

This module is updated based on one created by Susanne Morgan of Ithaca College to include more recent data and for ease of use with WebCHIP 4.0.

Value of an Education (Instructor's Guide)

An introductory module using WebCHIP and data from the U.S. Census

THIS MODULE HAS THE FOLLOWING OBJECTIVES:

Skills

- To orient students to WebCHIP, by in-class demonstration
- To learn to identify the contents of various datasets, read marginals, and read a percentaged crosstab table.
- To give beginning practice writing about data.
- To provide a brief homework assignment beginning to graphically illustrate data.

Substance

- To clarify common misperceptions about the frequency and value of a college education.
- To use collaborative learning techniques.

CLASS SETTING, EQUIPMENT AND MATERIALS

In class, with projection from a Macintosh or PC. Full lab is not necessary.

Materials:

- In-class Exercise: Quiz and grid for answers
- Instructions and grids for the homework assignment.

Faculty steps:

- Distribute In-Class Exercise: Value of a College Education in the U.S. for individual completion. Remind them that the numbers should be percentages of the U.S. population.
- Form students into groups, and instruct them to arrive at one group guess.
- Briefly, have the groups report their answers, and record them on the board or transparency.

- Note: This module uses three different datasets from acs2008, each with different variables and different categories. You need to return to the BROWSE window to move from one dataset to another. For this introductory exercise, the in-class part uses two datasets, but the homework uses only one, so it should not be as confusing for the students.
- To open the dataset in WebCHIP:
 - Go to <http://ssdan.net/datacounts/webchip>
 - In "Collections" on the left sidebar. Find **acs2008** in the drop-down box and select it.
 - In data sets find **EducOccup** and select it
- Create a *Marginals* table to see the population in the dataset, and the variables included. This screen will give the answers to the first part of the exercise. Ask students to fill in the correct answers on their copies of the In-class Exercise.
- Ask students why they think the percentage with a college education is so low. If they suggest that older people may have been less likely to attend college, then demonstrate by creating a percent across crosstab with age as the first variable (for the rows) and then education as the second variable (for the columns). Spend some time asking students to read the table. The form should be "Of all those over 65, ...% have a college degree." Compare those over 65 with those 25-34, noting the percentages with a college degree or with less than 9 years of school.
- If they do not have any ideas about the reasons the percentage of college education is low, then go on to the next step.
- To find the answers to the second part of the exercise, you need to go back to the data browser and open the dataset **Earn** file in **acs2008**.
- Create a *Marginals* table to see the population in the dataset, and the variables included. This screen will give the answers to the second part of the exercise. Ask students to fill in the correct answers on their copies of the In-Class Exercise.
- Ask students to speculate on the value of a college education. For this example, we should consider only people who are 25-34, because they are products of contemporary education and you would remove the effect of older people being less likely to have a college degree. What proportion of those aged 25-34 with a college degree or higher do students predict are now earning over \$50,000? What proportion of those with less than a high school diploma are not earning over \$50,000?
- Now, go back to the data browser and open the **Work-25** file under "datasets" Note the label of the table to see who is included here (only full-time workers, and only in the age group 25-34.)
- Create a percent across crosstab with EDUC in the rows (click first) and EARNINGS in the columns (click second.) Spend some time asking students to read the table. The form should be "Of all those with a college degree, ...% are earning under \$25,000, while of all those with less than high school, ... % are earning under \$25,000."

In-class activity:

Ask each student to choose 3 numbers from the tables and write an interpretative statement about it. Suggest the form, "Of all the,...% are " Have them work in pairs to check their answers, and clarify any confusion in class. Collect the papers.

Homework Assignment: *Graphing the value of a college education in the U.S.*

This assignment does not require them to use a computer, as the answers will be on their handout of the tables from class. However, encourage them to try to enter WebCHIP and the EducOccup data set, and to see what else they can discover in it. They should form teams of two.