



Lesson Plan: Are Colleges Still Affordable?

Worksheet

Part I: Investigate the Model

Use the mathematical model to investigate the effects of the following situations. Show your work on other paper. Compute the value of **A** for both salary ranges.

1. For the 2003-2004 school year, the University of Illinois estimated that incoming students would need the following budget: tuition, \$5,568; fees, \$1,442; room & board, \$6,618; books, \$782; and transportation, \$770. Assume the parents' contribution was \$5,000; the student's, \$1,000; and a grant, \$6,680. The interest rate was about 4.7%. Assume the student plans to teach in Illinois, where the median starting salary for a BA is \$28,132 and the lowest is \$20,299.
2. Increase the tuition in problem (1) by 5%. Keep all other factors constant.
3. Increase the tuition in (1) by 10%. Keep all other factors constant.
4. Increase the interest rate in (1) to 6%. Keep all other factors constant.
5. Increase the student's contribution in (1) to \$2,000 per year. Keep all other factors constant.
6. Suppose the student in (1) takes 5 years to graduate. Keep all other factors constant.
7. Suppose the student in (1) repays the loan in 8 years. Keep all other factors constant.

Part II: Evaluate the Model

8. According to the model, does a change in tuition of 5% or 10% make a significant change in student debt?
9. What are the advantages of the model?
10. List some assumptions made by the model. Describe any limitations or potential failures.
11. What changes would you make?
12. Is college still affordable? Is it a good investment?