D-Lab
Development, Design, Dissemination

Teaching Notes

World Facts Quiz
Written by Amy Smith

This exercise serves as an engaging introduction to a class on international development and/or appropriate technology. It brings issues to the students' attention in an extremely interactive way and allows you to focus on topics or technologies of particular interest to your class.

The order in which you present the answers can be very important, especially when there is a list of data from several countries, as the stark contrasts between countries can increase the impact of the information presented.

I usually follow the quiz with a brief description of some technologies that address the problems that are highlighted by the quiz: the sari cloth water filter, the pot-in-pot evaporative cooling system, the Light Up The World Foundation solid-state lights, and the Grameen phone. These examples also show the range of what is considered to be "appropriate" in today's context.

A good follow-up reading is the New York Times article *Kofi Annan's Astonishing Facts*, by Barbara Crosette (September 27, 1998).

Unless otherwise indicated, the data listed in this teaching note is from the 2005 World Development Indicators by the World Bank. Refer to the most recent version of this document in order to update the answers for your class.

1. What percent of the world's population lives on less than $1 per day? *~20%*

    a. In India? *35.3%*
    b. In Mexico? *9.9%*
    c. In Zambia? *63.7%*

2. How many people in the world do not have access to safe drinking water?

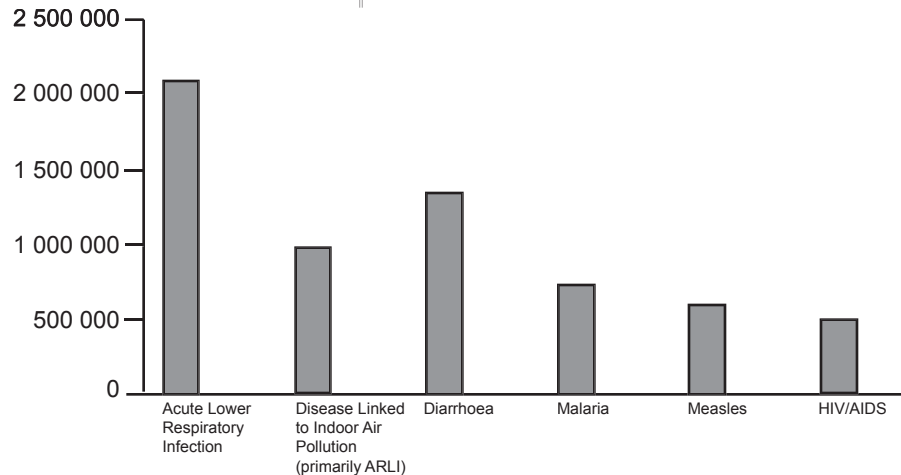   *~1,000,000,000*   *(World Health Organization, 2005)*

3. What is the leading cause of death in children under 5 (excluding neo-natal deaths)?

    Acute respiratory problems caused by burning fuels and poor ventilation

Bar chart with y-axis ranging from 0 to 2 500 000. Categories: Acute Lower Respiratory Infection (~2 100 000), Disease Linked to Indoor Air Pollution (primarily ARLI) (~980 000), Diarrhoea (~1 350 000), Malaria (~730 000), Measles (~600 000), HIV/AIDS (~500 000).

(from "Smoke, the Killer in the Kitchen, ITDG Publishing)

This is a remarkable statistic, that almost no one gets right. It is all the more shocking because it seems like it should be so preventable.

4. What was the average life expectancy in Lesotho in:
   a. 1990: *57 years*
   b. 2002: *37 years*

   This is almost entirely due to AIDS/HIV and is a striking statistic showing the effect of the disease in Southern Africa.

5. How much does it cost to light a household for a year in the developed world (using mains electricity)?   *US$82*   *(Evan Mills, 2002)*

6. How much does it cost to light a household or a year in the developing world (using kerosene)? *US$96, and it provides only about 1/10 the amount of light*
                                                                    (Evan Mills, 2002)

7. How many computers are there per thousand people in each of the following countries?
      a. USA: *659 (551)*   b. India: *7 (17)*   c. Mexico: *82 (118)*   d. Haiti: *<1 (18)*

   The number in parentheses is the number of internet users per 1000 people

8. How many radios are there per thousand people in each of the following countries?
      a. USA: *2109*   b. India: *120*   c. Mexico: *330*   d. Haiti: *55*

9. How many telephones are there per thousand people in each of the following countries?
      a. USA: *1146*   b. India: *71*   c. Mexico: *449*   d. Haiti: *55*

   This is the number of fixed line and mobile subscribers. Interestingly, the number has increased by 40% in the last year in India and Haiti...

10. What percent of the population lives in urban areas in each of the following countries?
    a. USA: *78%*   b. China: *39%*   c. Brazil: *83%*   d. Haiti: *38%*

11. What is the rural population density in each of the following countries? (per sq. km.)
    a. USA: *37*   b. India: *466*   c. Mexico: *102*   d. Haiti: *669*

12. What percentage of the population works in the agricultural sector in each of the following countries?
    a. USA: *2%*   b. India: *60%*   c. Mexico: *18%*   d. Haiti: *51%*

13. How many tractors are there per thousand agricultural workers are there in the following countries?
    a. USA: *1640 (272)* b. India: *6 (94)*   c. Mexico: *44 (131)* d. Haiti: *<1 (2)*

    (In the parentheses are the number of tractors per 100 sq. km. of arable land, thus, even though India has fewer tractors per worker, per area, it's about the same as Mexico…)

14. What percentage of crop yields are lost due to post-harvest storage issues?
    ~20%

15. What is the unemployment rate in each of the following countries?
    a. USA: *5.8%*   b. China: *4%*   c. Brazil: *9.4%*   d. Zambia: *12.4%*

16. How many years of schooling does the average boy have in each of the following countries?
    a. USA: *12.1%*   b. Brazil: *5.4%*   c. India: *6.3%*   d. Haiti: *3.5%*

    (Source: 2002 World Development Indicators by the World Bank)

17. How many years of schooling does the average girl have in each of the following countries?
    a. USA: *12.0%*   b. Brazil: *4.4%*   c. India: *3.7%*   d. Haiti: *2.1%*

    (Source: 2002 World Development Indicators by the World Bank)