

WORK EXPERIENCE
and
EXTRACURRICULAR ACTIVITIES

Name _____

	FALL	SPRING	SUMMER
Yr. 19 _____	<p><u>Activities & Responsibilities:</u></p> <p><u>Employment - Source & time involved:</u></p>	<p><u>Activities:</u></p> <p><u>Employment:</u></p>	<p><u>Activities & Employment:</u></p>

casation, I have written those showing substantial improvement, to congratulate them and encourage continuance of forward progress.

**Record of Work Experience
and Extracurricular Activities**

Exhibit C illustrates the form used by the author to gather these details. Prior to using this approach, I really did not know the involvement of my advisees. This data is most useful as one advises on course loads and as reference letters are written. By keeping this updated, students can better recall the specifics of their involvement. The more a student reveals about himself, the more clues there are for understanding and really knowing him as a person. I found also, prior to use of Exhibit C, as well as the other exhibits, that I would sometimes ask the same question more than once. Now I keep everything recorded and can avoid such embarrassment, and can develop a much deeper and broader knowledge of each student.

Exhibit D

<p>Picture or ID card in upper lefthand corner</p>	<p style="text-align: right;">Name _____</p> <p style="text-align: right;">Option _____</p>
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Notes from Office Visits and Conversations

Notes from Office Visits

Exhibit D reflects a page devoted to notes I feel necessary following each visit or phone call. Again, it is keeping track of seemingly minor details that lets a student know you are sincerely concerned about him. I like to attach his ID card or photograph in the upper left-hand corner, to assist in keeping names and faces straight during the early stages of contact:

File Organization

A manila-type folder is used for the student file. Two-hole access binders are used on both the left and right sides of the file, binding materials at the top. On the left side, the order is as follows, with

- (1) being on top
- (1) Course program — actual
- (2) Course program — worksheet
- (3) Work experience and extracurricular activities

On the right side, the order is as follows, with (1) being on top:

- (1) Notes from visits and phone calls
- (2) Biographical and family data
- (3) A senior check sheet (when available)
- (4) Test scores and entrance details
- (5) Correspondence

Conclusion

This article has described one advisor's attempt to gather and organize relevant information about an advisee, needed as a basis for advising that student. The privilege of counseling students in regard to personal and

educational matters is precious. We must approach the task with dedication by offering the very best advice possible. As a prerequisite for giving that advice, we should insist having the necessary background information.

References

1. Campbell, John R., *In Touch with Students ... A Philosophy for Teachers*, Chapter 4. Educational Affairs Publishers, P. O. Box 248, Columbia, Missouri, 1972.
2. Weigers, Howard L., "So You Want To Be An Advisor," *The Journal of the National Association of Colleges and Teachers of Agriculture*, Vol. XVII, No. 2, (June 1973).

USE OF UNDERGRADUATE TEACHING LABORATORIES TO CONDUCT RESEARCH

John S. Avens and Byron F. Miller

Abstract

A case study reporting success in learning behavior when students become a part of original ongoing experiment to solve a real world problem. Student preference for such involvement reported.

Direct contact with hundreds of undergraduate students at Colorado State University through teaching and advising over the past 7½ years, leads us to believe many undergraduate students want to do something real, meaningful and useful as part of their educational experience. That is, they want to supplement their lecture/text book learning with real experiences they can participate in firsthand rather than watch or just hear about. They want to contribute to the welfare of mankind and they want to do it now. They don't want to wait until they graduate. They want to get their hands dirty, learn by direct experience and be a useful part of what is going on in the real world.

Teachers of agriculture who are also involved in agricultural research have an excellent opportunity to provide this "learn by doing something real" experience for some of our undergraduate students, while at the same time accomplishing the objectives of their research interests and programs. Why not allow students, through undergraduate laboratory courses, to conduct useful research to help solve "real world" problems? Thus, they can learn by contributing and getting directly involved.

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Published with the approval of the Director of the Colorado State University Experiment Station as Scientific Series Paper No. 1998.

One Case Study

A teaching laboratory experience was provided in which undergraduate students participated directly in conducting an original ongoing research experiment to help solve a real problem concerning microorganisms and poultry meat.

The students' challenge was to determine the effect of thawing method on the number of microorganisms on frozen turkey carcasses after thawing. Their work was done as part of the food microbiology unit of a course, "Poultry Products Technology". Many students had not previously had a microbiology course. This laboratory exercise helped them to visualize and experience bacteria in food and thus provided reinforcement to the classroom learning sessions on food microbiology.

The experiment had seven treatments (thawing methods for frozen turkey carcasses), as listed in Table 2, with seven replicates of each treatment. The experiment was conducted by four different classes over a 4 year period 1968 to 1971 (Table 1). The measurement was number of aerobic microorganisms (bacteria and molds) on the skin of the thawed carcasses.

Each student analyzed one replicate turkey carcass, thawed by one of the seven methods (Table 1). The analysis involved removing skin samples, four from each thawed carcass, blending them separately in diluent fluid and dispensing aliquots of the dilution into petri dishes. Melted agar growth medium was then poured into the petri dishes and swirled to mix with the sample. When the medium had solidified, the petri dishes were incubated until each bacterial cell from the turkey skin sample had multiplied into a visible colony which could be counted. Aerobic microorganism counts were multiplied by the dilution factor and an average microorganism count per cm² of carcass skin was calculated for each of