Mitchell’s Musing 1/2/12: What Would Florence Nightingale Say?

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Below are three PowerPoint slides I used to present in my Labor Markets course. The general topic of the portion of the course in which they were used was “productivity.” We discussed measures of productivity including “multi-factor” productivity. Economists will know that the unexplained residual growth that appears when total factor productivity growth is calculated is often attributed to technological advance.\(^1\) The purpose of the slides was to illustrate that technological advance means more than just inventing clever new gadgets. It can also encompass managerial techniques and new ways of interpretation and analysis that raise output without the need for more input.

Most people – if they know the name Florence Nightingale – would say she was the “first nurse” or something along those lines. They would not think of her as a statistician. However, Nightingale believed in using statistics to determine the best course of medical treatment, a new idea at the time. In order to make statistics convincing, however, you need to communicate what they are showing. So she invented what is sometimes mistakenly called the first pie chart, but is really a cross between a pie chart and a bar chart. Different courses of treatment were shown by dividing the circle by the number of treatments. The radius of each circle segment was proportionate to the rate of success being shown. Thus, the most effective treatment results were made visible and, thus, more convincing. By convincing others to use the best treatment option, she improved medical outcomes, i.e., raised productivity of hospitals.

I was reminded of Florence Nightingale’s innovation using statistics by the following announcement posted on the website of the U.S. Bureau of the Census:

\(^1\) The latest releases of multi-factor productivity are at http://www.bls.gov/mfp/news.htm.
What is the Statistical Abstract?

The Statistical Abstract of the United States, published since 1878, is the authoritative and comprehensive summary of statistics on the social, political, and economic organization of the United States.

Use the Abstract as a convenient volume for statistical reference and as a guide to sources of more information both in print and on the Web.

Sources of data include the Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis, and many other Federal agencies and private organizations.

The U.S. Census Bureau is terminating the collection of data for the Statistical Compendia program effective October 1, 2011. The Statistical Compendium program is comprised of the Statistical Abstract of the United States and its supplemental products -- the State and Metropolitan Area Data Book and the County and City Data Book. In preparation for the Fiscal Year 2012 (FY 2012) budget, the Census Bureau did a comprehensive review of a number of programs and had to make difficult proposals to terminate and reduce a number of existing programs in order to acquire funds for higher priority programs. The decision to propose the elimination of this program was not made lightly. To access the most current data, please refer to the organizations cited in the source notes for each table of the Statistical Abstract.

Source: http://www.census.gov/compendia/statab/

The notice appears to say there will be no Statistical Abstract published after the latest one which just came out (for 2012).

I poked around on the web to see what was going on. Librarians across the U.S. have protested. The Statistical Abstract is the starting point to which library patrons seeking data on whatever topic they have an interest are first referred. In theory, all of the data are located somewhere else -- if you can find them. But as Florence Nightingale discovered, you have to make data visible for them to matter. (And it might be noted -- as the notice point out - that some data in the Statistical Abstract are proprietary and, therefore, not available to general users.)
If you are an expert in a particular field, you probably know where to obtain data for that subject. But someone who is a novice in the field will not know. Apart from the data actually appearing in the Statistical Abstract – which may not be the latest given publication lags – there is a source note for each table, nowadays often with the web link, from which more recent data can be obtained.

I was further reminded of an earlier episode in which another handy compendium was lost. Back in the day, the Survey of Current Business, a monthly statistical journal published by the Bureau of Economic Analysis (which like the Bureau of the Census is part of the U.S. Department of Commerce), used to have a centerfold section. Unlike Playboy’s centerfold, however, there were no pictures. But there were reams of data from various sources (some proprietary) on various measures of economic activity, sector by sector. Then – out of the blue - the centerfold section just disappeared, and the Survey became a much less useful source.

The Department of Commerce is supposed to promote “business” and there is a saying in business that “the customer is always right.” So – with librarians around the country saying they and their patrons need the Statistical Abstract - where is the customer voice in the decision to eliminate it?

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2 As a personal example, I prepare for students in my course on California Policy Issues an interactive PowerPoint “California IQ” test, with questions and answers about various aspects of the state: education, agriculture, electricity use, crime, etc. I am not an expert in all of those fields, so I make heavy use of the Statistical Abstract to find the needed information. Check out http://issuu.com/danieljbmitchell/docs/califiq?mode=window&backgroundColor=%23222222 for the latest example (in a pdf version).