COLLABORATIVE EFFORTS BETWEEN OHIO STATE UNIVERSITY AND THE FACULTY
OF AGRICULTURE AT THE UNIVERSITY OF SWAZILAND

Larry E. Miller, Professor
204 Agricultural Administration Building
Department of Human and Community Resource Development
The Ohio State University
Columbus, OH 43210
(614) 292-0450
(614) 292-7007 (fax)
miller.103@osu.edu

Barnabas M. Dlamini, Pro-Vice Chancellor
Department of Agricultural Education and Extension
The University of Swaziland
P.O. Luyengo
Swaziland
268 8 4723
268 8 6505 (fax)
bmd@iafrica.sz

Abstract

This article describes a sustained collaborative effort, spanning a decade, to enhance the
capabilities of The Ohio State University (OSU) and the University of Swaziland (UNISWA),
Southern Africa. The effort included amending the curriculum of the UNISWA Faculty of
Agriculture, launching attachment programs, initiating a master’s degree program in agricultural
and extension education, establishing a graduate school, and internationalizing faculty members
at OSU. The primary argument is that sustained linkages between two institutions may be more
effective than a series of linkage efforts between the institutions.

Introduction

In 1988, The Ohio State University (OSU) College of Food, Agricultural, and
Environmental Science (CFAES), and The University of Swaziland (UNISWA) Faculty of
Agriculture (FA) entered into a collaborative effort to assist each other to maximally develop
human resources which would improve the quality of life and level of living of their
respective institutions and to improve UNISWA FA’s teaching, research, and curricula (Masina,
1989). Recognizing the importance of the collaborative effort, a number of activities were
planned, including professional faculty development workshops, programming of field
attachment (internship) programs, curricular review, external examining, and improving the
graduate school structure at UNISWA. The creation of the field attachment program is one
of the major activities described in this article. This portion of the collaboration was funded by
the United States Agency for International Development (USAID) with assistance from
Pennsylvania State University (PSU). The reader will note that the collaboration has
continued after the end of the USAID support.
Purpose

The purpose of this article is to describe a collaborative effort between a university from a developed country and a university from a developing country. The specific objectives are:

1. Describe the collaborative effort undertaken by OSU and UNISWA.
2. Describe the achievements of the collaborative effort.
3. Describe the lessons learned from the collaborative effort.

Methods and Data Sources

Information for this article was obtained from reports produced in the collaborative effort between the two institutions. Personal experiences of the authors are also drawn upon.

Results

The overall purpose of the collaborative effort was to enhance programmatic and faculty capabilities of the two institutions. A number of activities were planned and implemented at UNISWA to accomplish this purpose.

Activities Undertaken

The first activity was (1) “A Survey of Potential Attachment in Swaziland” designed to help identify Swazi agribusinesses that would be interested in hosting interns from the Faculty of Agriculture. This preliminary work fed into (2) a workshop on internships that was conducted at a later date (Miller, 1992 ). The third (3) activity was an “Evaluation Plan for the Linkage Program.” This plan helped to evaluate the attainment of objectives of the program (Diamond, 1992 ). The next activity (4) included the preparation of “Agribusiness Case Studies” which were presented to UNISWA faculty and agribusiness persons in a workshop. A workshop on internships (attachments) was organized by OSU and the UNISWA Department of Agricultural Education. An outcome of this workshop was the identification of conditions under which interns would participate in attachments, appropriate participation by UNISWA faculty members in the process, and appropriate evaluation measures. Another important activity (5) was an executive visit to OSU by the Dean of the UNISWA Faculty of Agriculture. A survey (6) of the horticultural needs in Swaziland was also conducted (Waters & Boyer, 1993 ). The next activity (7) was a Swazi Attachment Visitations to the U.S. by UNISWA agricultural faculty. The purpose of these visits was to review attachments conducted in Ohio and Pennsylvania. Procurement of teaching and farm equipment (8) was an activity that bolstered teaching and farm programming at the UNISWA FA farm and was accomplished with USAID support.

The universities also collaborated (9) to conduct an intensive six weeks study abroad program of courses, seminars, and field trips that introduced OSU students to issues of development and the culture in Southern Africa. Students became aware of the region’s unique challenges through direct exposure to African development issues. After an introductory session on Southern African history and culture, participants pursued an integrated program that combined classes on culture, society, education, agriculture, and development. The OSU has agreed to similarly host students from UNISWA.

Achievements of the Collaborative Efforts

The collaborative effort facilitated profound personal and professional relationships that continue through frequent communication and that have evolved into other creative and productive relationships. OSU faculty have served as external examiners. Faculty at OSU and UNISWA are sharing joint publications and exchange information in various ways. OSU faculty were able to incorporate experiences and information about Swaziland into their courses to help students better understand the different societies and economies, and share the culture of that country. Two teaching workshops were held in 1989 and 1990 which produced two
documents called “The Challenge to University Educators: the Teaching/Learning Process.” One document contains model lesson plans, which are not prescriptive and can be modified according to the user’s needs. The other shows and explains practical skills. Other workshops held include “Tractor Maintenance and Repair” and “Pesticide Applications.” These workshops were conducted jointly and were well attended by representatives from government ministries, university employees, private sector firms, and other entities. One output of the OU, PSU, UNISWA, USAID linkage is “The Farmer’s Handbook”, published by the Ministry of Agriculture and Cooperatives from a cropping systems research and extension project. It is a huge volume of information on specific, basic agricultural information that is simply and clearly presented.

The teaching and curricula related workshops have resulted in faculty producing high quality lesson plans and notes for their students, and practical manuals for their laboratory classes. When UNISWA started a postgraduate program (MS) in agricultural education, OSU made a contribution in terms of curriculum ideas. An Executive Advisory Committee was formed to help assess the relevance of the curriculum to employment opportunities. Methods that could be adopted for teaching, for example, with the Ministry of Agriculture and Cooperatives Extension were introduced, and pamphlets for training in many fields – horticulture, soil science, entomology, plant pathology, and sociology – were produced. The linkage introduced the innovation of the sociology component to help researchers understand the reasons farmers did not apply certain techniques or adopt certain new methods.

The linkage program improved outreach programs at the University of Swaziland which are of value to students, employers, and the institution training prospective employees (Dlamini, Gobin & Gumbi, 1994). UNISWA, unlike OSU, does not have an arm directly tying Extension to the university. Indeed, the extension program in Swaziland exists within a Ministry of Agriculture and Cooperatives separate in the Swaziland national government from the Ministry of Education. Therefore, faculty at UNISWA often had little exposure to the public and played a minor role in service, extension or outreach. This had a detrimental effect upon their general level of credibility with important agricultural and agribusiness stakeholders in Swaziland. Improving the outreach of the University is a goal of the current administration. Touching the citizens of Swaziland will heighten their awareness of the overall utility and pragmatic nature of UNISWA, making it a more valued member of society. Citizens can see that its value is broader than just educating the enrolled student: indeed, UNISWA can extend its educational opportunities to all.

Field attachment programs were introduced to enable students to relate to the pragmatic operations of their chosen field of study, make career decisions, acquire skills of immediate relevance to the work place, and improve their job prospects after graduation which could hasten promotions. Field attachment programs benefit employers by giving them an inside track on identifying, selecting, and hiring the quality of employees they desire. Students are now placed in over 50 companies and those who have graduated are often employed by those very companies where they did their field attachments.

OSU has, for three years, provided the UNISWA Department of Agricultural Education and Extension with an external examiner to assist the department in reviewing curricula, curriculum content, rules, and regulations thus improving the quality of instruction in the department’s graduate programs. Further, OSU, in 1997, provided the University of Swaziland with a consultant to assist in reviewing and putting in place a structure, rules, and regulations for a graduate school. The University of Swaziland is presently implementing the recommendations by Miller (1997).

The UNISWA farm, through the linkage program, was able to acquire a feed mixer, prepare a farm master plan, and improve its
record keeping system. The goal of the farming operation changed from solely making money to the exclusion of student involvement, to serving as an active learning laboratory for students to acquire essential psychomotor competencies and skills important to careers in and understanding of agriculture.

A recent study by Corten and Dlamini (1996) to obtain insight about how responsive the UNISWA faculty of agriculture was to the needs of the agricultural and home economics-related industries found that most of the skill areas were important and were being addressed by the faculty of agriculture; the courses taught were regarded as important and relevant to the needs of both public and private sectors; short courses have not become a regular activity of the faculty of agriculture’s mission to fulfill the needs of industries and, therefore, the faculty of agriculture had to embark on the institutional development of short courses and in-service training; and most firms were willing to cooperate with the faculty of agriculture in exchange for research results, Swazi nation land issues, research projects, farm visits by students, irrigation management, establishment of entrepreneurial activities, and giving demonstrations to students. The study indicated that linkage programs assisted in improved cooperation between the faculty of agriculture and agro-based industries.

Lessons Learned

The lessons learned from these collaborative activities are applicable to many programs to help change African faculties of agriculture. Indeed they are applicable to African universities generally.

Avoid overburdening of faculty. Faculty are likely to resist participation in any linkage project if they see such involvement as a burden. UNISWA FA could have viewed attachment programs in this light. Active participation is required if attachments are to be part of the core of the training received by students. This means that faculty must be heavily involved in them in order to give direction to, and monitor and evaluate student performance. Full faculty participation would be more likely to occur if faculty were relieved of other teaching duties to participate in any linkage or attachment, or if new faculty and staff were hired to facilitate such programs. Further, the policy decision to initiate experiential learning programs through attachments should be made after faculty involvement in the decision making process so that a consensus is reached among the faculty. This often involves change in the status quo or current procedures and ideas about the teaching mission of the faculty. Some faculty may resist change, and the creation of a climate of faculty governance enhances the likelihood of the success of the program. This is true whether one is describing linkage programs or a specific project such as the attachment program.

Interdisciplinary requirements. Linkage programs involve faculty from many different disciplines just as did the specific attachment program. Attachments provide students with the opportunity to address real problems, the solutions to which require inputs from various disciplines. Thus, attachments should be structured so that they are not overly identified with any specific discipline. Upon return to campus, students should be given the opportunity to reflect on attachment experiences in an interdisciplinary setting. If this setting is not provided, students are less apt to incorporate the experiential learning experience into their formal learning environment.

Private sector interest. Considerable interest has emanated from the private sector supporting the linkage and attachment programs. Many institutions are willing to contribute to the professional and academic development of students and faculty. However, the private sector, in many countries, is not accustomed to contacting universities directly to request assistance from faculty, or to offer their assistance in the learning process. Thus, it is important for universities to initiate these contacts.

Student motivation for attachment. Students can be highly motivated to participate in attachments
if they can see how they will personally benefit. Faculty and staff need to clarify and emphasize these benefits to the students. As an attachment program matures, current students will be able to observe the benefits that accrued to past students who participated, and word will spread about the benefits, particularly those related to how an attachment program aided eventual job placement. Attachments may substitute for time spent by students in gainful employment to make money to further their education. When possible, students should be remunerated for contributions they make in their attachment settings.

**Conclusions and Implications**

The collaborative effort has enabled both institutions to better their academic programs, and the faculty to experience significant professional growth and better serve their formal students and outreach clientele groups. The professional horizons of faculty have been broadened, undergraduate and graduate programs at the UNISWA have an improved capacity for outreach programs, and teaching strategies and programming at the university farm have improved.

Sustained collaborative effort over a period of years between the two institutions has proven more effective than might have been the case if many collaborators and institutions had been involved. Sponsors of programs should note the success of this effort when they seek to develop sister-institution undertakings. This model not only produces the desired effect but a level of commitment that transcends most consulting efforts for institutional development. Profound personal and professional relationships have been established that continue through frequent communication. The relationships have evolved into creative and productive partnerships, developed training programs that can be replicated, built upon the cultures of the universities, and engaged industry through field attachment programs, advisory councils, and other groups which offer relevant employment opportunities for students. The positive climate has resulted in benefits for numerous Swazi students wanting to study at OSU, regardless of their major. Students in mathematics education and student personnel work have directly benefited because faculty at OSU have a profound personal commitment and are available to them.

Equally essential is the identification of key persons to develop and carry out the linkage. Faculty committed to making such a linkage operational must be identified. These faculty must actively seek out opportunities to perpetuate linkage activities. Initiatives cannot solely come from the university in the developed country, or when requests for proposals come from development agencies. USAID has changed its mission related to agricultural development and institution building. This change has necessitated that other potential funding agencies and innovative approaches be sought to perpetuate a linkage. Linkages based solely upon the availability of sponsored projects will surely atrophy as the availability of financial support diminishes. Faculty contribute in many ways to the creation of a supportive climate of professional trust. For example, UNISWA faculty can trust OSU faculty to assist and mentor prospective students, and OSU faculty can trust UNISWA faculty to develop learning activities for a study abroad program.

**References**


