With regard to appropriate instructional methods, advisors ranked 5 methods for use by interns. Table 3 illustrates mean rankings for each method and the number of first place rankings.

Table 3. Mean Rankings of Instructional Methods by Illinois Extension Advisors surveyed April 1981 N = 82

Method	Mean Ranking	No. of First Place Rankings
Agents' on-the-job instruction	4.67	66
Conferences and special meetings	3.05	6
Classroom instruction	2.67	9
Intern handbooks and study guides	2.62	1
Audio-visual methods	2.01	0

Age and previous internship experience comparisons with these rankings yielded no significant differences.

Additional competencies recommended for development during internship included Time management. Computer instruction was an additional instructional method recommended for inclusion in internship experiences. These two recommendations were common among all age groups and experience classifications.

All respondents preferred a 12-16 week internship. No significant differences were found among preferred length of internships when compared to age and previous internship experience. The respondents also felt that primary instructional responsibilities rested with the cooperating advisor.

The results of the survey suggested the following conclusions regarding competencies and instruction for quality collegiate level agricultural extension internship programs:

1. Advisors felt that communication skills, advisor role and function, and extension teaching methods should receive greatest emphasis during internship experiences.
2. The extension advisors felt they should be the primary source of instruction for the intern, using on-the-job instruction to demonstrate the essential competencies.

Based on these conclusions the following recommendations were made:

1. Internship responsibilities and functions of the advisor should be clearly specified before training of interns, with specialized advisor training to be provided by sponsor of internship program.
2. Advisors should have access to and receive updated instruction in efficient use of on-the-job instructional methods.
3. Communication skills, role and function of advisor, and use of extension teaching methodsshould be given major emphasis during an internship.
4. Time management skills should be highlighted during an internship experience.
5. The primary mode of instruction should be the "on-the-job" format, with some use of computerized instruction to assist in training interns.
6. Internships should last from 12 to 16 weeks.

Footnotes

1. Milton E. Larson. 1972. **An Internship Program for the Training, Exchange, and Transition of Vocational Education and Business, Industry, Agricultural, and Government Personnel.** Ft. Collins: Colorado State University.
2. Paul A. Miller. 1973. **The Cooperative Extension Service: Paradoxical Servant.** New York: Syracuse University.
3. Billy Lee Coffindaffer. 1961. Experiences of Beginning Cooperative Extension Agents and Their Implications for an Induction Training Program. Doctoral Dissertation, University of Wisconsin, Madison.

Students at the Interface Between College and Community

Mary Taylor Haque

Universities and colleges have often been categorized as "ivory towers" - unique settings isolated from the "real world" and occupied by professors and students who blissfully ignore the problems that confront surrounding communities.

Realizing that undesired isolation of community from university life can and sometimes does occur, I would like to present an approach to teaching that would minimize the separation between community and student life.

My approach involves establishing an interface between university and community, identifying a common ground where students act as a link between two somewhat separate territories. Through undergraduate students, projects of mutual benefit to both universities and communities can be embraced.

Undergraduate students, with fresh and eager minds and immense energies, are one of America's great untapped resources. They are, however, often overlooked as a resource, and have long been placed in a passive role within our universities. Teachers traditionally take the active role, gathering and compiling information, asking questions, and providing answers. Advanced learning, of an active and ongoing kind, can be stimulated by allowing and encouraging students to, first, ask important questions, and second, set about exploring new territories by finding their own answers.

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Once found, the depth of these answers can be measured by giving them to someone else to test and utilize. Asking questions stimulates curiosity, promotes interest, improves reasoning, and increases student ability to isolate and define problems. Students versed in the art of asking questions become intellectually athletic and spring easily into the phase of seeking solutions. Here they learn to discover sources, collect information, analyze data, and solve problems. When asked to communicate his or her solutions to an interested party, the student must learn to sift through the information collected, decide what data is most appropriate, and prepare a meaningful presentation for his or her audience. The presentation generally reinforces the importance of the cognitive functions, instills confidence, and generates enthusiasm in the student while imparting information to the audience. A tremendous sense of accomplishment and satisfaction results when students follow this three-part process of asking questions, seeking solutions, and giving answers. The process takes on special significance when taken out of the classroom and placed in the community. Students become teachers, and this reversal of roles stimulates awareness and promotes intellectual maturity.

Overlap

There are numerous areas where community and university interests overlap. Let us consider three recruiting, landscape design, and internship programs, where a student involvement in projects has resulted in a mushroom effect. Participation in these three areas by students in the Department of Horticulture at Clemson University has simultaneously expanded student learning, university efficiency, and community improvement.

Just imagine what student involvement in a recruiting program could do. An interested student at Clemson decided to address this issue and prepared a slide and tape presentation on "Horticulture at Clemson" for a seminar project. He is now mobilizing other students and preparing them to present this package at high schools in their home towns. Such student involvement frees faculty committees to pursue research, teaching, and extension duties within departments. It also ex tends the reach of the university into communities and provides an educational and vocational service to high schools around the state.

Benefits

Communities can benefit in many ways from students at the interface. Large numbers of people from communities all over South Carolina call Clemson University for assistance in landscape design. Our extension personnel simply cannot take the time required to do a design, be it public or private in nature. If these calls are directed to a professor of design, they may be screened and adapted as class projects. Students are thus able to work directly with clients on a wide range of projects. Clemson students completed

Landscape design students at Clemson University take an active role in finding projects, preparing a design, and improving their community through design. Warren McClam, a senior, presents a planting plan for Pendleton High School before the school board.

planting plans for schools, parks, playgrounds, downtown entryways, residences, churches, gardens, highways, and industries during the past year. In doing so, they have only achieved high visibility for themselves, but also for the university. Communities and people who look to Clemson for support are satisfied, and they in turn are willing to support the university. Many clients have donated money to Clemson in exchange for a landscape design, and a feeling of mutual good will and appreciation is realized.

To pursue the concept of placing students at the interface between university and community, one should follow a very simple three-part process. First, identify departmental, community, state, or national needs associated with one's area of expertise. Second, screen these needs and choose a project that is interesting and appropriate for classroom use. Third, double check to make sure that the project benefits the university, the community, and most importantly, the student.

Example

Using our third example, which deals with one of Clemson University's internship programs, I will illustrate the process of finding and completing a project involving students at the interface between university and community. This project, entitled "Strengthening the Horticulture Internship Program," was undertaken as a response to two needs: 1) The need of students to obtain more direct working experience in horticulture; 2) the need of the industry to find available employees with an interest in and knowledge of horticulture.

The need established, the next step was to identify a course that could incorporate a project on horticulture internship programs. Seniors in horticulture at Clemson are required to take two semesters of seminar, a course which was limited to researching journal articles in the library and making oral reports in class. Why not allow one of the four required reports to be a problem such as "Strengthening the Horticulture Internship Program"? Several of our seniors, having been through the internship program, were well aware of both the strengths and weaknesses of the program. Two students, one who had been through the program and one who had not, elected to work together as a team on this problem. They contacted horticulturally oriented businessmen over South Carolina and across the nation to determine which businesses would be interested in having a Clemson horticulture major work in conjunction with the internship program. A list of interested employers was compiled, and the name, address, telephone number, job description, salary range, and other pertinent information concerning each job were outlined on a form designed by the students. These forms together with available pictures, pamphlets, and comments from prospective employers, were placed in a notebook in the department head's office for student and faculty reference. This resource notebook provided by the students now acts as an ongoing interface between the university and the horticultural industry.

In addition to providing this resource notebook, the students reworked old administrative forms. The new forms briefly describe the internship program, outline student, faculty and employer responsibilities, and explain the process and requirements for completing the internship program.

Finally, to publicize the internship program, the students gave several departmental presentations, advertised in newsletters, and organized a package for extension leaders to present at horticultural association meetings.

The students who put together this package received credit in a course entitled Senior Seminar. They gained experience working with people, organizing information, writing business letters, and speaking in public. In addition, they made contacts with potential employers and future colleagues.

Conclusion

One word of caution to those undertaking a project with students at the interface between university and community. Keep "student" as the key word. Every project should be accepted and approached as a learning experience for the student, one that will provide a unique and challenging experience. When attacking an unsolved problem, student curiosity is aroused and with it a drive to satisfy this curiosity which works as a motivating force. When motivated, our undergraduate students have made significant contributions.

The potential exists for creating a strong edge at which universities and communities can meet, communicate, and work toward common goals. Undergraduate students are interested in and capable of acting as a link between the two. With supervision from teaching faculty, projects of various scope and impact can be completed that will benefit the university, the community, and the student.

Effect of Item Order on Exam Scores

Larry A. Nielsen and
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Abstract

The effect of question order on test scores was examined for a group of 289 students in a natural resources course. Four exams were assembled from the same questions by creating two orders of questions and then creating two page sequences for each order of questions. Comparisons between exams differing only in page order revealed a consistent bias toward lower page scores on the exams with more difficult initial pages. The bias produced differences in mean total scores of 5.9 percentage points for one pair of exams and 3.6 percentage points for the other. This case illustrates the influence of the examination environment on student performance.

Introduction

An integral part of education, whether in the classroom, or in continuing education programs (e.g., Denova 1979), is the evaluation of student response in the form of written tests. Test construction and administration, however, is perhaps that portion of the teaching-learning experience treated most casually by college instructors. Frequently, essay exams are created the night before a test and multiple-choice exams are composed hurriedly, without revision, to meet a crowded typing schedule.

Such nonchalance continues despite the knowledge that many factors affect the reliability of individual questions and entire testing situations. The relationship of questions to course objectives (Davis 1968), the subjective or objective question format (Wood 1970), the environment of the room (Green 1975), the order of questions (Nelson 1970), the cognitive levels addressed (Marshall and Hales 1971), the scoring method (Davis 1968), and the examination length (Green 1975) influence the way the test is taken by students. For example, the validity of a multiple-choice test item is influenced by length of the stem,

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