

institutions have senior seminars and upper-level components in their program, the interdisciplinary component the upper-level in this program is unique.

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### **Improving Teaching: A CQI Approach**

University professors should consider implementing a CQI (Continuous Quality Improvement) approach to improving teaching. Industry had adapted the CQI approach to improving their products. Why shouldn't university professors do the same?

Improving teaching isn't just a one shot seminar, a special course, or an "after-the-semester" review of course evaluations. While these are useful tools for improving teaching, there are techniques that can be used regularly through out the semester that can result in continuous quality improvement in teaching. These techniques are easy to use and involve students. This presentation examines those techniques and the research basis for their use.

The first step in implementing a CQI teaching improvement program is to select 1-2 students in each class to be team leaders. The job of the team leader is to disseminate and collect the instruments used in the CQI process. The use of team leaders helps reduce any threat that might be involved in the process and allows the professor to concentrate on teaching instead of distributing and collecting instruments. After team leaders are selected the professor will need to spend about one hour orienting the team leaders to the process.

The basic process used in this CQI approach is to obtain continuous feedback from students. Before a class session starts, the team leader randomly selects five students and gives each an instrument the size of an index card. Brief instructions on what to do are printed on the back of the card. If any additional clarification is needed, the team leader will explain. At the end of the class the team leader collects the cards and gives them to the professor. The professor reviews the cards and then make adjustments in his/her teaching performance based upon this feedback.

Eight different cards are used. The cards can be used in a variety of way depending upon the feedback received and the structure of the class. The eight cards are:

- Interest Graph
- Question Digraph
- Movement Diagram
- Mannerisms
- Learned Most

Don't Understand  
Interaction Matrix  
Cognition Level

During the presentation the use of each card will be described and master templates will be distributed.

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### **Learning Styles and Student Achievement: Bringing Psychology into the Agricultural Classroom**

Recent research in the relatively new field of instructional psychology has provided useful, yet contentious, conclusions concerning the effect of learning styles on student achievement. The two major objectives of this paper are: (1) to discuss and summarize the recent literature in educational and cognitive psychology pertaining to the effects of environmental, emotional, sociological, physiological, and cognitive differences on student achievement, and (2) to provide an assessment and examples of how these research results can be usefully integrated into the agricultural classroom at the college and university level.

Learning styles are the biological and developmental characteristics that affect how students learn. There is a large and growing literature in educational psychology that provides evidence that students learn more in environments conducive to their individual learning style, including elements such as instructional environments, perceptual preferences, left/right brain hemisphericity, sociological preferences, and time-of-day preferences. If the major objective of our teaching effort is to promote and encourage student achievement, then taking learning styles into account could enhance our ability to achieve this goal. This is particularly true given the large and increasing diversity in agricultural student experiences, backgrounds, and career interests.

Some researchers have concluded that closer matches between student and teacher learning styles yield higher levels of student achievement; others suggest that students should learn to adapt to their teachers' styles. This controversy is discussed with regard to higher education classes in agricultural fields. Specific teaching methods, practices, and examples which take into account the diversity of learning styles are provided in an attempt to enhance learning in agricultural classrooms.

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