

# Funding a College Education

## Lesson Plan

### Objective

The following activity is designed for students to research how they might pay for a college education. It draws on students' knowledge and comfort level with researching topics online using search engines.

Students will be able to:

- Use the internet/search engine to search for answers.
- Discover the importance and value of paying for a college education.
- Define student-aid specific phrases.

### Teaching Materials

- Student handout
- Computer for each student
- Federal website links

### Lesson Activity

1. Prior to beginning the activity, inform students about the federal websites where a large amount of information is available. They will undoubtedly find these web pages by doing simple online searches.
  - **US Department of Education Subsidized and Unsubsidized Loan Information**
    - **DIRECT LINK:** <http://studentaid.ed.gov/types/loans/subsidized-unsubsidized>
  - **US Department of Education Perkins Loan Information**
    - **DIRECT LINK:** <http://studentaid.ed.gov/types/loans/perkins>
2. Provide the definition of the term Grant Money.
  - a. Wikipedia web definition: Grants are non-repayable funds disbursed by one party, often a government department, corporation, foundation or trust, to a recipient, often a nonprofit entity, educational institution, business or an individual ([http://en.wikipedia.org/wiki/Grant\\_money](http://en.wikipedia.org/wiki/Grant_money)).
3. Instruct students to research Federal Pell Grant and answer the following questions:
  - a. How much money can I get from a Federal Pell Grant?
  - b. What will the amount I get depend on?

Student Answers:

Resource used during research stage: <b><u>Federal Student Aid Grants and Scholarships PELL</u></b>
a. Amounts can change annually. The maximum Federal Pell Grant award is \$5,645 for the 2013–14 award year (July 1, 2013 to June 30, 2014).
b. The amount of money you get, though, will depend on: <ul style="list-style-type: none"><li>• your financial need,</li><li>• your cost of attendance,</li><li>• your status as a full-time or part-time student, and</li><li>• your plans to attend school for a full academic year or less.</li></ul>

**Loans:**

4. Inform students that the U.S. Department of Education offers eligible students at participating schools two types of loans to be used for funding college expenses. Tell students to research the following questions based on loans:
  - a. What are the two types of loans called?
  - b. What is the difference between the two?
  - c. Who pays interest on these loans? When?
  - d. What makes you eligible for each type?
  - e. How do you apply?
  - f. Are there limits on how much money you can borrow?
  - g. What are the current interest rates?

Student Answers:

Resource used during research: <b><u>FEDERAL STUDENT AID SUBSIDIZED and UNSUBSIDIZED LOANS</u></b>
a. The U.S. Department of Education offers eligible students at participating schools Direct Subsidized Loans and Direct Unsubsidized Loans.
b. Direct Subsidized Loans have slightly better terms to help out students with financial need.
c. The U.S. Department of Education pays the interest on a Direct Subsidized Loan: <ul style="list-style-type: none"><li>• while you're in school at least half-time,</li><li>• for the first six months after you leave school (referred to as a <b><i>grace period</i></b>*), and</li><li>• during a period of <b><i>deferment</i></b> (a postponement of loan payments).</li></ul> <p>You are responsible for paying the interest on a Direct Unsubsidized Loan during all periods.</p>
d. To receive either type of loan, you must be enrolled at least half-time at a school that

participates in the Direct Loan Program. Generally, you must also be enrolled in a program that leads to a degree or certificate awarded by the school. Direct Subsidized Loans are available only to undergraduate students who have financial need. Direct Unsubsidized Loans are available to undergraduates and graduate or professional degree students. You are not required to show financial need to receive a Direct Unsubsidized Loan.

e. To apply for a Direct Loan, you must first complete and submit the Free Application for Federal Student Aid (FAFSA).

f. The actual loan amount you are eligible to receive each academic year may be less than the annual loan limit.

These limits vary depending on:

- what year you are in school and
- whether you are a dependent or independent student.

g. <b><u>Interest Rates</u></b>	<b>Undergraduate Students</b>	<b>Graduate Students</b>
<b>Direct Subsidized Loans</b>	3.86%	N/A
<b>Direct Unsubsidized Loans</b>	3.86%	5.41%

5. Instruct students to define the term grace period and determine the grace period for federal student loans.

*Student Answers:*

**Definition:** The grace period is a set period of time after you graduate, leave school, or drop below half-time enrollment before you must begin repayment on your loan. The grace period gives you time to get financially settled and to select your repayment plan.

**6 months**

6. Provide students with the following hypothetical situation:

The academic year for a college runs from August 1<sup>st</sup> through May 30<sup>th</sup>. You take out a student loan at the beginning of your junior year.

- a. How long (in months) before you are required to begin repayment of that loan?

*Student Answer:*

**30 months**

- August through May of junior year = 12 months
- August through May of senior year = 12 months
- Grace period = 6 months

**Compound interest** arises when interest is added to the principal of a deposit or loan, so that, from that moment on, the interest that has been added also earns interest (source: Wikipedia.com).

Interest on student loans is calculated monthly, so at the end of a month, interest on the outstanding principal is calculated for that month and added to the principal of the loan. So, next month, the principal is a bit larger, and the interest owed becomes a bit larger.

With a *subsidized loan*, the government pays your interest while you are in school and during your grace period. So, when you begin paying back your loan, the balance is the same as it was when you took out the loan.

7. Provide the following hypothetical situation:

The academic year for a college runs from August 1<sup>st</sup> to May 30<sup>th</sup>. You take out a subsidized student loan at the beginning of your junior year for \$10,000.

- a. How long (in months) before you are required to begin repayment of that loan?
- b. How much interest has the government paid on this loan on your behalf?  
(Interest is calculated monthly, but the interest is paid monthly, so no compounding occurs.)

*Student Answers:*

a. **30 months**

b. \$965.10

- **$\$10,000 * 0.0386 = \$386/\text{year}$**
- **$\$386/12 = \$32.17/\text{month}$**
- **$\$32.17 * 30 \text{ months} = \$965.10$**

With an *unsubsidized loan*, you are responsible for paying the interest that will accumulate while you are in school and during your grace period. To avoid interest compounding before you begin repaying the loan, you will need to pay the interest monthly while you are in school and during

your grace period. There are choices available to you when deciding how to repay the loan. If you are able to pay the interest as you go, maybe with a part-time job, you can avoid the effects of interest compounding on your loan.

To determine what the balance on a student loan would be at that time in the future when you must begin repaying the loan, you can use a formula.

8. Tell students to research: **Future Value Formula**
9. Remind students to be careful. The future value formula has a *time parameter*, and many of the examples given show this time parameter in years. However, the parameter is actually the *number of compounding periods*. So, examples showing the time parameter in years assumes annual compounding. Student loans compound *monthly*, so the formula requires an adjustment to the time parameter.
10. Provide the following hypothetical situation:

The academic year for a college runs from August 1<sup>st</sup> to May 30<sup>th</sup>. You take out an unsubsidized student loan at the beginning of your junior year for \$10,000.

- a. How long (in months) before you are required to begin repayment of that loan?
- b. What would the balance of the loan be if you deferred all payment until the end of the grace period? (This assumes you allow the interest to compound from the date the loan is taken out until the grace period ends and repayment begins.)

*Student Answers:*

a. <b>30 months</b>
<p>b. <b>\$11, 011.40</b></p> <ul style="list-style-type: none"> <li>• <math>FV = P x \left(1 + \frac{i}{n}\right)^{nt}</math> <ul style="list-style-type: none"> <li>○ P = principal, I = interest rate, n = number of compounding periods per year and t = time in years</li> </ul> </li> <li>• <math>FV = 10,000 x \left(1 + \frac{.0386}{12}\right)^{12 \cdot 2.5}</math></li> <li>• <math>FV = 10,000 x (1.0032167)^{30}</math></li> <li>• <math>FV = 10,000 x (1.101140)</math></li> <li>• <math>FV = 11,011.40</math></li> </ul>

## Conclusion:

There is great value put on a higher education in today's job market. Higher education can be expensive, however, and it can seem quite a daunting task to find the money for one without having an income to pay those costs. Of course, there are private sources of money for college, but the government can assist students in pursuing a higher education by offering access to grants and loans.

U.S. Department of Education grants and loans are available, and you should research your options carefully to determine which are best suited to your needs.