

# TEACHING-LEARNING IN THE POLYTECHNIC ENVIRONMENT: REVIEW

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## Abstract

The dynamic nature of teaching-learning process makes it imperative that new entrants to, as well as old hands in, teaching be given periodic exposure to the human, material and methodological challenges in the teaching arena, especially the teaching of adults. Thus, in this paper, some salient issues in teaching-learning as they affect Polytechnic education are broadly examined. At the end, a number of recommendations aimed at making teaching and learning in the Polytechnic more purposeful and rewarding are offered.

## Introduction

Decree No. 33 of 1979 empowers Polytechnics and Colleges of Technology to train and produce middle-level manpower for Nigerian industries and public corporations, among other responsibilities. This is in consonance with the broad objectives of tertiary education to intensify and diversify education to meet the needs of the economy with course content carefully chosen, especially in the professional fields to reflect national requirements. COREG and Osokoya (1997).

The practical implementation of these provisions imposes tremendous burdens and pressures on both old and new entrants to the teaching and learning arena. An opportunity such as this is seized upon to offer some orientational exposure to facilitators of learning in order to prepare them for the stress and storm inherent in their 'chosen' calling.

## General Principles of Teaching and Learning

Although this paper is not a treatise on pedagogy, per se, it is necessary to pay more than passing attention to the operative expression in the topic. Teaching is a process which involves the deliberate, premeditated creation or contrivance of suitable environment, whether within or outside the classroom, use of materials and appropriate methodologies to mediate a change (positive or negative) in the behaviour of the learner.

The change in behaviour is called learning, according to Adjai (1980). He goes further, then, to define learning as involving "the numerous processes an organism or an individual goes through to acquire a skill which becomes evident in a change in the organism's or individual's behaviour." Reinforcing this view, Gagne (1970) holds that:

- learning depends on events in the environment with which the individual interacts; the events the individual lives through in his home, in his geographical environment, in school and in his various social environments will determine what he learns and therefore, to a large extent, what kind of person he becomes. It is clear from this that teaching is a process and learning its product.

## Teaching-learning at Tertiary Education Level

Andragogy, or teaching of adults, is very serious business, contrary to popularly held assumption that it is a lot easier to teach children, Fontana (1981). He explains that one of the factors which exert phenomenal pressure on the teacher of adults is that most students in tertiary institutions have out-grown the impressionable stage where the teacher could easily become a role-model; the learners are more or less set in attitude and perception, and have most probably imposed their own logic on life. This means that some of the entertainment teaching methods and theatrics, which have never failed to excite children, will hardly make the desired impact on adults. Thus, a teacher of adults is expected to possess, among other attributes, the following:

## Mastery of Subject Matter

To teach adults and enjoy it, the individual's first quality is scholarship - a thorough, fresh

knowledge of subjects, according to Adesina (1990). This is to enable the teacher acquire intellectual control of the pupil's mind, a factor requisite for classroom discipline and respect for teacher. Okoh (1983) submits that:

"a good teacher must know his subject: otherwise, will be teaching students wrong , inaccurate or outdated facts, or worse, still, lie will merely be 'plastering on' thin material that will easily crack and will fail to excite the deeper interest and stir the imagination of pupils for greater involvement and discovery of the subjects."

Also, Fretwell (1965) lends his view to this over-riding quality of the teacher. He says "...to be a god college teacher, one needs to be thoroughly competent in the teaching discipline " and at the same time be engaged in the monumental task of research. No less significant is National Board for Technical Education (NBTE) position on the eligibility for accreditation of diploma programmes in Polytechnics that " generally, the teaching staff determines the adequacy of the programmes, as instructional goals and objectives are achieved only to the level of competence and vision of the teaching staff."

What this means is simply that at any time that the teacher or lecturer stands before his students, whether he knows it or not, he, represents the best authority in the subject that the students can interact with. He is the epitome of intellectual fidelity, a completely solemn and sacerdotal responsibility!

### **Possession of Methodology**

Fretwell (1965) believes that the ideal teacher, competent in his field, would be a master of a variety of methods of teaching and would use each in turn in its proper way; some of such methods of teaching are: lecture, project, discussion, and problem-solving.

But of these teaching methods, lecture method is obviously the most prominent approach to presentation of a body of knowledge and skills (within the context of workshops and practicals) in tertiary institutions. It may not be an ideal way of communicating new knowledge (which books and journals do best) according to Fretwell (1965),

but it can enable a good teacher of adults pull together his material in a meaningful way ... to guide students through established disciplines by means of emphasis, synthesis and contrast; to draw attention to established work ...and above all, to communicate to them something the enthusiasm which inspires his own scholarship.

Fretwell adds that one great advantage of the lecture method is that it makes "accessible to the students actual contact with the greatest men in their own discipline."

As has already been stated, a number of teaching styles exist, from which, because of the variegated disciplines which make a polytechnic, a teacher is expected to choose, or as it may become necessary, to make a combination. Thus, Lawrence (1971) recommends that the essential challenge on the teacher of adults is to cause learning to be achieved through the intrinsic motivation of problem-solving, to ensure a more enduring and widely applied body of knowledge and skills. To him, problem-solving schooling or method of teaching is:

- i. most likely to produce activists and critics of the social order without resort to propaganda,
- ii. most likely to promote an egalitarian respect for individuals and a fluid social structure,
- iii. most likely to develop both creators and competent consumers of technological change.
- iv. most likely to develop multiple channels of leadership and a circulating leadership, all in close conjunction with followership.

### **Moral Character**

Seeing that the cumulative effect of a teacher's evaluation and summative reports on a learner is generally life-long, coupled with other ambient influences, sometimes subtle, which the teacher exerts, the issue of an above-average character rating for the teacher becomes more than a peripheral wish. Adjai (1980) succinctly sums it all up that "cultural values transmitted in the

school should be embodied in the teacher's behaviour...for the teacher to use personal examples rather than precepts."

Fontana (1981) adds that there is evidence that "successful teachers have positive attitudes towards responsibility and hardwork; ...able to put school before self and to submerge minor differences with colleagues in the interest of establishing ...those coherent and consistent policies...of truth, integrity and service." He adds a rider that unsuccessful teachers, among other symptoms, tend to be more suspicious, secretive and aggressive!

### **Conclusion**

It is beyond doubt that teaching in a tertiary institution, with particular reference to Polytechnics, is no mean task. Of course, one is painfully aware of the morass of despair in which the average academic is floundering. The pressure to make himself socio-economic-ally relevant has pushed many a committed lecturer into the soakaway of moral decrepitude. As one cynical observer has put it, "...lecturers are building houses instead of building posterity...!"

Vo discharge this onerous responsibility to the standard expected, and to derive satisfaction and self-actualisation there from, teachers, old and new, need to be sufficiently prepared, both intellectually and psychologically.

### **Recommendations**

Fretwell (1965) packages the following prescriptions which he believes will make teaching of adults eventful and creative: •

1. The teacher must prepare his lesson in advance, choosing accompanying instructional materials, selecting the most suitable method for delivery and preparing himself psychologically to face his students.
2. The lecture/workshop should be carefully planned to include one or two but not too many salient points.
3. These salient points should, if possible, be illustrated by concrete examples (the mere theories themselves could be best read in a book).
4. As far as possible, the lecturer should speak direct to the students, seeking for the nearest equivalent to direct personal communication. A lecture read in a monotonous voice could be better and more quickly read by the students from a book.
5. This means that the lecturer must know the most elementary things about voice production and appropriate teacher stage habits.
6. The teacher, in spite of the gargantuan constraints which swear to subvert the sacred duties imposed on him, must strive to build and sustain a clean moral character- for the good of self, society and posterity.

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