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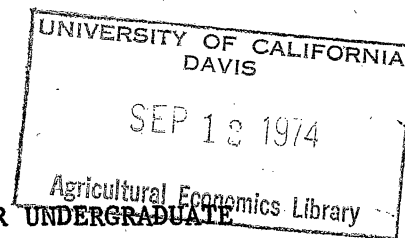
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Agricultural
Economics aspects 1974



OFF-CAMPUS WORK AND STUDY EXPERIENCE PROGRAMS FOR UNDERGRADUATE
STUDENTS IN AGRICULTURAL ECONOMICS AND AGRICULTURAL BUSINESS MANAGEMENT*

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Historical Perspective

The concept of integrating occupationally based study and work experiences as part of the curriculum for undergraduate students in higher education is not a new idea. However, there has been a resurgence in the awareness and use of the concept for agricultural students in recent years. Defined broadly, the concept encompasses any off-campus work or study experience with a private business or government agency which is organized by the university for which academic credit and/or pay is received by the student. Some of the more common names given to these efforts include "work-study programs", "internships", "sandwich programs", and "cooperative education programs". This paper will discuss the usage of such programs in historical perspective, discuss their philosophical basis, discuss the place of programs in the curriculum, describe the nature of programs currently in use by departments, discuss the advantages and disadvantages of such programs to the student participant, the university, and the participating business or agency, and detail an operational framework for program implementation.

* Presented at the annual meetings of the American Agricultural Economics Association, Texas A & M University, College Station, Texas, August 21, 1974.

** Professor of Agricultural Economics and Agricultural Business. Special thanks are due W. D. Gorman, D. L. Costley, and L. B. Catlett, my N.M.S.U. colleagues who reviewed the paper and provided important suggestions.

Long before the development of today's extensive educational system, Francis Bacon in the 17th Century said that "studies teach not their own use; there is a wisdom without them, and above them, won by observation". In these words, we find a philosophical root for work-study programs. In early times, society depended upon apprentice programs to teach craftsmen the trades necessary for society to subsist. The little theory a craftsman needed could easily be taught along with his practical training in the apprentice program. However, as time went on and society's demands for technological progress increased, the complexity of the educational process increased beyond the scope of the apprentice programs which were not able nor designed to cope with equipping the rising class of engineers and scientists for their professions.

In the late 1800's, recognizing the need for the integration of theory with practical application, engineering schools, in particular, tried various ways to combine them. Some colleges introduced regular shop courses into their curriculums to give their students a practical feel for what they would encounter once they were in industry. Worcester Polytechnic even went so far as to operate a shop on a commercial basis producing articles for sale. Others advised work for a period of 15 months in industry between their junior and senior years. Some colleges also required students to do summer work in approved industrial plants.

The educator given formal credit for combining work and study as an integral part of the educative process in higher education is Dean Herman Schnider who inaugurated cooperative education at the University of Cincinnati in 1906. He believed that if college students would spend a portion of their time working in industry, applying the knowledge and

theory gained in school to practical work situations, their education would become richer and more meaningful. While originally his students alternated between the classrooms and industry on a weekly basis, the periods of alternation have since lengthened so that most universities using the so called coop program now use alternating quarters or semesters. On a somewhat less structured basis, institutions have also established what may be referred to as a non-resident term where students may alternate at regular or irregular intervals working with various business, industrial, and service organizations.

Recent History

Prior to 1950, it was not unusual for agricultural curriculums to include a "practical experience" component. With burgeoning student bodies after World War II, there were adequate jobs for graduates; and with an increased number of academicians espousing the virtues of "education for education's sake", work experience programs fell in favor. This stance has now reversed itself--no doubt spurred by the student unrest in the 60's which included a cry for "relevant education". The growth and success of Colleges of Technology inside some of our major universities, as well as new institutions outside, aided a turnabout. Student awareness of the need has also heightened in the face of a tighter job market. So, now in the 70's, it is fashionable to be "practical" and offer work experienced based programs.

A number of reports verify these general conclusions. From the White House Conference on Youth in 1971, one youth stated:

Educational systems and programs must be made relevant to students' life situations and the probable futures that their

world will offer. Students must be permitted to explore various areas of interest.....Students need to be allowed to learn outside the formal classroom and to receive academic credit for this they also need to move freely between vocational and academic programs .¹

The internship concept also was given impetus by the Report on Higher

Education in 1971 which states:

Thus it is argued that the task is.....to meet the demand for relevance in education by developing new curricula. We doubt whether many students have had sufficient exposure outside the educational system to know what a relevant education might be. Both students and a faculty need more experience away from the campus... ..Educational internships in government, industry, and social service, cooperative education programs, work-study programs, and the like should be greatly expanded.²

The Carnegie Commission on Higher Education (also in 1971) issued a special report with a rather strong statement:

We believe not only that all colleges should encourage prospective and continuing students to obtain service and work experience, but also that some colleges may wish to require it before admission or at some point during matriculation and could, in fact, in appropriate instances, grant credit for it toward completion of degree requirements. The report recommends further: that the expansion of post-secondary educational opportunities be encouraged outside the formal college in apprenticeship programs, proprietary schools, in-service training in industry, and in military programs; that educational credit be given for the training received, and that participants be eligible, where appropriate, for Federal and State assistance available to students in formal colleges.³

¹ Wade Green, Youth's Agenda for the Seventies, A Report on the White House Conference on Youth with a Summary of Recommendations, the JDR 3rd Fund, New York, New York, 1971.

² Report on Higher Education, U. S. Department of Health, Education, and Welfare, Office of Education, Washington, D. C., 1971.

³ The Carnegie Commission on Higher Education, Less Time, More Options--Education Beyond the High School, McGraw Hill Book Company, January 1971.

There is also a revival of the focus in recent years on "non-traditional" educational methods in higher education. A research report of the American Association for Higher Education summarizes the situation as follows:

One of the most dramatic developments on the academic scene in recent years is that of granting credit to students for learning in non-traditional ways. There seems to be the realization now that classroom learning--however we conceptualize it--is simply no longer sufficient; it must be supplemented by other kinds of experience--at work, in the home, through internship and field activities, and in travel and service abroad.⁴

The Commission on Non-Traditional Study concluded that non-traditional study is the revival of

.....an attitude that puts the student first and the institution second, concentrates more on the former's need than the latter's convenience, encourages diversity of individual opportunity, and de-emphasizes time and space or even course requirements in favor of competence and, where applicable, performance. It is not a new attitude; it is simply a more prevalent one than before.⁵

Philosophical Considerations

As workers in an applied discipline, one would doubt that agricultural economists would completely reject the notion that occupationally based industrial experience away from the campus would have no merit whatsoever. Disagreement probably lies in the amount of academic credit that might be formally given for such experiences and the most expeditious way to

⁴ Ohmer Milton, Teaching or Learning?, Research Report No. 6, American Association for Higher Education, May 1, 1971.

⁵ Diversity by Design, abstract of the major findings and recommendations in the Commission on Non-Traditional Study's final report. CNS, 888 Seventh Avenue, New York, New York, February 2, 1973.

integrate them into the curriculum. During a period of study leading to a baccalaureate degree, most agricultural economists would likely agree that a student should develop a capacity for: (1) critical analysis and problem solving, (2) taking a responsible position in society, (3) forming a philosophy of life--living harmoniously with one's self, other people, and the physical world, and (4) continuing one's education. Using more general categories, the objectives of a university education might be considered to fall into two groups: the first pertains to individual development for self understanding and fulfillment, good citizenship, and living harmoniously with other people and the physical environment, and the second involves career education which includes the component of developing some employable skills. In curricular discussions among agricultural economists, there are wide variations among the percentage emphasis that each of these two areas should receive. To the extent that one argues that the percentage for the career education emphasis should be relatively higher, one would suppose that such an individual would also support off-campus work-study based experiences to a greater degree.

The majority of those individuals who would espouse work-study experiences as an integral component of a university education are likely in the "progressivist" camp with regard to educational philosophy. The progressivist believes that a person is an experiencing organism, an integral part of the flow of events, relations, feelings, thoughts, and things. They believe that the student's behavior is wholly within the realm of his experience. Like other animals he is engaged in the recurrent conflicts; the defeats and victories of the struggle for existence, but his powers are very different. This is especially true of his intelligence and his ability to face and resolve problems. Practicing this ability has enabled him to survive over other species and accordingly, it is the practice and improvement of intelligence that is properly central to education.

To utilize his intelligence, it means that he must also make full use of his environment. More exactly, he must have the opportunity to share freely, steadily, and richly in the events of nature and culture immediately around him. A university or any other school is good when it enables him to grow through such sharing, when it provides ways of expression for his total behavioral pattern, and when it permits him to act in relation to the actions of others. It is bad when it blocks expressions of his feelings, when it denies satisfaction to his curiosity, when it turns him away from his own problems and interests, and when it fails to provide an opportunity for him to cope with them directly, overtly, and experimentally.

Students learn from things that occur in all phases of life--in and out of school. Educative versus miseducative learning is the choice. The first is expertly directed toward constructive consequences and evaluated according to a clear conception of the good life, a desirable culture; the other is non-directed, determined by unexamined, static, conflicting values. If education is to deal with modern problems, it must shift radically from the traditional curriculum of fixed courses, fixed hours, fixed rules, and fixed objectives toward a widening pattern whose subject matter encompasses nothing less than the entire complex environment.

Educational institutions must be concerned with all parts of life. In short, a public education that walls itself off from the most deeply felt aspects of living and concerns itself with courses and academic requirements that are the least deeply felt aspects of the student's experience is an irresponsible education. Students work most intensely

at tasks in which they are motivated by their impulses, desires, and talents. To force effort upon students when they are not in the least interested and they do not feel or see any significance in what they are compelled to do, can only mean that they will probably learn far better to dislike that kind of effort more than they will learn the content or skill that is the ostensible educational objective.

Proper content of curriculum is an experience that is educative. Whatever enables one to grow is important in curriculum. The well constructed curriculum is not unlike a laboratory. It is increasingly experimental, and all its participants--teachers and students alike--are, in some fashion, staff scientists. Hence, it is necessary to avoid rigidities and requirements, absolute boundaries, mechanical standards and frequency solutions. Just as the experimental method is flexible, exploratory, tolerant of the novel, curious to try the hitherto untried, so, too, is its educational symbol.

Progressivists are often charged with confusing work and play, that education is itself hard work and "sugar coating" of courses or skills by reducing them to "fun" merely encourages lacks of these standards. Progressivists reply that to identify schooling with work and much outside activity with play means again that the former is divorced from on-going experience while the latter remains an intimate part in such experience.

In summary, progressivism is the theory in practice of an American culture and the process of growing up. It is the philosophy that is liberal in character. It prides itself on tolerance, continuity, and progressive experimentation. It is a philosophical basis for work and study experience programs.

Work and Study Experience Programs in the Curriculum

In general, a curriculum may include work and study experience on a job for three purposes: (1) beginning experiences early in the curriculum which serve as an occupational exploration, acquainting the student with opportunities and requirements in the field, (2) experiences in the middle and latter half of the curriculum which serve to give the student the opportunity to test theory against practice in which serves to teach skills which the institution feels are best learned on the job rather than in the academic classroom, and (3) experiences near graduation or shortly thereafter which are correctly characterized as internships prior to entry into professional practice.

With regard to the first category which may be somewhere under the classification "orientation experiences", there are few used at the university level. Here the goal is usually one of having the student explore the field and experience its requirements before undertaking the major portion of his professional course work.

The variety of programs in which agricultural economists seem to be most interested fall within the second category of "operational experiences". These are designed to teach certain skills on operational procedures which the institution does not or cannot teach. These programs give students the opportunity of testing theory against professional practice. A common reason for including such experiences is the tendency for some institutions and their faculties to prune from their offerings those courses which are deemed "vocational".

For most purposes, the term "internship" is probably erroneously used in agricultural economics circles. The term properly describes the activity of the person who has completed all the academic requirements for admission to a profession but who must undergo a period of occupational experience in the profession prior to his "certification" as a recognized practitioner. Thus, the internship occurs either just prior to graduation and the receipt of the degree, or where licensing examinations are given, after a period of satisfactory experience. The internship is designed as a transition to professional practice wherein the neophyte applies learning theory to actual practice, adapting himself to the demands of the employer and fellow employees. The intern also experiences the conditions of practice and usually learns some operational skills not taught in the academic classroom. The distinction between an intern and a coop student is subtle but important because it affects matters such as placement, supervision and timing of the experience, and credit-pay decisions. The intern is one who is master of the basic academic content of his profession and who has been screened for entry into the profession. He is treated, during the internship, as a member of the profession albeit as a beginner. He serves his internship under the direct supervision of a practicing member of the profession. For years, of course, it has been customary for university students involved in teacher-education to "intern" as a student teacher as part of their regular curricular program. The work internship is most likely understood in the context of the requirements to become a medical doctor.

On the other hand, the cooperative student is a student employee who is learning part of the procedures of the profession on the job and is supervised by senior employees or unit supervisors. From the cooperative student's experience comes not acceptance by the profession, but increased skills and knowledges of the job, a better understanding of actual practice, and, hopefully, a motivation for increased performance back on the campus; a background which can sharpen classroom questioning and discussion and produce a more insightful self understanding of strengths and weaknesses.

Summary of Programs Offered

Scope

Programs included in the analysis are those using a work experience oriented environment to produce desirable education outcomes. While all work is educational in some context, those students who work during the summer or at any time during their college education in jobs which they secured for themselves and which have no connection to the university except that they may have gotten a job through the university's placement service are excluded from consideration. Included in the analysis is the full range of work programs that are college or university sponsored to the extent that they are considered an important component of the curricular program. Also included are the so-called coop education programs for which no academic credit is given. Any work-related program for which academic credit is given is included.

Usage

In April 1974, questionnaires were sent to 54 state supported universities offering a four-year undergraduate program leading to a Bachelor of Science degree with a major in Agricultural Economics and/or Agricultural Business Management.⁶ Forty-seven universities responded for a 87% rate. To the question, "Is it possible for an undergraduate student to receive academic credit for participating in an off-campus activity that includes a work and/or study experience with or without pay?", 30 or about two-thirds of the total respondents answered "yes". Two others indicated that a program would begin in the fall semester, 1974. To a second question, "Is it possible for an undergraduate student to engage in an off-campus work experience organized by the university (other than usual placement office services) related to his major academic interest with pay but without credit?", 18 (38%) responded with a "yes" answer. Three others indicated that a new program would begin soon.

Names given to the programs include the following: Agricultural Business Internship, Agricultural Internship, Summer Internship, Management Training Internship, Coop Study, Traineeships, Internship in Agribusiness, Outreach, Youth for Action, Supervised Practice, Work-Learn Program, Work-Experience, Field Study, and Coordinative Internship. Excluding the nine universities who answered "no" to both initial questions, only one of the remaining 38 indicated that they plan to

⁶The major land grant University in each state plus Cal. Poly. St. U., Texas Tech U., Southern Ill. U., and W. Texas St. U.

contract or reduce activity in their programs in the next five years; one other indicated the matter was uncertain, five indicated they intended to continue the level of activity in the programs as it is now, while the rest replied that they intended to expand their programs of this kind in the next five years. This substantiates a current high level of interest among agricultural economists in work-study programs and a general resolve to increase their use in the future.

Participation and Duration

Twenty-six departments reported a total student participation of 480 in the past three years or an average of 160 per year. The range on a per-year basis was one to 24 with an average participation of six. Program durations varied from six weeks to a full semester of 16 weeks. The average was 11 weeks. Five departments reported an average program duration of 16 weeks, indicative of utilizing a full semester. Fifteen other departments reported either a 10 or 12 week average program duration. One on a full coop program reported 32.

Program Availability

Sixteen departments opened their program only to juniors and seniors while 10 others said their program was available to lower division students as well. However, three of these would not accept freshman students in the program.

Credit Awarded

Credit awarded per experience to students averaged six quarter hours for those students participating in the past three years. One department reported a 16-week program for which 20 quarter hours of

credit was awarded. Another department indicated a new program under way that would give a similar credit award. However, the majority of departments awarded between three and six quarter hours of credit per program experience. Minimum credit awards per experience averaged 3.4 quarter hours with a range from 0-15. With regard to the maximum allowed per experience, departments reported an average of nine quarter hours with a range of three to 20. When asked about the maximum hours of credit allowed within a total Bachelor of Science degree program, an average of 12 quarter hours with a range of 4 to 24 was reported.

Basis for Credit Awarded. Half of the departments indicated that the academic credit awarded was a function positively associated with the time spent in the program. Of the group, 17 indicated that the quality and/or amount of reports filed by the student was also a variable influencing the amount of credit awarded. A general rule seemed to be that one credit was awarded for about each two weeks of experience in the field. Eighty-five percent indicated that a final report was required of the student. Two departments indicated there was no final report required and one indicated that it was at the discretion of the advisor. In terms of frequency of reports required from the student, 16 of the 26 required only an end-of-program report; four required weekly reports, two required monthly reports, and four required intermediate reports based on the discretion of the advisor.

With regard to the question of who provided the transportation for the student to the program and return, 21 of 26 reported that the student was responsible for his own transportation while three indicated that the business or agency paid, while two others indicated a sharing of this responsibility.

Benefits Accruing from Work and Study Experience Programs

Answers regarding program benefits were given by faculty who were asked to reflect what students and cooperators thought were benefits. However, it is difficult to make such responses without introducing some personal bias.

Benefits to the Student

The question was asked, "According to student participants, what are the major benefits accruing to them?" The answers to this question were stated in a number of ways. The most frequent response had to do with the gaining of real world experience, the opportunity to seek economics in action and the insight gained into the problems of an actual manager. The terms "hands on learning" and "relevant education" were other ways of expressing this merit. Some said it gave them the opportunity to learn how a business works. Some noted that this experience component was very helpful in preparing their resume. These kinds of ideas were mentioned as reasons from 22 of the respondents or about two thirds of the respondents.

The next group of benefits mentioned by nine respondents had to do with the improvement in the appreciation of academic courses when the student returned to the campus. The students said their view was improved because they had the opportunity to observe relevance of the courses to the work world. An improved view of the applicability and relatedness of classes to the real world was another way of expressing this idea. An equal number of respondents said the students indicated that the opportunity for a job and the opportunity to earn money was of an equal importance.

In addition to these two major sets of advantages as expressed by the students, there were a number of others which include the following: an improved self confidence, an improved perspective of a job in the area of one's interest, and contacts or expanded job opportunities. One respondent observed that 80% of work-study students were offered jobs by the business or agency for which they had the experience. Others included vocational experimentation, the chance to test the application and usefulness of their knowledge, a better idea of what jobs are like and a better idea of what education is needed, a chance to get away from the campus, academic credit, and opportunity to make decisions, to learn to assume responsibility, to develop skills in defining problems and applying academic knowledge, to work with people, and that the experience created an awareness that they were not ready for top level management merely because they had completed a Bachelor's degree.

Disadvantages

While the vast majority of students report a great deal of satisfaction, some disadvantages were reported. Some question the program value for other than an orientation program. Others report they were used too much as a "hired hand" and learned very little about management decision making. These disadvantages would likely disappear with proper pre-experience communication among the student, cooperator, and university supervisor so that there is a clear understanding of what is expected of each other.

Summary

In summary, the merits reported by agricultural economics students reported are consistent with other studies.⁷ Basically, they include: (1) students find greater meaning in their studies as theory and practice are more closely related; (2) the coordinating of work and study increases student motivation via seeing connections between the jobs they hold and the things they are learning on the campus results in greater interest in academic work; (3) for many, work experience contributes to a greater sense of responsibility for their own efforts, greater dependence on their own judgments, and a corresponding development of maturity; (4) because the experience involves the students in relations with co-workers who come from a variety of backgrounds, and because success in these jobs requires constructive relationships with colleagues, most students develop greater understanding of other people and greater skills in human relations; and (5) programs help markedly to orient students to the world of work.

Benefits Accruing to the Business or Agency

The question was asked, "According to business and government agency participants, what are the major benefits accruing to them?" By far the most overwhelming benefit mentioned by 20 of the respondents was that it gave the business or agency a chance to look over a prospective employee without any obligation. This tended to be helpful to their recruitment program. A second major category of benefits had to do with public relations with the community and the university. Some felt that it gave

⁷ Wilson and Lyans, Work-Study College Programs, New York: Harper and Brothers, 1961.

them a progressive image and considerable public relations value with potential employees. One mentioned that it promoted the company and gave the company visibility as the student returned to this campus after his experience and shared a good feeling about the company with his fellow students. Other reasons include the following: to get a fresh look at a particular job, a chance to get better acquainted with university programs, a chance to get better acquainted with student capabilities, a useful input in designing management development programs, an aid in establishing criteria for recruiting purposes, a chance to understand new employee motivational factors, a chance to get valuable suggestions from the student's final report with regard to company problems, and that the students sometimes provided a contribution far greater than the wage for which they were paid. Another important factor mentioned was that it reduced training time for new employees if they hired the student who had just completed the program. Some companies felt that the source of seasonal help of rather high quality was a significant benefit.

These advantages to the business or agency are also consistent with other studies. Benefits may be summarized as follows: (1) a mutually important industry-college relationship is enhanced, (2) the student serves as a "goodwill ambassador" for the cooperator with faculty and students upon return to the campus, (3) the infusion of fresh young people from an educational environment can provide new ideas and viewpoints which can be refreshing, stimulating, and helpful, (4) the program can be an excellent source of temporary manpower, and (5) cooperators

can look over potential employees without obligation, and if they eventually hire the student, less cost and time is required for in-service type training.

Benefits to the University

The respondents were asked, "What are the benefits accruing to the university?" The most frequently mentioned benefit (10 times) was that it was good public relations with business firms and the general community. Mentioned an equal number of times was that it offered an opportunity to broaden the base of educational offerings available to students including facilities and contributed an effective teaching method which was not available on campus. Six mentioned that it gave better working relationships with industry while five noted that it resulted in better motivated students and less "senioritis". Five respondents indicated that it provided case material for the classroom and was helpful in providing classroom feedback both with regard to particular courses and to how well "we are doing" with regard to the total curricula. Seven noted that the placement of students was easier if they had participated in such a program. Other reasons mentioned one or two times included: happier students, that it convinces students that the university is really interested in their education and that the university understands the importance of the work world in education which tends to reduce the "ivory tower" concept of professors and university people, faculty learned something about the real world, variety in curriculum, research input data and better research cooperation with industry, an aid in student recruitment, an aid in extension programs in agribusiness,

more college support from agribusiness, and a source of speakers for campus activities.

Again, these are consistent with findings of other studies: (1) the establishment of a relationship with the cooperators can reduce the "isolationism" of the college and result in a better rapport with the commercial community, (2) classrooms are stimulated by the feedback students provide that have participated, (3) it broadens the base of facilities the university can offer--often the student gets a chance to use specialized equipment not available on campus, (4) placement of students becomes much easier, (5) fund raising activities are often aided substantially as cooperators become more willing to support research, give scholarships, provide campus speakers, and provide data for projects, and (6) recruitment of students is enhanced as students are attracted to universities having such programs.

Operational Formats for Program Implementation

It is important that a written operational format be evolved for the implementation work and study experience programs even though details will necessarily vary among departments. Based on the responses received by the survey and the author's experiences, the format should include:

I. Set of Guidelines for Distribution to Students and Cooperators:

For general student distribution and to cooperating agencies, a set of guidelines should be developed to inform the student about the programs available, how to go about applying for participation, and the program requirements. The guidelines should include:

1. A statement of the objectives of the program.
2. A statement of the requirements and regulations of the program to include:
 - a. Who is eligible.
 - b. What is the minimum grade point average (if any) necessary.
 - c. What is the minimum and maximum credit allowed per experience and within the total B.S. degree requirements.
 - d. A statement regarding stipends.
 - e. A statement of the various alternative programs available (if more than one).
 - f. A statement detailing nature of memorandum of agreement required.
 - g. A statement concerning the reports required and the grading procedure used.
 - h. How and when to apply.
 - i. A statement of student responsibilities as in regards to housing, transportation, board, insurance, liability, etc.
3. A statement regarding the responsibilities of the cooperator and the university.

II. Student Application

It is recommended that interested students be required to complete a formal application. This will insure that serious and sufficient thought has been given to the matter. The application should include:

1. Name, campus address, and telephone number.
2. Option in which enrolled for degree.
3. Name of faculty advisor.
4. Credits earned to date.
5. Grade point average by semesters and cumulative.
6. Time available to devote to work-study--number of weeks and desired period.
7. Statement as to "why you want to participate" in program.
8. Financial resources available to expend on the program or alternatively level of stipend needed in order to participate.
9. Desires as to type of cooperator and nature of experience.
10. Language proficiencies (if applying for international program).
11. Statement of previous practical experience.

III. Memorandum of Agreement

Of 27 departments reporting the use or planned use of work-study programs, 13 use no formal agreement. Ten used a three-party agreement (student-university-cooperator) while two used a two-party agreement. Of the latter, one was between the student and the university while the other was between the student and the cooperator. Two others planned to evolve formal agreements. This author strongly recommends the use of three-party agreements to formalize communication and responsibility among the parties reducing the incidence of unsatisfactory experiences due to misunderstanding and to demonstrate to the student participant that such agreements represent good business practice.

The memorandum of agreement should include the following:

1. Name, home address, and phone number of student.

2. Name of cooperating business or agency and address.
3. Name of cooperator's representative responsible and business telephone number.
4. Name of university faculty member responsible and telephone number.
5. Duration of the program and working hours.
6. Stipend to be received by participant.
7. Detailed nature of actual duties to be performed by student-- attached as appendix to agreement.
8. Nature of student's responsibility as to travel to and from location of cooperator, housing, board, and insurance.
9. Course in which to enroll at the university.
10. Amount of academic credit to be awarded upon successful completion.
11. Nature and frequency of reports to be filed by the participant with the cooperator and with the university.
12. Evaluation report responsibility.
13. Signatures of student, university representative authorized, and cooperator.

IV. University Liability Statement

These statements should be worked out in cooperation with the university's attorney and details will vary from state to state. Basically, the statement releases the university from responsibility of accidents or death of the student while engaged in the work-study program.

V. Required Reports

A format of the reports required by the student for submission to the faculty representative should be developed. This will assume consistency and equitable treatment of student participants. It may include:

1. Students name and mailing address.
2. Cooperator's name and address.
3. Period covered by report.
4. Summary of new knowledge gained and experiences since previous report.
5. Space for problems encountered, suggestions, etc.
6. Student's signature with date sent to cooperator's supervisor and university.

VI. Evaluation Reports

To assure continued improvement, an evaluation at the end of each program is absolutely necessary. Independently, the student, the cooperator, and the faculty representative must take time to evaluate the program. The university and cooperator should also evaluate the student. The format for each will vary somewhat.

For the cooperator, what rating would he give to the student on a number of characteristics that could include ability to learn, interest in learning, speed of completing responsibilities, willingness to receive guidance, relationships with other employees, dependability and reliability, ability to perform without supervision, judgment, personal appearance, enthusiasm, courtesy, overall performance? Additionally, the cooperator might be asked: Did the student earn the stipend paid? What characteristics did you like best about the student? Least? In what ways does the student need to improve himself? What overall rating do you give to this student's program? What recommendations do you have for the university to improve it? What benefits accrued to you as a cooperator?

For the student, give yourself a rating on personal characteristics (use the same list as used by the cooperator). Also, what were the

benefits you received from the program? Would you recommend a similar experience to other students? Do you feel university credit is justified for the program? Why or why not? What is your overall evaluation of the experience?

The faculty representative should, in addition to evaluating the student for grading purposes, be asked what particular benefits does he feel accrued to the university from arranging the program, does he feel the university should continue to work with the cooperator, the strong and weak points of the program, and suggestions for improvement.

Summary

Of 54 state universities surveyed, about two thirds offered the opportunity for a work-study experience program off-campus for academic credit and/or pay. Interest in complementing the formal classroom and laboratory setting on-campus with such off-campus programs is rising and most departments plan to expand the program. Objectives of such programs are stated in numerous ways but basically include:

1. To offer students an additional approach to learning and teaching by integrating classroom theory with employment experiences in the practical world of decision making.
2. To give students the opportunity to explore their own interests in vocational fields.
3. To provide additional motivation for courses given on campus.
4. To serve to increase the student's understanding of the application of scientific principles and management techniques.
5. To give students an appreciation of the relationship between formal education and job success, thereby increasing their self-confidence, maturity, and sense of responsibility.
6. To enhance the relationship between the university and the employers of its products (graduates) as regards the university's ability to monitor its academic offerings, and receive increased support for research and extension.

As a vehicle for implementation, a special course is designated with variable credit.⁸ Course titles vary widely. A formalized three-party memorandum of agreement is recommended. The emphasis on work experience versus emphasis on study experience will vary for individual students and the desires of cooperators. Most subscribe to the notion of an inverse relationship between credit given and stipend received which is typically similar to the idea of credit awarded and degree to which program is "work only" related. Another way of expressing it is if the cooperator utilizes the student to do a particular job that replaces the cooperator's need to hire another person, there is likely a higher stipend paid and less credit awarded. However, if the student has the opportunity to study the cooperator's business by moving among departments and/or researching a problem, the student should likely receive less pay and more credit. In some instances, the student may be nearly a total liability to the cooperator as measured by his output of directly productive work.

The mode of operation seems to be a maximum award of one credit for each two weeks of experience and the total should not exceed 8-10% of total B.S. degree requirements.

There are no significant disadvantages to any party from the offering of work-study programs. However, there are definitely benefits to all participants. There is difference of opinion as to whether such programs

⁸ Some universities offer an additional seminar class for credit for students who have completed their off-campus programs, there is additional learning from the sharing of experiences among students.

are of higher or lower cost to the university per credit hour of instruction. Some argue it is higher because each program is typically prepared for only one individual. Others argue it is lower because it utilizes facilities off-campus. Partly, it depends on the extent to which campus facilities are at capacity. While programs are being initiated, the university must appreciate the significant gear up time required and give adequate time and reward to the faculty involved. In early stages of development, there seems little doubt costs are higher. Funds are needed so that the faculty member can make initial visits to potential cooperators. For international oriented programs, this cost is considerably higher.⁹ The public relations value of such programs with the tax paying public is of considerable value. Happier and better motivated students provide an important bonus for being involved. The minds of the majority of educators likely embrace many tenets of the progressivist educational philosophy and work-study programs are likely to receive majority support of faculties if credit awarded is not pushed out of the 8-10% range. For the 1970's, it seems like the "way to go" to be "up-to-date". But it's really an "old" idea with "new" support.

⁹Space does not allow discussion of international oriented programs. An unpublished paper by the author entitled "An International Dimension in Undergraduate Curricular Programs in Agriculture" is available.