Educational LOAN Workbook

For parents who are financing their children's college education

Revised 1993 Edition

Introduction

It is important for families to know that the value of a college education increases every year; studies have shown that college graduates earn 40% more over their lifetimes than high school graduates. Rate of return estimates on a college education do not take into account the satisfaction the student may have derived while in school nor do they consider how a college education may have enhanced the non-monetary aspects of life after graduation.

Planning to meet college costs is an investment in the future. Families and students have many choices in financing this investment, including applying for financial aid, outside grants and scholarships, part-time work and educational loans. This workbook will help parents make an educated choice about borrowing to pay for college.

According to research done by the College Board, more than half of all families who send their children to college borrow to cover the costs of their children's education. This workbook is designed to help parents make the decisions about financing education through loans a little easier. Borrowing can make economic sense. However, parents should determine the type and size of loan that is best suited to their financial situation and personal preferences. The information in this workbook is addressed specifically to parents. In the text, 'You' refers to parents.

How to use the workbook

Each section begins with a question about financing education through loans. At the end of some sections, there is an exercise, or action (Family Action). The information you supply about family circumstances will help you in your decision making process about the role of loans in financing the cost of your child's education.

When to use the workbook

Although the information in this workbook can help you plan how to meet educational expenses at any time of the year, the best time to use it is after the college or university has determined eligibility for financial aid. If the student does not receive financial aid, if not enough aid is awarded or if you choose to finance the parent contribution, this workbook will be helpful. Plan early and investigate all options.

Why borrow for college?

Even with traditional forms of financial aid that cover a portion of college costs, some families find they are unable to pay the balance out of savings and yearly income. According to the College Board, in 1993–94, the national average cost for tuition, room and board was $15,818 for four-year private colleges and universities, and $6,207 for public institutions. Multiply that by four years, and a college education for a dependent is easily the largest investment a family will make after its home. As with a home, a college or graduate education provides benefits over a period of years after the initial "purchase." Since the benefits are spread out over time, it makes sense to spread the payments over time as well. Thinking about borrowing for education in this way may help you feel more comfortable about educational loans.

Family Action:

Apply for Financial Aid: Check on all financial aid sources which may be available to the student and **apply** for them. Check with the financial aid office for specific details about financial aid eligibility and about other financing options. Nationally, over 5 million college students do receive some type of financial assistance.

Determine the annual cost of education (what it costs to attend): The annual cost of education includes both direct educational costs—tuition and fees, books and supplies—and living costs, such as room and board (or commuting costs), transportation and personal expenses. The "College Costs and Financial Aid Handbook," published by the College Board, can help you estimate total costs. The book may be available at the public library, your high school guidance counselor's office or bookstores. You can also check with the financial aid office.

Annual Cost of Education: ____________

Determine Family Contribution*: Financial aid applicants will be notified of their expected family contribution (FC) after submitting their financial aid application. The FC is the amount your family is expected to pay to help cover the annual cost of education. The financial aid system works on the premise that parents and students have the primary responsibility to finance the cost of college. The expected FC that is calculated reflects your family's capacity to carry that responsibility either through current income and assets or by financing it through educational loans.

Total Family Contribution: ____________

How much should you borrow?

The first answer to this question is no more than you really need. The preceding section had you calculate the annual cost of education and the total family contribution. Eligibility for financial aid is the difference between those figures.

	Annual Cost of Education
–	Total Family Contribution
	Eligibility (Need) for Financial Aid

In some cases, educational loans will be needed to finance the expected family contribution. Also, not every student will receive enough financial aid to meet their need.

All starred * items are defined in the glossary on page 10.

The second answer to how much you should borrow is no more than you can pay back. Before deciding exactly how much to borrow, determine who will assume responsibility for repaying the loan. For example, in some families parents pay off all the educational debt; in other families the parents pay for a certain time period and then the student assumes the monthly payments. You should carefully consider future events such as additional children in college or your own retirement which may affect your ability to repay educational loans. Remember, loans must be repaid and serious consequences exist for individuals who do not repay.

Family Action:

Determine responsibility for repayment:

CHECK ONE

- ☐ Parent responsible for all educational debt
- ☐ Parent and student share responsibility for repaying educational debt
- ☐ Student responsible for all educational debt

Estimate salary at time repayment begins:

PARENT ______________________

STUDENT
(if responsible for repayment) ______________________

Consult Figure 1 for entry-level salaries for student's estimated salary. If only a median salary is available, estimate a lower figure.

Figure 1
Estimated average yearly salaries
(Source: Occupational Outlook Handbook, 1992–93)

Position	Median/ Entry-Level	Gross Salary
Accountant		
Bachelor's	E	$26,600
Master's	E	31,100
Auto Mechanic	M	33,888
Chemist		
Bachelor's	E	23,000
Master's	E	30,000
Ph.D.	E	44,000
College/University Faculty		
Instructor	M	26,100
Assistant Professor	M	34,600
Associate Professor	M	41,800
Professor	M	56,200
Computer Programmer	M	34,000
Computer Systems Analyst	M	38,700
Dental Hygienist	E	27,664
Dentist	M	80,000
Economist	E	25,200
Education Administrator		
Assistant Principal	M	43,500–49,000
Principal	M	51,500–59,000
Dean	M	52,200–160,200
Engineer		
Bachelor's	E	31,900
Master's	E	36,200
Ph.D.	E	50,400
Financial Manager	M	35,800
Health Services Administrator	M	58,000
Hotel Manager		
Assistant Manager	M	31,000
General Manager	M	56,000
Lawyer	E	47,000
Librarian	E	25,300
Mathematician		
Bachelor's	E	27,000
Master's	E	30,100
Ph.D.	E	42,800
Nurse		
Staff (RN)	M	29,484
Head (RN)	M	36,090
Occupational Therapist	M	30,500
Pharmacist	M	41,300
Physical Therapist	M	30,958
Physician		
Resident	E	25,858–33,277
After Residency	M	155,800
Physician Assistant	M	40,000–44,999
Psychologist		
Bachelor's	E	21,000
Master's	E	25,700
Ph.D.	E	37,300
School Counselor	M	31,000
Social Worker	M	26,808
Speech Pathologist	E	25,000
Teacher		
Elementary	M	32,400
Secondary	M	33,700

The borrower should estimate what earnings will be when the loan goes into repayment and calculate what percentage of the monthly income will be used to cover payments on educational loans. Credit advisors caution that your monthly payments on all borrowing (including a home mortgage, car payments and credit cards) should not exceed 37% of gross monthly earnings. The repayment of undergraduate student loans should not exceed 8% of gross monthly income after college graduation. The combined repayment of graduate and undergraduate educational debt should not exceed 15% of gross monthly income after graduation. Those who choose to exceed these limits should expect to make sacrifices, possibly major ones, in their lifestyles in order to cover their educational loan payments.

Family Action:

Many educational loans require a credit review. This process has two steps: first, reviewing the credit rating and second, determining capacity to carry debt. The second step includes a debt to income ratio calculation*, which is relatively easy to compute.

The following exercise will help you determine the total amount in educational loans you can afford to repay. Use the income from all persons who will be responsible for repayment. (See notes 1 and 2.)

1. **Monthly Gross Income**
   (when repayment begins)
   __________ × 0.37 = __________
2. **Total Monthly Payment**
   (sum of rent or home mortgage, car payments, credit cards and other credit borrowing) __________
3. **Amount available for additional monthly debt payment**
   (subtract 2. from 1.) __________

Your monthly payments on all educational borrowing (for all dependents) should not exceed this amount. If you have any questions about these calculations, check with your financial aid office for more information.

You may also call The Educational Financing Helpline at 1 (800) 237-0712 for a free, computerized service that will calculate your borrowing capacity. See page 11 for the information you will need to use this service.

Planning your credit capacity

In order to have control over your ability to utilize educational financing, you must first make sure that you have excellent credit. Second, you must be prepared to finance all four years (or more) of each of your children's college education. You should carefully consider other purchases you will be making that may affect your debt to income ratio calculation.

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1) **Note to self-employed parents:**
Self-employed parents cannot use gross receipts of their business as gross monthly income. For debt to income ratio calculations, lenders will use the net income on Schedule C of the federal tax return plus depreciation expense. Repayment of loans from an individual's company to that individual is not considered as income, except for the interest portion of the repayment. If a car is used in the business, some lenders will exclude the car payment from the debt to income ratio with proof that the business is paying the loan and deducting the loan interest as business expense.

2) **Note for parents with investment property:**
Some lenders will exclude mortgage payments on rental properties from the debt to income ratio by using the rental income to offset the required payment. Any difference between the mortgage payment and the rental income would be factored into the debt to income ratio formula. Lenders will use Schedule E of the federal tax return to see if any out of pocket costs are required to carry the investment property.

What should you consider in choosing an educational loan?

The preceding sections were designed to help you determine whether you need to borrow, how much you should borrow and how much you can afford to repay. If you have decided that you will use educational loans, you should understand some of the principles of borrowing. In using credit, you are promising to pay later for goods, services or money you receive now. The decision to borrow money is a serious one, and it is your responsibility to be aware of the eligibility requirements, repayment terms, deferral provisions and consequences of default in each loan program.

The following information will help you understand these areas and enable you to compare the different educational loans that are available.

Family Action:

Use the Loan Comparison Chart in the center of the workbook to list the provisions of each loan program which is available to you. Check with the financial aid office about the specific programs administered by the college. Investigate the Federal Subsidized Stafford Loan first since the interest on these loans is subsidized by the federal government while the student is in school and certain deferments are available. You should also investigate monthly tuition payment plans (through the college), home equity loans, borrowing against life insurance and any other mechanisms which are available to you.

Consider the following areas when deciding which loan suits your individual circumstances:

ELIGIBILITY

Column C on Loan Comparison Chart

Borrowers should check with the lender on eligibility requirements. These requirements vary from program to program and may include citizenship considerations and attendance at certain schools. Also, some loan programs require a **Needs Test*** which means the borrower must demonstrate financial need for the loan. Similarly, school and government loans may require that family income and assets not exceed a certain amount. Most banks and many other lenders will perform a credit check* to assess whether the borrower is a good credit risk.

INTEREST RATES

Column D

Interest* is what you pay for the use of someone else's money. Usually interest is expressed as an annual percentage of the amount borrowed. Just as you want to pay the lowest possible price for a given item, you usually want to have as low an interest rate as possible. However, a borrower should consider every aspect of a loan including size of monthly payments and repayment terms, and not simply choose the loan with the lowest interest rate, especially when the difference in interest rates between loans is small. Figure 2 compares monthly payments on loans which have different interest rates.

Figure 2

Monthly Payments on a $10,000 Loan and a $25,000 Loan at Different Rates of Interest and Different Repayment Terms

$10,000:	Interest Rate	10 Year Schedule	15 Year Schedule
	5%	$ 106	$ 79
	6%	111	84
	7%	116	90
	8%	121	96
	9%	127	101
	10%	132	107
	11%	138	114
	12%	143	120
	13%	149	127
	14%	155	133
	15%	161	140
	16%	168	147
	17%	174	154
	18%	180	161

$25,000:	Interest Rate	10 Year Schedule	15 Year Schedule
	5%	$ 265	$ 198
	6%	278	211
	7%	290	225
	8%	303	239
	9%	317	254
	10%	330	269
	11%	344	284
	12%	359	300
	13%	373	316
	14%	388	333
	15%	403	350
	16%	419	367
	17%	434	385
	18%	450	403

The federal government, state agencies and colleges offer different types of loans but generally they fall into two categories:

Fixed-rate loans*: Banks, insurance companies and other institutions offer fixed-rate loans in which the interest payments are fixed at the time the loan is made. Banks often require collateral*, such as a lien on the borrower's home, before they will make such a loan. With a fixed-rate loan, the borrower knows the precise amount of each payment and exactly how many payments will be made.

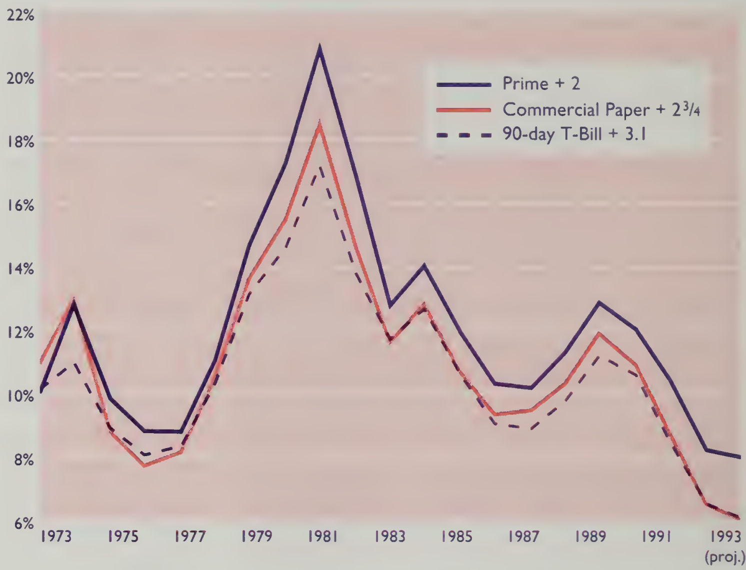
The federal government, state agencies and some colleges provide low-interest loans for higher education. These loans often have fixed interest rates well below the market rates a borrower might get at a bank and do not require any collateral. The interest rates are kept low because the lender augments the borrower's interest payments with money from taxpayers or from the college's own resources.

Variable market-rate loans*: Banks, other institutions and the federal government offer loans in which the interest rate varies with some measure of current market interest rates using an index (Column E) such as the prime rate* or the rate on 90-day Treasury bills*. Since interest rates change over time, either the amount of the monthly payment or the length of repayment must change as well. The disadvantage of a variable-rate loan is that the borrower does not know for certain what future payments will actually be. The cost of borrowing may average out to be more or less than it would be on a fixed-rate loan.

Figure 3 depicts the annual interest rates on variable-rate loans from 1973 to 1993. One loan is at the prime rate plus 2%, another is at the 90-day Treasury bill rate plus 3.1%, and another is based on monthly sales of Commercial Paper plus 2.75%. These rates are typical of those offered under variable-rate student loan programs. While no one knows for certain what rates will do in the future, the graph shows that interest rates varied considerably in the last twenty years.

Figure 3

Comparison of sample loan rates (1973–1993 (projected) annual averages)



CAPS

Column F

Some variable-rate loans have a cap beyond which the interest cannot rise. Make sure you know what the cap is on a variable-rate loan.

ANNUAL PERCENTAGE RATE (APR)

Column G

The interest rate quoted to a borrower may not always be the total rate of interest borrowers pay for the money they receive. Many student loan programs charge an "origination fee*," "insurance premium," or "guarantee fee" which is similar to the points homeowners pay when taking out a home mortgage. The origination fee is either subtracted from the money borrowed or added on to the original loan amount. Therefore, borrowers may pay interest on an amount that is greater than what they actually receive. Consider the following examples:

John borrows $2,000 at a yearly interest rate of 10.0% with a 5% origination fee. Initially, his payments are for interest only. Instead of receiving $2,000, John gets $1,900 because the lender takes $100 to pay the origination fee (5% of $2,000). At the end of the first year he pays $200 in interest (10.0% of $2,000). Since he

LOAN COMPARISON CHART

LOAN COMPARISON CHART

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Name of Loan Program; Name, Address and Phone Number of Lender	Loan Amount Requested	Eligibility Requirements	Interest Rate (%)	Fixed or Variable Rate (if variable, include index used)	Caps (%)	Effective APR (%)	Origination Fee	Minimum/ Maximum Amounts That Can Be Borrowed Per Year	Schedule for Repayment	Monthly Payments on Loan Amount Requested	Length of Repayment	Prepayment Option	Tax Benefits	Deferment Provisions
1. **The MassPlan** Massachusetts Educational Financing Authority 176 Federal Street Boston, MA 02110 1(800)842-1531		• Student must attend a participating college or university • Eligibility test • Credit review	8.5% fixed (expected to be lower 1993-94); 5.97% variable (as of 11/1/93)	Fixed Variable, based on Commercial Paper Index	N/A 18%	9.55% 7.37% (if rate stays the same)	6%	• Minimum: $2000 ($1500 at a public institution) • Maximum: Cost of attendance less financial aid	Repayment begins one month after disbursement	$10.48 $11.80	15 years 10 years	In full or in part at any time without penalty	Home Mortgage Option available	None
2.														
3.														
4.														
5.														
6.														
7.														

only received $1,900, his effective Annual Percentage Rate (APR) is 10.53% ($200 divided by $1,900).

Alternatively, Sue borrows $2,000 at a yearly interest rate of 10.0% with a 5% origination fee which is added on to the loan amount. Sue receives $2,000 but her actual principal amount is $2,105 (5% of $2,105 is $105 which leaves a remainder of $2,000). Like John, she begins paying interest only. In the first year her annual interest payments are $210.50 and her effective APR is also 10.53% ($210.50 divided by $2,000).

Federal law requires lenders to disclose the effective APR if available. The APR will be disclosed on all fixed-rate loans prior to your signing the promissory note. The APR on variable-rate loans is not known until you make your last payment, so variable-rate lenders cannot give you the effective APR at the time the loan is made.

SCHEDULE FOR REPAYMENT

Column J

Lenders offer many different schedules for repayment. Figure 4 shows different repayment schedules that could be offered on a $5,500 loan with a fixed interest rate of 8.5%. Loan A offers fixed monthly payments over the life of the loan so the borrower pays principal and interest from the first payment. With Loan B, the borrower pays interest only while the student is in school and begins payments on both principal and interest after graduation. Many of the government-subsidized loan programs allow the borrower to defer payments until after the student graduates as in Loan D. While the student is in school, the government pays the interest on the loans. After graduation, the borrower must pay principal and interest on the original loan amount. Other lenders may also have provisions for deferment but they typically

Figure 4

*Schedule of Different Monthly Payments Resulting From a $5,500 Loan with an 8.5% **Fixed** Interest Rate Borrowed on September 1st of the Freshman Year with Different Lengths of Repayment*

YEAR	Loan A	Loan B	Loan C	Loan D
1. Freshman	$ 68.19	$ 38.96	$ 0	$ 0
2. Sophomore	68.19	38.96	0	0
3. Junior	68.19	38.96	0	0
4. Senior	68.19	38.96	0	0
5.	68.19	97.78	95.69	68.19
6.	68.19	97.78	95.69	68.19
7.	68.19	97.78	95.69	68.19
8.	68.19	97.78	95.69	68.19
9.	68.19	97.78	95.69	68.19
10.	68.19	97.78	95.69	68.19
11.	0	0	95.69	68.19
12.	0	0	95.69	68.19
13.	0	0	95.69	68.19
14.	0	0	95.69	68.19
Total of Payments	$8,183	$8,910	$11,483	$8,183
APR	8.50%	8.50%	8.50%	4.50%

A 10 Year Loan, Principal & Interest Paid From Outset
B 10 Year Loan, Interest Only Paid While in School
C 14 Year Loan, Interest Capitalizes While in School
D 10 Year Loan, No Interest Charged While in School

capitalize* the interest payments as in Loan C (the interest payments that are due during the deferral period are added to the amount originally borrowed). Interest accrues on both the original principal and the interest that was added to the principal while the student was in school.

As Figure 4 demonstrates, the subsidy during the deferral period with government-sponsored loans makes a significant difference in the monthly payments and the effective APR.

In order to evaluate and compare loans that have different interest rates, repayment periods and monthly payments, it is important for you to understand the concept of present value*. Essentially, present value means that a dollar today is worth more than a dollar tomorrow because of the effect time has on the value of money. The further out in time a dollar will be received, the lower its present value. Thus, even though the total of payments for Loan C appears to be the highest, the present value of all its payments is actually the same as the present value of total payments for Loan A or B. This is true because Loan C's payments are made later. You want the loan with the lowest present value and, therefore, the lowest cost. When evaluating loan programs, the simplest means to discern the loan with the lowest cost is to look at the loan which offers the lowest APR. The APR takes into account both the present value of the loan payments and any other costs of the loan, such as an origination fee.

MONTHLY PAYMENTS

Column K

Some educational loans require a minimum monthly payment regardless of the amount borrowed.

LENGTH OF REPAYMENT

Column L

Repayment periods for student loans range from one to twenty years or more. Spreading the payments out over a longer period may increase the total dollars paid in interest but it may have advantages for many borrowers. For parent borrowers, lower payments over a longer period may make money available for investments that yield a higher rate of return than the interest paid on an educational loan. If the rate of return on a family's investment exceeds the interest on an educational loan, over the long run, the family will have fared better.

For student borrowers, extending payments farther into the future allows them to repay their loans when their earnings are at a much higher level. The first fifteen years after graduation from college is the period of the most rapid salary increase in a working person's career. Spreading payments over a longer period gives student borrowers lower monthly payments immediately after graduation and extends payments to a time when the student's salary will make repayment less of a burden.

Although there are strong arguments for some borrowers to extend payments on their educational loans over a long period of time, ultimately you must decide your own preference for payment.

PREPAYMENT

Column M

If you want to pay off your loan faster than your original term designates, some loans allow you to make more than one payment at a time or to prepay the total amount outstanding on the note. However, you should check the promissory note* which states the requirements of your loan because some lenders may charge a penalty to those who prepay.

TAX IMPLICATIONS OF EDUCATIONAL LOANS

Column N

In determining the desirability of a particular educational loan program, you should also consider the potential tax implications of various terms and repayment provisions. While the Tax Reform Act of 1986 phased out the deductibility of interest paid on most educational loans, the interest paid on educational loans which are secured by the borrower's home may continue to be deductible. You should consult a tax advisor to determine what tax benefits may be available to you. Some programs have an option to secure educational loans with your home.

Summary

The preceding pages have introduced you to information and exercises designed to help you understand educational loans and how they might be useful to you. You should use the strategies you have learned from this workbook to analyze your needs and repayment capacity as well as the financing options available to you through the college or outside sources.

Intelligent financial planning requires periodic review of your personal situation and the alternatives available to you. Make use of the tools you have been given in this workbook on an annual basis throughout your child's education. Continue to investigate all the options that are available so that you can be an informed consumer in the educational finance marketplace.

Adjusted Gross Income: Income, minus allowable deductions, listed on the federal tax return.

Annual Percentage Rate (APR): Effective rate which takes into account the interest rate, the origination fee or any other costs, and the present value of loan payments

Borrower: Anyone who obtains funds from a lender through an extension of credit for a period of time.

Capitalized interest: Accrued interest which is added to principal. When interest is capitalized the loan principal increases.

Collateral: The property or asset pledge to obtain a loan.

Credit Check: Review of an individual's credit history or past performance with credit.

Debt to Income Ratio Calculation: This calculation is used in the credit review and compares a person's debt payments to his/her income.

Deferment: Deferments allow the borrower to postpone payment for a specific period and can be granted for a variety of reasons.

Deferred Interest: Interest payments that are delayed for the borrower and paid at a later time.

Family Contribution (FC): The total amount a student and his or her family are expected to pay toward college costs from their income and assets. The amount is derived from need analysis of the family's overall financial situation.

Financial Need: The amount by which a student's family contribution falls short of covering the student budget. Generally, students are eligible for financial aid equal to their financial need.

Fixed Interest: Rate of interest which does not change during the life of the loan.

Gross Income: Income before deductions.

Interest: The amount paid (or fee charge) for the use of borrowed money. Interest is computed as a percentage of the principal.

Needs Test: A method for determining how much a family can reasonably be expected to pay toward a student's college educational costs. Some loan programs have a needs test which is based on the Family Contribution.

Origination Fee: The fee is charged to consumers for borrowing money. In some loan programs, the origination fee is deducted from the amount of the loan and in other programs it is paid off over the life of the loan.

Present Value of Money: The value at the current time of a cash payment which is expected to be received in the future, allowing for the fact that an amount received today could be invested to earn interest. (See page 8 of the workbook.)

Prime Rate: The rate at which banks borrow money from each other. Prime rate is an index which is used by variable-rate loan programs.

Promissory Note: The legal document stating the terms of the loan.

Variable Interest: Rate of interest that is tied to a certain index and changes periodically as the index changes.

90-Day Treasury Bill Rate: The rate at which the federal government sells its 90-day Treasury bills. The 90-day Treasury bill rate is an index which is used by variable-rate loan programs.

The Massachusetts Educational Financing Authority is pleased to present

The Educational Financing Helpline
1 (800) 237-0712

Please have the following information ready **when you call** so that our computer can evaluate your family's situation:

- The amount you need to borrow this year
- The total number of years the student has left to earn a bachelor's degree
- Your total annual income (including work, rental property, investments, etc.)
- Your monthly rent or mortgage payment (add real estate taxes and homeowner's insurance)
- Your total **minimum** monthly payments on all of your debts with a balance over $500

You must have a touch-tone telephone to use this service.

Notes

A workbook designed for parents involved in financing their children's college education and to provide guidance through the intricacies of educational loan programs.

Questions and comments about this workbook can be addressed to:

Massachusetts Educational Financing Authority
176 Federal Street
Boston, MA 02110
1 (800) 842-1531

The Authority is a not-for-profit state authority serving students enrolled in the Commonwealth's colleges and universities.

Sources:

The College Board – Office for Educational Research and Improvement; "Occupational Outlook Handbook".

Department of Labor; "Annual Statistical Digest" – Federal Reserve Board.