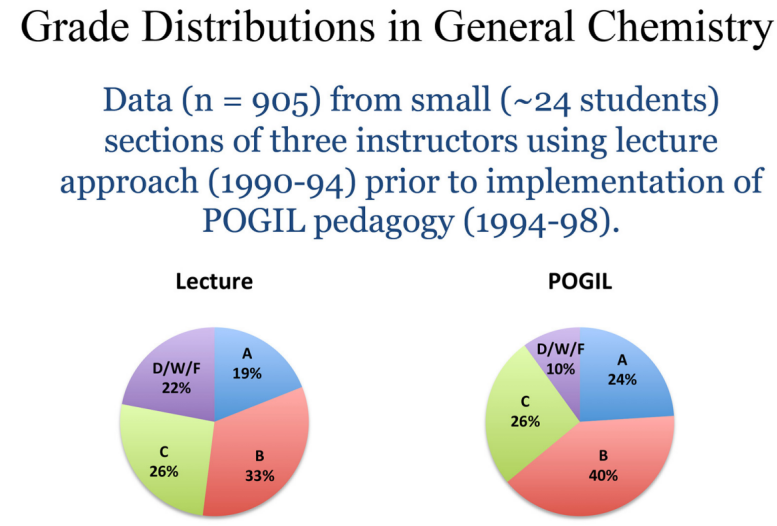
Meta Activity: POGIL Research 1

Process-Oriented Guided Inquiry Learning (see pogil.org) is a student-centered, group-learning instructional strategy and philosophy developed through research on how students learn best. The following figure is from a peer-reviewed research article about POGIL:



Farrell, J.J., Moog, R.S., & Spencer, J.N. (1999). A Guided Inquiry Chemistry Course. *Journal of Chemical Education*, *76*, 570–574.

Questions (7.5 min) Start time:

1. Based on the figure above:

a) How many years were considered? 8

b) How many instructors were involved? 3

c) How many students were involved? 905

2. Which grade categories improved after the instructors switched to POGIL?

D/W/F decreased from 22% to 10%. This result is arguably the most important. B's increased from 33% to 40%, and A's increased from 19% to 24%. In other words, more students passed, and most students' grades increased.

3. What does the research suggest about POGIL's impact on student success?

"Students in courses employing a POGIL instructional strategy achieved a significantly higher success rate (defined as receiving an A, B, or C in the course, as compared to a D, F or withdrawal) than students who had been taught by the same instructors in previous years using a more traditional lecture-oriented approach." (Moog 2014)