	11.0	2.6	65.6	27.7	13.2	3.3	55.8
Medium level	21.0	9.1	2.8	67.2	35.3	15.9	3.4	45.4
High level	22.6	8.8	3.0	65.7	42.8	21.8	3.1	32.4
Talked to someone/read materials on financial aid								
Yes	†	†	†	†	45.7	21.0	5.0	28.2
No	†	†	†	†	27.9	13.2	2.3	56.7
Heard of Lifetime Learning and/or HOPE Scholarship tax credits								
Yes	†	†	†	†	44.4	18.1	3.8	33.8
No	†	†	†	†	30.6	15.4	3.1	50.9
Type of college parent expected student to attend								
4-year public	†	†	†	†	38.8	28.0	3.6	29.6
4-year private	†	†	†	†	63.7	15.6	7.6	13.2
Undecided, 4-year	†	†	†	†	46.0	#	#	54.0
2-year	†	†	†	†	23.2	25.0	5.8	46.1
Undecided for any	†	†	†	†	24.5	#	#	75.5

#Too few sample cases.

†Not applicable.

¹An accurate estimate was defined as one within 50 percent of the actual average cost for the type of postsecondary institution student intended to attend in their state of residence.

²This question was not asked of homeschoolers who attended public or private school less than 9 hours per week.

³Homeschoolers include children schooled at home who attended public or private schools less than 9 hours per week.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Table C3.—Logistic regression coefficients and standard errors for table 10: 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees

Student, family, or parent characteristic	Having knowledge about the cost				Estimating the cost accurately			
	Student		Parent		Student		Parent	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Intercept	0.20	0.34	1.73	0.27	-1.58	0.38	-0.76	0.30
Grade in school								
6 through 8	-1.52	0.09	-0.92	0.09	-0.90	0.11	-0.58	0.09
9 and 10	-0.94	0.09	-0.58	0.10	-0.48	0.11	-0.22	0.10
11 and 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Student's sex								
Male	0.37	0.07	-0.09	0.07	0.25	0.08	0.03	0.07
Female	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Student's race/ethnicity								
Other, non-Hispanic	0.12	0.16	-0.13	0.15	-0.32	0.18	-0.48	0.16
Hispanic	-0.09	0.13	-0.18	0.12	-0.16	0.15	-0.34	0.13
Black, non-Hispanic	0.30	0.11	-0.44	0.10	0.28	0.12	-0.28	0.12
White, non-Hispanic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Language spoken most at home by student								
Other	-0.15	0.18	†	†	-0.24	0.20	†	†
English	0.00	0.00	†	†	0.00	0.00	†	†
Average GPA across all subjects								
Mostly A's	0.18	0.24	0.02	0.20	0.10	0.26	0.22	0.25
Mostly B's	0.01	0.23	0.03	0.19	0.02	0.26	0.27	0.24
Mostly C's	-0.08	0.24	0.02	0.20	-0.21	0.27	0.19	0.25
Mostly F/D's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repeated any grades since kindergarten								
Yes	-0.25	0.12	0.07	0.11	-0.30	0.15	0.08	0.13
No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School type ¹								
Public	0.14	0.13	0.13	0.13	0.04	0.13	-0.12	0.12
Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

See footnotes at end of table.

Table C3.—Logistic regression coefficients and standard errors for table 10: 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees
—Continued

Student, family, or parent characteristic	Having knowledge about the cost				Estimating the cost accurately			
	Student		Parent		Student		Parent	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Undecided for any	-1.29	0.10	†	†	0.40	0.11	†	†
2-year	-0.41	0.11	†	†	-0.71	0.16	†	†
Undecided, 4-year	-0.92	0.12	†	†	0.88	0.13	†	†
4-year private	0.89	0.14	†	†	0.69	0.15	†	†
4-year public	0.00	0.00	†	†	0.00	0.00	†	†
Student plays role in family decisions								
Often	-0.05	0.18	†	†	-0.16	0.21	†	†
Sometimes	-0.11	0.18	†	†	-0.24	0.21	†	†
Hardly ever	0.00	0.00	†	†	0.00	0.00	†	†
Talked with parent/teacher about the cost of college								
Yes	0.70	0.08	†	†	0.62	0.09	†	†
No	0.00	0.00	†	†	0.00	0.00	†	†
Talked with parent/teacher about financial aid								
Yes	0.19	0.08	†	†	0.16	0.09	†	†
No	0.00	0.00	†	†	0.00	0.00	†	†
Parents' education								
Less than high school	-0.40	0.18	-1.69	0.18	0.06	0.20	-1.47	0.22
High school only	-0.22	0.10	-1.02	0.10	-0.01	0.11	-0.66	0.11
Some postsecondary education	-0.22	0.09	-0.41	0.09	-0.07	0.10	-0.39	0.08
College graduate or graduate school	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household income								
\$25,000 or less	-0.14	0.13	-0.73	0.12	-0.27	0.14	-0.54	0.13
\$25,001 to \$50,000	-0.10	0.10	-0.62	0.10	-0.19	0.11	-0.29	0.10
\$50,001 to \$75,000	-0.15	0.11	-0.26	0.11	-0.17	0.12	-0.01	0.10
More than \$75,000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parent involvement in school								
High level	0.03	0.12	0.41	0.11	-0.04	0.13	-0.01	0.11
Medium level	0.02	0.09	0.16	0.08	-0.03	0.10	0.04	0.09
Low level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

See footnotes at end of table.

Table C3.—Logistic regression coefficients and standard errors for table 10: 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees
—Continued

Student, family, or parent characteristic	Having knowledge about the cost				Estimating the cost accurately			
	Student		Parent		Student		Parent	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Other	†	†	-0.22	0.18	†	†	-0.25	0.18
English	†	†	0.00	0.00	†	†	0.00	0.00
Parent involvement in school								
High level	0.03	0.12	0.41	0.11	-0.04	0.13	-0.01	0.11
Medium level	0.02	0.09	0.16	0.08	-0.03	0.10	0.04	0.09
Low level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Type of college parents expected the child to attend								
Undecided for any	†	†	-1.40	0.10	†	†	0.68	0.10
2-year	†	†	-0.49	0.10	†	†	-0.49	0.11
Undecided, 4-year	†	†	-0.94	0.11	†	†	1.26	0.11
4-year private	†	†	0.87	0.16	†	†	0.55	0.12
4-year public	†	†	0.00	0.00	†	†	0.00	0.00
Parents talked to someone/read materials on financial aid								
Yes	†	†	0.73	0.08	†	†	0.43	0.08
No	†	†	0.00	0.00	†	†	0.00	0.00
Parents heard of Lifetime Learning and/or HOPE Scholarship tax credits								
Yes	†	†	0.29	0.08	†	†	0.22	0.08
No	†	†	0.00	0.00	†	†	0.00	0.00

†Not applicable.

¹Homeschoolers who attended public or private schools less than 9 hours per week were not asked school related items. They were excluded from this analysis. Those who attended school 9 or more hours per week were assigned to the kind of school they attended.

NOTE: An estimation within 25 percent of the actual average cost for the type of postsecondary institution student expected to attend in their state of residence was considered an accurate estimate. For those planning to attend a public school out-of-state, the public school tuition in the student's state was doubled before comparisons were made.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts were from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Table C4.—Logistic regression coefficients and standard errors for table 12: Parents' preparations to pay for their childrens' postsecondary education

Student, family, or parent characteristic	Have started saving money/ making other financial plans		Have talked to someone/read materials on financial aid		Have heard of Lifetime Learning and/ or HOPE scholarship tax credits	
	b	s.e.	b	s.e.	b	s.e.
Intercept	0.72	0.24	-0.02	0.26	-0.40	0.25
Grade in school						
6 through 8	-0.24	0.08	-1.38	0.08	-0.20	0.08
9 and 10	-0.08	0.09	-0.95	0.08	-0.19	0.09
11 and 12	0.00	0.00	0.00	0.00	0.00	0.00
Student's sex						
Male	0.08	0.07	-0.09	0.07	-0.07	0.06
Female	0.00	0.00	0.00	0.00	0.00	0.00
Student's race/ethnicity						
Other, non-Hispanic	0.27	0.16	0.14	0.15	0.16	0.14
Hispanic	-0.02	0.11	0.04	0.12	-0.18	0.12
Black, non-Hispanic	0.06	0.10	0.27	0.10	-0.09	0.10
White, non-Hispanic	0.00	0.00	0.00	0.00	0.00	0.00
Average GPA across all subjects						
Mostly A's	0.40	0.18	0.22	0.21	0.23	0.20
Mostly B's	0.33	0.17	0.17	0.21	0.17	0.20
Mostly C's	0.16	0.18	0.07	0.21	0.09	0.20
Mostly F/D's	0.00	0.00	0.00	0.00	0.00	0.00
Repeated any grades since kindergarten						
Yes	-0.16	0.10	0.02	0.11	-0.23	0.11
No	0.00	0.00	0.00	0.00	0.00	0.00
School type ¹						
Public	0.34	0.12	0.13	0.11	0.09	0.11
Private	0.00	0.00	0.00	0.00	0.00	0.00
Parents' education						
Less than high school	-0.81	0.16	-1.03	0.19	-0.50	0.17
High school only	-0.56	0.09	-0.48	0.10	-0.47	0.10
Some postsecondary education	-0.37	0.09	-0.13	0.08	-0.16	0.08
College graduate or graduate school	0.00	0.00	0.00	0.00	0.00	0.00

See footnotes at end of table.

Table C4.—Logistic regression coefficients and standard errors for table 12: Parents' preparations to pay for their childrens' postsecondary education—Continued

Student, family, or parent characteristic	Have started saving money/ making other financial plans		Have talked to someone/read materials on financial aid		Have heard of Lifetime Learning and/or Hope scholarship tax credits	
	b	s.e.	b	s.e.	b	s.e.
Household income						
\$25,000 or less	-1.25	0.12	0.30	0.12	-0.52	0.11
\$25,001 to \$50,000	-0.80	0.10	0.24	0.09	-0.30	0.09
\$50,001 to \$75,000	-0.46	0.11	0.20	0.09	-0.19	0.09
<i>More than \$75,000</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
Language most spoken at home by parents						
Other	-0.76	0.16	-0.93	0.19	0.13	0.16
<i>English</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
Parent involvement in school						
High level	0.81	0.11	0.83	0.11	0.04	0.10
Medium level	0.46	0.08	0.42	0.08	0.15	0.08
<i>Low level</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
Type of college parents expected the child to attend						
Undecided for any	-0.40	0.09	-0.55	0.10	-0.31	0.09
2-year	-0.22	0.09	-0.32	0.09	-0.25	0.09
Undecided, 4-year	-0.02	0.12	-0.34	0.11	-0.33	0.11
4-year private	0.07	0.13	0.25	0.11	0.06	0.11
<i>4-year public</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>

¹Homeschoolers who attended public or private schools less than 9 hours per week were not asked school related items. They were excluded from this analysis. Those who attended school 9 or more hours per week were assigned to the kind of school they attended.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table C5.—Logistic regression coefficients and standard errors for table 14: 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors

Student, family, or parent characteristic	Academic requirements for college		Type of college to attend		Cost of tuition and fees		Financial aid	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Intercept	2.27	0.34	2.13	0.32	0.20	0.29	0.31	0.30
Grade in school								
6 through 8	-2.07	0.13	-1.71	0.12	-1.48	0.09	-1.76	0.09
9 and 10	-1.04	0.14	-1.35	0.12	-1.00	0.09	-1.29	0.09
11 and 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Student's sex								
Male	-0.11	0.07	-0.11	0.07	-0.02	0.06	-0.08	0.07
Female	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Student's race/ethnicity								
Other, non-Hispanic	0.20	0.17	0.23	0.15	0.14	0.15	-0.01	0.14
Hispanic	0.22	0.13	-0.01	0.12	0.36	0.11	0.12	0.11
Black, non-Hispanic	0.37	0.12	0.16	0.11	0.33	0.10	0.32	0.10
White, non-Hispanic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Language spoken most at home by student								
Other	0.35	0.17	0.17	0.15	0.00	0.14	0.33	0.14
English	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average GPA across all subjects								
Mostly A's	-0.05	0.21	-0.06	0.19	0.27	0.20	0.12	0.20
Mostly B's	-0.07	0.20	-0.17	0.19	0.16	0.20	0.06	0.19
Mostly C's	0.07	0.21	-0.04	0.20	0.01	0.20	-0.24	0.20
Mostly F/D's	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repeated any grades since kindergarten								
Yes	-0.15	0.12	-0.08	0.12	-0.20	0.10	-0.03	0.11
No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School type ¹								
Public	0.17	0.12	0.05	0.12	0.13	0.11	0.00	0.12
Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

See footnotes at end of table.

Table C5.—Logistic regression coefficients and standard errors for table 14: 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors
—Continued

Student, family, or parent characteristic	Academic requirements for college		Type of college to attend		Cost of tuition and fees		Financial aid	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
Type of college student expected to attend								
Undecided for any	-0.99	0.11	-1.22	0.10	-0.77	0.09	-0.69	0.09
2-year	-0.33	0.14	-0.55	0.12	-0.38	0.10	-0.43	0.10
Undecided, 4-year	-0.30	0.14	-0.46	0.12	-0.42	0.10	-0.37	0.11
4-year private	0.06	0.20	0.53	0.20	0.31	0.14	0.19	0.14
4-year public	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Student plays role in family decisions								
Often	0.81	0.18	0.72	0.17	0.73	0.17	0.65	0.18
Sometimes	0.55	0.18	0.54	0.17	0.54	0.17	0.37	0.18
Hardly ever	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parents' education								
Less than high school	0.00	0.18	-0.24	0.17	0.09	0.15	0.21	0.16
High school only	-0.08	0.11	-0.09	0.10	0.00	0.09	0.09	0.09
Some postsecondary education	-0.11	0.09	-0.09	0.09	0.02	0.08	0.10	0.08
College graduate or graduate school	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household income								
\$25,000 or less	-0.10	0.13	-0.10	0.12	-0.01	0.11	0.34	0.11
\$25,001 to \$50,000	-0.22	0.10	-0.10	0.10	0.00	0.09	0.24	0.10
\$50,001 to \$75,000	-0.04	0.11	-0.04	0.11	0.01	0.09	0.16	0.10
More than \$75,000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parent involvement in school								
High level	0.08	0.12	0.42	0.11	0.31	0.10	0.16	0.10
Medium level	0.11	0.09	0.32	0.08	0.24	0.08	0.07	0.08
Low level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

¹Homeschoolers who attended public or private schools less than 9 hours per week were not asked school related items. They were excluded from this analysis. Those who attended school 9 or more hours per week were assigned to the kind of school they attended.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Appendix D—Standard Errors

Table D1.—Standard errors for table 1: Percentage of 6th- through 12th-graders and percentage of their parents who reported plans for the student to attend postsecondary education, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Postsecondary education expected by				
	Student	Parent	Both	Parent but not student	Student but not parent
Total	0.37	0.31	0.41	0.25	0.33
Grade in school					
6 through 8	0.46	0.41	0.53	0.36	0.44
9 and 10	0.70	0.62	0.84	0.50	0.61
11 and 12	0.72	0.63	0.88	0.43	0.66
Student's sex					
Male	0.56	0.49	0.64	0.40	0.49
Female	0.39	0.38	0.50	0.29	0.35
Student's race/ethnicity					
White, non-Hispanic	0.42	0.39	0.48	0.28	0.38
Black, non-Hispanic	1.05	0.75	1.17	0.70	0.99
Hispanic	1.21	1.04	1.41	0.92	1.07
Other, non-Hispanic	1.79	0.85	1.88	0.85	1.79
Language spoken most at home by student					
English	0.38	0.31	0.42	0.24	0.34
Other	1.63	1.38	2.02	1.35	1.57
Average GPA across all subjects					
Mostly F/D's	2.80	2.65	3.08	1.91	2.98
Mostly C's	1.03	0.86	1.07	0.76	0.94
Mostly B's	0.45	0.46	0.57	0.39	0.42
Mostly A's	0.23	0.23	0.30	0.18	0.19
Repeated any grades since kindergarten					
Yes	1.64	1.45	1.74	1.14	1.44
No	0.32	0.31	0.41	0.24	0.30
School type					
Public	0.42	0.34	0.48	0.27	0.36
Private	1.18	0.55	1.23	0.42	1.12
Home school	2.50	4.58	4.49	4.31	#
Parents' education					
Less than high school	2.25	1.42	2.41	1.08	2.04
High school only	0.80	0.61	0.83	0.52	0.72
Some postsecondary education	0.47	0.53	0.68	0.49	0.43
College graduate	0.66	0.48	0.75	0.42	0.60
Graduate school	0.60	0.53	0.72	0.37	0.48

See footnotes at end of table.

Table D1.—Standard errors for table 1: Percentage of 6th- through 12th-graders and percentage of their parents who reported plans for the student to attend postsecondary education, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Postsecondary education expected by				
	Student	Parent	Both	Parent but not student	Student but not parent
Household income					
\$25,000 or less	0.97	0.69	1.05	0.60	0.85
\$25,001 to \$50,000	0.54	0.54	0.62	0.41	0.43
\$50,001 to \$75,000	0.70	0.56	0.78	0.34	0.58
More than \$75,000	0.37	0.46	0.54	0.44	0.36
Language most spoken at home by parents					
English	0.38	0.31	0.43	0.25	0.34
Other	1.50	1.40	1.96	1.22	1.44

#Too few sample cases.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D2.—Standard errors for table 2: Percentage distribution of students according to the postsecondary institution type students plan to attend as reported by students and parents: 1999

Institution type	Reported by student	Reported by parent
4-year institution		
Total	0.65	0.72
Public	0.59	0.74
Private	0.38	0.40
Undecided, 4-year	0.47	0.44
2-year	0.47	0.61
Undecided for the type of postsecondary institution	0.63	0.52

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D3.—Standard errors for table 3: Percentage distributions of 6th- through 12th-graders according to the postsecondary institution students plan to attend as reported by students and parents, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Reported by student			Reported by parent		
	4-year	2-year	Undecided	4-year	2-year	Undecided
Total	0.65	0.47	0.63	0.72	0.61	0.52
Grade in school						
6 through 8	1.03	0.64	1.04	1.07	0.81	0.81
9 and 10	1.29	0.90	1.18	1.32	1.30	0.98
11 and 12	1.20	1.03	1.05	1.35	1.36	0.92
Student's sex						
Male	0.89	0.78	1.00	0.95	0.94	0.82
Female	0.94	0.66	0.89	1.00	0.89	0.78
Student's race/ethnicity						
White, non-Hispanic	0.89	0.66	0.92	0.91	0.73	0.63
Black, non-Hispanic	1.78	1.39	1.70	2.05	1.70	1.46
Hispanic	1.82	1.43	1.83	1.70	1.65	1.74
Other, non-Hispanic	3.08	2.63	2.94	2.97	2.09	2.70
Language spoken most at home by student						
English	0.69	0.49	0.73	†	†	†
Other	2.40	1.98	2.64	†	†	†
Average GPA across all subjects						
Mostly F/D's	2.98	2.92	4.39	4.12	4.32	4.24
Mostly C's	1.55	1.55	1.68	1.52	1.56	1.36
Mostly B's	1.14	0.88	1.03	1.25	1.07	0.93
Mostly A's	1.12	0.73	0.98	1.22	0.87	0.96
Repeated any grades since kindergarten						
Yes	2.16	1.90	2.18	2.07	2.09	1.95
No	0.67	0.47	0.71	0.78	0.64	0.60
School type						
Public	0.69	0.52	0.67	0.81	0.66	0.61
Private	2.21	1.55	1.90	2.20	1.82	1.76
Home school	6.97	4.90	6.81	6.92	7.23	4.59

See footnotes at end of table.

Table D3.—Standard errors for table 3: Percentage distributions of 6th- through 12th-graders according to the postsecondary institution students plan to attend as reported by students and parents, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Reported by student			Reported by parent		
	4-year	2-year	Undecided	4-year	2-year	Undecided
Parents' education						
Less than high school	2.31	2.15	2.90	2.65	1.86	2.52
High school only	1.24	1.04	1.44	1.35	1.30	1.38
Some postsecondary education	1.25	0.98	1.33	1.57	1.34	1.14
College graduate	1.60	1.21	1.49	1.75	1.36	1.24
Graduate school	1.62	1.09	1.45	1.45	1.05	1.20
Household income						
\$25,000 or less	1.36	1.17	1.48	1.49	1.34	1.39
\$25,001 to \$50,000	1.36	0.84	1.38	1.25	1.01	1.06
\$50,001 to \$75,000	1.44	1.22	1.44	1.76	1.49	1.27
More than \$75,000	1.31	0.81	1.33	1.48	1.18	1.02
Language most spoken at home by parents						
English	†	†	†	0.78	0.63	0.55
Other	†	†	†	2.26	1.95	2.52

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D4.—Standard errors for table 4: Students and percentage of consistent and inconsistent reports between 6th- through 12th-graders and their parents regarding the level of institution students plan to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Percent of consistent reports				Percent of inconsistent reports		
	Total	4-year	2-year	Undecided	Total	Parents 4-year/ students 2-year	Students 4-year/ parents 2-year
Total	0.70	0.59	0.41	0.45	0.70	0.62	0.48
Grade in school							
6 through 8	1.10	0.97	0.39	0.82	1.10	0.89	0.68
9 and 10	1.35	1.12	0.85	0.82	1.35	1.13	1.12
11 and 12	1.38	1.28	1.04	0.46	1.38	1.18	1.04
Student's sex							
Male	0.98	0.85	0.61	0.70	0.98	0.92	0.68
Female	0.98	0.86	0.56	0.64	0.98	0.85	0.76
Student's race/ethnicity							
White, non-Hispanic	0.86	0.78	0.51	0.58	0.86	0.78	0.64
Black, non-Hispanic	2.01	1.79	0.88	1.28	2.01	1.70	1.63
Hispanic	1.77	1.45	1.09	1.57	1.77	1.49	1.54
Other, non-Hispanic	2.65	2.81	1.63	1.75	2.65	2.37	2.80
Language spoken most at home by student							
English	0.75	0.63	0.43	0.51	0.75	0.64	0.53
Other	2.64	1.99	1.30	2.55	2.64	2.13	2.25
Average GPA across all subjects							
Mostly F/D's	4.18	2.23	2.30	3.51	4.18	4.30	3.66
Mostly C's	1.88	1.19	1.14	1.20	1.88	1.67	1.53
Mostly B's	1.26	1.08	0.76	0.73	1.26	1.07	0.87
Mostly A's	1.17	1.28	0.57	0.72	1.17	0.97	0.79
Repeated any grades since kindergarten							
Yes	2.42	1.74	1.54	1.64	2.42	2.10	1.94
No	0.71	0.66	0.41	0.47	0.71	0.66	0.47
School type							
Public	0.74	0.63	0.44	0.50	0.74	0.67	0.51
Private	2.43	2.31	1.21	1.66	2.43	2.00	1.30
Home school	7.21	6.93	3.94	4.12	7.21	6.69	5.69

See footnotes at end of table.

Table D4.—Standard errors for table 4: Students and percentage of consistent and inconsistent reports between 6th- through 12th-graders and their parents regarding the level of institution students plan to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of consistent reports				Percent of inconsistent reports		
	Total	4-year	2-year	Undecided	Total	Parents 4-year/ students 2-year	Students 4-year/ parents 2-year
Parents' education							
Less than high school	2.52	1.88	1.20	2.60	2.52	2.13	2.55
High school only	1.30	1.01	0.90	1.10	1.30	1.20	1.15
Some postsecondary education	1.33	1.06	0.96	0.80	1.33	1.27	1.05
College graduate	1.74	1.79	0.84	0.84	1.74	1.45	1.14
Graduate school	1.43	1.49	0.90	1.00	1.43	1.25	1.00
Household income							
\$25,000 or less	1.34	1.19	0.99	1.03	1.34	1.24	1.22
\$25,001 to \$50,000	1.24	1.09	0.73	0.91	1.24	1.22	0.93
\$50,001 to \$75,000	1.40	1.50	1.08	0.98	1.40	1.41	1.07
More than \$75,000	1.36	1.40	0.57	0.84	1.36	1.17	0.93
Language most spoken at home by parents							
English	0.75	0.64	0.44	0.49	0.75	0.66	0.54
Other	2.71	2.07	1.51	2.05	2.71	1.92	2.39

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D5.—Standard errors for table 5: Percentage distributions of 6th- through 12th-graders and their parents according to the various reasons given for student not planning to continue education beyond high school: 1999

Reasons for not continuing education	Reported by student	Reported by parent
Main reason		
Cost too high/cannot afford	2.22	2.05
Needs/wants to work	2.63	1.67
Poor grades/unable to get in	0.96	1.17
Not interested/tired of going to school	2.87	2.79
Has a disability	#	1.92
Joining the military	2.27	1.62
Not sure of future plans	0.88	0.59
Other	2.75	1.64

#Too few sample cases.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D6.—Standard errors for table 6: Percentage of 6th- through 12th-graders and their parents who reported that they had obtained cost information or could accurately estimate tuition and fees at the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Have obtained information about cost of tuition and fees			Could estimate cost of tuition and fees		
	Students	Parents	Both	Students	Parents	Both
Total	0.51	0.63	0.41	0.51	0.56	0.28
Grade in school						
6 through 8	(¹)	0.73	(¹)	0.67	0.98	0.42
9 and 10	0.97	1.51	0.66	1.05	1.32	0.62
11 and 12	1.27	1.46	1.16	0.78	0.89	0.42
Student's sex						
Male	0.71	0.90	0.49	0.75	0.80	0.45
Female	0.74	1.05	0.66	0.75	0.88	0.36
Student's race/ethnicity						
White, non-Hispanic	0.64	0.66	0.57	0.60	0.66	0.37
Black, non-Hispanic	1.41	1.70	0.92	1.40	1.20	0.62
Hispanic	1.23	1.35	0.80	1.12	1.11	0.53
Other, non-Hispanic	2.79	2.64	2.30	2.04	2.51	1.28
Language spoken most at home by student						
English	0.54	0.66	0.44	0.53	0.59	0.30
Other	1.66	1.71	1.05	1.57	1.59	0.65
Average GPA across all subjects						
Mostly F/D's	2.21	3.40	1.11	2.93	2.68	0.99
Mostly C's	1.24	1.53	0.86	1.14	1.44	0.61
Mostly B's	0.87	0.96	0.74	0.83	1.09	0.44
Mostly A's	0.92	0.92	0.78	0.75	0.93	0.50
Repeated any grades since kindergarten						
Yes	1.43	1.82	1.17	1.30	1.67	0.66
No	0.55	0.66	0.44	0.54	0.58	0.30
School type						
Public	0.53	0.65	0.43	0.53	0.57	0.28
Private	1.80	2.05	1.48	1.69	1.98	1.10
Home school	5.10	6.52	5.08	2.78	5.72	#
Type of college student planned to attend						
4-year	0.87	0.99	0.68	0.79	0.77	0.47
2-year	1.58	1.82	1.56	0.98	1.27	0.41
Undecided	#	0.88	#	0.85	0.98	0.47

See footnotes at end of table.

Table D6.—Standard errors for table 6: Percentage of 6th- through 12th-graders and their parents who reported that they had obtained cost information or could accurately estimate tuition and fees at the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999
—Continued

Student, family, or parent characteristic	Have obtained information about cost of tuition and fees			Could estimate cost of tuition and fees		
	Students	Parents	Both	Students	Parents	Both
Student plays role in family decisions						
Hardly ever	2.52	2.87	2.19	2.39	2.73	1.27
Sometimes	0.73	0.94	0.55	0.73	0.86	0.39
Often	0.76	0.87	0.64	0.66	0.82	0.46
Parents' education						
Less than high school	1.74	1.83	1.13	2.05	1.01	0.45
High school only	1.09	1.17	0.72	0.96	1.00	0.47
Some postsecondary education	0.96	1.26	0.87	0.92	1.11	0.38
College graduate	1.37	1.77	1.30	1.26	1.56	0.86
Graduate school	1.38	1.51	1.17	1.19	1.42	0.73
Household income						
\$25,000 or less	1.12	1.34	0.78	1.04	1.10	0.35
\$25,001 to \$50,000	0.94	1.16	0.84	0.81	0.81	0.45
\$50,001 to \$75,000	1.15	1.40	0.97	1.21	1.39	0.82
More than \$75,000	1.10	1.53	1.00	1.08	1.70	0.74
Language most spoken at home by parents						
English	0.54	0.67	0.44	0.53	0.59	0.29
Other	1.38	1.50	0.93	1.63	1.35	0.71
Parent involvement in school						
Low level	1.19	1.19	0.76	1.07	1.12	0.52
Medium level	0.65	0.85	0.61	0.69	0.85	0.44
High level	1.18	1.65	0.99	1.12	1.47	0.74
Type of college parents reported the child planned to attend						
4-year	0.75	1.00	0.65	0.66	0.85	0.45
2-year	1.26	1.41	1.04	0.95	1.08	0.43
Undecided	0.72	#	#	1.05	1.17	0.63

#Too few sample cases.

¹This question was asked only of students in grades 9 to 12, but it was asked of 6th- through 8th-graders' parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D7.—Standard errors for table 7: Percentage of 6th- through 12th-graders and their parents who reported they had either obtained cost information or could estimate tuition and fees, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Have obtained information about or could estimate the cost of tuition and fees		
	Students	Parents	Both
Total	0.58	0.62	0.47
Grade in school			
6 through 8	0.67	1.01	0.49
9 and 10	1.10	1.38	1.04
11 and 12	1.20	1.16	1.13
Student's sex			
Male	0.88	0.84	0.68
Female	0.86	0.94	0.76
Student's race/ethnicity			
White, non-Hispanic	0.70	0.69	0.56
Black, non-Hispanic	1.76	1.76	1.31
Hispanic	1.66	1.69	1.30
Other, non-Hispanic	2.88	3.08	2.48
Language spoken most at home by student			
English	0.60	0.60	0.49
Other	2.31	2.28	1.51
Average GPA across all subjects			
Mostly F/D's	3.29	3.68	1.56
Mostly C's	1.53	1.77	1.28
Mostly B's	1.10	1.16	1.01
Mostly A's	0.96	1.06	0.96
Repeated any grades since kindergarten			
Yes	1.84	2.30	1.50
No	0.60	0.68	0.52
School type			
Public	0.62	0.67	0.52
Private	2.13	2.26	1.90
Home school	5.35	6.52	5.17
Type of college student planned to attend			
4-year	0.97	†	0.86
2-year	1.81	†	1.81
Undecided	0.85	†	0.58

See footnotes at end of table.

Table D7.—Standard errors for table 7: Percentage of 6th- through 12th-graders and their parents who reported they had either obtained cost information or could estimate tuition and fees, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Have obtained information about or could estimate the cost of tuition and fees		
	Students	Parents	Both
Student plays role in family decisions			
Hardly ever	3.16	3.33	2.62
Sometimes	0.86	0.93	0.70
Often	0.86	0.82	0.80
Parents' education			
Less than high school	2.21	1.96	1.44
High school only	1.28	1.37	1.06
Some postsecondary education	1.27	1.19	1.03
College graduate	1.63	1.75	1.62
Graduate school	1.71	1.33	1.65
Household income			
\$25,000 or less	1.56	1.40	1.09
\$25,001 to \$50,000	0.93	1.12	0.94
\$50,001 to \$75,000	1.44	1.35	1.28
More than \$75,000	1.17	1.15	1.08
Language most spoken at home by parents			
English	0.60	0.63	0.51
Other	2.14	1.92	1.37
Parent involvement in school			
Low level	1.37	1.28	1.05
Medium level	0.84	0.96	0.74
High level	1.31	1.48	1.37
Type of college parents reported the child planned to attend			
4-year	†	0.84	0.83
2-year	†	1.37	1.21
Undecided	†	1.17	0.68

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D8a.—Standard errors for table 8a: Sixth- through 12th-graders' and parents' estimates of the amount of tuition and mandatory fees and tuition and fees plus room and board, according to students' grade level, and the actual average tuition and fees paid in 1998–99 by type of institution students planned to attend, by selected student, family, and parent characteristics: 1999

Institution type	Tuition and fees reported by students in				Tuition and fees reported by parents of			
	Grades 6 through 12	Grades 6 through 8	Grades 9 and 10	Grades 11 and 12	Students in grades 6 through 12	Students in grades 6 through 8	Students in grades 9 and 10	Students in grades 11 and 12
Tuition and fees only								
4-year								
Public (in-state)	\$305	\$636	\$1,088	\$251	\$236	\$377	\$423	\$316
Private	1,596	#	1,800	663	737	1,326	1,008	872
Undecided, 4-year	2,451	2,027	4,281	#	523	625	1,245	#
2-year	367	657	523	510	209	440	228	436
Undecided for any	877	1,413	938	#	421	576	901	1,158
Tuition, fees, and room and board								
4-year								
Public (in-state)	492	1,971	1,613	388	204	473	460	189
Private	701	#	1,741	733	391	944	1,008	818
Undecided, 4-year	810	1,671	1,311	988	792	1,348	528	1,001
2-year	1,579	#	#	2,460	518	626	#	890
Undecided for any	1,084	1,666	1,167	1,564	660	947	800	1,665

#Too few sample cases.

NOTE: The last column in table 8 displays the actual tuition and fees, which are taken from a universe survey, therefore, no sampling standard errors are shown here.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1999), *Trends in College Pricing*.

Table D8b.—Standard errors for table 8b: Ninth- through 12th-graders' and their parents' average estimates for tuition and mandatory fees according to whether they had obtained information or could estimate costs, by type of institution students planned to attend: 1999

Institution type	Tuition and fees reported by			Tuition and fees reported by		
	All students	Students who obtained information	Students who could estimate	All parents	Parents who obtained information	Parents who could estimate
Tuition and fees only						
4-year						
Public (in-state)	\$317	\$336	\$798	\$274	\$253	\$761
Private	704	755	#	670	776	#
Undecided, 4-year	3,839	#	3,839	939	#	939
2-year	406	484	366	247	356	263
Undecided for any	742	#	742	739	#	739
Tuition, fees, and room and board						
4-year						
Public (in-state)	509	598	942	225	258	464
Private	688	706	#	514	600	929
Undecided, 4-year	870	#	870	475	#	475
2-year	1,783	2,298	#	673	929	842
Undecided for any	1,060	#	1,060	941	#	941

#Too few sample cases.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D9.—Standard errors for table 9: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Student				Parent			
	Estimated tuition within 25% actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 25% actual	Over-estimated	Under-estimated	Could not estimate
Total	0.55	0.47	0.29	0.58	0.59	0.60	0.34	0.62
Grade in school								
6 through 8	0.62	0.33	0.34	0.67	0.82	0.80	0.49	1.01
9 and 10	0.96	0.85	0.52	1.10	1.27	1.23	0.68	1.38
11 and 12	1.15	1.32	0.82	1.20	1.35	1.38	0.78	1.16
Student's sex								
Male	0.84	0.64	0.44	0.88	0.74	0.78	0.46	0.84
Female	0.72	0.64	0.44	0.86	0.92	0.88	0.53	0.94
Student's race/ethnicity								
White, non-Hispanic	0.63	0.61	0.36	0.70	0.76	0.79	0.46	0.69
Black, non-Hispanic	1.75	1.12	0.81	1.76	1.63	1.32	0.99	1.76
Hispanic	1.07	1.16	0.76	1.66	1.20	1.33	0.60	1.69
Other, non-Hispanic	2.09	2.80	1.13	2.88	2.49	2.56	1.35	3.08
Language spoken most at home by student								
English	0.60	0.51	0.31	0.60	†	†	†	†
Other	1.37	1.47	1.24	2.31	†	†	†	†
Average GPA across all subjects								
Mostly F/D's	2.72	1.80	1.17	3.29	2.81	3.32	1.72	3.68
Mostly C's	1.14	0.89	0.71	1.53	1.36	1.39	0.88	1.77
Mostly B's	0.88	0.73	0.45	1.10	0.96	0.77	0.62	1.16
Mostly A's	0.86	0.79	0.51	0.96	1.15	0.98	0.57	1.06
Repeated any grades since kindergarten								
Yes	1.38	1.25	0.94	1.84	1.50	1.72	1.11	2.30
No	0.57	0.51	0.30	0.60	0.61	0.66	0.38	0.68
School type								
Public	0.55	0.52	0.31	0.62	0.63	0.60	0.35	0.67
Private	1.90	1.47	1.11	2.13	2.04	1.91	1.18	2.26
Home school	5.26	1.96	1.74	5.35	7.10	3.84	1.92	6.52

See footnotes at end of table.

Table D9.—Standard errors for table 9: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Student				Parent			
	Estimated tuition within 25% actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 25% actual	Over-estimated	Under-estimated	Could not estimate
Type of college student planned to attend								
4-year public	1.07	1.42	0.74	1.38	†	†	†	†
4-year private	2.66	2.20	2.33	2.40	†	†	†	†
Undecided, 4-year	1.70	#	#	1.70	†	†	†	†
2-year	0.90	1.33	1.04	1.81	†	†	†	†
Undecided for any	0.85	#	#	0.85	†	†	†	†
Student plays role in family decisions								
Hardly ever	2.67	2.06	1.70	3.16	†	†	†	†
Sometimes	0.72	0.62	0.37	0.86	†	†	†	†
Often	0.81	0.68	0.48	0.86	†	†	†	†
Talked with parent/teacher about the cost								
Yes	0.94	0.82	0.52	1.02	†	†	†	†
No	0.65	0.47	0.33	0.86	†	†	†	†
Talked with parent/teacher about aid								
Yes	1.00	0.79	0.57	0.97	†	†	†	†
No	0.62	0.50	0.32	0.71	†	†	†	†
Parents' education								
Less than high school	1.92	1.31	1.15	2.21	1.25	1.09	0.79	1.96
High school only	1.03	0.86	0.48	1.28	1.16	0.96	0.59	1.37
Some postsecondary education	1.03	0.83	0.58	1.27	0.96	1.16	0.69	1.19
College graduate	1.26	1.08	0.79	1.63	1.75	1.42	0.98	1.75
Graduate school	1.27	1.24	0.75	1.71	1.62	1.31	1.00	1.33
Household income								
\$25,000 or less	1.14	0.80	0.69	1.56	1.18	0.90	0.63	1.40
\$25,001 to \$50,000	0.82	0.80	0.53	0.93	1.08	1.01	0.73	1.12
\$50,001 to \$75,000	1.45	0.97	0.72	1.44	1.45	1.24	0.92	1.35
More than \$75,000	1.16	0.91	0.51	1.17	1.47	1.28	0.79	1.15

See footnotes at end of table.

Table D9.—Standard errors for table 9: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Student				Parent			
	Estimated tuition within 25% actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 25% actual	Over-estimated	Under-estimated	Could not estimate
Language most spoken at home by parents								
English	†	†	†	†	0.63	0.63	0.37	0.63
Other	†	†	†	†	1.36	1.45	1.02	1.92
Parent involvement in school								
Low level	1.14	0.99	0.57	1.37	1.04	0.98	0.70	1.28
Medium level	0.77	0.59	0.42	0.84	0.73	0.73	0.53	0.96
High level	1.06	0.96	0.74	1.31	1.64	1.49	0.85	1.48
Talked to someone/read materials on aid								
Yes	†	†	†	†	1.16	1.14	0.62	1.05
No	†	†	†	†	0.73	0.67	0.37	0.88
Heard of Lifetime Learning/HOPE Scholarship								
Yes	†	†	†	†	1.25	1.22	0.75	1.13
No	†	†	†	†	0.66	0.63	0.41	0.81
Type of college parent expected student to attend								
4-year public	†	†	†	†	1.32	1.30	0.86	1.27
4-year private	†	†	†	†	2.36	2.01	1.67	1.38
Undecided, 4-year	†	†	†	†	1.83	#	#	1.83
2-year	†	†	†	†	0.94	1.21	0.76	1.37
Undecided for any	†	†	†	†	1.17	#	#	1.17

#Too few sample cases.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Table D10.—Standard errors for table 10: Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999

Student, family, or parent characteristic	Odds ratio of having knowledge about cost		Odds ratio of estimating accurately	
	Student	Parent	Student	Parent
Grade in school				
6 through 8	0.09*	0.09*	0.11*	0.09*
9 and 10	0.09*	0.10*	0.11*	0.10*
11 and 12	1.00	1.00	1.00	1.00
Student's sex				
Male	0.07*	0.07	0.08*	0.07
Female	1.00	1.00	1.00	1.00
Student's race/ethnicity				
Other, non-Hispanic	0.16	0.15	0.18	0.16
Hispanic	0.13	0.12	0.15	0.13*
Black, non-Hispanic	0.11*	0.10*	0.12*	0.12*
White, non-Hispanic	1.00	1.00	1.00	1.00
Language spoken most at home by student				
Other	0.18	†	0.20	†
English	1.00	†	1.00	†
Average GPA across all subjects				
Mostly A's	0.24	0.20	0.26	0.25
Mostly B's	0.23	0.19	0.26	0.24
Mostly C's	0.24	0.20	0.27	0.25
Mostly F/D's	1.00	1.00	1.00	1.00
Repeated any grades since kindergarten				
Yes	0.12*	0.11	0.15*	0.13
No	1.00	1.00	1.00	1.00
School type				
Public	0.13	0.13	0.13	0.12
Private	1.00	1.00	1.00	1.00

See footnotes at end of table.

Table D10.—Standard errors for table 10: Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999—Continued

Student, family, or parent characteristic	Odds ratio of having knowledge about cost		Odds ratio of estimating accurately	
	Student	Parent	Student	Parent
Type of college student expected to attend				
Undecided for any	0.10*	†	0.11*	†
2-year	0.11*	†	0.16*	†
Undecided, 4-year	0.12*	†	0.13*	†
4-year private	0.14*	†	0.15*	†
4-year public	1.00	†	1.00	†
Student plays role in family decisions				
Often	0.18	†	0.21	†
Sometimes	0.18	†	0.21	†
Hardly ever	1.00	†	1.00	†
Talked with parent/teacher about the cost of college				
Yes	0.08*	†	0.09*	†
No	1.00	†	1.00	†
Talked with parent/teacher about financial aid				
Yes	0.08*	†	0.09	†
No	1.00	†	1.00	†
Parents' education				
Less than high school	0.18*	0.18*	0.20	0.22*
High school only	0.10*	0.10*	0.11	0.11*
Some postsecondary education	0.09*	0.09*	0.10	0.08*
College graduate or graduate school	1.00	1.00	1.00	1.00
Household income				
\$25,000 or less	0.13	0.12*	0.14*	0.13*
\$25,001 to \$50,000	0.10	0.10*	0.11	0.10*
\$50,001 to \$75,000	0.11	0.11*	0.12	0.10
More than \$75,000	1.00	1.00	1.00	1.00
Language most spoken at home by parents				
Other	†	0.18	†	0.18
English	†	1.00	†	1.00

See footnotes at end of table.

Table D10.—Standard errors for table 10: Logistic regression results (in odds ratios) of 6th- through 12th-graders' and their parents' knowledge about college costs and whether they could accurately estimate tuition and fees: 1999—Continued

Student, family, or parent characteristic	Odds ratio of having knowledge about cost		Odds ratio of estimating accurately	
	Student	Parent	Student	Parent
Parent involvement in school				
High level	0.12	0.11*	0.13	0.11
Medium level	0.09	0.08	0.10	0.09
Low level	1.00	1.00	1.00	1.00
Type of college parents reported the child planned to attend				
Undecided for any	†	0.10*	†	0.10*
2-year	†	0.10*	†	0.11*
Undecided, 4-year	†	0.11*	†	0.11*
4-year private	†	0.16*	†	0.12*
4-year public	†	1.00	†	1.00
Parents talked to someone/read materials on financial aid				
Yes	†	0.08*	†	0.08*
No	†	1.00	†	1.00
Parents heard of Lifetime Learning and/or HOPE Scholarship tax credits				
Yes	†	0.08*	†	0.08*
No	†	1.00	†	1.00

*p<.05.

†Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts are from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Table D11.—Standard errors for table 11: Percentage of 6th- through 12th-graders’ parents who reported having taken various steps to prepare to pay for their children’s postsecondary education, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Have started saving money/ making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE Scholarship tax credits
Total	0.69	0.65	0.58
Grade in school			
6 through 8	1.00	0.83	0.98
9 and 10	1.47	1.27	1.14
11 and 12	1.18	1.30	1.24
Student’s sex			
Male	0.96	0.99	0.92
Female	1.05	0.94	0.85
Student’s race/ethnicity			
White, non-Hispanic	0.83	0.75	0.76
Black, non-Hispanic	1.79	1.78	1.45
Hispanic	1.63	1.49	1.37
Other, non-Hispanic	3.29	3.21	3.01
Average GPA across all subjects			
Mostly F/D’s	3.69	3.86	2.59
Mostly C’s	1.70	1.66	1.47
Mostly B’s	1.30	1.16	0.93
Mostly A’s	1.04	1.10	1.11
Repeated any grades since kindergarten			
Yes	2.10	1.96	1.48
No	0.71	0.70	0.64
School type			
Public	0.76	0.68	0.60
Private	2.24	2.53	2.02
Home school	7.46	6.22	6.69
Student plays role in family decisions			
Hardly ever	3.42	3.21	2.46
Sometimes	1.02	1.02	0.86
Often	0.89	0.95	0.92

See footnotes at end of table.

Table D11.—Standard errors for table 11: Percentage of 6th- through 12th-graders' parents who reported having taken various steps to prepare to pay for their children's postsecondary education, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Have started saving money/ making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE Scholarship tax credits
Parents' education			
Less than high school	2.25	1.96	1.82
High school only	1.49	1.37	1.03
Some postsecondary education	1.26	1.31	1.16
College graduate	1.75	1.60	1.81
Graduate school	1.59	1.72	1.53
Household income			
\$25,000 or less	1.49	1.61	1.14
\$25,001 to \$50,000	1.26	1.23	1.09
\$50,001 to \$75,000	1.52	1.35	1.45
More than \$75,000	1.24	1.43	1.37
Language most spoken at home by parents			
English	0.73	0.68	0.60
Other	2.19	1.53	2.03
Parent involvement in school			
Low level	1.33	1.21	1.14
Medium level	1.00	0.85	0.88
High level	1.63	1.65	1.47
Type of college parents expected the child to attend			
4-year	0.95	0.96	0.91
2-year	1.41	1.48	1.29
Undecided	1.58	1.28	1.14

NOTE: Sample in table includes 6th- through 12th-graders' parents for who plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D12.—Standard errors for table 12: Logistic regression results (in odds ratios) of parents' preparations to pay for their children's postsecondary education: 1999

Student, family, or parent characteristic	Have started saving money/ making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE scholarship tax credits
Intercept	0.24*	0.26	0.25
Grade in school			
6 through 8	0.08*	0.08*	0.08*
9 and 10	0.09	0.08*	0.09*
11 and 12	1.00	1.00	1.00
Student's sex			
Male	0.07	0.07	0.06
Female	1.00	1.00	1.00
Student's race/ethnicity			
Other, non-Hispanic	0.16	0.15	0.14
Hispanic	0.11	0.12	0.12
Black, non-Hispanic	0.10	0.10*	0.10
White, non-Hispanic	1.00	1.00	1.00
Average GPA across all subjects			
Mostly A's	0.18*	0.21	0.20
Mostly B's	0.17	0.21	0.20
Mostly C's	0.18	0.21	0.20
Mostly F/D's	1.00	1.00	1.00
Repeated any grades since kindergarten			
Yes	0.10	0.11	0.11*
No	1.00	1.00	1.00
School type			
Public	0.12*	0.11	0.11
Private	1.00	1.00	1.00
Parents' education			
Less than high school	0.16*	0.19*	0.17*
High school only	0.09*	0.10*	0.10*
Some postsecondary education	0.09*	0.08	0.08*
College graduate or graduate school	1.00	1.00	1.00

See footnotes at end of table.

Table D12.—Standard errors for table 12: Logistic regression results (in odds ratios) of parents' preparations to pay for their children's postsecondary education: 1999—Continued

Student, family, or parent characteristic	Have started saving money/ making other financial plans	Have talked to someone/read materials on financial aid	Have heard of Lifetime Learning and/or HOPE scholarship tax credits
Household income			
\$25,000 or less	0.12*	0.12*	0.11*
\$25,001 to \$50,000	0.10*	0.09*	0.09*
\$50,001 to \$75,000	0.11*	0.09	0.09*
<i>More than \$75,000</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Language most spoken at home by parents			
Other	0.16*	0.19*	0.16
<i>English</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parent involvement in school			
High level	0.11*	0.11*	0.10
Medium level	0.08*	0.08*	0.08
<i>Low level</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Type of college parents expected the child to attend			
Undecided for any	0.09*	0.10*	0.09*
2-year	0.09*	0.09*	0.09*
Undecided, 4-year	0.12	0.11*	0.11*
4-year private	0.13	0.11*	0.11
<i>4-year public</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

*p<.05.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D13.—Standard errors for table 13: Percentage of 6th- through 12th-graders who reported discussing various issues relating to postsecondary education with their parents or school teacher/counselors, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Total	0.65	0.70	0.67	0.65
Grade in school				
6 through 8	1.12	1.04	1.06	0.98
9 and 10	1.11	1.25	1.26	1.24
11 and 12	0.68	0.83	1.00	1.33
Student's sex				
Male	0.94	1.01	0.99	0.92
Female	0.87	0.90	0.97	1.00
Student's race/ethnicity				
White, non-Hispanic	0.85	0.83	0.77	0.79
Black, non-Hispanic	1.48	1.58	1.90	2.12
Hispanic	1.42	1.79	1.79	1.51
Other, non-Hispanic	2.64	2.86	3.27	3.06
Language spoken most at home by student				
English	0.69	0.71	0.68	0.68
Other	1.86	2.46	2.51	2.37
Average GPA across all subjects				
Mostly F/D's	4.19	3.78	4.24	3.93
Mostly C's	1.42	1.62	1.50	1.53
Mostly B's	1.00	1.12	1.15	1.14
Mostly A's	1.02	0.91	1.18	1.06
Repeated any grades since kindergarten				
Yes	1.85	2.13	2.16	2.03
No	0.66	0.71	0.69	0.75
School type				
Public	0.70	0.71	0.75	0.71
Private	2.02	1.86	2.29	2.24
Home school	6.31	6.81	7.51	7.51
Type of college student expected to attend				
4-year	0.83	0.84	0.97	0.77
2-year	1.46	1.68	1.72	1.57
Undecided	1.11	1.36	1.02	1.07

See footnotes at end of table.

Table D13.—Standard errors for table 13: Percentage of 6th- through 12th-graders who reported discussing various issues relating to postsecondary education with their parents or school teacher/counselors, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Student plays role in family decisions				
Hardly ever	3.46	2.74	3.47	3.65
Sometimes	0.90	1.15	0.98	1.05
Often	0.96	0.86	0.93	1.00
Parents' education				
Less than high school	1.97	2.87	2.10	2.60
High school only	1.28	1.28	1.54	1.34
Some postsecondary education	1.25	1.30	1.34	1.36
College graduate	1.55	1.71	1.76	1.53
Graduate school	1.28	1.17	1.67	1.59
Household income				
\$25,000 or less	1.17	1.46	1.40	1.38
\$25,001 to \$50,000	1.17	1.28	1.06	1.12
\$50,001 to \$75,000	1.24	1.33	1.41	1.68
More than \$75,000	1.31	1.34	1.54	1.34
Parent involvement in school				
Low level	1.10	1.57	1.39	1.37
Medium level	0.88	0.72	0.77	0.87
High level	1.65	1.40	1.61	1.73

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table D14.—Standard errors for table 14: Logistic regression results (in odds ratios) of 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999

Student, family, or parent characteristic	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Grade in school				
6 through 8	0.13*	0.12*	0.09*	0.09*
9 and 10	0.14*	0.12*	0.09*	0.09*
11 and 12	1.00	1.00	1.00	1.00
Student's sex				
Male	0.07	0.07	0.06	0.07
Female	1.00	1.00	1.00	1.00
Student's race/ethnicity				
Other, non-Hispanic	0.17	0.15	0.15	0.14
Hispanic	0.13	0.12	0.11*	0.11
Black, non-Hispanic	0.12*	0.11	0.10*	0.10*
White, non-Hispanic	1.00	1.00	1.00	1.00
Language spoken most at home by student				
Other	0.17*	0.15	0.14	0.14
English	1.00	1.00	1.00	1.00
Average GPA across all subjects				
Mostly A's	0.21	0.19	0.20	0.20
Mostly B's	0.20	0.19	0.20	0.19
Mostly C's	0.21	0.20	0.20	0.20
Mostly F/D's	1.00	1.00	1.00	1.00
Repeated any grades since kindergarten				
Yes	0.12	0.12	0.10	0.11
No	1.00	1.00	1.00	1.00
School type				
Public	0.12	0.12	0.11	0.12
Private	1.00	1.00	1.00	1.00
Type of college student expected to attend				
Undecided for any	0.11*	0.10*	0.09*	0.09*
2-year	0.14*	0.12*	0.10*	0.10*
Undecided, 4-year	0.14*	0.12*	0.10*	0.11*
4-year private	0.20	0.20*	0.14*	0.14
4-year public	1.00	1.00	1.00	1.00

See footnotes at end of table.

Table D14.—Standard errors for table 14: Logistic regression results (in odds ratios) of 6th- through 12th-graders' discussions about various issues regarding postsecondary education with their parents or school teachers/counselors: 1999—Continued

Student, family, or parent characteristic	Academic requirements for college	Type of college to attend	Cost of tuition and fees	Financial aid
Student plays role in family decisions				
Often	0.18*	0.17*	0.17*	0.18*
Sometimes	0.18*	0.17*	0.17*	0.18*
<i>Hardly ever</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parents' education				
Less than high school	0.18	0.17	0.15	0.16
High school only	0.11	0.10	0.09	0.09
Some postsecondary education	0.09	0.09	0.08	0.08
<i>College graduate or graduate school</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Household income				
\$25,000 or less	0.13	0.12	0.11	0.11*
\$25,001 to \$50,000	0.10*	0.10	0.09	0.10*
\$50,001 to \$75,000	0.11	0.11	0.09	0.10
<i>More than \$75,000</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Parent involvement in school				
High level	0.12	0.11*	0.10*	0.10
Medium level	0.09	0.08*	0.08*	0.08
<i>Low level</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

*p<.05.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Table DC1.—Standard errors for table C1: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 15% of actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 15% of actual	Over-estimated	Under-estimated	Could not estimate
Total	0.49	0.47	0.30	0.58	0.52	0.57	0.40	0.62
Grade in school								
6 through 8	0.57	0.36	0.37	0.67	0.74	0.79	0.50	1.01
9 and 10	0.93	0.86	0.60	1.10	1.17	1.24	0.80	1.38
11 and 12	0.93	1.27	0.83	1.20	1.13	1.37	1.00	1.16
Student's sex								
Male	0.72	0.64	0.45	0.88	0.74	0.79	0.53	0.84
Female	0.68	0.66	0.44	0.86	0.79	0.87	0.62	0.94
Student's race/ethnicity								
White, non-Hispanic	0.58	0.62	0.39	0.70	0.73	0.77	0.54	0.69
Black, non-Hispanic	1.61	1.15	0.85	1.76	1.34	1.36	1.18	1.76
Hispanic	1.02	1.16	0.80	1.66	1.16	1.39	0.68	1.69
Other, non-Hispanic	2.04	2.80	1.23	2.88	2.46	2.72	1.35	3.08
Language spoken most at home by student								
English	0.54	0.51	0.32	0.60	†	†	†	†
Other	1.33	1.45	1.37	2.31	†	†	†	†
Average GPA across all subjects								
Mostly F/D's	2.72	1.81	1.17	3.29	2.74	3.30	1.72	3.68
Mostly C's	1.12	0.90	0.72	1.53	1.11	1.46	0.91	1.77
Mostly B's	0.74	0.79	0.49	1.10	0.92	0.81	0.73	1.16
Mostly A's	0.79	0.80	0.54	0.96	1.07	0.98	0.60	1.06
Repeated any grades since kindergarten								
Yes	1.36	1.25	1.00	1.84	1.33	1.82	1.17	2.30
No	0.52	0.52	0.31	0.60	0.54	0.63	0.45	0.68
School type								
Public	0.50	0.53	0.33	0.62	0.55	0.56	0.40	0.67
Private	1.75	1.53	1.17	2.13	2.15	1.97	1.42	2.26
Home school	5.28	1.98	1.89	5.35	6.31	5.94	2.74	6.52

See footnotes at end of table.

Table DC1.—Standard errors for table C1: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 15% of actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 15% of actual	Over-estimated	Under-estimated	Could not estimate
Type of college student planned to attend								
4-year public	0.97	1.36	0.91	1.38	†	†	†	†
4-year private	2.56	2.39	2.34	2.40	†	†	†	†
Undecided, 4-year	1.70	#	#	1.70	†	†	†	†
2-year	0.76	1.35	1.14	1.81	†	†	†	†
Undecided for any	0.85	#	#	0.85	†	†	†	†
Student plays role in family decisions								
Hardly ever	2.43	2.05	1.79	3.16	†	†	†	†
Sometimes	0.66	0.61	0.39	0.86	†	†	†	†
Often	0.71	0.70	0.57	0.86	†	†	†	†
Talked with parent/teacher about the cost								
Yes	0.84	0.83	0.56	1.02	†	†	†	†
No	0.59	0.49	0.35	0.86	†	†	†	†
Talked with parent/teacher about aid								
Yes	0.89	0.82	0.62	0.97	†	†	†	†
No	0.60	0.50	0.34	0.71	†	†	†	†
Parents' education								
Less than high school	1.82	1.34	1.21	2.21	1.22	1.09	0.90	1.96
High school only	0.89	0.87	0.51	1.28	1.04	1.06	0.68	1.37
Some postsecondary education	0.96	0.85	0.62	1.27	0.86	1.20	0.72	1.19
College graduate	1.13	1.12	0.90	1.63	1.68	1.56	1.18	1.75
Graduate school	1.08	1.31	0.84	1.71	1.58	1.40	1.13	1.33
Household income								
\$25,000 or less	1.02	0.87	0.71	1.56	0.96	0.99	0.68	1.40
\$25,001 to \$50,000	0.71	0.80	0.55	0.93	0.90	1.07	0.72	1.12
\$50,001 to \$75,000	1.24	1.03	0.80	1.44	1.54	1.34	1.01	1.35
More than \$75,000	1.07	0.99	0.53	1.17	1.42	1.37	0.98	1.15
Language most spoken at home by parents								
English	†	†	†	†	0.56	0.61	0.41	0.63
Other	†	†	†	†	1.32	1.46	1.07	1.92

See footnotes at end of table.

Table DC1.—Standard errors for table C1: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 15% of actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 15% of actual	Over-estimated	Under-estimated	Could not estimate
Parent involvement in school								
Low level	1.01	1.00	0.70	1.37	0.97	1.06	0.82	1.28
Medium level	0.70	0.64	0.45	0.84	0.66	0.74	0.60	0.96
High level	1.00	0.99	0.78	1.31	1.57	1.46	0.88	1.48
Talked to someone/read materials on aid								
Yes	†	†	†	†	1.11	1.18	0.73	1.05
No	†	†	†	†	0.70	0.67	0.44	0.88
Heard of Lifetime Learning and/or HOPE Scholarship tax credits								
Yes	†	†	†	†	1.17	1.24	0.82	1.13
No	†	†	†	†	0.59	0.61	0.49	0.81
Type of college parent reported student planned to attend								
4-year public	†	†	†	†	0.93	1.24	0.93	1.27
4-year private	†	†	†	†	2.00	2.13	1.83	1.38
Undecided, 4-year	†	†	†	†	1.83	#	#	1.83
2-year	†	†	†	†	0.90	1.28	0.90	1.37
Undecided for any	†	†	†	†	1.17	#	#	1.17

#Too few sample cases.

†Not applicable.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

Table DC2.—Standard errors for table C2: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 50% of actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 50% of actual	Over-estimated	Under-estimated	Could not estimate
Total	0.60	0.44	0.22	0.58	0.61	0.58	0.27	0.62
Grade in school								
6 through 8	0.62	0.30	0.26	0.67	0.83	0.73	0.38	1.01
9 and 10	1.08	0.76	0.29	1.10	1.31	1.17	0.35	1.38
11 and 12	1.19	1.23	0.66	1.20	1.40	1.16	0.60	1.16
Student's sex								
Male	0.92	0.60	0.32	0.88	0.75	0.74	0.39	0.84
Female	0.75	0.60	0.32	0.86	1.01	0.80	0.40	0.94
Student's race/ethnicity								
White, non-Hispanic	0.71	0.54	0.29	0.70	0.74	0.74	0.37	0.69
Black, non-Hispanic	1.71	1.06	0.66	1.76	1.74	1.17	0.68	1.76
Hispanic	1.19	1.08	0.49	1.66	1.42	1.23	0.35	1.69
Other, non-Hispanic	2.42	2.79	0.86	2.88	2.64	2.24	1.10	3.08
Language spoken most at home by student								
English	0.62	0.47	0.24	0.60	†	†	†	†
Other	1.79	1.36	0.69	2.31	†	†	†	†
Average GPA across all subjects								
Mostly F/D's	2.83	1.69	0.65	3.29	2.85	3.22	1.59	3.68
Mostly C's	1.28	0.86	0.61	1.53	1.72	1.14	0.53	1.77
Mostly B's	0.96	0.71	0.30	1.10	1.09	0.77	0.48	1.16
Mostly A's	0.95	0.71	0.41	0.96	1.19	0.85	0.47	1.06
Repeated any grades since kindergarten								
Yes	1.52	1.18	0.65	1.84	1.62	1.61	0.72	2.30
No	0.61	0.49	0.24	0.60	0.68	0.63	0.30	0.68
School type								
Public	0.60	0.49	0.24	0.62	0.66	0.56	0.29	0.67
Private	2.07	1.27	0.83	2.13	2.25	1.63	0.74	2.26
Home school	5.31	1.86	1.29	5.35	7.01	3.09	1.88	6.52

See footnotes at end of table.

Table DC2.—Standard errors for table C2: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 50% of actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 50% of actual	Over-estimated	Under-estimated	Could not estimate
Type of college student planned to attend								
4-year public	1.34	1.28	0.62	1.38	†	†	†	†
4-year private	2.96	1.57	1.58	2.40	†	†	†	†
Undecided, 4-year	1.70	#	#	1.70	†	†	†	†
2-year	1.18	1.31	0.73	1.81	†	†	†	†
Undecided for any	0.85	#	#	0.85	†	†	†	†
Student plays role in family decisions								
Hardly ever	2.92	1.85	1.27	3.16	†	†	†	†
Sometimes	0.76	0.56	0.32	0.86	†	†	†	†
Often	0.86	0.64	0.34	0.86	†	†	†	†
Talked with parent/teacher about the cost								
Yes	1.02	0.74	0.38	1.02	†	†	†	†
No	0.71	0.42	0.27	0.86	†	†	†	†
Talked with parent/teacher about aid								
Yes	1.08	0.75	0.45	0.97	†	†	†	†
No	0.63	0.47	0.25	0.71	†	†	†	†
Parents' education								
Less than high school	2.06	1.20	0.64	2.21	1.51	0.98	0.49	1.96
High school only	1.13	0.82	0.41	1.28	1.22	0.88	0.40	1.37
Some postsecondary education	1.15	0.69	0.46	1.27	1.22	1.08	0.53	1.19
College graduate	1.49	1.02	0.66	1.63	1.95	1.50	0.80	1.75
Graduate school	1.43	1.12	0.45	1.71	1.44	1.17	0.66	1.33
Household income								
\$25,000 or less	1.23	0.73	0.55	1.56	1.25	0.87	0.54	1.40
\$25,001 to \$50,000	0.93	0.72	0.40	0.93	1.19	0.98	0.46	1.12
\$50,001 to \$75,000	1.63	0.87	0.48	1.44	1.36	1.14	0.59	1.35
More than \$75,000	1.19	0.89	0.39	1.17	1.59	1.22	0.56	1.15

See footnotes at end of table.

Table DC2.—Standard errors for table C2: Percentage distributions of 6th- through 12th-graders and their parents, according to the accuracy of their reported estimates of tuition and mandatory fees for the postsecondary institution students planned to attend, by selected student, family, and parent characteristics: 1999—Continued

Student, family, or parent characteristic	Percent of students				Percent of students whose parents			
	Estimated tuition within 50% of actual	Over-estimated	Under-estimated	Could not estimate	Estimated tuition within 50% of actual	Over-estimated	Under-estimated	Could not estimate
Language most spoken at home by parents								
English	†	†	†	†	0.64	0.59	0.28	0.63
Other	†	†	†	†	1.70	1.36	0.73	1.92
Parent involvement in school								
Low level	1.15	0.97	0.43	1.37	1.08	0.92	0.50	1.28
Medium level	0.91	0.59	0.33	0.84	0.74	0.71	0.40	0.96
High level	1.26	0.84	0.55	1.31	1.83	1.44	0.49	1.48
Talked to someone/read materials on aid								
Yes	†	†	†	†	1.18	1.02	0.54	1.05
No	†	†	†	†	0.78	0.63	0.27	0.88
Heard of Lifetime Learning/HOPE Scholarship								
Yes	†	†	†	†	1.34	1.04	0.55	1.13
No	†	†	†	†	0.74	0.59	0.34	0.81
Type of college parent reported student planned to attend								
4-year public	†	†	†	†	1.45	1.26	0.57	1.27
4-year private	†	†	†	†	2.47	1.53	1.38	1.38
Undecided, 4-year	†	†	†	†	1.83	#	#	1.83
2-year	†	†	†	†	1.11	1.13	0.60	1.37
Undecided for any	†	†	†	†	1.17	#	#	1.17

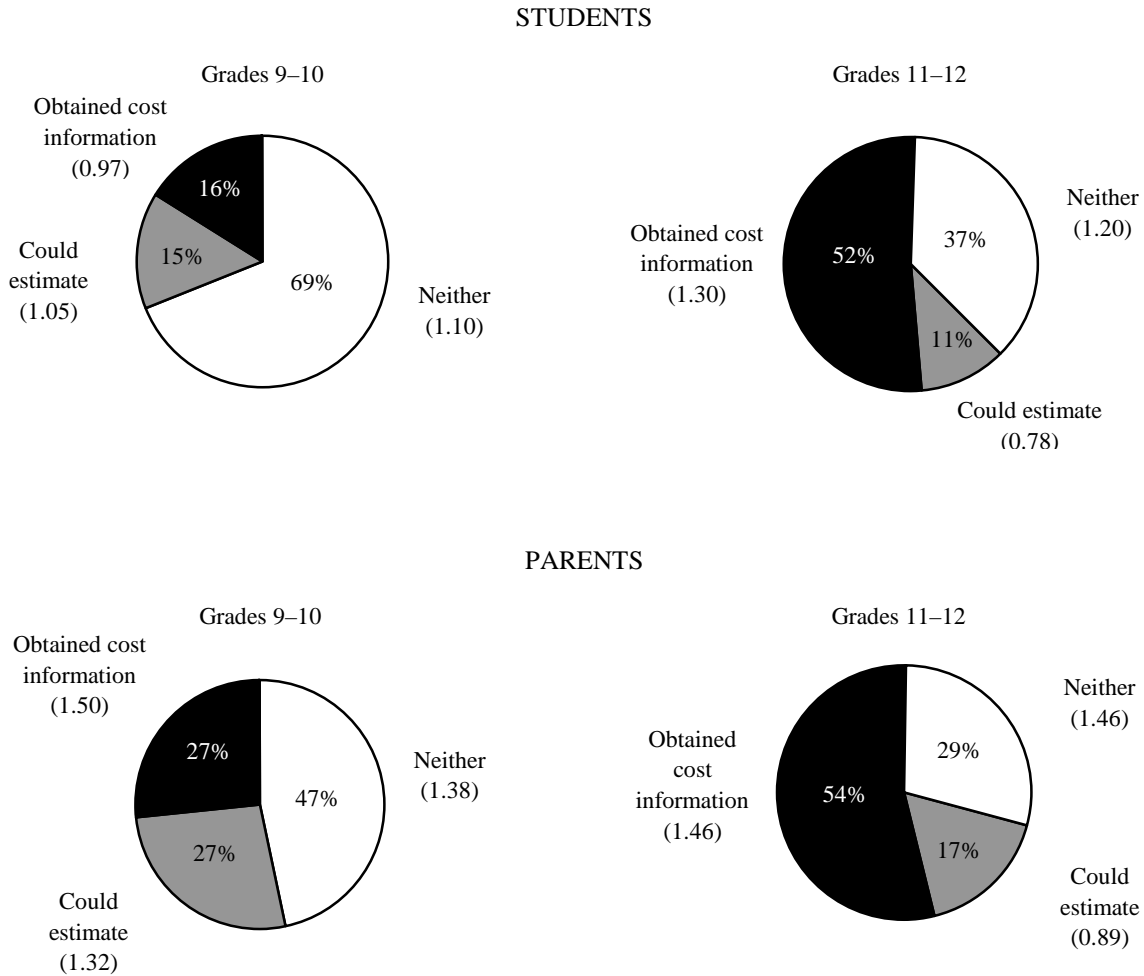
#Too few sample cases.

†Not applicable.

NOTE: Detail may not sum to totals because of rounding. Sample in table includes 6th- through 12th-graders and their parents among whom both student and parent reported plans for student to attend postsecondary education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

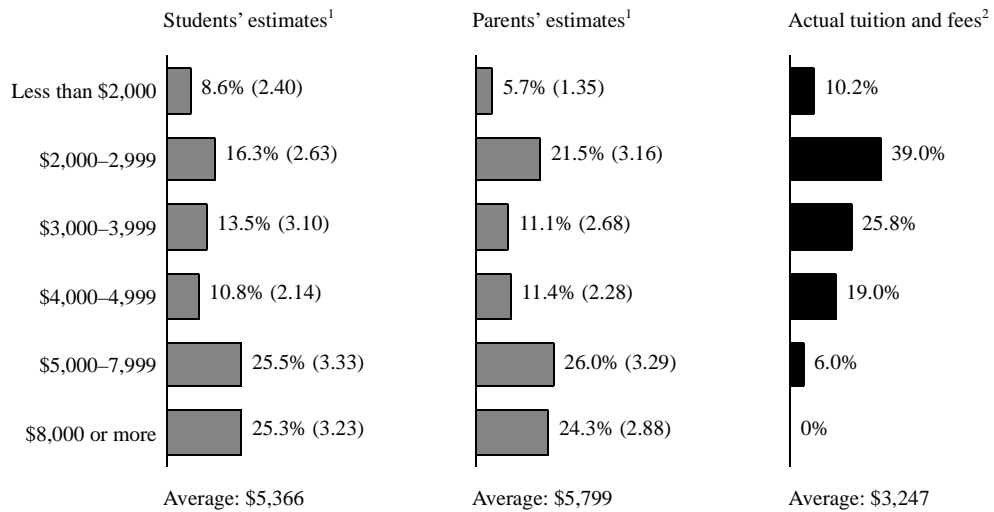
Figure DA.—Standard errors for figure A: Among 9th- through 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to whether they had obtained college cost information, could estimate the costs, or could do neither: 1999



NOTE: Detail may not sum to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Figure DB—Standard errors for figure B: Among 11th- and 12th-graders and their parents who reported plans for the student to attend a public in-state 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual and fees tuition paid by undergraduates in 1998–99

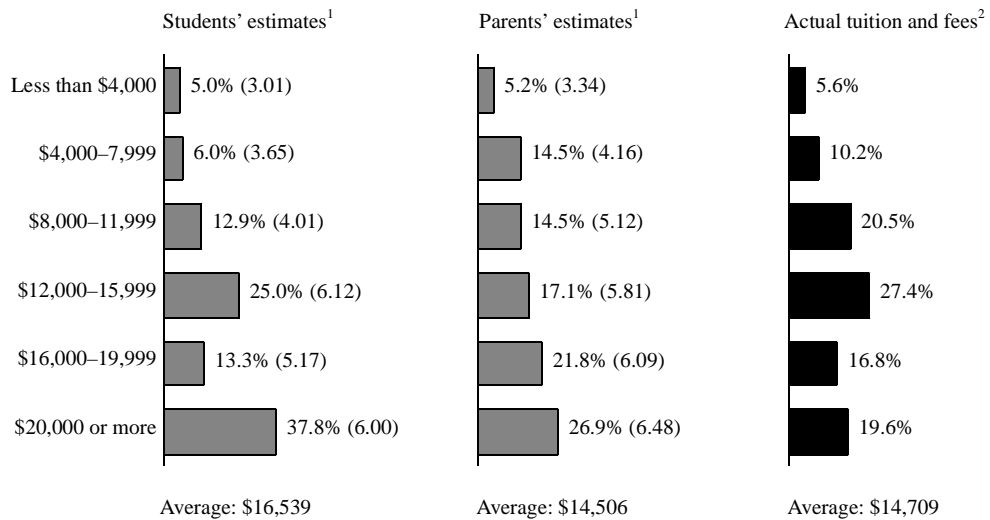


¹Does not include those who reported room and board in their estimates. Includes respondents who were undecided about where to attend but estimated tuition and fees for public 4-year institutions in their state.

²Does not include room and board costs. The survey is a universe, so there are no sampling standard errors associated with the percentages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

Figure DC—Standard errors for figure C: Among 11th- and 12th-graders and their parents who reported plans for the student to attend a private 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99

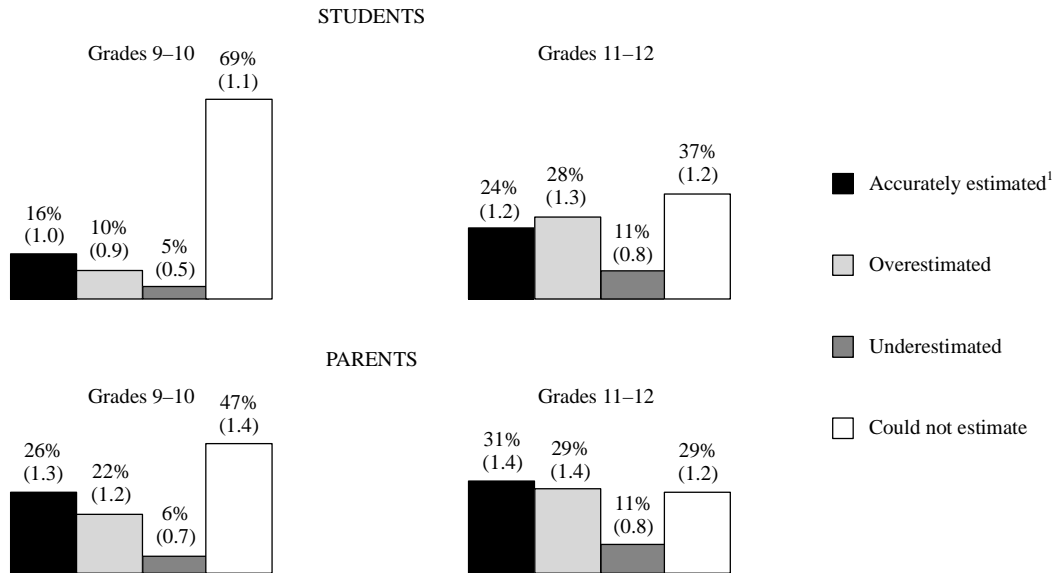


¹Does not include those who reported room and board in their estimates.

²Does not include room and board costs. The survey is a universe, so there are no sampling standard errors associated with the percentages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

Figure DD—Standard errors for figure D: Among 9th- through 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to the accuracy of tuition estimates for 1 year’s tuition and fees at the type of college the student planned to attend: 1999

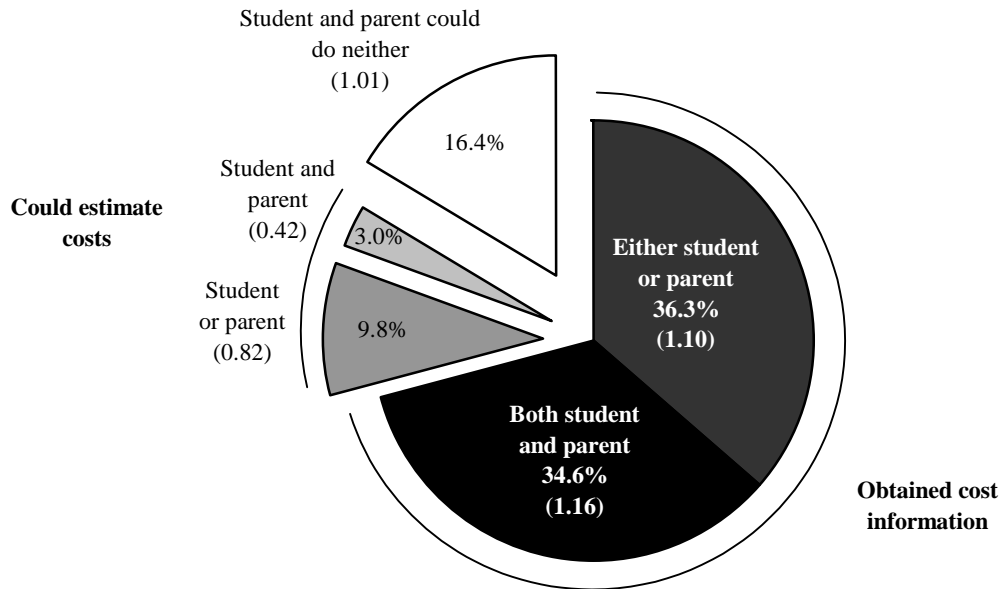


¹An accurate estimate was defined as one within 25 percent of the average for the type of institution the student planned to attend in their state of residence.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition amounts from the 1998 Integrated Postsecondary Education Data System (IPEDS).

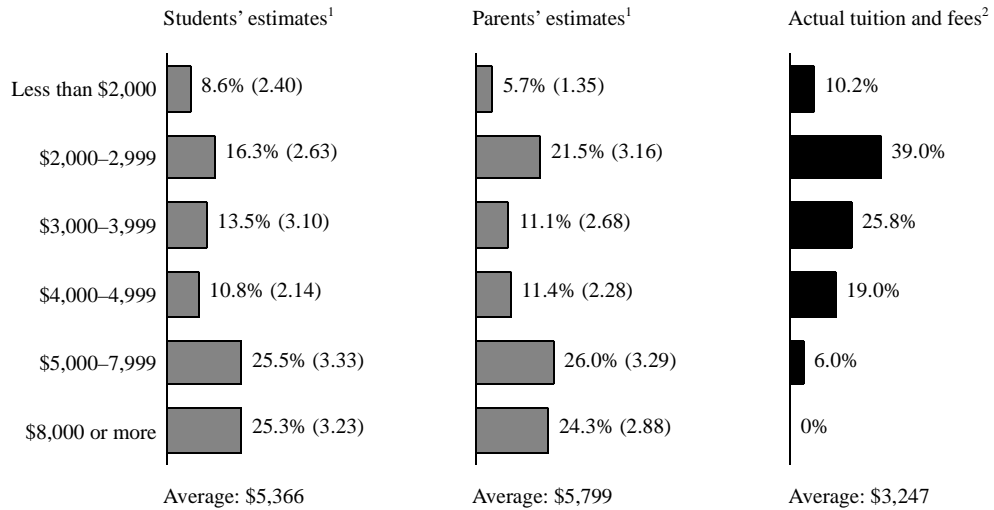
Figure D1.—Standard errors for figure 1: Among 11th- and 12th-graders and their parents who reported plans for the student to attend postsecondary education, the percentage distributions according to their knowledge of college costs: 1999



NOTE: Detail may not sum to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999).

Figure D2 —Standard errors for figure 2: Among 11th- and 12th-graders and their parents who reported plans for the student to attend a public in-state 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual and fees tuition paid by undergraduates in 1998–99

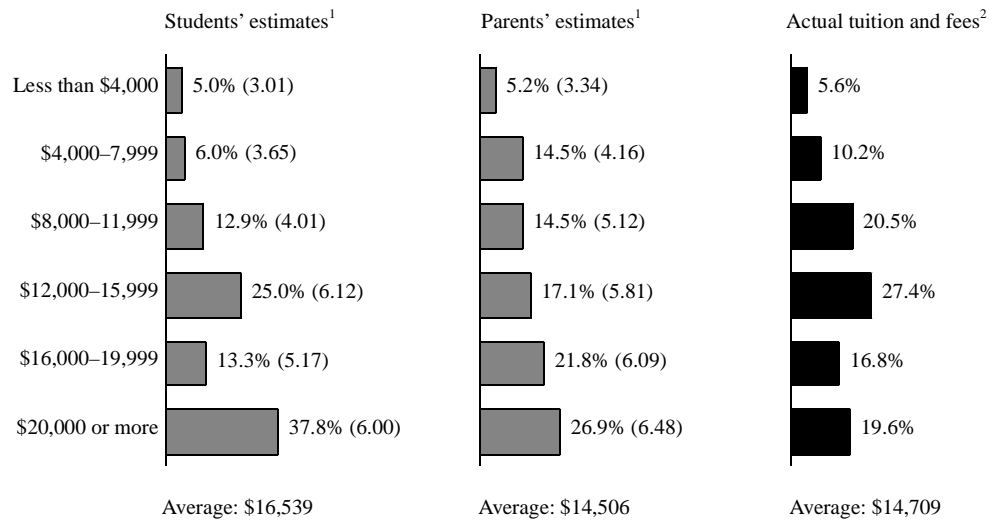


¹Does not include those who reported room and board in their estimates. Includes respondents who were undecided about where to attend but estimated tuition and fees for public 4-year institutions in their state.

²Does not include room and board costs. The survey is a universe, so there are no sampling standard errors associated with the percentages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.

Figure D3—Standard errors for figure 3: Among 11th- and 12th-graders and their parents who reported plans for the student to attend a private 4-year institution, and who provided an estimate of tuition and fees, the percentage distributions of estimated tuition and fees for 1 year and the actual tuition and fees paid by undergraduates in 1998–99



¹Does not include those who reported room and board in their estimates.

²Does not include room and board costs. The survey is a universe, so there are no sampling standard errors associated with the percentages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Youth Survey and Parent Survey of the 1999 National Household Education Surveys Program (NHES:1999). Actual tuition and fees published in The College Board (1998), *Trends in College Pricing*.