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SNEAK IN SOME CORE SUBJECTS

BY LYNNE CLARKE

"*I'm going to put this assignment on the refrigerator when I get home!*" Not exactly a comment you would expect from a high school student, is it? The comment is even more surprising considering that the assignment that the student is referring to is a health science technology assignment that was specifically designed to incorporate core subject standards—the standards that some of our career and technical education (CTE) students are trying to escape. Even if your students don't have an aversion to core subjects, they may not see the relationship between the core subjects and, say, their career path. The career path project outlined in this article can be adapted to work in any CTE class to highlight the relationship between core subjects and the real world.

Incorporating Standards

Most, if not all CTE classes have a requirement that calls for students to explore specific careers within the area; it usually mentions education requirements, job setting, salary trends, etc. This project will guide students through that exploration and allow you to incorporate both math and English Language Arts (ELA) into your lesson plan. The ELA standards can include areas such as oral presentation, Internet research, and the use of PowerPoint or Prezi. ELA can also include basic ELA standards such as grammar and spelling. Math standards can include addition, subtraction, multiplication, division, averaging and ratios. I usually allow the students to work on this activity for a week. When they are done they must each present the findings to the class using PowerPoint or Prezi. I require professional dress for the presentation. Here's how the activity works:

1. Each student must choose a specific health care occupation, *i.e.*, nurse or respiratory therapist. He or she must also each decide which college

to attend, and list each school and degree that will be needed for his or her chosen career. For example, if a student wants to be a doctor, he or she must list a pre-med degree and medical school. A student who wants to become a nurse practitioner or physician assistant must list an undergraduate degree and graduate school. The student must also decide where he or she wants to live and work upon graduation from college.

2. The student then explores the Web site for the chosen college. He or she must list the requirements for being accepted at the college, including any testing and high school courses. The degree's required core and major courses must also be listed. Students must list available extracurricular or pre-professional organizations available on campus.
3. The next step is to explore financing. Each student must list the cost of tuition, housing and meals for full-time study per semester. (The student may also elect to live at home so they would only be concerned with tuition.) Next, each student estimates the number of semesters he or she will be in school and then computes the total cost of the degree. Students must then explore scholarships, loans and grants. They must also go to the Free Application for Federal Student Aid Web site to apply for a PIN number. This step is repeated for each degree that the student must earn to reach his or her stated career goal.
4. Many students don't realize that there is another step when they graduate from school. Most health care and medical professions require an exam or "state board." Each student must find the Web site for the state licensing agency for the profession he or she has chosen. The testing and licensing application must be printed out, and each student must be able to point out requirements, testing format and fees. Students must also find out about licensing renewal requirements.
5. For the next steps each student is asked to visualize the house and car he or she would like to have after graduation. I bring in local real estate books and car advertisements from the newspaper. They each use loan and mortgage calculators on a credit union Web site to determine what the monthly payment will be for the house and car. I ask them to compute a 10 percent down payment for each and give them a reasonable interest rate to work with. This step usually generates a lot of questions about purchase price, downpayment and amount financed.
6. Salary projections are the next step. The student must find two Internet sources for the chosen profession. If the projections are shown in a range, the student must convert the range into the average. The two averages must then be averaged to get one number. That final number is then divided by 12 to get a monthly gross salary.
7. This step is called "Future Finances" and is designed to incorporate the concept of debt to credit ratio. Each student must add his or her car and house payment from the previous step to determine if that total exceeds 30 percent of the gross monthly salary. If the payment exceeds 30 percent, then the student must rethink either the career goal or downsize the house or car. (The activity is not complete until the payment totals are below the 30 percent limit!)
8. Now the student has to answer some reflection questions:
   a. What core subject will be your biggest challenge as you work toward your goals?
   b. What can you do about that now?
   c. What personal trait, if any, will make it difficult for you to meet your goal?
   d. What is the most surprising thing you learned while completing this project?
   e. Has this project caused you to reassess or change your goals? Why or why not?
9. Finally, the student must present his or her education plan to the class using PowerPoint.

Helping Students See the Big Picture

R. Kent Crookston, a college professor from Minnesota, wrote an article in Steven Covey's 7 *Habits Report* about working as a teenager in a sash and door factory. The area to which he was assigned was responsible for completing a large project using very expensive wood. Crookston was given a series of small tasks; despite trying, he made many mistakes. Finally, the shop supervisor pulled him aside and showed him the detailed blueprints and how his small tasks fit into the whole project. Armed with the vision of the entire finished project, Crookston was able to complete his tasks correctly.

This project is designed to give students a vision of the "entire project" of their education, including how the core subjects are used in practice, how they relate to each other, and why students need to know them. T

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