

Assessment of Experiential Education

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Abstract

One hundred twenty one former interns and 78 cooperators returned a survey to determine the effectiveness of the internship program at Colorado State University. The students considered the practical knowledge gained and an increase in self-assurance and maturity as the most beneficial aspects of the internship. Thirty-five percent indicated they were currently employed by the same firms or similar firms as their internship cooperator. Characteristics found by cooperators to be most lacking by CSU students were: related work experience, business and management skills and communication skills. The value of the internship was considered positive by both the student and cooperator and was ranked as an important criteria for selecting an employee.

Educating students in agricultural sciences for careers in today's agriculture demands greater technical skills plus a more holistic perspective of agriculture and its interaction with society. Providing opportunities for technical background development can be accomplished in several ways. However, internships with specific companies and organizations provide the most effective learning method for experiential education (Moser and Flowerday, 1983).

Additional hands-on experiences for urban, non-farm students interested in agriculture are needed to acquaint the student with production agriculture. Mayer (1980) and Seals and Armstrong (1983) suggest utilizing university and college faculty and resources to provide hands-on learning activities. An employer assessment of graduates by Broder and Houston (1986) indicated that Colleges of Agriculture should provide greater opportunities for leadership and internship experience in their degree programs.

This paper reports the results of a survey to determine the effectiveness of the internship program at Colorado State University as viewed by both the former students and the employer cooperators.

Program Description

The CSU internship program consists of the intern (student), the cooperator (employer) and the university coordinator (faculty member). The academic credit, additional income, practical experience, application of the "academic knowledge" to the "real world" are a few of the reasons mentioned by interns for participating. All are positively interacting in specialized career development. The student and faculty coordinator plan with a cooperator the internship program that best meet the needs and goals of

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all parties. An agreement that outlines the program is then signed. The cooperator may be from farming or ranching, agricultural businesses, research programs or state and federal agencies.

The faculty member supervises the internship program and plays a key role in the success of the experience for both the student and cooperator. The student submits periodic progress reports describing the work and the learning taking place along with any problems or concerns. Visitations by the faculty are encouraged but difficult to achieve. The student submits a final report and a self evaluation to the faculty coordinators along with an evaluation by the cooperator. These are then used to determine the final grade.

Survey Method

In the summer of 1987, 321 surveys were mailed to former intern students who had graduated from 1982-1985. Fifteen were returned as not deliverable. From the 306 delivered, 121 or 40% of the questionnaires were returned from former students. Three hundred and two surveys were mailed to the internship cooperators. Seventy eight usable responses were returned for a response rate of 26%.

Background of Interns

Eighty one percent of the interns indicated they had agricultural experience prior to the internship. Thirty-two percent had less than three years and 47% had more than eight years experience. Eighty two percent of the respondents reported they had one internship whereas 18% indicated they had two internship experiences. Eighty percent indicated their internship lasted for nine to 12 weeks.

Survey Results -- Former Interns

When former interns were asked how their internships were arranged, 50% indicated they personally had assumed much of the responsibility for the arrangements and 40% indicated they had some faculty assistance. Ninety-five percent indicated the arrangement was satisfactory with them.

Concerning the reports submitted by the interns, 88% indicated the reports were adequate in keeping the on-campus coordinator informed of their progress and 93% indicated the final report was adequate in concluding the internship. In general the faculty coordinators do not visit the students while on the internship. Thirty-eight percent said that was satisfactory however, 55% indicated they should have been visited by the faculty.

The survey also asked if the internship increased or decreased student interest in their major. Forty percent indicated it increased greatly and 43% said it increased somewhat with a combined total of 83%. Consequently 90%

indicated they did not change their major nor their concentration or emphasis within the major. However, 9% said they did change.

In response to a question concerning the workload assigned to them during the internship, 81% indicated it was "about right" while 8% thought it was too much and 11% thought it was too little. Following is the ranking in importance of the program characteristics considered most beneficial by the interns.

1. Practical knowledge gained
2. Self-assurance, maturity increased
3. New methodology learned
4. Interest in major increased
5. Contacts made for future employment
6. Personal weaknesses highlighted
7. Academic credit earned
8. Travel and cultural experience gained
9. Chance to use equipment not found at CSU
10. Financial benefits

The former interns were asked how the program could be improved. The following six items were listed and respondents were asked to check as many as they felt appropriate:

1. More communication between school, cooperator, and student before internship begins.
2. Allow more academic credit
3. Allow less academic credit
4. Better screening of potential cooperators
5. More visits to your place of work by an on-campus coordinator
6. Encourage cooperators to work with students more often in the capacity of "teacher".

Sixty percent indicated the College should encourage cooperators to work with students more often in the capacity of "teacher" and 45% indicated more communication between school cooperators and the student before internship begins. The remaining areas were checked by 20% or less of the respondents.

The survey asked four questions concerning employment in relation to their internship experience. Thirty-five percent indicated they were currently employed by the same firm or similar firm as their internship cooperator. Another 29% said they were employed in agricultural related areas and 17% were employed by a non-agricultural related firm. Thirty-three percent said they were offered a job by their cooperator. Of the 67% that indicated they were not offered a job by their internship cooperator, 30% said the firm was not hiring people at that time, while 6% said they were not satisfied with the firm.

Respondents were asked to give reasons they declined offers from the cooperating businesses. The highest, 21% said they had been offered a job by another firm that sounded better. Eleven percent declined because they were not satisfied with the firm and another 11% indicated they were returning to a family business or were self-employed. Eight percent declined because of low pay and another 8% declined because of job location. The remaining answers were scattered: those attending graduate school, "didn't like the type of work offered" and no response.

The interns were asked how valuable internship experience was to their current job. Thirty-seven percent indicated extremely valuable, 31% said fairly valuable and 19% said slightly valuable. Overall, 95% would recommend a similar experience to future students, 3% indicated, probably not and no one indicated definitely not.

Background of Internship Cooperators

Relating to the size of the organization, 37% of the internship cooperators indicated they had one to five year round employees, 20% percent said they had 5 to 10, 15% had 10 to 20 and 28% had 20 or more full-time employees. Thirty-five percent of the cooperators said that 75 to 100% of their employees were college graduates. Fifty-six percent of the cooperators were located only in Colorado however, 12% said they were national or international in scope. Fifty-eight percent said they work with one intern per year whereas 25% had three or more per year.

As far as the years involved with an internship program, 24% had been working with interns for four to five years, 24% six to ten years and 20% had been working with interns for 10 years or more.

Survey Results -- Cooperators

Locating Students

The cooperators were asked how they located students, 46% indicated they were initially contacted by the student seeking an internship, 28% work directly through a faculty member, 17% sent advertisements to the University and 9% went through formal interviews on campus. Ninety-seven percent said the method they used was satisfactory with them.

Time of Year for Internship

Forty-seven percent said during the summer, 27% spring, 14% winter and 12% during the fall was the best time to utilize an internship. Twenty-two percent indicated this time period was too short for maximum benefit.

Cooperator Ranking of Program Contributions

The cooperators ranked in order of importance items they considered valuable related to their cooperation with the CSU intern program. The following are the four most significant items.

1. The opportunity to help train and prepare students for future agricultural employment
2. The opportunity to hire a higher quality employee on a temporary basis.
3. The opportunity to keep in contact with academia and keep abreast of new developments through contact with student interns.
4. Economics -- The opportunity to hire a student intern that is not as costly as a full-time employee.

Following is the ranking in descending order of the program characteristics the cooperators considered most beneficial to the student.

1. Practical knowledge gained
2. Self-assurance, maturity increased
3. New methodology learned
4. Contacts made for future employment

5. Academic credit earned
6. Personal weakness highlighted
7. Chance to use equipment not found at CSU
8. Financial benefits
9. Travel and cultural experience

Future Employment Possibilities

When considering factors influencing employment, 30% indicated they often offer the intern permanent employment, 47% seldom and 23% said they never offer the intern permanent employment. Eighty-seven percent said they felt that CSU students were being adequately educated for careers in agriculture.

Following are the characteristics found most lacking by CSU students along with the percent of cooperators choosing that characteristic:

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| 1. Related work experience | 31% |
| 2. Business and management skills | 21% |
| 3. Ability to communicate | 20% |
| 4. Technical knowledge | 13% |
| 5. Personality traits | 9% |
| 6. Computer knowledge | 6% |

The order of the characteristics considered most important when employing a CSU graduate is as follows:

1. Personality
2. Related work experience
3. Communication skills
4. Leadership experience
5. Courses taken at College
6. References
7. Grade point average

The following experiences considered most important when hiring a CSU student are ranked in descending order with one being most important:

1. Employment/internship experience with you, the cooperator
2. Employment/internship experience with another employer in a related area
3. Rearing in an agriculturally oriented environment
4. Part-time employment while going to college
5. On-campus laboratory experience
6. Field trips

When asked how the internship program could be improved, 41 percent indicated more communication between school, cooperator and student, 25 percent indicated more visits by the on-campus faculty coordinator, 18 percent said the cooperator needed to work with the intern more in the capacity as "teacher" and 16 percent said allow students more academic credit. One hundred percent of the cooperators indicated their opinion of the CSU internship program was positive and wanted to continue working with the CSU student interns.

Summary

The internship program provides hands-on opportunities to a career related experience. Each internship is unique and individualized. Consequently, the most beneficial aspects of the program as noted by the student interns was the

practical knowledge gained and the self-assurance and maturity that developed during the experience.

Results of the survey indicate that 31% of the interns were offered jobs by their cooperator. Both Cessna (1977) and LaProd (1977) had reported 56% of the interns were offered jobs by the firms that had hosted the internship. The fewer job offers may be that job opportunities have decreased. Thirty-three percent of the cooperators participating with the interns were not hiring full-time employees. A substantial benefit to the intern is the probability of full-time employment with the cooperator.

The opportunity to help train and prepare students for future agricultural employment and hiring high quality employees on a temporary basis were primary reasons the firms cooperated with the CSU internship program. As perceived by the cooperators, the program characteristics considered most beneficial to the students were also those identified by the interns. The importance of the practical knowledge gained and the self assurance and maturity developed by the interns are considered the most important of nine different characteristics.

Obtaining related work experience, developing business and management skills and learning to communicate more effectively were the three characteristics found most lacking in the CSU interns. The internship program, by providing hands-on experience gives the student an opportunity to strengthen these three areas.

When employing a CSU graduate, personality, related work experience, communication skills and leadership experience were considered most important by the cooperators participating in this survey. Employment/internship experience with the cooperator or another cooperator in a related area is considered more important than being reared in an agriculturally oriented environment. This points out the value of an internship for students both rural and urban, especially when most of the cooperators are in the "service" portion of agriculture and not in production agriculture.

Overall this survey substantiated the unique value an internship plays in supplying experiential education to the student. The first hand knowledge of a potential career facilitates a smoother transition from the campus and classroom activities to the future career. The value of this experience was not only viewed positively by the intern but was ranked as an important criteria for selecting an employee as determined by the cooperators. This experience not only provides the hands-on learning for both rural and urban students, but enhances specific skill development for all students that facilitates job placement.

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