

MY FAVORITE  
lesson

Laura M. Crowley

## Financing a College Education

**H**ow much does college cost now? Can you predict how much it will cost in the future? What kinds of student loans are available? How much do these loans cost borrowers in the long run? My favorite lesson is called the College Project, and in it juniors and seniors address these highly relevant questions.

The idea for this lesson arose when I found an error in the calculations my bank sent me regarding the payments I would owe for a personal loan. Had I not known how to use the formula for the present value of an annuity, I would not have found this error. Right then I decided that my students should have the knowledge to manage their finances. No student ever asks, “When are we ever going to use this?” when loans and savings arise naturally in a unit on exponential functions.

During the College Project, students investigate a college of their choice to determine the true cost of attendance (tuition, room and board, books, student fees, travel expenses, fun money, etc.) We use recent growth rates to predict the increase in tuition for each year that they will be in college and come up with a grand total, which is always a staggering amount.

Next, each student creates a plan to determine how to cover the costs: paren-

tal contribution, summer jobs, work-study, scholarships, loans. Students make a formal presentation to their parents, outlining the costs and their plan. They also submit a paper detailing their calculations and create a poster. The purpose of the posters is to spark class discussion and comparison of college costs.

Through their paper and poster, students address two major questions:

1. What is the amount of your monthly payments and the total cost of your loan?
2. If your parents had begun saving for college the day you were born, how much would they have needed to put aside each month to have enough to pay all your college costs on the day you turned eighteen?

Over the years, this project has taught me many valuable lessons. One is that financial issues are more delicate in some families than in others, so I always give students the option of making their presentation to me, rather than to their parents. Second, so that students need not worry about sharing private family finances through their poster, I now have them prepare the written report about their own situation and create the poster about a fictitious student. Third, some students are fortunate enough to have their college costs covered entirely by parents, so I require these students to create a scenario that would necessitate a loan, such as travel abroad or furnishing an apartment.

The conversation we have on the day the posters are due is not only lively but also an excellent way for me to assess how well students express their math-

ematical understanding verbally. This project provides a format for alternative assessment as well. I use a rubric to assess the students’ posters and papers for mathematical accuracy, clear communication, relevant representation, and engaging presentation. To help with checking the calculations, I wrote a simple program for the TI-84 graphing calculator so that I can input each student’s values and check that each performed the calculations correctly.

The students also complete a self-evaluation form and ask their parents to fill out a parent feedback form. Comments on the self-evaluation form have included these:

- “I better appreciate my parents now.”
- “I’m debating now whether it’s worth it to go to a private college versus a state school.”
- “I never thought of all the extra costs college will entail.”
- “I’d better start saving now so I can afford to send my own kids to college.”

Students love this project. At least one student every year mentions that it was very *interesting* (pun intended). And parents, pleased that their children are thinking about the value of money, love this project too.



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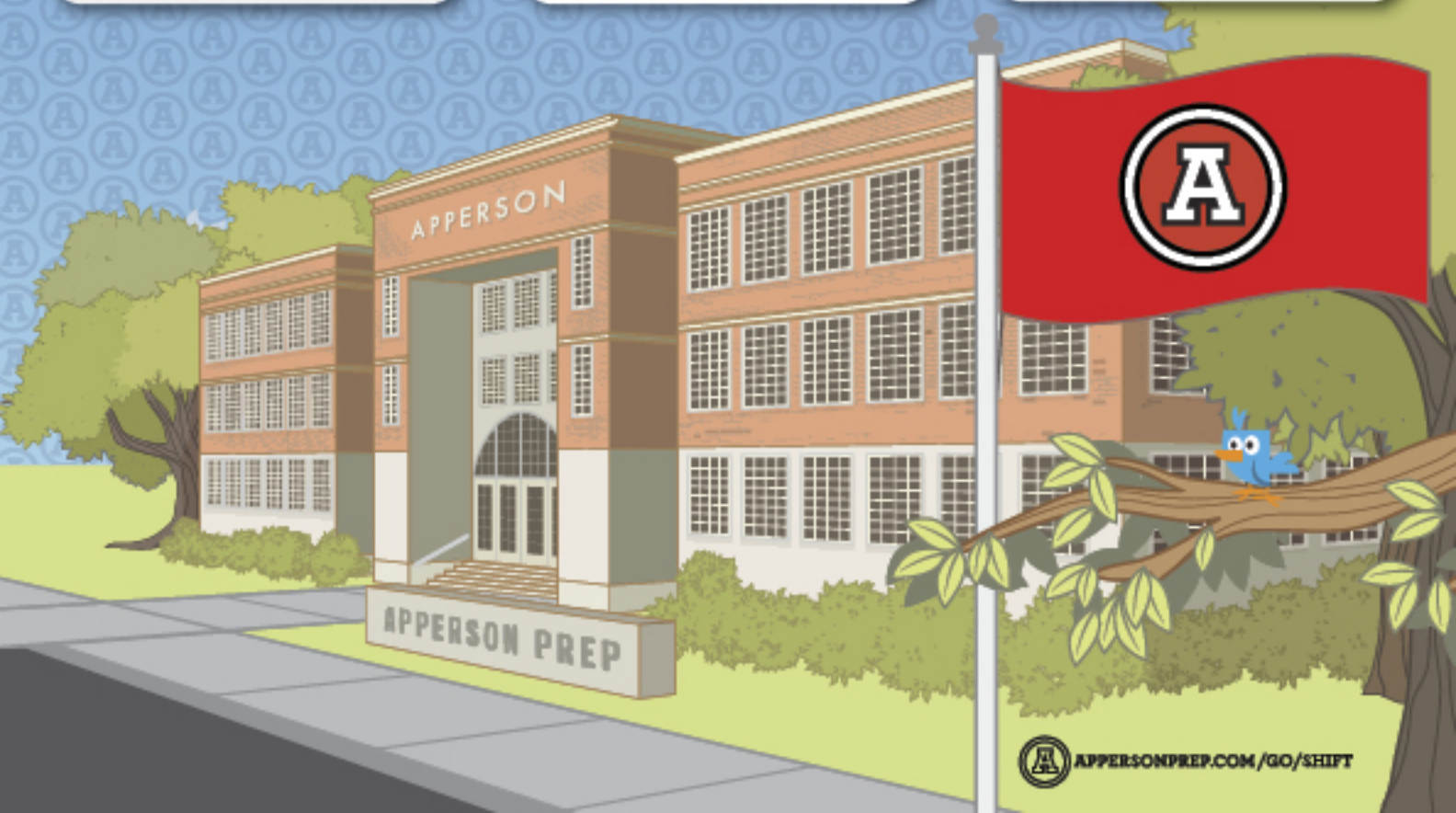


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