DATA SAY:
First-Year Experience students take a pre-test of the ACAT exam as a measure of CORE knowledge in the areas of Animal Science, Plant Science, Soil Science, and Agricultural Business. Seniors take the post-test. Reports for 2012-2013 indicate that first-year students score at the 14th percentile nationally, and seniors score at the 52nd percentile.

SO WHAT:
Although senior scores are competitive, faculty found that some students were taking upper level courses before completing the CORE.

HOW WE CHANGED:
Pre-requisites were modified so that CORE courses are completed on time. Faculty instituted pre-test and post-test embedded assessments in each CORE course.

WHAT WE GOT:
Improvements to the CORE include:
- Animal Science – Professors introduced Blackboard quizzes and a course review day to reinforce difficult concepts.
- Plant Science – Hands-on activities were added to the curriculum.
- Soil Science – Student activities were added to reinforce four problem areas including soil parent materials, typical bulk density range, nutrient loss/water quality and soil reactive surfaces.
- Agricultural Business – Competency-based review tests were required until students reached mastery of content.
DATA SAY:
Over 60% of students in Introduction to Animal Science demonstrated significant increases in pre-test/post-test scores, and 75% of students in the upper quartile demonstrated significant gains.
Likewise, students in Introduction to Soils demonstrated a 28 percentage point increase in scores over the duration of the course.

SO WHAT:
Student learning outcomes are improving in the CORE areas of Animal Science and Soil Science.

HOW WE CHANGED:
Tests are being developed to monitor improvement in Plant Science and Agricultural Business.

WHAT WE GOT:
Over time, senior ACAT scores are expected to increase.