In this study, motivation or level of interest appeared to be a more important determinant of academic performance than prior experience. Although grade distribution was not altered by level of interest, there was an effect of interest on mean grade average. The students who described their interest as career-oriented had the highest mean grade average. Included in the career group were a number of students who desired a career in veterinary medicine. Pre-veterinary students frequently tend to be highly motivated and grade-oriented and this may have been partially responsible for the higher grade average. Inclusion of the pre-veterinary students in the career group may also be the reason for the surprisingly large number of students in this interest area.

Conclusion

There was no effect of prior experience on grade distribution or final grade average in a light horse management course that emphasized the scientific aspects of management. Level of interest did not alter grade distribution but did affect final grade average. The students who indicated they were interested in the course for career purposes had a higher average than those who described their interest as hobby or casual.

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INTERNATIONAL AGRICULTURE

Lessons Learned About On-Campus Training of Foreign Specialists

Albert G. Madsen

Introduction

Colorado State University and many other United States Land Grant Universities are involved in training foreign specialists concerned with agricultural systems. In recent years, Colorado State University instructors have utilized several different approaches to training and from this experience there is a better understanding of precautions that must be taken to achieve effective training. It is recognized that large numbers of adults throughout the world need technical skill training rather than instruction directed toward academic degrees. There are now four basic non-degree training designs used separately or in combination for training foreign participants (see International School). Lessons learned about these training approaches, as well as others, were discussed in a recent workshop (see Madsen, 1985).

Non-Degree Training Designs: Lessons Learned

Design No. 1. Special courses or programs developed for specific clientele or single country groups. These courses vary in length from a few days to two semesters and are most generally interdisciplinary in nature. It has been found that selection of appropriate participants needs to be closely evaluated in regard to their age and education. While older people in the later stages of their careers have performed satisfactorily in special courses, at times they seemed disinterested in the content presented. They were not as enthusiastic nor as interested in detail as their younger colleagues. Greater attention may be given to differentiating training into at least two categories: (a) providing the younger technicians with more discipline oriented "how to do it" technical training, and (b) providing the senior people training that will more directly apply to improving managerial skills.

It is a challenge to present useful training and maintain the interest of all trainees when there is a wide spectrum of disciplines. This seems to be accomplished through courses which provide "hands on" experience as well as classroom instruction while specialists of different disciplines work together. This technique has been used in Diagnostic Analysis workshops (Madsen, pp. 8-9, 13-15).

Programs that are relatively long, two months or more, and involve a number of different faculty present some problems with the continuity of subject matter presented. When many subjects are covered, each subject will not be treated in the depth desired by a few individuals. The trade-off between breadth and depth of material presented must always be closely evaluated.

Design No. 2. Special short courses of four to eight weeks duration offered in summer or between semesters. These courses are frequently oriented toward one discipline but there are courses with more than one discipline involved.

Generally, participants have been selected with the specific course in mind and were, therefore, relatively qualified for the course. However, candidates for these courses have not been rejected due to

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lack of qualification if their language ability is satisfactory. Participant response to these specialized courses has been excellent.

The selection of participants can be influenced by trainers or the agencies conducting or sponsoring training. A relatively direct method of influencing the selection of training candidates is to write a job description which indicates the kind of trainee wanted for the course. When it is possible to identify the audience in advance, courses can be developed that will more directly meet specific needs. This is especially applicable for adult education.

Greater emphasis should be given to breaking these specialized short courses into modular segments. This would allow host countries to choose the desired segment for in-country instruction.

Design No. 3. The third type non-degree program is that of selecting regular academic classes based on trainees' individual needs. An advisor is assigned from the appropriate discipline to provide direct guidance to each person. The training period for this program is most usually six months to one year.

A program built on a selection of academic courses is useful for those with proper training. It is not unusual for trainees to think that they are more qualified than they actually are for upper division or graduate level courses. When this mistake is made low grades are obtained. On occasion, advisors themselves place specialists, who are on campus for only one or two semesters, in courses where they lack prerequisites. The justification for this action has been the desire to provide the maximum professional improvement in the short time. However, the results are too often frustration for the trainee when this occurs. Another reason for low performance of some non-degree participants is that they do not want to take the time to learn the specific detailed material required in formal academic courses.

Design No. 4. Field trips are the fourth component of training strategies for adults. These vary in length from one day to six weeks. Trips range from local to international "teaching while looking" tours. Field trips are a vital part of training and generate goodwill for the host country. They provide an opportunity for seeing technology in operation, for talking to practicing professionals as well as foreseeing a new culture. It is important to select the right people to provide instruction at the sites visited.

Follow-Up Training

Training follow-up is an area which warrants greater attention and funding. Post-training activities can substantially increase the payoff from educating foreign technicians.

Follow-up to training involves providing additional expertise and assistance to facilitate the use of training in jobs after trainees return home. It includes reinforcing subject matter taught and providing additional training when needed. Follow-up also includes an evaluation of the effectiveness of training. There are two levels where influence may be exerted to increase the probability that training will be effectively applied on the job. The first level of influence is on the individual and the second level is on the institution.

Follow-up must be planned and budgeted for. The biggest limitation to follow-up in many projects has been a lack of funding for this important activity.

Possible activities for follow-up include the following suggestions:

1. Conduct a needs assessment of trainees by letter. This could also include offers to provide learning materials, a newsletter, and/or direct assistance.
2. Educate host country agencies about the needs for follow-up and identify particular areas of follow-up needed.
3. Build into training activities a process whereby the perceived future needs of the trainees can be identified.

Summary and Conclusions

The need for non-degree training of foreign specialists is great. Tailoring short courses to meet the needs of specific countries for interdisciplinary training or presenting discipline oriented courses has been successful in non-degree training. The careful selection of academic courses for individuals has been valuable in improving technical capability in six-month to twelve-month periods. The age, background and prior education of trainees must be closely evaluated when development specialized courses. Follow-up to training should be made an integral part of training international specialists in order to obtain the maximum benefits from training.

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