Evaluation of Training in the Health Science Faculty of Dilla College from the Perspective of Curriculum, Teaching Methodology and Student Evaluation

Girma Ababi

Objectives

- To assess the relevance of the current curriculum of the departments of the faculty to the educational goals and objectives of the institution.
- To explore areas of deficiency in implementation of the curriculum and suggest possible solutions.
- To comment on the actual teaching and learning process from the perspective of effective teaching and learning methodology.
- To describe the difficulties faced so far in student evaluation and suggest some coping mechanisms.

Back Ground Information

Dilla College of Teacher Education And Health Sciences was established in 1997 G.C. in Dilla town, 360 kms South of Addis Ababa. Since 2000 G.C., the College along with Awassa College of Agriculture and Wondogenet College of Forestry has formed The Debub University.

The College has two major faculties; the Education and Health Science Faculties. Under the Health Science Faculty there are five departments. These are the Public Health Officer, Biomedical and Behavioral Sciences, Nursing, Environmental Health and Laboratory Technology Departments. The Health Officer Department trains

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health officers at B.Sc. level while the last three departments train public health nurses, sanitarians and laboratory technologists respectively. The Biomedical and Behavioral Sciences Department is a supportive department to the other four.

It is envisaged that graduates of the Faculty form a team of health professionals that will strengthen the implementation of the current health policy of the nation (i.e. the primary health care approach).

Needless to mention the significance of equipping graduates of the faculty with basic knowledge and medical skills, the current teaching and learning process appears defective in many aspects. I will try to reflect mainly upon the curriculum, the teaching and learning methodology, and student evaluation in the pre-clinical phase of the training and suggest possible solutions.

The Curriculum

Although the term curriculum is used in several different ways in current educational literature, it is reasonable to conclude that it has to be the reflection of the educational philosophy of the nation at large.

Based on a clearly stated educational philosophy, institutions set their educational goals and objectives. Therefore, curriculum encompasses all the activities that are geared toward the achievement of the institutional goals and all the inputs into an institution are intended to support the implementation of the curriculum.

Some of the expected outcomes of the implementation process should include developed talents, acquired knowledge, and skills and improved intellectual abilities on the side of the learner.

However, bringing about the desired output requires careful designing, implementation and evaluation of the curriculum. Some of the defects in the curriculum designed, its implementation and evaluation in the faculty are stated as follows.

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The Curriculum Designed and Its Organization

According to Henry A. Giroux (1981), curriculum design refers to developing plans for educational program, including the identification and selection of educational objectives, the selection of learning experiences and the evaluation of the educational program.

When viewed from this perspective, the curriculum for the pre-clinical phases of the four departments in the faculty lacks clearly stated educational objectives, learning experiences and evaluative mechanisms of the program. There is one working document for each department which contains a list of subjects to be taught, credit hours and course descriptions.

However, the scope of coverage for each subject was not clearly stated and some topics in certain subject area are arranged haphazardly. For example, the sequence of topics of anatomy and physiology course for nursing, laboratory technology and environmental health students are all different. Even within the nursing department, the sequence of the topics in the course mentioned above differs among groups of junior nursing, upgrade nursing and public health nurse students.

One can not deny that the scope of coverage of a given subject in different departments varies depending on the credit hours allocated. However, irregularity in the sequence of the topics hinders the logical and psychological sequencing of facts and concepts and hence cripples the learning experiences and the attainment of the desired objectives.

There is also irregularity in the scope of coverage of different topics of a given subject. Less important topics are emphasized and more important ones are overlooked. To sum up, the curriculum the faculty is utilizing in the pre-clinical phase of the training so far requires at least revision.

Curriculum Implementation

Even if careful planning and development of a curriculum are obviously important, they count for nothing unless instructors are aware of the product and have the skills to implement it. Therefore, the curriculum cannot achieve its aims unless it is implemented (taught) the way it is intended to be implemented. Thus, implementation is a critical phase in the cycle of planning and teaching a curriculum.

The term curriculum implementation refers to the process of putting the developed curriculum into effect (i.e. the actual use of a curriculum). However, effective implementation requires at least two important ingredients:

- An instructor who is aware of the expected outputs and has skills of the implementation.
- Relevant teaching resources.

Viewing the situation in the Health Science Faculty, Dilla College, from these perspectives reveals the seriousness of the challenges in the implementation for at least the following reasons.

- There is a critical shortage of instructors in the biomedical and behavioral sciences department, which is supposed to offer the preclinical courses for all departments in the faculty. Thus, an instructor is required to offer two to three courses for different groups of students. One can imagine the challenge posed by shortage of time to get well prepared for all courses and by unfamiliarity of instructors to some of the courses.
- Most of the instructors in the department are medical doctors who have never been exposed to pedagogical courses so far.

For an instructor who is not familiar with institutional objectives (which is not well stated in the curriculum) and curriculum implementation, the possibility left is to implement the curriculum simply the way he thinks it is best.

- As one of the newly established colleges in the country, the Health Science Faculty, Dilla College, has a serious shortage of teaching resources. To mention some:
 - There are no demonstration rooms for the different groups of students.
 - Well equipped laboratories to perform experiments in the basic science fields (Anatomy, Physiology, Pathology, Microbiology and Biochemistry) are non existent.
 - Relevant texts and reference materials in the above mentioned fields are inadequate.
 - Models, charts, simulators and other teaching aids are
 scarce.
 - The departments are not well equipped with new information technologies which are crucial in facilitating "the teaching and learning process. Therefore, in the absences of the above mentioned skills and scarce resources, effective curriculum implementation becomes unthinkable.

The Teaching and Learning Methodology

The whole exercise of teaching and learning is to enable the students learn. There are different types of learning. But in general, learning is said to be effective when it results in desired outcomes which can be short term or long term. The short term outcomes may be assessed in terms of recall, recognition or demonstration of what has been taught while the long term outcomes may be assessed in terms of the behavioral changes brought about through the learning process.

However, the learning process is not as simple as it may appear. There are several factors (variables) that influence the learning process and the expected outcomes. Some of these are learner variables, text variables, instructional variables and environmental or social variables.

Although the learning outcomes are the result of interaction between the above mentioned variables, I would like to focus mainly on the instructional variables (which involve the instructor) and look at the situation in our faculty from this perspective.

Instructional variables refer to the method used for getting and maintaining students attention and guiding them to learn by themselves so as to achieve the desired objectives. Hence, effective instruction requires pedagogical skills.

Due to lack of pedagogical skills of most instructors in the faculty, the following deficiencies are observed in the process of instruction.

- More emphasis is given to the coverage of the content than helping students to learn; understanding of the facts and mastery of the skills taught.
- Most instructors do not realize the significance of specifying goals of instruction and activating prior knowledge at the beginning of each instruction.
- Due to lack of familiarity with individual differences among the learners, there is no tendency of utilizing different methods of instruction.

 Encouraging discussion, getting feed back and frequent evaluation of students performance is at least not a common practice. etc.

Student Evaluation

Student evaluation is the most important tool of ascertaining the achievement of the desired educational objectives.

However, evaluation has its own short comings for two major reasons. 1) all measurements are estimates and hence lack accuracy and 2) the type of measurement we deal within education is an indirect measurement resulting in wider margin of error.

Student evaluation is not only an indirect indicator of the effectiveness of teaching and learning process but also helps educators in ascertaining the effectiveness of the curriculum. It involves at least two stages. These are testing (with properly constructed test items) and grading the test result using systematic marking procedures.

Testing and Grading

Educational experts state that good tests do not just happen. They require adequate and extensive planning so that instructional objectives, the teaching strategy to be employed, the textual material and the evaluative procedure are all related in some meaningful fashion.

It is also pointed out that testing and teaching are two inseparable components of the entire teaching and learning process. Heaton (1982:5) states that both testing and teaching are so closely interrelated that it is virtually impossible to work in either fiercely without being constantly concerned with the other. This fact can be strengthened by a common observation that test items that are carefully written by a trained and duty minded teacher can be instruments of innovation and help in the improvement of teaching and learning. On the other hand, the poorly constructed tests would be harmful to teaching and learning. However, preparation of a good test requires familiarity with different test items (that is, short answer, multiple choice, essay, true-false and matching), the advantage and disadvantage of each and their efficiency in measuring the expected outcomes of a given subject.

Considering the situation in our health science faculty, the practice, I can say, is far from what is being expected for some of the following reasons.

- As most of the instructors (including myself) are not exposed to formal training in educational or psychological measurement, our objective of testing was just for discrimination. So those who performed would be promoted while poor performers would fail. Hence, the role of a test in evaluating and improving the entire teaching and learning process was underestimated by most instructors.
- There was no habit of planning a test. Most instructors used to prepare a test a maximum of five days before the date of administration.
- Most instructors were not familiar with the capacity of the different test items in measuring the different levels of learning. Therefore, most of the tests (if not all) were targeted at measuring the students' ability of memorizing and recalling facts and concepts low levels of learning.

Grading a test result is concerned with a set of systematic procedures for converting a test or composite numerical measures of achievement into grades or marks. The purpose is to establish greater uniformity among instructors in their marking practices and hence in the meaning of the marks they issue. Therefore, the grades are assigned according to the relative status of the students taking a test all of whom have been exposed to similar instruction.

With this regard, although there is no established rule at faculty level on methods of grading test results, all the departments in the faculty

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use the fixed-scale rule', which does not utilize statistical manipulations.

Conclusion

From what has been discussed so far, one can conclude that the faculty is not functioning up to expectations. The major reason for the deficiency in one way or another, is lack of appropriate pedagogical skills of the instructors. I would like also to emphasize that, to a varying degree, these deficiencies exist in almost all health training faculties in the country. Although there are no numerical data to be referred to, it is stated that most instructors (including professors) in medical schools and other health training institutions have no formal pedagogical training. Therefore, it can be seen as a national problem and requires great attention by IER and the government at large in order to attain the vision of academic excellence and to produce competent and efficient health professionals.

Recommendations

- There is an urgent need to train all faculty members on
 - Curriculum design (organization) and implementation.
 - Effective teaching and learning methodology.
 - Evaluation of the teaching and learning.
 - Educational research methodologies and others
- · Revision of the current curriculum
- Empowering the faculty with human and material resources
- · Collaboration with sister institutions.

Reference

UNESCO - Training manual - Guide to Teaching and Learning in Higher Institutions.