STORIES IN PICTURES

by Paul W. Newlin

Indiana's chief state school officer received the national Future Farmers of America's Distinguished Service Award of the 1977 National Convention in Kansas City. He has greatly aided in improvement of the quality of educational agribusiness education in the state. (Photo courtesy Indiana State Dept.)

The FFA offers numerous opportunities of developing leadership skills through training in activities such as on-the-farm safety surveys. Above are Denmark, FFA members, Larry Shaak and Don Stalwick visiting with dairy farmer Richard LiCoutre. (Photo courtesy Russ Stolley, Denmark, WI — Related story on page 176)

Training through the FFA has led this young Denmark FFA member to the American Farmer Degree and the nation's winner in the Placement in Agricultural Processing. Tim Novak has taken advantage of the opportunities through the FFA leadership training program. (Photo courtesy Russ Stolley, Denmark, WI — Related story on page 176)

A contestant participating in the Pennsylvania State FFA Interview Contest. The contest consists of three parts: 1. Writing a letter applying for a job, 2. Completing an application for a specific job, and 3. Being interviewed for the job for which application was made. (Courtesy Photograph Committee, FFA Alumni Word, made available by James F. Morraness, Penn State)

A capacity audience of over 1,000 FFA members attended each of the leadership seminars supported by the FFA Alumni Association during the National FFA Convention. (Photo courtesy Dan Reeser, National FFA Center)

Volume 50 Number 9 March 1978

Theme: International Education in Agriculture Serving Our Friends Here and There
Involvement In International Agriculture—A Challenge For Agricultural Education

GUEST EDITORIAL

In the early 50's (during the Truman Administration) the United States recognized the need to shift our assistance to the less developed countries of Latin America, Africa and Asia. This recognition gave rise to the Point Four Program which provided resources in the form of commodities, technology, money and technical assistance. In the early sixties all unilateral foreign assistance programs (including the Point Four Programs) were brought together and a new federal agency, entitled the Agency for International Development (AID), was created and charged with the responsibility of administering these programs.

Although the United States has provided assistance to other countries for a number of years, our assistance program was greatly expanded with the War on Poverty. This program has provided a tremendous amount of assistance to European countries for their post-war rehabilitation.

POINT FOUR AND AID

NEEDS OF POOR MAJORITIES

By Harold R. Matteson

Covering agriculture is a challenge to those responsible for providing technical assistance.

The REAL RESOURCE—AG TEACHERS AND EXTENSION AGENTS

By Harold R. Matteson

The REAL RESOURCE—AG TEACHERS AND EXTENSION AGENTS

Agricultural Extension has also been involved in programs for the rural and urban poor. The Expanded Nutrition Program where paraprofessionals are used extensively is an example of a recent effort in this area. The teachers and extension workers, therefore, must carry on this important work with determination and skill.

The CHALLENGE

I believe this opportunity is forthcoming and with it comes many challenges. The challenge is to provide a challenge to those responsible for providing technical assistance.
“No Man is an Island”

James P. Key

“NO MAN IS AN ISLAND” is the title of a song which aptly expresses the position we hold in Agricultural Education in the United States. Perhaps we do have the most advanced agriculture in the world and produce food for ourselves and many other countries too. This simply makes it imperative that we share ideas and methods in agriculture with countries in other countries—both ways.

First, simply because we have a more advanced system of agriculture does not mean we have all the answers. We can still learn from our friends in other countries. Second, just because some of our ideas and methods work very well here does not mean we can automatically transfer them to another country and expect them to work.

Therefore, when we exchange students of agriculture with another country, both of our countries gain. Not only do the students from both countries gain new ideas and methods: they gain an understanding of different cultures, philosophies and ways of living which in turn helps build a bridge of understanding between those countries.

When students, teachers, or farmers travel to another country, they gain ideas and insights and see that there is not just one way to farm and carry out agri-business.

International students studying at the colleges and universities in this country learn not only advanced technology in agriculture but the friendliness and sharing of farm people in the United States. Students from the U.S. studying in other countries likewise gain this insight.

The United States has shared much of its agricultural technology through specialists sent to other countries to aid through sharing agricultural expertise. It has also given agricultural commodities to countries in need.

The United States, through a couple of articles in this issue, true international education in agriculture occurs during student exchange visits. When they live, work, and study with host families and host schools, the exchange students, host students and host people learn to appreciate the different ideas and methods which can be used to accomplish the same end—feed the world.

Several articles mentioned that the approach of the United States should be less giving of commodities and high level technical aid and more giving of basic aid to the small subsistence farmers that are the backbone of agriculture in many developing countries.

Overall, the articles in this issue should promote understanding of international education in agriculture and of ways each of us can have an important contribution in increasing the level of this education in agriculture, both here and abroad.—Ed.

Steve Forysth

Mads Michael Nielsen is not your ordinary Vocational Agriculture II student. He is a member of the Yleta Future Farmers of America Chapter, Mads is the first foreign exchange student to participate and be active in the vocational agriculture program in the Yleta Independent School District of El Paso, Texas.

YOUTH EXCHANGE PROGRAM

Mads is a participant in the school district’s Youth Exchange Program and is from Sventrup, Denmark, a town of 4,000 villagers. His host family in the exchange program is the Third Pope family and Mads’ “host brother,” Kevin Pepe, is also a member and an officer of Yleta FFA program.

Mads arrived in El Paso in August of this year and quickly became active in vocational agriculture. His agriculture background in Denmark included working on a dairy farm in tiny Sventrup and raising horses.

I wanted to learn about American and El Paso agriculture as a participant in FFA,” says Mads. “My school permit expires in May of 1978 and I hope to carry back to Denmark various materials and knowledge learned while participating in Yleta’s agriculture program.”

NEW AWARENESS

Many Yleta FFA members have been able to learn and appreciate the varied agriculture practices used in Denmark in a society that is efficient, but whose agriculture practices are behind the United States in output. Through Mads’ conversation and class reports, the Yleta Chapter has discovered that dairying and swine are the major agriculture products raised by Danish agriculture. Mads is also proud of the many green acres of pastureland in Denmark and his country’s contribution to food production has been the production of “Danish hams and bacon,” a real consumer’s delight.

According to Yleta Agriculture Department chairman, J. B. Farrell, Mads’ participation in vocational agriculture through the foreign exchange program has brought a new awareness to the Yleta FFA members. “Our kids now know that there is more than just cotton, peaches, and irrigated farming on the local level. Several thousand miles away a Danish farmer hopes for a good year with his dairy and swine operation. Mads has helped us to learn and appreciate a total world effort of feeding the world’s population.”

Projects and Activities

Mads, who is eighteen, and a graduate of a Sventrup public school that would be the equivalent of a U.S. junior high school, has a medium sized farm as an agriculture project. Along with his “host brother,” Kevin, who has a Hereford stud, Mads helps his lamb at the Yleta FFA school farm. Twice a day, morning and night, Mads and Kevin feed and clean the livestock. Big plans are to show and, hopefully, sell his lamb at the Southwestern International Livestock Show in February or the Yleta FFA’s Chapter Show in March.

In addition to his lamb project, Mads is active in the Yleta FFA’s many activities and takes part in the overall agriculture program. Mads says, “We have no agriculture youth organization in Denmark like the FFA. And I have been lucky and glad to have learned and participated in an agriculture program. I hope I have shown people what a Dane is like and how different each agriculture is. I certainly have grown to appreciate America’s agriculture and also the educational aspects.”

Nielsen’s future plans include continuing his education at a Højre Førdebæredæknings (a Junior College) in his native Denmark. Although the agriculture opportunities and economics are somewhat frightening and challenging to him, he plans to try and stay involved in some form of agriculture.

INTERNATIONAL EDUCATION IN AGRICULTURE

To the Yleta chapter’s advisors and members, the foreign exchange program that allows a youth from one country to participate in the agriculture program is very rewarding. New ideas and concepts are exchanged and lasting friendships formed. A Danish agriculture student in America certainly is International Education in agriculture that serves our friends there and here.

Steve Forysth

Mads Nielsen proudly sits at his show lamb at the Yleta FFA school farm. El Paso, TX. Mads is a foreign exchange student member and has the lamb as his project.
IN INTERNATIONAL EDUCATION
A TWO-WAY PROCESS

by Roy Agan
Teacher Education
Sam Houston State University
Huntsville, TX

In this country, we frequently classify ourselves as experts in preparing educators in other parts of the world, for in several other nations in the improvement of their pre-service education. We may point with pride at the farm-based project programs in some nations, school agriculture programs in still other nations and so on. And we wonder, however, if our wide-ranging educational programs in agricultural education programs in the United States improved in the agriculturist countries of the world? We should not ignore this valuable resource.

INDONESIAN AGRICULTURAL EDUCATION

In October, 1977, this writer made a study tour of the programs of agricultural education in Indonesia, the islands of short term and Master's Degree programs for 34 agricultural education students. This followed the direction of a program of 34 teachers of agriculture on graduate degree level. This situation is well prepared and given a continuous basis under the sponsorship of their government, both abroad and at home. Training courses for teachers of agriculture offer both theoretical and practical instruction to vocational agriculture students in schools. This writer's research has indicated he will be in the group of students in the three countries of any caliber in which the national program in crops. Opportunities are available in schools of vocational agriculture for both theoretical and practical instruction in fields. The National FFA Center, under the direction of Levine, Gammage, is arranging group-learning (field classes) for a group of teachers from the United States who want to actively teach vocational agriculture in these nations. There are formal sessions given in German, French and English through simultaneous translations. However, a really valuable outcome of the course is the opportunity for informal visits among the teachers of vocational agriculture from different countries between the formal classes.

The National FFA Center, under the direction of Levine, Gammage, is arranging group-learning (field classes) for a group of teachers from the United States who want to actively teach vocational agriculture in these nations. There are formal sessions given in German, French and English through simultaneous translations. However, a really valuable outcome of the course is the opportunity for informal visits among the teachers of vocational agriculture from different countries between the formal classes.

LAND LAB EXPERIENCES IN SIERRA LEONE AND ILLINOIS

by Bertton E. Souther
International Agricultural Education University of Illinois
and
Sunny W. Tucker
Agricultural Education
Njala University College
University of Sierra Leone

The concept and importance of experience programs in education is neither novel nor new. Around 600 BC, the ancient Greek philosopher, Sophocles, said, "One learns only by doing the thing; for things you think you know it - you have no certainty, until you try." In China there is an old proverb which denotes a similar theme: "I hear and I forget; I do and I understand."

One type of school based experience program is the school farm or laboratory. Land labs are becoming increasingly important in both Illinois and Sierra Leone. A recent study by the authors found that more than half of the agricultural departments in Illinois currently have some type of land laboratory. This number is expected to increase and the quality of experience programs by these land laboratories is expected to improve as teachers acquire additional skills and knowledge about how to incorporate this resource into the instructional program.

In Sierra Leone, school gardens are new and are being used to provide a form of practise for students. These gardens are being developed and used as effective in turning young people away from agriculture. In Sierra Leone, efforts are now underway to provide positive, school-based agricultural experience programs for rural students of these communities. Students are preparing new gardens as part of their instruction. They are preparing new gardens as part of their instruction. This negative use of the school garden tends to associate farm work and activities with undesirable behavior in the minds of students. The agricultural education faculty at Njala University College, University of Sierra Leone, are working to change this traditional style of using land laboratories. They are providing new agricultural teachers who understand how to use this school land as an effective educational tool.

Njala University College, University of Sierra Leone, as in many developing countries, are relatively small and the resources of farm families are very limited. Many farm families operate at the subsistence level. Their farming methods are often very inefficient. However, they have much to offer in the way of improved supervision experience programs within their villages. Seldom is sufficient land and other resources available to allow students to "learn by doing" at home. The negative use of school gardens in the past has further complicated the situation. Students go through school gaining little practical experience in agriculture and what experience they do get is forced upon them in a negative context. Furthermore, the examiners given by the West African Education Council Area theoretical rather than practical knowledge and skills. Rather than preparing rural students to return to the land and increase agricultural production, schools in many developing countries are ineffective in turning young people away from agriculture.

In Sierra Leone, efforts are now underway to provide positive, school-based agricultural experience programs for rural students. These gardens are being developed and used as effective in turning young people away from agriculture. In Sierra Leone, efforts are now underway to provide positive, school-based agricultural experience programs for rural students. These gardens are being developed and used as effective in turning young people away from agriculture. In Sierra Leone, efforts are now underway to provide positive, school-based agricultural experience programs for rural students. These gardens are being developed and used as effective in turning young people away from agriculture.
PLAIN AS THE NOSE ON YOUR FACE

by

Lee D. Sandager
Vocational Agricultural Instructor
Forest Lake, MN

A few years ago I had the opportunity to be a part of a team of educators who were recruited and assigned to a USAID project of teacher education in East Africa. My assignment was to a teacher training college in Kenya. My duties and responsibilities were to serve as a staff member working with other African tutors to train students to teach agricultural primary schools. An additional responsibility was to develop a curriculum for teaching agriculture in the teacher training institutions of Kenya. The program was administered by Teachers College, Columbia University, and involved educators of several disciplines. I was, however, the only member of the team with a background in vocational agriculture. This quickly gave a reference point different from others that I would have the pleasure of working with.

IDENTIFYING NEEDS

My training and years of experience provided an opportunity to quickly identify the problems in rural education. I learned that what was obvious to me may have not been so obvious to others on our American team without the benefit of a vocational education experience. An old adage used by Dr. A. M. Field, professor of Agricultural Education at the University of Minnesota, during my college days became apparent: “We must take the student from where he is to where he ought to be.”

It appeared obvious that the African students who were to become teachers must be taught how to identify the needs of their students and of the farms and the villages from which they came.

Studies revealed that 83-90% of the people in East Africa would continue to live in the rural sector for the next 35-40 years. If education is to have meaning and purpose to the lives of these rural families, it must be directed with an application to improve their lives and their daily living conditions. The science, math, and the language skills that they learned before being plugged into their life on the land and in the village where they are now and where they will be for the next generation. Education must be relevant!

PROBLEM SOLVING WITH THE “SELECT 50”

by

Harold Engeking
Coordinator of Adult Education
Southern Illinois University
Carbondale, IL

"learning by doing" that the smith of knowledge is gathered. To accomplish this, farmers need help selecting the demonstration plot. Applicants fill out the fertilizer, plant the seed, apply the herbicides, and harvest the crop. As the farmers give of their time and effort, the crop becomes their crop and learning and understanding is increased many times over that of the farmer who only observes and has no part in planting, planning, or harvesting of the crop.

2. Let local farmers (the Prefeto, local agricultural leaders and farmers) help plan the demonstration plot. This will result in a different plan in each county, but this is good. Programs should not be standardized because standardized programs limit initiative, curb ideas, and sometimes result in a lock step, smiley approach to the solution of agriculture problems.

3. Never underestimate the intelligence of farmers. Look to them for ideas and suggestions. If a farmer has an idea and receives recognition for it, he will work for it. Getting and using farmers is the most important.

4. Never treat farmers as inferior. Treat them with courtesy and respect. The most prospective way to depend upon the cooperation you receive from farmers.

5. The farmer’s family is most important to him and you should include them in your plan. To ignore them is using them as bait. Treat the farmer's wife as you would the Queen of England and his children as the most precious individuals you have ever met.

(March 1978)

THE AGRICULTURAL EDUCATION MAGAZINE

MARCH 1978

300

201
"KYAUTATA ZAMAN KAYUE” NIGERIAN STYLE-TO-AG

by Robert Martin
Ve. Ag. Instructor
Bremens, IN

Robert A. Martin

"Kyautata Zaman Kayue"—(Improvements to the local situation)—fully expresses attempts being made to "vocational" agricultural education in Nigeria and much of Africa today. This West African country and indeed most of the world community has come to the realization that the agricultural industry demands very high priority.

THE CHALLENGES

One cannot speak of Africa as a whole or Nigeria in particular without thinking about its agricultural potential and the great challenges that have come about in recent years. These challenges will by no means go away by playing a bit of black magic. The situation is ever-changing and one only needs to look at population increases to know full well that the demand for increased efficiency and production in Nigerian agriculture is created now. Nigeria has a population of about 70 million people. By 1985 this is expected to reach over 102 million people. Nigeria is the most populous country in Africa and has enormous resources in land, materials and people to progress substantially in the future.

THE ANSWER

How can these challenges be met? The answer seems to lie in education. The Nigerian government and education have urged people to go back to the land and produce the food necessary for her people. Can it be that this is an energetic push in the secondary school system to promote the agricultural industry? To help meet this need for people to return to the land, secondary schools have broadened their offerings by introducing agricultural science into their curriculum. Until recently only a small number of schools had a course in agricultural science. Now many schools are offering this course to their students in an effort to emphasize the dignity of work and the importance of agriculture. The introduction of agriculture in schools across this great country is based on the following principles. The first principle is certainly the guiding one; the others are incidental to the first.

GUIDING PRINCIPLES

1. The education of boys and girls in purely academic subjects without moral and spiritual education at the same time is disastrous. It is in line to create generally individuals who like to dissociate themselves from common uneducated people and so, instead of becoming useful to society, they become more parasitic. Moral and spiritual values are best instilled by laying emphasis in the school curriculum on practical work of every kind. In this agricultural curriculum maintained throughout the entire course of five years, there is more practical work than in any other subject. There has been evidence of well-developed character in former students of schools having offered agriculture for five years compared to those who have chosen a more lucrative career. Many former students of the author are now in careers in agriculture. They indicate not only a deep appreciation of their practical training but also an enthusiasm to use that training in helping others.

2. The manpower needs of the country should be a guiding principle in the choice of a career, particularly for those who are concerned to serve rather than to fulfill ambitions. General education is, of course, not intended to be a professional training for a career, but an important principle behind agriculture on the syllabus is to point boys and girls in the direction of the many opportunities in the main careers for people in this land—agriculture.

3. Nigeria’s greatest needs are in agriculture, and in this field an almost indefinite number can be absorbed. Secondary school graduates given proper academic training are more likely to turn their attention to agriculture. Agriculture maintained throughout the school course keeps up an interest in this field which often develops into a genuine career interest.

4. It is too easy for a secondary school student in this country to live up to his full potential in this world of the world of the school with its high standard of living, and the world of the “home” with its simplicity and hardships. The activities of boys and girls in school cut across both worlds; having agriculture science help keep the balance between home and school life. There is probably less tendency for students to drift aimlessly in town with this sort of background.

5. Nigerian educators have come to the realization that if secondary school students learn agriculture in school, students, who study agriculture in school and later become teachers, can instill in students the right attitudes to life. There is not objection to this, however; that is that agriculture must be treated as a subject with the same status value as that of other high-rat-ed subjects in the school curriculum.

SUCCESSFUL AGRICULTURE PROGRAMS

Over the past few years the agriculture programs that have functioned successfully in Nigerian schools have developed upon the kind of things that:

- Maintain the interest of the student in this subject up to and beyond the time he leaves the school.
- Enrich the kind of character which is aware of the main needs of the country and is humble enough to want to help those who form the majorities of the farming folk.
- Keep the course practical and regulated to everyday life.

PROGRAM PROJECTS

In order to achieve this, the following projects have been worked into the course at several of the secondary schools.

1. Student Farms—Each student has a farm plot to produce goinea corn, groundnuts, cotton and mus- maro, which is planted on the farms on a rotational basis.

2. Student Gardens—Each student raises tomatoes, squash, okra, carrots and cucumbers.

3. Students of Waide Secondary School carefully care for their gardens and enjoy a brief rest as the camera catches them.

4. Livestock Projects—There are class projects handled by five or six students in a class. The livestock include chickens, cattle, pigs and rabbits.

5. Experiments for Local Agricultural Authority—Here young farmers are given an opportunity to conduct projects in an area.

6. Student Experiments—These include fertilizer trials, pesticide trials, and various soft tests.

7. Helping and Teaching the Local People—Selling chickens to the local people and teaching them how to raise them.

8. Lectures by Local and Visiting Agriculturists—Continued

LAND LAB EXPERIENCES . . .

1. Occupations and to provide experience through cooperative education programs. Some schools in Illinois are moving to supplement this off-farm agricultural training with firsthand knowledge and experience in production agriculture. The land laboratory of the school farm is the critical element in this approach, since students do not have the opportunity for "production" experience programs at home. Through school farm and "experience operating and adjusting farm equipment, overhauling and repairing machinery, and planting, cultivating and harvesting crops. In addition, some schools students negotiate to engage on behalf of the FFA Chapter, study and purchase crop insurance, sell commodity contracts and analyze production records to determine how efficiently the chapter utilized labor and capital.

2. Unlike Sierra Leone, the majority of agricultural students in the U.S. will not be directly engaged in agricultural production. However, in both countries young people are needed who understand and are positive for agriculture. Persuasion working in ag-business must know and appreciate the problems faced by the farmers they are attempting to serve.

SUMMARY

One criticism frequently made by American agricultural specialists working abroad is that agricultural personnel need basic skills and not necessarily the latest, most角落 practical experience. In many parts of the U.S. today, a majority of the participants in agricultural education programs are young people who are very interested in working hard and learning how to farm.
SUBSISTENCE TECHNOLOGY FOR FARMERS IN LESS DEVELOPED COUNTRIES

by John Lorent
Dir. of Environmental Studies
Queens College, City Univ. of NY

Today we are constantly reminded of the exploding world population and the much slower progress in increasing food production. Information collected by organizations such as the Food and Agriculture Organization (FARO) of the United Nations, World Health Organization (WHO), and the United States Department of Agriculture (USDA) all indicate that the world is rapidly approaching a point when it will be unable to feed itself. The most immediate pressing problems exist in the then-developed countries (LDCs), where in some cases more than 60 percent of the population are suffering from protein-calorie malnutrition.

PROBLEMS

(1) Shortages of food supplies have prompted the United States and other mid-20th century countries to develop international agricultural programs in LDCs. However, many of these attempts involved the importation of Western technologies which are oriented towards solving the problems of highly industrialized countries using modern intensive agricultural practices. Such programs had little or no effect on the productivity or increase in the standard of living for populations in rural areas of LDCs.

(2) Many of these programs were preoccupied with production for commercial markets employing 20th century technology that requires specific knowledge and skills, high capital investment, and equipment dependent on industrial support systems and services. This emphasis on sophisticated intensive technology has proven to be too cumbersome, and in some cases, not adaptable to environments of the host country, hence they were wasteful of capital and natural resources.

In some cases governments and wealthy businesses have developed programs in LDCs that have been directed to short-term exploitation rather than toward a more sustainable, yield agriculture. Such programs would often originate from a country that was less industrialized and less efficient. Too often the programs were directed to only a small number of the population and of the population that were already efficient. Too often the programs were directed to only a small number of the population and of the population that were already efficient.

PROPOSING A PROGRAM

Because of their size and potential, many of these family farm enterprises could be the most efficient users of the land if they were to adopt basic ecological agricultural practices and by using a technology requiring simple hand and animal powered tools and hardware. This would result in an increase in agricultural land productivity and reduced need for food supplies and afford a gain in the standard of living for the local population.

Many of the family farms of LDCs have the existing technology and skills needed for the use of the tools and hardware of simple hand and animal powered technology.

The ability to develop a program of technological priorities for individual group or family needs.

ADVANTAGES

The following are some of the advantages which could be realized by introducing a simple hand and animal powered technology into rural and remote areas of LDCs:

1. This simple technology can be introduced at a low capital investment.

2. Tools and hardware of this technology are not cumbersome and can be transported without difficulty to remote areas either by roads and trails, or even using animal power or manpower.

3. The same technology can be self-sufficient, as the facilities and resources for producing and repairing the tools and hardware are well adapted to environments of the host country, hence they were wasteful of capital and natural resources.

4. The technology is dependent on local labor, and thus can be used by the broadest segment of the rural population.

5. The simplicity of this technology has the capability for immediate implementation into many rural areas and family farm enterprises.

6. The main purpose of this proposal is to seek assistance in developing a program to train young people as change agents to work in LDCs, with the knowledge and skills of basic subsistence agriculture, using simple hand and animal powered tools and hardware.

BACKGROUND

Many rural communities and farm families in LDCs are living at a primitive, poverty-stricken existence, with less than 10 percent of the rural population. It is important that the well-being of the group be given priority consideration and attention be made to improve the general health situation and thus stimulate their internal motivation to work.

It is contended that the establishment of new small technologies will improve the productivity of existing technologies using the same infrastructure and other features of the economy and social structure. A program as proposed will develop greater internal motivation and pride in the family farm enterprise.

It is not the intent of this program to replace any existing technology with a technology proposed to be "correct" but rather that the existing technologies be complemented and supplemented in a course of improvement.

Current agricultural curriculums in modern universities in developed countries are not suited for application in LDCs. Many poorly motivated and technologically obsolete programs are being adapted in the developing countries of the 1970s. Further, many of the rural agricultural areas have not been exposed to the many efficient hand and animal tools and hardware technology of this last period.

(Concluded on page 212)
A FIVE-YEAR PLAN

by

William H. Kelly

Associate Dean
College of Agriculture
University of Vermont

Burlington, VT

In some nations, some elite elements can see education as a means of maintaining privileges and legitimated continued high status for themselves and their children.

EDUCATION FOR WHAT?

While each developing country is certainly unique, there are often many striking similarities and common problems. One of these is that the ground is the educational system which is usually assumed to be vital and necessary to any forward looking society. But is traditional education per se the answer to underdevelopment and a slumber economy? The author suggests it is not, and any proposed program in agricultural education must start by examining, and perhaps challenging, the basic tenets of the educational system.

Dr. Norman Miller, an anthropologist and film maker, summarized the situation in many developing countries very nicely with the following statements:

- EDUCATION FOR UNEMPLOYMENT. For a great many primary and secondary students there is simply no place in the marketplace for their jobs. If local economies are growing too slowly to accommodate even these students with higher educational attainments.

- EDUCATION FOR DISAPPOINTMENT. The process of enlightening gives students hopes that can never be fulfilled and conditions the young to a way of life that in fact is impossible.

- EDUCATION FOR INEQUALITY. Discrimination against girls, against nomadic groups, against poorer students, and against ethnic groups. This system is found in most educational systems.

This story for "Kroen Russe" part of the ski film "Tales of Chamonix" and "The Angoras" was made by film maker Wall Dr. Norman Miller. Discovered Pictures of Chamonix and the Angoras. The video is now provided by the film maker.

William H. Kelly

The model for agricultural education suggested in this article is based upon the following six assumptions:

1. The agricultural problems and solutions described by Miller are real, and education in these disciplines in most developing countries. Host countries must recognize this and be receptive to agricultural and pedagogical innovations that will attempt to reverse these trends.

2. A condition that is truly interested in the project is genuinely interested to participate as a cooperative partner.

3. The minimum time required for the project is five years (but could be slightly longer depending upon the assessment phase).

4. Curriculum development for the intermediate level must proceed simultaneously with a program in teacher education.

5. Any secondary or other level curriculum development should be able to stand as a self-contained program. In other words, it should not be developed on the assumption that the students will have sufficient prerequisite academic background in any specific area.

6. The program will be built around what is referred to as the capacity of the country to finance support. U.S. funds should be viewed as a way of helping Americans involved in the project to change and pay for participant training in this country.

The author agrees with Norman Miller's assessment of the situation as long as education is defined as traditionally educational in nature. Miller goes on to list three main factors that must change in order to reorient the purpose of education:

1. Government policy and assumptions on education

2. What happens in school

3. The amount of education given

The remainder of this article will attempt to outline the author's concept of a comprehensive and realistic program in agricultural education that will attempt to solve these problems above, plus hopefully avoid the educational pitfalls outlined by Miller.

BASIC ASSUMPTIONS FOR MODEL

The model for agricultural education suggested in this article is based upon the following six assumptions:

1. The educational problems and solutions described by Miller are real, and education in these disciplines in most developing countries. Host countries must recognize this and be receptive to agricultural and pedagogical innovations that will attempt to reverse these trends.

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ASSessment PHASE

The first step is to determine realistic broad goals and objectives for the project. As a basis for the process, many U.S.-funded projects have either looked this point or attempted unrealistically optimistic goals previously determined by the host government. For example, in many settings it would be entirely feasible to introduce to university students the basic principles of family planning, plus hopefully avoid the educational pitfalls outlined by Miller.

THE AGRICULTURAL EDUCATION MAGAZINE

MARCH 1978

207

206

206

206
WORK EXPERIENCE IS TAKING ROOTS IN INDIA TODAY

by Dr. D. K. Goswami
Chairman, Dept. of Agriculture
Regional College of Education
Amaravati, India

Since the achievement of independence in 1947, India has tried to change its educational system in order to meet the new challenges and needs of the society. Three Commissions on Education, the Rashtrakothi Commission on University Education in 1949, the Madhavji Committee on School Education in 1952 and the Kothari Commission in 1964-66, have recommended this approach. The Government of India has implemented most of the recommendations of these commissions.

Introduction of work experience in the schools up to the secondary stage is one of the important recommendations of the third commission. Efforts have been made and are being made to implement this recommendation also. In India, work experience is supposed to be a term of recent origin. Mahatma Gandhi suggested somewhat similar type of program in 1934 under the name of "Rahat Prasad Education." Work experience in educational institutions is a method of integrating education with some productive work. In a broader sense, work experience may be defined as the participation of students in some productive work in school, college or university, in the home, in a workshop, in a factory, on a farm or in any other productive situation. In fact, work experience seems to produce responsible citizens by involving in the student values such as cooperation, honesty, sincerity, confidence, leadership, dignity and love of labor.

In the present educational system in India, most of the students' interest is open怔ed and passive, i.e., on the study of languages, humanities and social sciences. Some time is given to numeracy also, i.e., to the study of mathematics and natural sciences. But the work experience has been almost totally absent till recently. It needs to be highlighted since it enables the students to acquire skills to do some productive work in an efficient manner. Moreover, the Kothari Commission on Education (1964-66) in its report has greatly emphasized the introduction of work experience in educational institutions as a means to the ends of "education and training". Thus the Kothari Commission on Education (1964-66) in its report stated: "The introduction of work experience in the schools is a very important part of the educational system in India. It is a step in the right direction and should be encouraged."

In an agricultural country like India, work experience in agriculture should play an important role in increasing the agricultural production of the country. It may help better students in self-employment also.

ORGANIZATION OF WORK EXPERIENCE

For effective education, the poor organization is of vital importance. A good organization creates background against which work can be organized. It enables the teachers to utilize the facilities for the development of the various fields. It harmonizes and unifies the various components of the school system.

The organization should be flexible and dynamic. It should be economical to manage, and should be practical and fruitful. It is best for one community to learn from another. While all human and material resources should be brought to bear in the minimum, building blocks, houses, farms and factories, equipment and organizers, community needs and desires, pupils, teachers, parents should be integrated into the whole. In brief, organization of work experience is an essential ingredient of education. Any good organization should consist of planning, staffing, directing, coordinating, controlling, reporting and budgeting. The Kothari Commission on Education (1964-66) recommended the introduction of work experience in agriculture right from the junior class up to the university stage. At the same time, it is necessary that he be provided with a variety of experiences based on the current and future occupational needs in the surrounding area. Experience gained should be adapted to the students' interest and ability.

The main objective of introducing work experience in the educational system is "linking of education with work." Thus the purpose of "doing" as part of the learning experience, i.e., "learning by doing" has been closely associated with the introduction of work experience program in India. It is like a slogan in the United States of America, "Learn to do by doing." In an agricultural country like India, work experience in agriculture should play an important role in increasing the agricultural production of the country. It may help better students in self-employment also.

The agricultural production of the country has increased remarkably due to the introduction of work experience in agriculture. The government has achieved this goal by providing better education and training to the students. The Kothari Commission on Education (1964-66) recommended the introduction of work experience in agriculture right from the junior class up to the university stage. At the same time, it is necessary that he be provided with a variety of experiences based on the current and future occupational needs in the surrounding area. Experience gained should be adapted to the students' interest and ability.

THE AGRICULTURAL EDUCATION MAGAZINE

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Students in an agriculture work experience class remove weeds from their vegetable plot.
A UNIQUE EDUCATIONAL EXPERIENCE

by E. Crot Stillwell
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diplomacy in operation. Other important factors that surfaced were the negative aspects of food eaten, types of entertainment, and philosophy of life as evidenced by the working and playing together of those involved.

WORK EXPERIENCE ABROAD

Perhaps the most effective method of international education that either American youth or foreign youth can participate in is the Future Farmers of America Work Experience Abroad (F.F.A.-W.E.A.) Program, established by the National F.F.A. Association located in Alexandria, Virginia. For many, the F.F.A.-W.E.A. program means little or nothing until becoming involved either by having a young man or woman in your community for a designated period of time or by sending a local youth to a foreign country. My first experience with the W.E.A. program was through a neighboring agriculture instructor who asked me to help in locating a "host family" for a W.E.A. European participant. Obtaining the help of other agriculture instructors, the search began and a suitable host family was found.

Our first W.E.A. student was to arrive on June 2, so plans were made to journey to the airport and pick up the participant and take him to his host family. From this point forward, seven years ago, this adviser has dealt with a dozen or more young men and women from foreign countries who arrived on the Work Experience Abroad Program. Also, two students from our chapter traveled to Europe under the F.F.A.-W.E.A. program.

From the time a student arrives until he leaves, the host family and the participant learn from each other. Simple methods of how things are done, there or here, are learned as to family life, recreation, and sight-seeing during the program. The host family begins by providing room, board, and a salary as set forth by national office guidelines. There is a time to give direction, suggestions, and advice when any misunderstanding on the part of the host family or the W.E.A. participant.

Once the language problems are ironed out and the participants can really express themselves, an educational exchange takes place which is fabulous for these students.

Mistaken ideas, false notions, ideas of wealth, and educational programs of the kind are brought about from this medium of People to People exchanges, the F.F.A.-W.E.A. Program is democracy in action at its best.

The real educational exchange through this program allows participants to educate themselves, adjust their philosophy of life through the educational exchange of ideas, ways and means, to become more knowledgeable, useful citizens for both countries.

Education "Here and Here" is a unique educational experience for those who accept the challenge to participate.

Sam Houston State University, he taught more than 1500 student teachers, many of whom have assumed prominent leadership positions in agricultural education.

Gerald Morrison was born in a farm home June 23, 1899, the first of nine children. He attended rural elementary schools. Because of the lack of an accredited high school in his rural community, Gerald had to "board" with a family at a nearby larger town in order to complete a high school education. He attended Howard Payne College and began his professional career as a teacher and principal of rural schools. Mr. Morrison completed his B.S. degree in Agricultural Education from Sam Houston State University in 1931 and remained in college to obtain his "Smith-Hughes" certification in 1932. He obtained his first vocational agriculture teaching position in May, Texas. As a beginning vocational agriculture teacher, he was required to teach some of the existing school structures and build his own vocational agriculture facility.

In 1937, Gerald accepted a vocational agriculture teaching position at Madisonville, Texas, where he supervised the local canned fruit plant and food production projects at the beginning of World War II. He served in this capacity until the fall of 1942 when he became a teacher trainer at Sam Houston State University. During the remaining years of World War II, Mr. Morrison served as an itinerant teacher trainer and traveled throughout the state of Texas, assisting non-certified teachers to develop teaching competencies.

For many years the name of Gerald Morrison was synonymous with the State FFA Leadership Contest in Texas. As a student at SHSU, he was chairman of the student committee which established this contest. In his vocational agriculture classes and also as a regional director, he emphasized the leadership development of the highest priority. He was also chairman for the State Public Speaking Contest, and several area FFA judging contests for a number of years.

In addition to his academic preparation at Sam Houston State University, Mr. Morrison also studied at West Texas State University, Sul Ross University, University of Texas, University of Houston and Texas A & M University where he received the Master of Education degree in 1941.

Professor Morrison has been the recipient of several state and national awards. He received the Honorary American Farmer Degree and the Southern Regional Distinguished Service Award from the NVATA. He was honored three times for Distinguished Service from the Vocational Agriculture Teachers Association of Texas. He was recognized as the Vocational Agriculture Teacher Trainer in the State of Texas and received a Special Service Award for outstanding service to the State FFA Association.

(Concluded on page 215)
The Apple Tree Curriculum Approach in Korea

**BACKGROUND**

Since the first systematic Agri-Trade-Industrial High School was established in 1904 and the first Agriculture and Forestry High School in 1906, agricultural education in Korea may be classified chronologically into three phases. The first stage (1906-1945) was the period under the Japanese control. The second stage (1946-1962) was prolonged by the Law of Education in 1949 and the first curriculum regulation for agricultural education in 1955. The third stage (1963 to date), a developmental stage, resulted in the establishment of the Department of Agricultural Education at Seoul National University, the revision of the curriculum regulation, the development of the educational objectives for agricultural high schools in 1963, the implementation of national skill contests in 1966, the third revision of curriculum regulation in 1971, the improvement of agricultural extension services for Farmers of Korea and the provision for the cooperative vocational education program in 1972.

Educational objectives of agricultural high schools which were specified in the second curriculum regulation in 1963, were (1) to educate prospective and present farmers and (2) to develop leadership to contribute to rural community development. The objective, to educate individuals who were planning to engage in agriculture, was added in 1971.

To achieve these educational objectives, agricultural high schools established such departments as agronomy, forestry, livestock management, agricultural mechanics, agricultural civil engineering, agricultural products, horticulture, agricultural cooperatives, sericulture, agricultural extension, and agricultural home economics. Depending on the local situation and program needs, at present there are four to six departments and ten to twelve occupational agriculture teachers at each agricultural high school. The curriculum for each department involves 30 to 50 percent of general education and 50 to 70 percent of their time in agriculture. By the Law of Education, thirteen model agricultural high schools, in 1972, out of 115 agricultural high schools were required to provide 30 percent general education and 70 percent agricultural education.

**APPLE TREE CURRICULUM APPROACH**

The educational objectives of agricultural high schools in The Republic of Korea may be divided into two categories: (1) to develop effective citizens for society and (2) to develop effective citizens for the world of work. To become productive citizens in society, students should develop abilities and understandings in such fields as health, emotional life, mental functions, values, and social life. In becoming citizens in the world of work, students need to develop abilities to engage in applied biological and agricultural occupations.

The curriculum in Korea is considered to have a system and subsystems of elements much like that of an apple tree (model 1). The relationships of all elements and sub-elements to the overall curriculum system are both contributory and directive. The root system of an apple tree may be compared to the agricultural education curriculum objectives related to the development of citizens in the society (general education). The portion of the tree above the ground may be compared to the objectives to develop citizens for the world of work (occupational agriculture education). The trunk may be compared to the common abilities which are needed for all agricultural occupations. The limbs may be compared to the common abilities which are needed for each agricultural occupational cluster: agricultural production, agricultural supply and service, agricultural mechanics, agricultural products, forestry, ornamental horticulture, and natural resources. The branches may be compared to the abilities needed for each agricultural occupation. The twigs may be compared to the abilities needed for each occupational task. The fruit may be compared to the entering level competencies needed for each agricultural occupation.

If the apple tree model is used to illustrate current education, some parts of the root system and some parts of the trunk may be compared to career exploration. Some parts of the trunk, limbs, branches, twigs, stems, and buds may be compared to career preparation.

A combination of the subject matter approach and the integrated curriculum development approach is used in the development of the total educational objectives of the agricultural high school. In the case of the task analysis approach, this year's skills and knowledge learned this year may not be applicable for jobs of the future because knowledge and skills required for the job are changing very rapidly. Although new skills and knowledge and skills may be supplied through in-service education, it will be very difficult to learn up-to-date knowledge and skills. Therefore, there are close relationships between general and vocational education.

**CONCLUSION**

When the apple tree curriculum approach is used, the following outcomes will result:

1. There will be a close relationship between general education and vocational education.
2. Transfer of learning will be maximized through emphasis on the interdependence of the two areas. The model tree needs the necessary fertilizers so that the root system will be able to absorb the nutrients needed to nourish the buds. In this situation, only the knowledge and skills needed for the apple tree may be compared to the new knowledge and skills needed for changing job situations. Fertilizers may be compared to in-service education. When teachers think of the process of photosynthesis, the root system, leaves, and air work together to make carbohydrate in an apple tree. Similarly, some part of general education and some parts of vocational education must be combined to maximize certain knowledge and skills.

Therefore, there are close relationships between general and vocational education.
DUAL DEGREE—A NEW CONCEPT FOR "THIRD WORLD" DEVELOPMENT

In January, 1976, the need for a new cooperative educational program between the liberal arts colleges and Kansas State University, College of Agriculture, began to emerge. As a result of an agreement out of a common concern for hungry people facing malnutrition and starvation around the world. Lack of avail-

able finances to fund the world and inadequate logistics ruled out most other alternative solutions.

BACKGROUND

Through research and analysis, it became apparent that the private liberal arts colleges were doing an excellent job of educating their students in the liberal arts, including a vital worldview module. At the same time, the tax supported land-grant university was providing high quality basic and applied traditional or occupational oriented education leading to a Bachelor of Science degree for its students.

Out of many discussions between representatives of the private Kansas college and Kansas State University, emerged the possibility of combining the best of these two worlds in order to help the "Third World." This meant bringing together the 'world view' combining the liberal arts college and the occupational components of the land-grant university. This unique opportunity led to the creation of the first cooperative educational program in the United States involving a liberal arts college and a land-grant university. The foundation for the first cooperative Dual-Degree Program was laid in 1976, with the development of a Dual-Degree Program. This new type of program is now being offered by several colleges and universities across the country. The Dual-Degree Program offers students the unique opportunity to combine the strengths of both types of institutions.

THE GERM OF THE IDEA

A request from the Kansas State University Agricultural Education Institute to the Kansas Agricultural Education Institute, Kansas State University, was made to encourage the private liberal arts colleges to join the main campus in the development of a Dual-Degree Program. The idea was to combine the strengths of both types of institutions to create a unique educational opportunity for students.

THE BASIC PRINCIPLE

The basic innovative principle behind the development of the cooperative curriculum program was the commitment to encourage the private liberal arts colleges to participate in the development of a new program. The program was designed to allow students to combine the strengths of both types of institutions.

by Dwight Weibe
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--Continued on page 215--

Continued DUAL DEGREE... ADVANTAGES

Why is the program feasible and desirable from the institutional point of view? One possible reason is that the liberal arts college can offer unique courses or faculty at another institution. Second, it encourages each institution to focus on its strengths. Third, it provides the private colleges with a plan for offering additional degree programs. Fourth, it builds a bridge of relationship between the student and Kansas State University, ensuring that its six-year study, Filth, opens the door to more cooperative curricula programs. Such was the intent of the Kansas State Board of Regents by offering on a cooperative basis tax supported education in non-bidding areas to apply.

DEVELOPMENT

Because of the "Third World" need for the education of agricultural education teachers, it was agreed to develop this curriculum model for the first cooperative program. The project was to be a very appropriate decision because the liberal arts colleges were involved in a state approved secondary Teacher Education certification program. The program also helped meet the requirements for Vocational Certification. It also ensured that the liberal arts colleges had already received a Cooperative Degree Cooperator Program in Home Economics Education. It also ensured that the Agricultural Education Curriculum was developed as an internship program.

CONTINUED LEADER

Mr. Morrison's family is a reflection of his personal and professional philosophy. He has been involved in many leadership roles, including serving as President of the local Chamber of Commerce, and as a Sunday school teacher. He believes that education is a right and that every child should have the opportunity to receive a quality education.

Mr. Morrison has been an active member of the local community. He has served as a board member of several local organizations. He has also been involved in many community service projects, including helping to organize and run community events.

CONTINUED PROBLEM SOLVING

1. Be a problem solver, not a problem creator. If you fail in one trick or trial, don’t give up. Start working on the ten or twenty others that are available to you. Remember, “The best things don’t come easy.” Keep trying until you find the solution for you. You can’t do it all yourself. Don’t be satisfied until you find the answers for yourself and others.

2. Keep trying even when you fail. Keep trying until you find the answers for yourself and others.

That's right, you're learning. It's been said that Brazil is a "sleeping giant." Industrialization is increasing at a rate of two to three times a year. The expansion is being replaced by new ideas and technology. The "ultimate solution" is reworking the "same old dance." More people are turning "the other way." A "Youthful Giant" with an increasing agricultural production that will be an important factor in eliminating hunger in the world.

Marvin Caples

NEW REGIONAL EDITOR "WELCOME"

The new regional editor for the state of Texas is Marvin J. Caples, of the Department of Agricultural Engineering and of the Texas A&M University. Caples holds the B.S. Degree and M.S. Degree from Texas A&M University and an M.S. Degree from Oklahoma State University. He taught vocational agriculture in Texas for eight years. Marvin teaches at Sam Houston State University. We would like to say "welcome" to Marvin and wish him well in his new position as department chairman.

Continued on page 215...
STORIES IN PICTURES

by Paul W. Newlin

Here an agricultural teacher demonstrates the use of the soil auger for taking soil samples at a work experience site in India. (Photo courtesy D. E. Garg, Regional College of Education, Ajmer, India — See related story on page 220)

Prince电信 writes his depression grades as a part of his agricultural experience at Wakil Teachers' College, Busa, Nigeria. (Photo courtesy Robert A. Martine, Bromont, IN — See related article on p. 221)

These Young Farmer's Club members of Wakil Secondary School, Busa, Nigeria, prepare to deliver their cotton crop to the market. (Photo courtesy Robert A. Martine, Bromont, IN — See related article on p. 221)

Medo Ndzun, exchange student from Swaziland, Denmark, exercises his medium wool lamb at the Yecla FFA School Farm at El Paso, TX. He is the first foreign exchange student member of the chapter. (Photo courtesy Steve Farrenka, Yecla FFA — See related article on p. 221)

Young men and women in Kenya, East Africa, preparing experimental trial plots as part of their teacher preparation. Learning by doing experience is perpetuated when they become teachers in the rural schools of Kenya. (Photo courtesy Lee D. Sandberg, Beef Lake, MN — See related article p. 220)