

cluded placing a greater emphasis on the things the instructor knew were to be observed. These included involving the students in formulating the day's objectives, getting greater student participation, asking more questions during the lecture, more review of the day's material, etc. . . One instructor made a special effort to lecture in the same manner as other lectures.

Three instructors said they made adjustments or changes in their teaching after the observations. The changes included giving more attention to alternatives to the lecture format and more attention to visual aides. Two other instructors said they got several ideas about adjustments to be made next semester.

The useful information that the instructors gained from the observations and pre-and post-conferences included suggestions on visuals, the need to individualize according to student needs, and the impression that most benefits are gained before the observations by prior study of the scale items.

All of the instructors felt they were objectively observed for purposes of improvement rather than being evaluated.

The classes observed included eighteen lectures, one laboratory, and two graduate seminars.

The difficulties in applying the IOTA instruments to the observations included:

- problems with semantics (at least 6 mentioned this). Words such as many, few, several, etc., were especially mentioned.
- the suitability of the scale items to college instruction in general
- unobservable scales
- problems with interpretation of some scales, such as, individualization of instruction
- difficulty in applying the instrument to classes such as seminars and labs

Those who observed instructors who had not been through the IOTA workshop felt that while these instructors accepted the observations reasonably well, there were difficulties in using the instrument with someone not familiar with it. These instructors saw little value in the experience. One observer felt the observations with non-IOTA instructors did have value and provided a faster way of learning about IOTA than the workshop route.

Discussions with Colleagues

Eighteen of the IOTA workshop participants had discussed IOTA with other colleagues. Eleven found their colleagues interested in IOTA; three said their colleagues were not interested and in fact some had a negative attitude.

Another Workshop

Fifteen of those who had gone through the WSU workshop said they were in favor of co-sponsoring another workshop with our neighboring institution, the University of Idaho. Three were not in favor of another workshop. There was a strong recommendation among those who favored another workshop that we first take time to evaluate the impact of the workshop held in April. They definitely urged that we use the IOTA program for at least one semester and then take another look at the advisability of sponsoring another one. They also suggested that we refine and revise some of the scale items before more extensive use is made of the IOTA instrument. One instructor suggested giving more attention to whether the items that rate high on the IOTA scales will, in fact, improve learning.

Experiences With IOTA in Agricultural Courses at the University of Nebraska-Lincoln

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An IOTA (Instrument for the Observation of Teaching Activities) workshop was held at the University of Nebraska-Lincoln in January 1974. Our objective was to improve instruction and IOTA appeared to be an objective instrument to assess present teaching activity. About one-third (33) of the teaching faculty of the College of Agriculture were invited to attend the work-

Further Comments

One instructor cautioned against the potential tendency of administrators to use the instrument as an evaluative tool. In other words, the total score of one instructor should not be compared with the score of another instructor. Another instructor felt that the IOTA instrument will work well in addition to student evaluation. One person was concerned that instructors might place over-emphasis on teaching methods and overlook subject matter.

Future IOTA Plans

Future plans concerning implementation of IOTA at Washington State University include the following:

1. Revision of some of the scale items and scale descriptions by an ad hoc committee of IOTA workshop alumni.
2. Review and test the revised scales by the workshop participants.
3. A meeting of the workshop participants to discuss our experiences with IOTA.
4. Going beyond the observation stage and begin to use the interview scales and technique.
5. Giving consideration to an orientation, rather than a full-scale workshop, to acquaint more instructors with IOTA.
6. Making preliminary plans for an IOTA workshop in the Spring of 1975 sponsored jointly with the University of Idaho.
7. Plan an implementation or refresher workshop, probably one day in length, for those who went through the workshop this spring.

One WSU agriculture faculty member has attended an IOTA Leadership Training Workshop and hopefully he will be able to assist in conducting future workshops.

Summary

The College of Agriculture at Washington State University had a mandatory program of student evaluation of instruction from 1962 to 1972. It became voluntary in 1972 and other means of evaluation for improvement were sought. The IOTA program of peer assisted self-evaluation was investigated. Three faculty members attended IOTA workshops elsewhere. As a result of their experiences, and on the recommendation of the College's Committee for the Improvement of Instruction, an in-house IOTA workshop was held in the spring of 1974.

The workshop participants at WSU were generally enthusiastic about IOTA and are going forward with its implementation for improvement of instruction. Efforts are being made to adapt it to the local situation and to revise it to satisfy needs of those who will use it. The implementation of IOTA in agriculture will be paced to suit the faculty. It is their project. Its only use will be for improvement of instruction. Other methods of evaluation, including voluntary student evaluation, will continue to be used for administrative purposes.

- 1 Professor of Agricultural Economics.
- 2 Associate Professor of Animal Sciences.

References

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shop. Following the workshop and its evaluation, an ad hoc committee was appointed by the Dean of the College of Agriculture with the charge to design an implementation plan for IOTA and to involve additional faculty members. This paper is a report on the IOTA experience at the University of Nebraska-Lincoln since that workshop.

Actions and Rationale

A summary of the activities and the timetable involved in our plan is presented in Table 1. The rationale for proceeding in the manner adopted was based on the views expressed by participating faculty in the post-workshop evaluation. The fact that IOTA is only one instrument available to faculty for observation of teaching was noted by the workshop participants. The concern was expressed by some faculty that too much time would be involved in observing teaching. Others thought that since considerable faculty time was already invested in IOTA, that IOTA should be given a trial. Our goals were: (a) to improve our observation skills and to experiment with IOTA on a limited faculty participation basis (only IOTA trained); (b) to evaluate our trial objectively; (c) to make IOTA available to other faculty and (d) to provide the opportunity for involvement of all College of Agriculture faculty in IOTA.

Table 1. Activities, timetable and faculty participation in IOTA.

Activity	Date	Faculty Participation
IOTA Workshop and Post-Session Evaluation	7-9 January 1974	33
Ad hoc Committee Designated	21 January 1974	5
IMPLEMENTATION PLAN		
a) submitted to Dean	8 February 1974	
b) presented to faculty	1 March 1974	
Volunteers for IOTA trial	22 March 1974	25
Actual Participation in Phase I Trial	8 April - 3 May 1974	21
Evaluation of Phase I	14-28 May 1974	19*
Phase II Trial	1 September - 30 November 1974 (Tentative)	?

*Two weeks allowed for response to questionnaire, 19 faculty responded.

Implementation Plan

The implementation was limited to classroom activities. Administrators were not permitted to serve as observers.

The plan prepared by the ad hoc committee consisted of three phases. The first phase entailed recruiting a core of volunteers from faculty that attended the workshop. Volunteers then served as observers and also had their classes observed. Phase I will be evaluated. If IOTA as employed in Phase I is unsuccessful, further implementation of IOTA will be abandoned.

The second phase involves making the service of IOTA observers available to all faculty on a voluntary basis. IOTA will be described to the entire faculty and its use will be demonstrated on the UN-L campus, by means of sessions videotaped during Phase I. The observation teams will be made up of IOTA workshop participants who refined their observation skills during Phase I. Faculty that are not IOTA trained may receive additional insight on IOTA by visiting classes with experienced observers. Phase II will be evaluated and altered if necessary.

The third phase, if implemented, will entail developing procedures for making formal IOTA training available to additional interested faculty. Planning for Phase III has been deferred until Phases I and II have been implemented and evaluated.

Results

Only Phase I has been completed to date. Sources of data for evaluation of Phase I include the post-workshop narrative evaluation, a questionnaire concerning Phase I and several videotaped classes that were viewed and discussed by some observers.

Because of scheduling difficulties only 21 of the 25 volunteers participated in Phase I. Twelve different faculty members had their classes observed. Twenty-one faculty (including the 12 that were observed) served as observers in teams of 3 and visited one or two classes.

Our observation consisted of five separate activities. They were: (1) a pre-session: a short visit between the team and the instructor prior to class; (2) the classroom observation; (3) a

post session: a short visit between the team and the instructor after class; (4) a reconciliation: reconciling differences in observed instructor behavior; and (5) 'visit afterward': an informal meeting with the instructor and the observation team. This meeting was unstructured and usually encompassed discussion of the instructor's and the team's selection of the observation scale that most closely described the observed behavior. In some cases a discussion on philosophies of teaching and teaching methods developed.

After class observations were finished, a three question questionnaire was circulated to the participants of Phase I. The intent was to determine: (a) whether the instructor having his class observed (observee) felt that the visit was useful, (b) whether the observers felt that they made a contribution to improving instruction of the observee and (c) whether or not IOTA should be continued, modified, or another program pursued. The results are presented in Table 2.

Table 2. Results of the Phase I questionnaire.*

1. As an observee (one being observed), please rate your response to the IOTA team that visited your class:				
Very Beneficial	Moderately Beneficial	Possibly Beneficial	No Benefit	
0	4	5	0	
2. As an observer (one observing others), please rate what you believe your visit did for the observee:				
Very Beneficial	Moderately Beneficial	Possibly Beneficial	No Benefit	
0	2	11	1	
3. I believe that IOTA should be:				
Implemented on Our Campus	Studied Further and Evaluated	Discontinued but Adopt an Alternative	Discontinued with No Alternative	
1	11	5	1	

*Nineteen of 21 faculty participants responded. The totals do not sum to 19 because not all respondents were both observer and observee, some indicated multiple answers and others replied in a narrative.

Comments relating to each question were also solicited on the questionnaire. There were remarkable similarities between the post-workshop and the end of Phase I evaluations. Of course the same people who attended the workshop were volunteers for Phase I. The comments can be characterized by noting trepidation by some that they were being evaluated or that the system may evolve into an evaluation. Some thought that visits should be interdepartmental to avoid the possibility of creating bad feelings within a department. On the other hand others felt that visits should be intradepartmental so that competence could be judged more adequately. There were problems dealing with semantics of the observation scales. Finally, there was considerable sentiment to have more than one visit and also to have observers visit all aspects of the course (lecture, recitation, lab, etc.).

Discussion and Conclusions

There was a formidable investment of staff time in this program. For example, 99 man-days were spent while attending the workshop. Assuming the instructor spent one additional hour with the visitation team (exclusive of the class session itself) and assuming each observer spent a minimum of two hours for each class visited (this includes the five phases of each visit), there would be at least seven man-hours invested per class observed. This could realistically be rounded to one man-day. Therefore, our implementation of Phase I resulted in 12 man-days of class visitations. We would estimate about 10 man-days spent by the ad hoc committee and about an additional four man-days for meetings attended by the remainder of the workshop attendants. This is a total of about 125 man-days.

Sixty-seven percent (12 of 18) of the respondents felt that IOTA should be implemented or continued on a trial basis pending further evaluation and this was likely a very biased group. The respondents attended the workshop and also volunteered to participate in the trial implementation. It is likely that this group would tend to be more favorable to IOTA than a random sample.

The ad hoc committee has recommended to the Dean that Phase II of the implementation plan be initiated for the fall (1974) semester. This recommendation was made because more than 94 percent (17 of 18) of the respondents wanted to continue with IOTA or try an alternative plan for improvement of instruction. This was a strong vote to continue with some plan and there is the possibility that we can alleviate some of the negative concerns with IOTA or modify the IOTA instrument to fit our specific needs.

Also, there were some very positive remarks about the program. First, the observers thought that they were the primary benefactors of IOTA visits. IOTA serves as an ideal instrument to encourage faculty to visit other classes and to give them exposure to instructors that have demonstrated outstanding teaching abilities. This visitation is most definitely a means of improving instruction. Second, the response to the 'visit afterward' session was highly favorable. The interchange between faculty members in a small group provided a forum for relevant discussions on teaching methods and techniques. Invariably discussions entailed how the observer or observee could adopt a given technique to a larger or smaller class, to a lecture or a lab session, and so on.

In summary, most of us in the College of Agriculture at the University of Nebraska-Lincoln are of the belief that class visitation by peers can be very important in teaching improvement. We also feel that some sort of objective instrument is needed in

order for the observer to be helpful to the observee. IOTA is an instrument for observation. Although IOTA has not received overwhelming support, we are continuing, on a voluntary basis, trial and evaluation of the plan at our university. The negative responses to this instrument may be eliminated through either learning more about IOTA (in depth learning as well as more faculty learning about the program) or modifying the instrument to fit our specific needs. We feel that the implementation plan by stages and by a fraction of faculty on a trial and evaluation basis is a better approach than a total commitment to the program.

Acknowledgements

We would like to thank Dr. T. E. Hartung, Dean of the College of Agriculture, for his encouragement and support as well as his commitment to improving instruction. Special thanks are due Drs. E. F. Ellington, R. B. Maxcy, and Z. B. Mayo for their contributions as members of the ad hoc committee and all the volunteers who participated in Phase I and made many constructive suggestions. A grant from the Teaching Council of the University of Nebraska made possible the IOTA workshop.

¹ Assistant Professor of Wildlife Biology and Associate Professor of Agronomy respectively.

MINUTES AND REPORTS

Minutes of the NACTA Executive Committee Meeting June 19, 1974 - Lincoln, Nebraska

The meeting was called to order by President Pasto at 9:15 A.M. in the Nebraska Center, Lincoln, Nebraska. Executive Committee members present were: Pasto, Beeks, Alexander, Brown, Wright, McCain, Thomas, Ecker, Rawlins, Boyce and Sandstedt. Chairmen of NACTA committees and others present included Seif, Book, Everett, Everly, Eldridge, Rydl, Campbell and Shrode.

The minutes of the September 21, 1973, Executive Committee meeting were approved as distributed.

President Pasto appointed an Auditing Committee of Sumner Griffin, Robert McGuire, and Neil Sandstedt, Chairman. A Resolutions Committee of Thurman Thomas, Stanley Sahlstrom and Omri Rawlins, Chairman, also was appointed.

Virginia Book commented on activities of the Publicity Committee. She suggested that a majority of the Publicity committee members each year should be appointed from the institution hosting the annual NACTA Conference. Another suggestion was to include a member of Delta Tau Alpha and a member of the NACTA Journal staff to insure ongoing publicity for NACTA and DTA throughout each year.

The treasurer's report was presented and discussed. After discussion, a motion was passed to increase annual NACTA Library membership dues from \$5.00 to \$8.00 for libraries in the U.S., territories and Canada, and to \$10.00 for foreign libraries. NACTA brochures and Dues Notices will need to be reprinted to reflect these increases. A copy of the Treasurer's report as accepted is attached to these minutes.

The NACTA Journal Editor's report was made by Wright. He indicated that four issues of the Journal were published on schedule. Printing costs and postage both increased during the year. Wright indicated a continuing need for more quality articles for the NACTA Journal. He requested that he be relieved of responsibilities of Editor at the end of this year. Jack Everly volunteered to assume the NACTA Journal Editorship next year. He and John Wright will work out the details of an orderly transition of moving Journal publication from Ruston to Champaign. The Executive Committee commended John Wright for his 16 years of dedicated service as NACTA Journal Editor and voted to continue the \$300 honorarium for another year.

Seif gave the report of the Teacher Recognition and Evaluation committee. The NACTA Teacher Fellow program is working well although more nominees would be welcomed. Seif and the Executive Committee members commended NACTA Southern Regional Director Rawlins for obtaining another \$300 contribution to be awarded for Excellence in Teaching in the Southern Region. Gold Kist, Inc., 3348 Peachtree Road, N.E., Atlanta, GA 30326, was the donor of the award funds. The report was accepted.

President Pasto reported that he had obtained clearance from Dr. and Mrs. Ensminger and Interstate Publishers for the NACTA-Ensminger-Interstate Distinguished Teaching award to be awarded to a Canadian who would qualify otherwise for the honor.

A report of activities of the NACTA Improvement of Teaching committee was made by Treese. He stated that insofar as the major emphasis

of NACTA, "to improve the college teaching of Agriculture" was furthered during the year, the work of his committee was successful. The report was accepted.

Ecker presented the report of the E. B. Knight Journal award committee. The report was accepted. A copy is attached to these minutes. The E. B. Knight Journal Award committee was instructed to prepare recommendations for screening Journal papers so as to expedite the work of the committee in selecting the outstanding Journal article each year. The recommendations are to be presented for action at the September 1974 Executive Committee meeting.

The Membership committee report was made by the Secretary. Membership figures are shown below:

Membership Category	June 1973	June 1974
Active	84	96
Institutional	63	74
Institutional Active	139	221
Library	81	90
Life	4	4
Sustaining	1	1
Complimentary	11	15
	<u>383</u>	<u>501</u>

The report was accepted.

Beeks indicated that the Nominating Committee was ready to present its report at the Thursday (June 20, 1974) Business meeting.

The Delta Tau Alpha committee report was given by Rydl. He indicated that the honor society enjoyed healthy increases during the year both in membership and in finances. There were 590 DTA members and \$7,866.80 at the close of the college year. A successful DTA convention was hosted in April by Northwest Missouri State University. Ten chapters were represented by approximately 50 delegates. The Sam Houston State University chapter won the Corbus Outstanding Chapter award. National DTA Advisor Rydl reported that DTA is not presently listed among agricultural honor societies recognized for advanced GS placement in Civil Service employment applications. A motion was passed encouraging the National DTA Advisor to take necessary steps to rectify the oversight. The NACTA Executive Committee pledged to assist in any manner it can. President Pasto will contact Dr. J. A. Hayles at Arkansas State University concerning his nomination to the post of National DTA Secretary-Treasurer. The committee report was accepted.

President Pasto reported that the Secretary-Treasurer could no longer obtain local travel funds to participate in two NACTA events each year. A motion was passed to reimburse the Secretary-Treasurer from NACTA funds for his travel to the Fall Executive Committee meeting each year.

President Pasto and President-Elect Alexander are to contact Canadian delegates to the annual NACTA conference to solicit their suggestions as to whether Canada should be partitioned to become parts of the Eastern, Central and Western NACTA Regions. The officers are to report recommendations at the Fall Executive Committee meeting.

Campbell reported for the Ad hoc committee for a Student Writing Contest. His committee agreed that such a contest would be desirable. Further, that suitable certificates, but no cash awards, be given to winning undergraduate and graduate papers and that these papers be published in