Emerging Pathogens: It’s All About You and Me

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Abstract

With this grant my goal is to further educate my community about the emerging pathogens that are most likely to adversely affect their lives most immediately. Because the community and school that I teach in is located in the center of what is primarily an agricultural area, the citizens are mostly uneducated, low income wage earners with little to no understanding of the impending threat of emerging pathogens to their way of life. It is imperative that this citizenry become knowledgeable about these pathogens to ensure that their lives and livelihoods are protected.

Mission Statement

I will provide awareness of the existence of emerging pathogens and the possible economic impact to the region of Western Palm Beach County to my students, and there by the community as it relates to the world. Students will receive information regarding the pathogens that are present in their immediate environment that are of human origin, specifically, HIV/AIDS.

Description of Teaching Unit

This lesson will bring HIV / AIDS awareness to my students. It is structured on a discussion / information sharing format.

PI credentials
B.S. degree – Technical Aeronautics, Tennessee State University
M.S. degree – Science Education, Nova Southeastern University
Chemistry and Biology course work done at Palm Beach Atlantic University
AP Biology trained
CRISS trained
Current Science Department chair/coach
Summer 2008 ICORE participant

Literature Cited

- CDC statistical data
- County Health Department
Budget and Budget Justification

1. Local and district transportation for students to visit a college laboratory
   School District transportation - $200.00
   - Expectations / Outcome expected for laboratory visit
     1. Students will be made aware of new career path possibilities
     2. Students will see the actual tests being done for HIV diagnoses
     3. Students will tour and be exposed to an actual commercial laboratory

Deborah Leach-Scampavia, Education & Outreach Administrator, Scripps Florida
has been contacted and 30 of my students are scheduled for a visit to Scripps
Florida laboratories located on FAU Honors campus located in Jupiter, FL on
January 24, 2009.

Lesson Plans

HIV / AIDS

I. HIV, general information/intro
   I will present the HIV/AIDS information in a really attention getting manner by passing out
different colored sticks as students enter the classroom. These sticks will represent the HIV /
AIDS current statistics in our local community that are accessible through the health department.
One color will represent the number of people who will be infected at whatever ratio and time
frame, another color will represent the people who are infected but have know knowledge that
they are infected, and finally, the last color will represent the people who are living with full
blown aids. Students will be informed of what their sticks represent. We will then discuss and
dispel myths about HIV / AIDS.

The lesson will cover:
   - Testing methods for HIV infection
   - How HIV is contracted and its’ progression to Full blown AIDS
   - Local, State, and National Statistical data will be shared.
   - The importance of being tested if at risk at all.

As a conclusion to the lesson:

Students will be asked to write down one thing about HIV/AIDS that they were previously
unaware of prior to this lesson. Then students will share their one thing with the class.
Immediately following their Scripps Florida visit students will complete a post Scripps visit
scavenger hunt of visit facts.