

## **Stories and Statistics: Using Historical Examples in the Teaching of Applied Statistics**

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This presentation describes the use of historical data and bibliographies in applied statistics courses in several disciplines, including public health, psychology, social work, and business. With some examples dating back to 1877, topics such as data acquisition and utilization of results continue to have relevance for current-day undergraduates.

Examples demonstrating the development and use of bibliographic sources for the classroom:

1. Discriminant functions and classification.
2. Adverse reproductive outcomes.
3. Historical health statistics.
4. Reliability, validity, and other special topics in health services research.

Some examples of “stories” and historical data:

<u>Year</u>	<u>Page</u>	<u>Description</u>
1877	1	Title Page
1877	22	First Report by Ezra M. Hunt
1877	74	Act to Establish a State Board of Health
1877	75	First example of an index
1878	3	Transmittal letter to Governor George B. McClellan
1878	7	Registry Law as to Vital Statistics
1878	17	Report on the Disposition of Insane Criminals
1878	34	Report on Hatting
1878	97	Early Cross-tabulation of Births by Municipality
1878	105	Early Cross-tabulation of Causes of Death by Location
1881	128	A Review of English Statistical Reports
1882	59	Sanitary inquiries into the conditions of charitable and penal institutions
1886	67	The Relation Between Drinking-Water and Typhoid Fever
1886	79	The Hygiene of Occupations
1886	187	Heredity
1886	197	Infant Mortality
1887	161	The Passaic River As Related To Water-Supply and Death-Rates
1887	192	First use of color in a graph
1887	204	Proportionate Mortality in Color
1890	54	Sewer Plan for Trenton (in color)
1891	22	Anthrax, Rabies, and Pasteur
1891	52	Notes on Mental Hygiene
1892	54	Tobacco and Its Effects on Youth
1898	218	Thematic Map (in color)
1899	49	Map locating sanitary districts
1900	46	Color map
1930	80	Deaths Under Age 5 for 51 Years
1999	8	County Map (in color)
1999	9	Trend Graph

Incorporation of materials into lectures and student projects.

1. Examples of homeworks.
2. Examples of lecture materials, including central tendency and digit preference.

Implications for improving student interests and scholarly abilities.

1. Reinforcing the use of APA citational style.
2. Examples of student-initiated projects.