



## Assessing the impact of instructors and students as "transfer agents"

**Abstract:** *This project followed up with high school agriculture teachers to see whether their students carried informational messages beyond the classroom. It also investigated whether the level of training the classroom instructor received on a particular topic had an impact on student retention and use of the message.*

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**Budget:**  
\$12,500 for one year

### Background

Results of the ISU Sociology Department's 1995 Rural Life Poll suggested that most farmers manage manure based on their own personal experiences, rather than on information provided by agricultural scientists. A recent Sustainable Agriculture Research and Education (SARE) survey indicated that projects which involved local FFA chapters are effective but under-utilized as a means of promoting sustainable agriculture. Can FFA chapter members assume leadership roles in helping farmers take advantage of new information about soil and tissue tests?

Curriculum materials on early spring nitrogen checks and salesmanship were developed with the assistance of five secondary school agriculture instructors who received special training. (The ag teachers were Dave Briggs of Jefferson, Dean Dodd of Hampton, Tom Paulsen of Carroll, Berny Sohm of Webster City, and Dave Grunklee of Reinbeck.) The materials were also provided to 165 other agriculture instructors, but without any special training or background preparation.

Goals of this project were to contact all the high school agriculture instructors to determine how:

1. The five specially trained participating instructors used the educational materials

in the classroom, and the extent to which their students carry the projects beyond the classroom in public service, and

2. The performance and effectiveness of the students as transfer agents are impacted by the level of preparedness of the instructors (the five specially trained participating instructors vs. the 165 instructors who received no in-service tutorials).

### Approach and methods

A random-sample survey of half of the agriculture instructors was compared to information obtained from the five trained instructors. Questions dealt with the use of the early spring nitrogen (N) check curriculum and the involvement of the students as transfer agents for the information. Ninety-nine of the 148 instructor surveys were returned.

### Results and discussion

Use of the educational materials varied greatly according to levels of training. Nearly 60 percent of the respondents who attended the in-service sessions had incorporated the curriculum into their classes, while only 11 percent of the instructors who did not attend any training were using the materials.

According to the responses received from the trained instructors, an average of 100 producers were provided services explaining the early spring N check, while there were little to no producer services carried out among students of teachers who did not attend an in-service session.

FFA students in two of the five trained instructors' classes (in Hampton and Jefferson) conducted random surveys of the producers they had worked with to promote the checks. Comments from producers and one agribusinessman were very positive; in fact, there were no negative responses about the usefulness of students as transfer agents.

### Conclusions

- Intensive training for participating instructors makes them more likely to encourage students to develop real-world skills and assume community leadership roles.
- New curriculum developed and disseminated to agricultural instructors is not effective unless in-service training is provided. The more time devoted to educating

the teachers beforehand, the greater the chance that the information will be incorporated into the classroom.

- Producers are favorably impressed when they see students in their communities engaged in assisting with real-life activities.

### Impact of results

The ISU Agriculture Education Professional Development Program is now in place to develop classroom materials and offer in-service training for the materials, providing agriculture instructors with a year-round program. Sustainable agriculture educational materials are being developed along with training on how to use results from this project.

One example is the Horticulture Biological Control Curriculum, developed with Leopold Center funding, which was in-serviced through the Agricultural Educator's Professional Development program via the ICN and face-to-face. This curriculum was distributed to all instructors at their 1999 summer conference and is also available to them on the Internet.

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