LEARNING FOR EXTENSION

By D.J. Underwood, Principal Extension Officer,
Agriculture Education and Training Branch, D.P.I., Konedobu

WHAT IS EXTENSION?

"Extension is education in real-life situations".

Agricultural Extension, then, is basically concerned with informal out-of-school training for the farmer and his family.

The aim of this out-of-school training is to extend agricultural productivity for both subsistence and cash farming in order to improve the quality of life in rural areas.

A major problem we all have is the change and uncertainty all around us. As extension workers it is our responsibility to look at the changes and uncertainties in agriculture as they affect the rural people.

Think of the changes that take place when cash crops are introduced to a subsistence farming system. There are changes in work patterns and in the distribution of labour for both men and women. The patterns of trade and exchange are broadened as a range of new goods and services find their way into the society. A new source of food leads to changes in diet together with changes in the system of family food supply. All of these changes have uncertain outcomes. That is, no-one knows all about the ways the changes can affect people's lives.

The ability to manage changes like these is clearly an important goal for education.

The education that we are talking about is the helping of people to:

a) identify their own problems and opportunities.

b) use new information to achieve improved benefits through solving problems or grasping opportunities.

For example, to the Highland farmers of Papua New Guinea, preparing land for a garden with the use of hands and sharpened sticks was no problem - until steel tools were available. After the tools were available gardening without the use of a steel spade then seemed to be a real problem. The people then looked for information on how to overcome this new problem. The result was that as the supply of steel tools increased, all farmers grasped the opportunity to benefit from the change.

A highlands woman uses a traditional digging stick to plant her kaukau. Most people have now switched to using steel spades as they are much more efficient - an example of how people can adapt to and benefit from change.

Now let us move from the general idea of "education" to the particular idea of "learning."

LEARNING FOR EXTENSION WORK

In order to manage change and uncertainty both the extension worker and the farm family need to be effective learners. Learning for the sake of learning, as we do at school, often does not really help in real-life situations. With the learning described in this article, decisions can be made towards the improvement of real-life situations. This goes on throughout life. It is life-long learning.

The following are a few points to take note of when thinking about education as life-long learning:

1. Learning is a process that goes on throughout life. Each individual is responsible for the amount of learning he or she does.

2. Individual learners

   a) should be encouraged to take up the responsibility to learn for their own needs;

   b) have different needs and goals;

   c) differ in the way they improve their own abilities to learn knowledge and skills, and develop attitudes and beliefs;

   d) differ in the speed at which they learn;

   e) learn more effectively when following their own objectives rather than objectives set by others.

3. Having clear objectives makes it much easier to achieve results, and to measure progress.

4. Learning is more effective when the learners are actively involved in learning experiences rather than just listening and watching facts being taught or skills demonstrated.

The aim of extension work is to help farmers become more effective at managing real-life change in the environment around them. But in order to help others we must first be effective learners ourselves.

Look at the situation of an agricultural extension officer when he arrives at a new posting. He already has some training which qualifies him for the position; and he also has some experience in agriculture and in extension. However, he is facing many changes which he will need to manage so that he can adapt to his new situation. He obviously has a lot to learn - about different customs and practices, different management and managers, variations of farming systems, variations of climate. In many things the changes are not big, but they present problems and have to be studied. This is a typical real-life learning situation. If the officer is an effective learner he will quickly gather information and develop the knowledge and the skills needed to give him success in the new situation.

As we become more conscious of the fact that **problem-solving and learning are much the same thing**, we realise that effective learning does not belong to the classroom, but to everyday real-life situations and experiences. Whether we realise it or not we all attend the University of Life!

THE LEARNING CYCLE

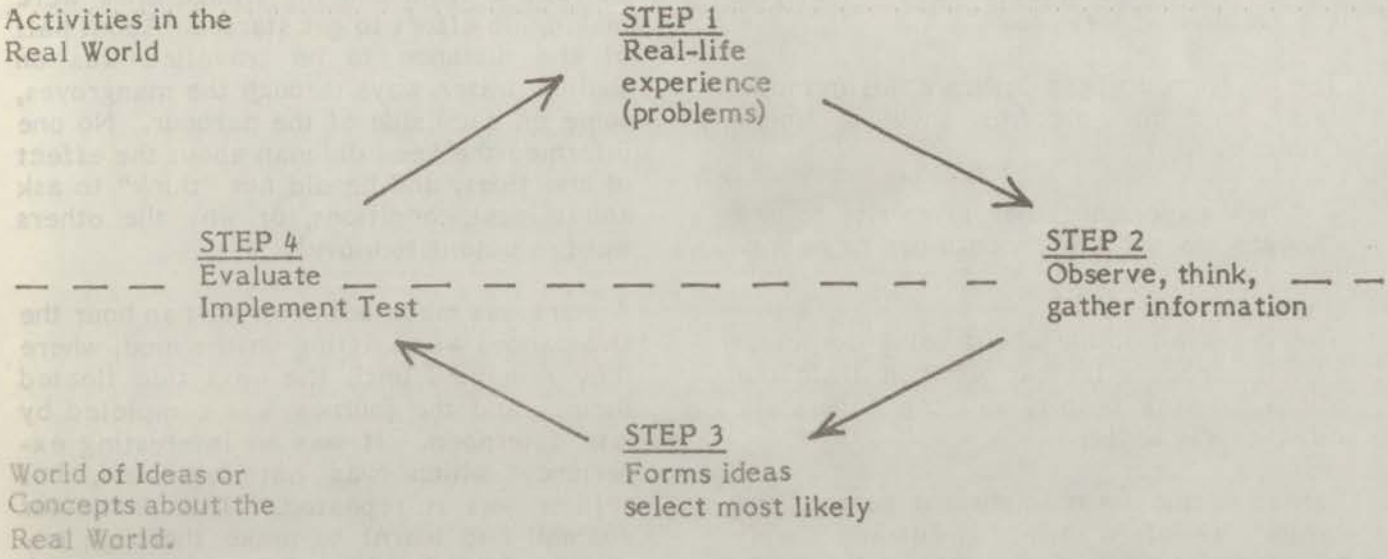
The "experience-based" learning we have been talking about follows a cycle containing four major steps. If we are aware of this, we can greatly improve our learning ability. The usual pattern of the cycle is:

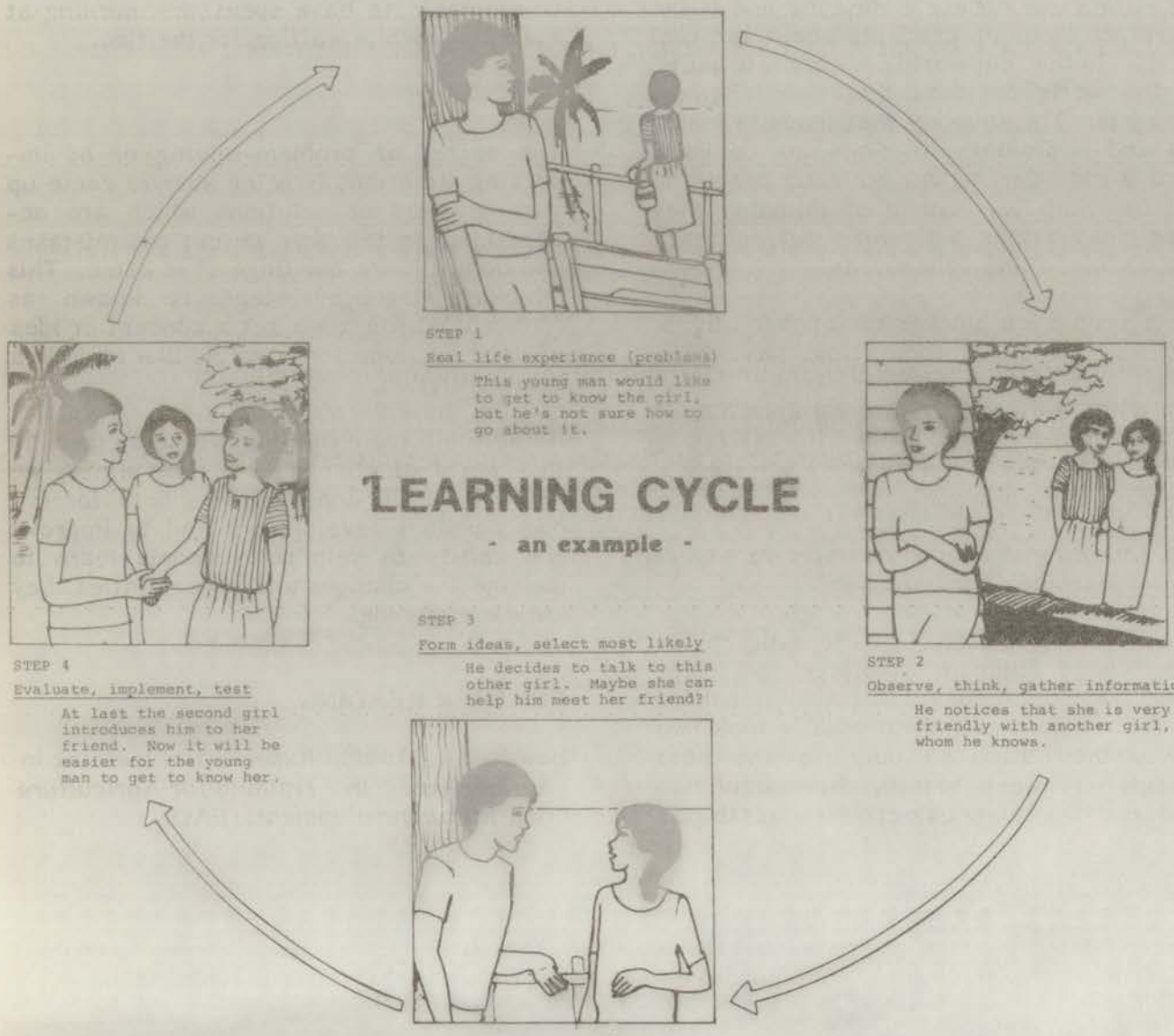
1. A person (the learner) comes up against some real experience which presents a problem or a difficult situation.

2. The person observes and thinks about this.

3. Various ideas for possible action come to mind as the learner tries to find out what is needed to allow for improvements or solutions.

LEARNING CYCLE





4. A decision is made to test and apply new ideas until effective action can give an acceptable change in the problem experienced

The diagram on page 3 shows this in model form, and the pictures show a simple example.

The new experience then gives rise to new changes, so the cycle continues to be followed.

The important thing about being conscious of this process is that we can train our minds to work better, and can understand other people better.

Step 3 is the most important part of the cycle. We often miss this out and simply try the first thing that comes to mind. In the diagram the dotted line indicates a boundary between two worlds. On the top side is the Real World of activities and real-life experiences. Below the line is the World of Ideas or concepts about the real world. In the real world are concrete facts, in the world of ideas there are abstract thoughts. The thinking that leads to learning and improving situations can be quite hard work! This is why so many people do not use Step 3. Instead of thinking, they hope that things will work out, or they simply drift along with events.

Some people are quicker to act than others, but all of us at some time have been caught out when acting "before we think." Too often we jump from Step 2 to Step 4 without thinking through the alternatives by entering the World of Ideas.

The following is a good example of experiential learning - the hard way!

A certain agricultural patrol with an inexperienced didiman in charge had clear objectives for the day: to travel by canoes across the harbour, which usually took two hours, then walk an hour to the next village. A week before, this patrol had achieved the same objective in getting to the village where they now were. This time, however, the didiman saw that both the patrol team and the village crew were making no effort to get started. About half of the distance to be travelled was on shallow water-ways through the mangroves, some on each side of the harbour. No one informed the keen didiman about the effect of the tides, and he did not "think" to ask about local conditions, or why the others were reluctant to move!

A start was made but after half an hour the two canoes were sitting on the mud, where they remained until the next tide floated them - and the journey was completed by late afternoon. It was an interesting experience which was not regretted, but neither was it repeated. This particular didiman had learnt to make thorough enquiries about local conditions, and to seek reasons when he noticed others were reluctant to do something. It would have been more productive and a lot more comfortable to have spent the morning at the village while waiting for the tide.

The secret of problem-solving or of improving situations is being able to come up with answers or solutions which are acceptable. In this way we cut out mistakes and do not "burn our fingers" so often. This "thinking through" stage is known as "conceptualising"; we get a concept or idea of what we hope for or would like to do in a given situation.

As agricultural extension workers, then, in this world of change and uncertainty, we need to be life-long learners both for our own personal development and to improve our ability to help rural people learn to manage the changes and uncertainties they are experiencing.

FURTHER READING

Bawden, R. (1982). Experiential learning in agriculture. In *Training for Agriculture and Rural Development.* FAO.