# INSTRUCTIONAL EFFECTIVENESS: AN AID OF MAXIMIZING EDUCATIONAL BENEFIT IN THE HEALTH SCIENCE TEACHING

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**Keywords:** Educational Calibration, Integration, Organization, and Teaching Performance.

## ABSTRACT

This article discusses briefly the Instructional Qualities of a teacher, and how these teaching strategies can and should be applied to adjust to the learner's expectations and needs, and it also examines how the teaching qualities can and should be assessed, using specific criteria as a facilitative function, for maintaining teaching alive.

## INTRODUCTION

The value of teaching competency in Allied Health Sciences has been questioned for years. A substantial body of research has indicated that the lack of teaching competency does little to achieve in the desired standard (1,17,28). Pedagogy, as a science of teaching, has not been given a place in the health sciences teaching in Ethiopia. Recognizing from researches and observations health sciences' teachers graduate having skills and knowledge that help them to meet the public health care system, and spontaneously assigned in the teaching force without getting formal instructions in the teaching sciences. It is apparent that teaching competency is scarcely to be expected in the absence of a reasonable knowledge of teaching method.

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Today, professional organizations and individuals are criticizing the inadequacies, inequities and obsolescence of our health sciences education (24). The author of this article believes that many factors contribute to the imbalance of standard of health sciences education, but singles out the instructional qualities of the teacher as one variable for the cause of the imbalance for discussion.

The purpose of this paper is; therefore, to examine briefly certain instructional qualities, and discuss the achievement of such qualities.

## INSTRUCTIONAL QUALITIES

In the teaching world, curriculum, teacher and teaching method are interrelated. Each supports the other to achieve vivid outcome. Practically, a curriculum may be well prepared, but it is the teacher who actually interprets, and imparts skills, knowledge and attitudes. It is apparent that better equipment alone cannot make a better school, but better staff. In this sense, the instructional effectiveness are qualities of a teacher which attribute to the effectiveness of teaching/learning process. Effective instruction is, then, the imparting of skill, knowledge and attitudes which the learner successfully acquires in the process of the interaction. According to Palmer quality of teaching, and the ability to demonstrate competence, greatly influence the success of the student (21). Thus, the result of effective teaching qualities is learning efficiency. Teaching/Learning, then, rests on the teaching skills of the teacher. Generally, educationalists agree that teacher should maintain their competencies throughout their teaching career, but no one knows quite how to ensure that they do so. And this depends on the periodic assessment of the competence of the teachers.

The question is what are the essential qualities which collectively contribute to the teaching/learning efficiency, and the teaching competencies level which correspond to the criteria laid down for particular performance? These questions provide the author of this article the framework for discussion which determine the key indicators of effective teaching performance posed by health sciences educators.

Despite the ample research that has been done in an attempt to achieve the best learning results, educationalist have not yet agreed on the most effective methodology (17, 28). Particular merits; however, have been claimed for those which appear to facilitate teaching/Learning process. Research of the past decade has shown that many scholars consequently advocating the following set of ideals which contribute to the effectiveness of teaching/learning process (1, 10, 20, 26):

1. **Subject Matter Competency and Effective Communication**:- It is a thorough back-ground of information in the content to be taught. A better teaching depends on a better comprehension of what to be taught with effective communication (19). In the process of transmission of knowledge from the source to the recipient of the knowledge, the transmission capability, or communicating effectively and the command of the subject matter are indispensable in facilitating student learning. McPherson believes that the student's motivation is increased when the importance, and relevance of subject contents, and prescribed learning are made clear (20).Thus, without the mastery of the course, failure is bound to occur.

2. **Professional Attitude**: It is maintained that if an instructor is not interested in his work,then, he cannot effectively communicate with the students(1,17).Instructors who teach with zeal and vigour can promote higher percentage of transfer and appreciable performance (1,11). For this reason,



selection of instructors based on their attitudinal aspect is of greater importance in teaching/learning process.

3. **Resourcefulness and Creativity**:- An Efficient teacher makes professional judgement as to which method is best applied to the teaching/learning situation. But an instructor who continuously uses the same method of instruction is either incompetent, or lazy, or both (1). A good teacher must be creative in developing his program utilizing current methods, and various teaching aids which ensure teaching/learning situation that would enable a student to succeed. Taggor remarks that a teacher can never truly teach unless he is still learning himself (25). And Tesfaye argues that teachers should improve their pedagogical, and practical skills in order to be productive (23). For fuller explanation for this point it is worth referring to Tesfaye's paper on Educational Literacy (23). It is, therefore, imperative that a teacher be learner-oriented as far as he is in the teaching force. Otherwise, he will be in a problem in coping up with the needs, and demands of the new generation.

4. **Personal Relationship with Students**:- The emotional responses of the teachers have a powerful effect on the attitudes towards learning, and learning itself. Psychoacademicians believe that a feeling of confidence inspired by the teacher can substantially increase learning, while strong emotions as fear, anger may entirely block learning (1,4,6). It is becoming widely recognized and accepted that learning becomes most effective when the learner is able to freely reveal what he knows and believes. The existence of a climate of openness between students and teachers is, therefore, indispensable (2,4,26,29). According to Able, "the teacher's task is always to draw reluctant students to learning (8)". For this reason, the teacher

should be sensitive to the responses of the class, encourage students' participation and welcome questions and discussions. The teacher who has good rapport with his students can require, and get more achievement from them (1) than the one who is disliked, resented, or not respected (1,6).

5. **Writing Instructional Objectives**:- The main purpose of education is the accomplishment of specific learning outcomes by the learner. Mager says, "Instruction is successful, or effective, to the degree that accomplishes what sets out to accomplish (18)". In order to attain this aim, the instructor should state his directional signs, or objectives which indicate what the students are learning, where are they going, and what is expected from them as a result of the new learning. Pedagogically, instructional objectives guides the student to be self-directed learner which enables him to know what would be obtained from the course, and observe his strengths and weaknesses himself (9, 12). For reference to writing objectives the health science teacher should review Mager's Preparing Instructional Objectives (18), Kibler's et al's Behavioural Objectives and Instruction (15), and Caput's Instructional Objectives (5).

6. **Planning, Organizing and Preparation**:- Meaningful and systematic organization facilitates learning (1,11,10,26,29). For this reason, the instructor should:

   6.1. Write the objectives, or learning outcome of the topic
   6.2. Arrange the subject matter in accordance to the objectives
   6.3. Ensure that adequate materials are available
   6.4. Select appropriate techniques for instruction
   6.5. Obtain necessary instructional aids
   6.6. Write a lesson plan encompassing the above elements.



7. **Objective Evaluation**:- Evaluation is essential, and constant aspect of teaching/learning. Learners should be kept aware of their strengths and weaknesses through out the instruction, and suggest appropriate measures for resolving learning problem. Irion considers feedback to students as the most important variable that governs learning process (13). Scholars advocate that evaluation system should be fair, reliable and unbiased (11,14); otherwise it would adversely affect the learner's morale (16). And this disturbs the learning process which probably ends with a negative psychological effect on the students persistence. Thus no appraisal can be made for the teacher. To evaluate his students the teacher should (1, 20, 22):

   7.1. Test frequently at the appropriate intervals,
   7.2. Compare what the students were able to do, with what was expected of them. For this reason, the teacher should keep the following consideration in his mind (18).
      7.2.1. The student given what,
      7.2.2. The student does what,
      7.2.3. How well?
   7.3. Analyze if the objectives of the program were met, and if not, why not?. This will guide the instructor to make him sure whether the academic wind is blowing in the right direction or not.

Educationalists warn that if any of the seven component parts is lacking in quality, the others will be affected, and the desired outcome will not be achieved (1). The goal is to apply the seven variables intergretively, and thus get a mastery level of achievement for or nearly every student.

## TEACHING PERFORMANCE ACCOUNTABILITY

The above empirically derived suggestions should, therefore, function effectively to meet the need of the learners. There is however, accountability for any task. The criterion of teaching is effective learning because it improves and proves student learning. So the relationship among the above seven entities must account for success or failure in learning. And this depends on periodic assessment of the competence. The fact is that student who does not fulfil his academic duty can be flanked, but what about an instructor who comes in and talks to the black-board, and fails to demonstrate tangible competencies in discharging his curricular, instructional and valuational responsibilities. To recognize the problem, and to understand the causes are essential first steps in any effort to come to grips with it.

In recent years, much emphasis has been placed on the development of criteria against which the quality of teaching health sciences should be measured in the assumption that if teaching tasks is properly carried out, the quality of teaching/learning would be successful (3,7,27). To objectify this assumption, evaluation tools have been formulated for assessing teaching staff (See Appendices A and B). They are not claimed to be ideal model, and exhaustive but at least they are believed to contribute something for teaching/learning efficiency (3). And this staff evaluation criteria have been tested in several countries with positive similar results(3). Thus, instructional qualities and performance assessment, both are variable, and neither need to be to the exclusion of the other if the desired goals and objectives are to be successfully achieved.



## CONCLUSIONS

The very important outcome of health sciences education is the production of responsive and competent health workers. To ensure the achievement of such goals, it is imperative to improve the instructional qualities so that the emerging health workers may be better equipped to effectively function in the health care system. And to understand the current position of the staff, institutes should explore themselves whether they are doing up to the expectations of the learners or not. If the response is positive, there is quite resealable qualification, but if the response is No - then, they are at instructional deficiency because they are doing a poor job, and inevitably results failure in learning. For this reason periodic assessment of teaching competence seems essential.

There is; however, no discussion as to the necessity of assessing teaching skills, as a part of the certification process, in the health sciences teaching institutes in Ethiopia. In arriving at some tentative conclusions and recommendations, it may help to consider some of the issues raised at the introduction of this paper. And in order to improve the quality of teaching personnel for health sciences short term refresher courses in educational psychology, teaching methods and learning evaluation system are essential with a provision of practical training because the teachers who have these qualifications will be better able to facilitate learning. These institutions should, therefore, always make an effort to improve faculty attitudes, and teaching effectiveness vis-a-vis assessing performance to keep competitive sprit alive so that the teachers would redouble their teaching efforts. Unless this is done instructions to our students will not be complete.

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## APPENDIX A

### EVALUATION OF THE TEACHER IN THE CLASSROOM*

1. Creates an atmosphere which promotes learning
2. Being prepared for class.
3. Demonstrates comprehensive knowledge of subject matter.
4. Meets the objectives for each class.
5. Presents subject matter clearly and at a level appropriate to the students.
6. Presents subject matter at an appropriate pace
7. Being open to questions, given the limitations of a large lecture setting.
8. Gives effective answers to questions
9. Emphasizes the most significant concepts
10. Uses appropriate examples to demonstrate concept applications.
11. Being able to discern confusion and to clarify subject matter when necessary.
12. Demonstrates involvement in and enthusiasm for the subject matter.
13. Facilitates your overall learning of the subject matter

## APPENDIX B*

### EVALUATION OF THE TEACHER IN THE CLINICAL LABORATORY*

1. Assists students in the setting of objectives for clinical laboratory experiences
2. Ensures the selection of appropriate experiences to meet objectives
3. Helps students prepare for experiences
4. Helps in new situations without taking over
5. Provides helpful and timely feedback while you are performing in the clinical laboratory
6. Provides helpful and timely feedback after your performance in the clinical laboratory.
7. Provides helpful and timely feedback on your written assignments
8. Provides an atmosphere that is conducive to student learning
9. Being accessible to students
10. Promotes learning through the exchange of ideas in group conferences.

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* **Abridged evaluation tool. Students rate the teacher by checking one of four boxes labelled poor, fair, good, excellent, after each item.**



## BOOK REVIEWS

**Fundamentals of Research in Nursing: By David J. Fox. 4th Ed. Norwalk: Appletion-century-crofts, A publication Division of Prentice-Hall, Inc., Preface III, PP. 460, 1982.**

It goes without saying that any student, or person engaged in academic work is expected to produce an academic paper work that will be of credit both to himself, and the Institute granting the degree, or the journal publishing the report. As a result, a health sciences' student, or a would-be researcher should have skills that make participation in the research endavours possible. Consequently, he must learn to distinguish between the conventional, and non-conventional usages, and forms so that what he writes will be accepted or not. Accordingly, Fundamentals of Researching Nursing could equip the would-be researcher with a foundation for developing extensive research competencies.

Although the author designated the book for nursing research, the methodology seems applicable, and binding to any health science related research. So it deserves the attention of most graduate students, faculty, and practitioners who will be engaged in the health science research work. Closer examination reveals that the approach of this book is not to advise the under-prepared, or novice how he shall conduct his research but rather to orient him into general principles of scholarly writing, and demonstrate how these principles are applied to a specific academic work. The author introduces the representative of commonly used research competencies which are essential in conducting empirical research clustered under the topics of:

1. The nature of Research and the Process
2. Research Planning
3. The Process of Data Collection
4. The Process of data analysis
5. Reporting the Research Results.