Utilizing a Digital Library to Teach Undergraduate Statistics
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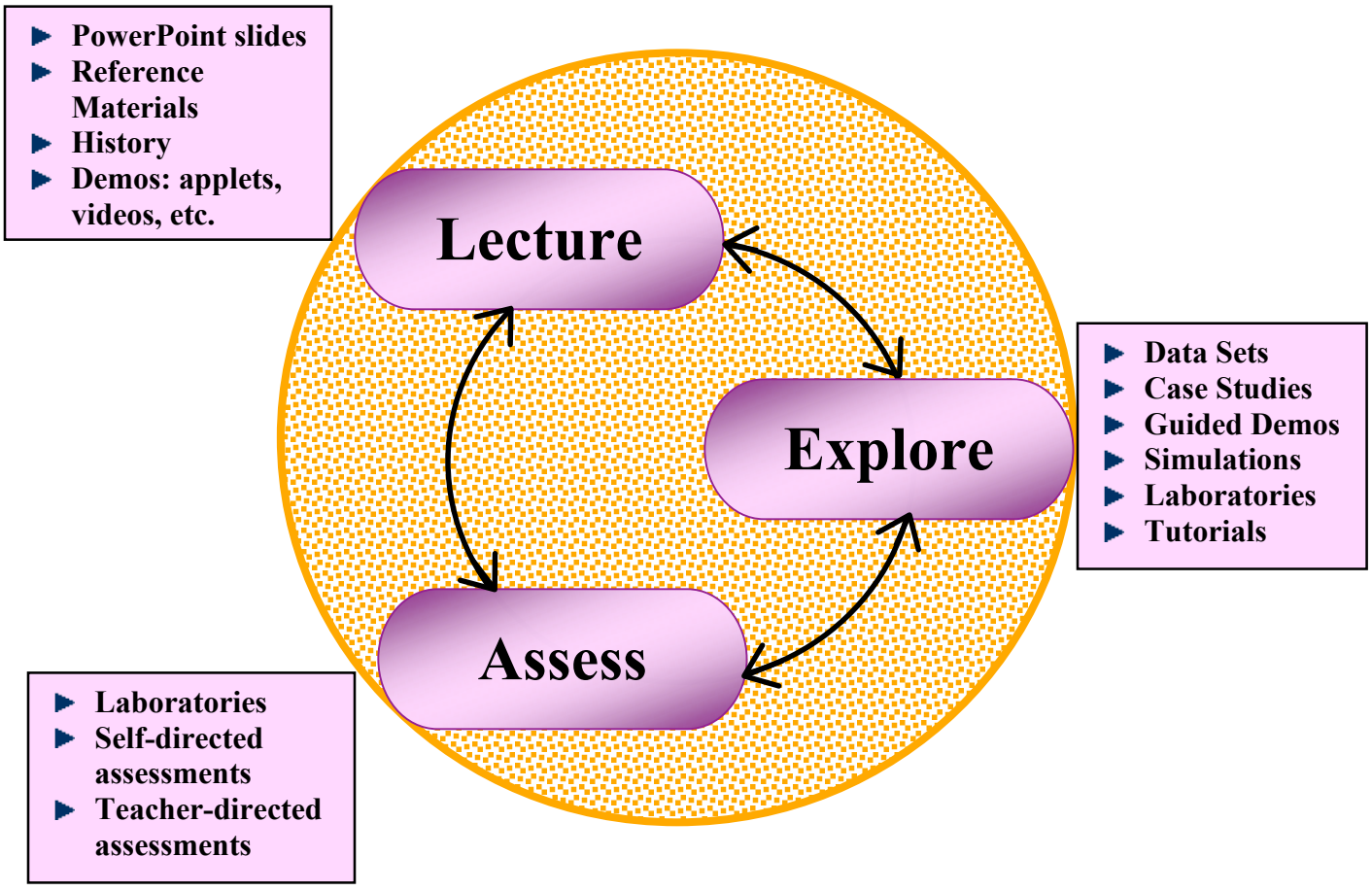
CAUSEweb, a new digital library for undergraduate statistics instructors, is a great source for on-line teaching and learning materials. This searchable database of resources includes lecture examples, laboratory activities, datasets, analysis tools, etc. CAUSEweb's resources can be easily integrated into instructional plans for statistics courses.



Searching Hints:
It often helps to search not only by topic, but also by ***type of resource***, ***application area***, or ***object format***. For instance, if you want an applet that simulates the Central Limit Theorem and applies to business, type ***applet + simulation + business + central limit theorem*** in the search box. (The "+" signs are optional.)

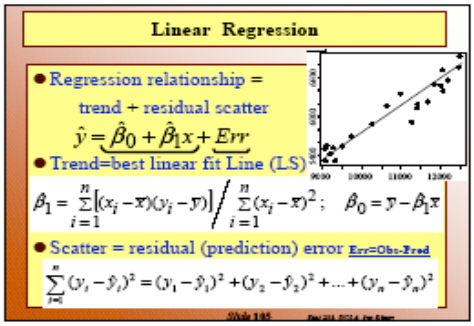
Resource Types: animation, case study, collection, drill and practice, quiz/test, lecture/presentation, reference materials, simulation, sound, tutorial, webpage.

Application Areas: biology, business, psychology, mathematics, etc.

Object Formats: Java applet, audio, video, Flash, etc.

Correlation and Regression

LECTURE



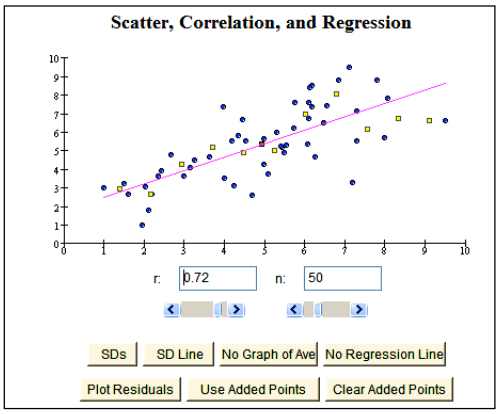
Slides like this one from the PowerPoint presentation **Statistical Methods in Biomedical Imaging**[1] can be used to save a lecturer the time of creating his or her own.

Search Criterion: *correlation + regression + lecture/presentation*

[1] Ivo Dinov. UCLA STAT 233.
http://www.stat.ucla.edu/~dinov/courses_students.dir/04/Spring/Stat233.dir/STAT233_notes.dir/StatisticalMethods05.pdf

EXPLORE

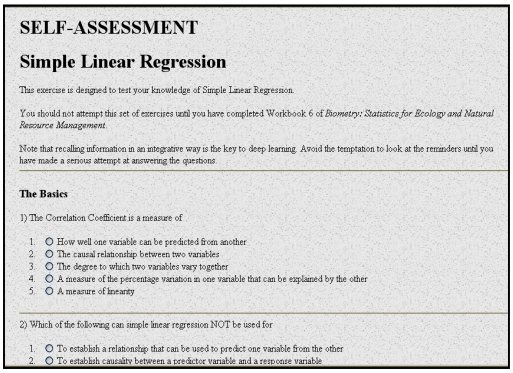
Applets like this one from **SticiGui Java Tools**[2] can be used to help students understand correlation and regression. Students can explore changes in the correlation coefficient and the data to see how it affects the regression line.



Search Criterion: *correlation + regression + applet + simulation*

[2] Phillip Stark. UC, Berkley. http://stat-www.berkeley.edu/~stark/Java/Html/Correlation.htm

ASSESS



Using self-tests like this one from **Biometry: Statistics for Ecology**[3], students can submit their answers and get immediate feedback in terms of a grade as well as questions or topics which need improvement.

Search Criterion: *regression + quiz/test*

[3] Arthur Georges. University of Canberra. http://aerg.canberra.edu.au/envirostats/bm/selftest.htm