Teaching Methods in Agricultural Colleges and Universities in Ethiopia: The Case of Ambo College of Agriculture

Terefe Tolessa

Training of students in the areas of agriculture at tertiary education level was not a recent phenomenon in the Ethiopian education system, rather the trend in move is as old as the age of educational system of this country. The first agricultural institute was established at Ambo College in 1930's.

From that time onwards, thousands of agricultural professionals in different fields of specializations have been produced to address the demands of technical knowledge for the betterment of the agricultural sector of the country. The demand of this training is continued to be felt and realized in different sectors as well as at higher level of studies. Many universities under the federal government and colleges in the regional states are training a huge number of professionals at different levels of capacities. This training is targeted towards the alleviation of shortage of manpower in the areas of agriculture so as to reduce the level of food shortage facing this nation. The agricultural policy of the government clearly stipulates that agricultural led industrialization policy can only be achieved when those capable professionals in colleges and universities are to be trained with effective teaching methods.

Despite all those efforts made at various institutions to produce highly qualified agricultural professionals, the very important element of delivering appropriate knowledge to students was a limiting factor for instructors at higher education institutions in general and at Ambo college of Agriculture in particular. Most of the instructors who were and are offering courses of various types have not been appropriately equipped with various teaching methods. As a result most of the

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graduates from these institutions including Ambo College of Agriculture were not in a position to learn about methods of teaching and learning.

In most of the colleges and universities in Ethiopia, lecturing which is not supplemented with other teaching methods that could increase the learners ability to understand more has been the only method used to deliver knowledge. Among the many shortcomings the lecture method has the following are commonly observed in our case. These are instructors:

- tend to lecture at a faster speed. As a result, the learners cannot take notes and understand the concepts discussed. They may not link the relationships of concepts while the lecturing is going on;
- tend to ask many questions at a time and confuse the students in the class;
- tend to ask questions and answer themselves without giving opportunity to students to answer the questions;
- don't usually collect several answers to questions raised in order to increase participation and obtain various answers from different angles, but they tend to be satisfied with only one answer whether it is right or not;
- usually use "yes, but ..." reaction for their questions than constructing ideas on what has been raised by the students;

Other teaching methods which include group works, case studies, and new technologies are rarely used to teach students in Ambo College of Agriculture. The most common reasons for instructors tend to rely solely on a lecture method are:

Large Number of Students

To administer group works and case studies, the number of students enrolled per annum in a particular department is very large. This means that the number of group works and case studies to be used become very difficult for one instructor to facilitate all those roles to be expected from him or her. Moreover, the problem of managing groups is also very difficult to realize the process due to time constraints. In Ambo College of Agriculture, we were used to teach diploma program students until very recently. In this program the number of students in one department were more than 300 (three hundred) which was not manageable to practice the mentioned methods for one instructor who usually offers more than one course in a semester. It was also sometimes very difficult to know the students in the class. To this end, having large number of students in the same department did not make the teaching and learning process suitable to employ several teaching methods. It is also unthinkable and is not practical for an individual instructor to divide these large number of students into small groups for more participation.

New Technologies that are Used in Teaching are Rarely Found or not Found at All

The infrastructural development facilities in higher education need a high capital investment which could consume much of our limited resources available. This limitation of resources is highly manifested at Ambo College of Agriculture. In the case of Ambo College new technologies are rarely available, for example, video, film, and computers are not sufficiently found to backup the lecture method. Technologies that are used for presenting instructional materials and enhancing communication are dramatically changing from time to time. These technologies are very important for effective teaching and to introduce various types of presentations. Such technologies like video, film, overhead projectors and computers are all very crucial to improve students' learning at a more efficient way and are nowadays popularized all over the world. However, such

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technologies are not made available in our college for teaching purposes except the overhead projectors in some of the lecture rooms of the college. As a result, the teaching and the learning process is mainly restricted to oral presentation. In addition to the above mentioned limitations regarding new technologies, the instructors and students of Ambo College of Agriculture do not have any chance to browse new information from the internet as there is no connection with this technology.

Moreover, some courses which require laboratory work are mainly carried out through demonstrations by instructors. But activities carried out in laboratories should mainly be done by students than teachers. The main reasons that students do not do the laboratory works are lack of laboratory, laboratory equipment and laboratory chemicals.

Past Experiences of Instructors as Students and Lack of Knowledge about Various Teaching Methods

In our context, most instructors in the Agriculture profession have not taken courses that guide them employ several teaching methods which could improve the teaching and learning process. Furthermore, most instructors rely on the methods of teaching their past higher education instructors used. This is mainly a lecture method. Using their own past experiences as students dictate their teaching methods for they had no or little awareness about methods of teaching. A typical example that can clearly show that instructors of agricultural professionals have had no courses in pedagogy is the case of Ambo College of Agriculture. Trainings on pedagogy like what the Institute of Educational Research has been organizing at a national level do have positive impacts on the future performances of instructors.

In addition to the limitation of adequate knowledge of pedagogical courses, instructors think that students are not as competent as expected in the courses they are taking. Moreover, the communication method was only one way and instructors are at the

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center of the process of learning while students remain to be participants by only receiving the knowledge transferred from instructors. This has led to have shallow learning. In general, the teaching methods mostly used is teacher-centred in which students are passively involved in the learning process.

Absence of Educational Books

Educational books especially reference books that are found in the main library at Ambo College of Agriculture are very old and out dated. The available books, therefore, donot include recent developments in the agricultural sector. Moreover, most of these books in the library are of western origin and do not take into account the social, environmental and economic realities of our country. Using such books for teaching purposes make our students to neglect their actual and practical life that they would face after completing their study in the college. This may make the would be agriculturalists to face new challenges when they are employed in development institutions.

In general, the teaching methods that are supposed to be employed in order to equip students with knowledge is very limited. The circumstances found in Ambo College of Agriculture in particular and of other universities in general are facilitated poorly. The overall problems of the availability of new technologies for various teaching methods are highly observable in our college. Consequently, instructors only use lecture method. Thus, these problems made the instructors to be handicapped to deliver knowledge at a required level and quality. The lecturing method used by instructors itself is poorly administered and appropriate cautions in the delivery are not undertaken.

Moreover, the fact that the agriculture instructors in our higher education institutions have not been made to take courses in pedagogy in their tertiary level education has contributed to the multifaceted problems that are already existing in these institutions.

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So, in order to produce professionals that are capable of solving the problems of production and productivity, natural resource degradation and other considerations in the areas of agriculture, the need to pay more attention in making more conducive environments, high capital investments on higher education institutions and incorporating pedagogical courses for agricultural professionals are important not only for the instructors in these institutions, but also for those students who are supposed to be change agents in the rural community where extension services are to be provided.