thorn or come into contact with magic herbs. These then, may cause a reptile or a worm to come to life in the victim's viscera. Once it starts moving, the victim starts running, shouting, etc. The stomach is often affected although it also can be an incurable sore.

Selelele/setlaela (A fool. Term derived from tlaela, to be stupid): A Tswana term for the mentally retarded. It is indicative of the abnormal dull and inactive person.

Setsenwa (Derived from tsenwa, to be mad): It is a general Tswana term for mental illness ranging from mild to severe disorganization. Such a person can at times seem quite normal and at other times commit a serious crime.

Swikwemhu (Possessed by gods): Tsonga. This is not considered to be a serious disorganization, although the person behaves queerly. The person frequently has certain compulsions.

Tshipengo (Madness): The Venda word for general madness.

Tshereana/Tsheereana (Foolishness): A Tswana, Southern and Northern Sotho term referring to severe mental retardation where a person is helpless in many ways. It is a condition of gradual retardation caused by food poisoning.

Tswana (It refers to a calling): This is a common disturbed condition of women. It often occurs in spring, and it is believed that it happens to a person to show him that he should become a witch-doctor. Although the condition refers to a slight personality disturbance it may be the beginning of madness. It is, however, mostly considered to be a sign of calling, and the slight disorganization is considered to be the beginning of a process of teaching by the gods. All mental disturbances where clear consciousness and more or less systematized thought processes prevail, are classed as ukutwasa.

Xigona/Xigona (Cripple): Tsonga term for a physical disability. A cripple or a lame person. It can also reflect mental retardation. These conditions may occur naturally or may be caused by poisoning.

CONCLUSION

It is desirable in all psychiatric work, but especially so with Bantu patients, that the labelling of disorders should primarily be ordered so that certain terms will eventually obtain a more precise meaning. It would also seem necessary that new concepts be coined to fit in with cultural needs and with nosological requirements. Even though a more complicated life-sphere will tend to precipitate personality deviations specifically related to conditions of stress in modern life, notice should be taken of essential cultural bases of disorders, and with this consideration in mind, the list of terms given may be of value.

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What in the Senior Student's View, Makes a Good and What Makes a Bad Teacher at a Medical Faculty?

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SUMMARY

Improving the quality of future doctors demands more than the latest audiovisual aids. Medical teachers lack training as teachers, and the whole system lacks organization and inexplicit definition of goals. Thus the teaching of often irrelevant facts has overwhelmed other educational objectives, emotional maturity and dexterity, which the students highly esteem.


*Essay submitted by I. F. W. while he was a fifth-year student in 1972, to the Medical Advisory Committee to Noristan Laboratories, Pretoria, and for which the first prize of a gold medal and R500 was awarded.

Medical schools function as subdepartments of large universities and are strictly controlled by rules laid down
by the Medical and Dental Council. Some of these rules govern the curricular content and length, and prevent teachers from making radical innovations. This has not been without benefit, for many are, in fact, ill-prepared to teach. Appointments at universities are made on a basis of a research record, and few, if any, of the appointees have had any background suited to teaching.

In spite of this, most doctors recall with nostalgia those eccentric giants of learning, who, in their quest for knowledge, became emotional, unpredictable, and often libellous, but nevertheless attracted many students. There are the few failures who in spite of their learning and devotion to teaching, fail to convince even one student that the teacher understands his subject. The majority of the teachers at a medical school fall between these extremes, as on a gaussian curve. Very many factors indeed are responsible for this. Many adjectives will not determine why one teacher is superior to, or more successful than, another. Some teachers are born with a 'charisma', but there is more to teaching than a flair for showmanship, or a magnetic personality, although these are certainly valuable attributes.

Perhaps the most important discriminator is the teacher's own motivation for teaching. By answering the question, 'why are you teaching?', the close relationship between motives, methods and results will appear. Many teachers see their teaching responsibilities as a necessary evil interfering with their research projects.

The medical profession is unique in one respect, at least, in that its members must be competent and proficient before they are let loose on the unsuspecting public. Proof of competency is not equivalent to proof of having duly attended and completed a given course of study. University syllabi are well known for their vague descriptions of curricular requirements. The good teacher, nevertheless, has clearly in mind what objectives his students should achieve as a result of his teaching—perhaps that is why the good teacher is so rarely found. It is far easier to reshuffle the hours allocated to a certain topic than it is to state explicit objectives of behaviour and to implement efficient methods of attaining these objectives.

Behavioural objectives of teaching have been recognized for a long time, and may be classified into cognitive, affective, and psychomotor behaviour.

**COGNITIVE BEHAVIOUR (CONTENT, KNOWLEDGE, AND FACT TEACHING)**

This objective has for many years been wrongly accepted as constituting the beginning and end of teaching. The bad teacher is content to pass on facts to his students, and lectures have come to be regarded as a transference of notes from the lecturer's script to the student, without passing through the mind of either. Teachers are obviously involved with facts, and for this reason there is a preoccupation with the teaching of facts only. (Books disseminate facts, and are more efficient than the average lecturer.) This has also been fostered by the average examination paper by which very little more than memory is measured. Most students have had the unpleasant experience of being almost failed by some 'super-specialist' for not knowing some trivial detail or esoteric theory. Bad teaching produces a regurgitation of facts and the student learns to respond to a question as a stimulus to reproduce a given response. The higher aspects of cognition, such as reasoning and problem-solving, are neglected. The good teacher teaches not to just know and understand facts, but how to put them to practical use.

With the expansion of knowledge doubling itself roughly every 10 years, it is imperative that the teacher selects what he should teach. The student cannot tell what is of importance and what is not, and examination topics are an even worse guide. Bad teachers cannot discriminate between what is of real importance and what is only assumed to be important on the basis that it has been taught before. In one field of study, that of red-cell abnormalities, disorders were graded into 3 classes (hardcore, core and non-core) in terms of importance. Of some 65 disorders, only 8 were selected by a panel of haematologists as being of sufficient importance to require detailed knowledge (signs, symptoms, pathophysiology, laboratory values, and management); a further 23 conditions students need to know in only a general way, and the rest, more than half, were too rare to justify allotting time for in the curriculum.

The good teacher has his priorities clearly set out and adapts his teaching to his particular geographical situation. In a large city, the case of amoebic pericarditis is clearly of less importance than the many chronic alcoholics and smokers. The good teacher, in addition to covering the essentials of the common and important conditions, teaches enough of the scientific method to prevent blunders when a rare disease presents, or when a common disease presents in a rare manner. Having clear priorities and sharing them, is a part of the intellectual honesty of the good teacher. He also realizes that one of his most important functions is to get his students to work on their own. Probably the best way of achieving this is to have them understand the extent and depth of knowledge that will be required of them, and to utilize the principle of 'feedback', or self-assessment. Not only do the teacher and the student have similar aims for the students' education, but the teacher also shares in the success of the student in achieving this ideal.

'Feedback' is one of the most powerful incentives to efficient learning, if it is without delay, and if it is explicit, clear, and specific. Its value lies in intimately involving the student. The seminar and discussion group succeed as good methods of teaching, because 'feedback' becomes easier in a small group; everyone has the opportunity to become involved, and involvement means 'feedback'. (The good discussion group leader must, however, have a clear grasp of group psychodynamics to control a mercurial situation.) 'Feedback' can be implemented on a large scale as long as the basic requirements are fulfilled; to teach the pathology of tumours of bone, a series of questions and a number of possible answers on sheets (with many blank spaces for notes) are handed out. The lecturer explains the question. Once the class has chosen *one* of the answers, the lecturer discusses why one answer is correct and the others not. The benefit of this method
is, that each student becomes involved, i.e. commits himself and then assesses his knowledge. Any wrong concepts are immediately corrected and the reasons explained. A progression from simple to complex questions is likewise possible, and students have a permanent although skeletal record of the important facts of the subject. (The success and enthusiasm this method receives is perhaps greater owing to the precise objectives formulated, and to the orderly sequential planning.)

The efficient organizing of a course in the light of the objectives, allows for the easy completion of a syllabus without haste, and since each section is planned, ancillary aids such as TV or motion pictures can be substituted without disruption. The good teacher, with a clearly-defined subject, can ask questions to determine competency, and the questions themselves can be evaluated for validity, content and reliability in terms of his original objectives.

All these efforts appear to emphasize the importance of the 'Chicago loop' in efficient learning and teaching:

Objectives ➔ Evaluation ➔ Learning experience

The 3 factors are mutually related and, for example, once valid objectives are determined, the single most important factor, a decision can be reached on the best way to implement them, and the best method of assessing the effect of the teaching, which will influence the objectives. (It is evident that the present system of quantifying the curriculum in terms of time, is wrong; the constant should rather be performance, and the variable, time. A student will be as slow or as quick as he needs to be to master a certain subject.)

**AFFECTIVE BEHAVIOUR (EMOTION)**

Many teachers realize that the examples they set as teachers, are more eloquent than their words, and that students learn more by subconsciously imitating than they care to admit. The good teacher, therefore takes exceptional care not to pass on to his students any bad habit, or disrespect for the needs of the patient. By his manner and bearing a teacher profoundly affects any philosophy which the student may develop towards medicine.

Of all the areas involved in teaching, the affective one is the most sadly neglected. Facts per se are useless unless they are fitted into a mature system of caring for real people. Students need the opportunity to express their anxieties about such matters to their teacher. Some attempts have been made to create at least an awareness by discussions and short films on human sexual response and by interdepartmental seminars on the care of the terminal patient. These methods are not ideal, but do indicate an awareness of what teaching should achieve.

In most cases, teachers who have been successful general practitioners are good teachers by student standards. They seem to have a perspective of disease, and a concern for the patient's total needs, which is impossible to acquire under the tutelage of an incompassionate research worker in a sterile ward with bleeping monitors. The mentioned preoccupation with facts produces an unrealistic emphasis on the organic causes of disease. Every patient must have some definable anatomical or physiological defect, and very often in searching for an aetiology of disease, the psychological factors are totally ignored. (When students enter medical school they are much more aware of the personality of their patients, but very soon become convinced that psychiatry is only important in those distant mental hospitals which are visited as part of their training.)

The brute of the preclinical years, in fact, is on the organic basis of disease, with little inclusion of psychogenic factors. The good teacher is aware that up to a third of hospital patients have a psychogenic cause for, or as a major contributing factor to, their disease. To teach this, demands an exceptional teacher. Students find great difficulty in accepting, or even recognizing, simple states such as anxiety, depression, and hysteria, or even the effects which disease has on human relationships. The good teacher teaches his students the human aspects of disease.
PSYCHOMOTOR BEHAVIOUR (DEXTERITY, SKILL)

The proficient doctor must be able to do certain procedures and the good teacher knows that the teaching of such simple skills as lumbar puncture, or catheterization, is important. Very few students are, in fact, allowed under supervision, to do simple clinical procedures. The pre-clinical years do teach practical procedures such as microscopy, but often the majority of these laboratory procedures are so involved and dated that they are not done later. The student often forgets, for example, how to use a pipette, but the removal of a corneal foreign body, and intubation are important procedures.

The good teacher teaches the efficient use of the senses, and the importance of observation. This is frequently neglected, and often at the end of the student’s training, there is still confusion about the presence or absence of bronchial breathing, or the use of the ophthalmoscope. The bad teacher gives a long discourse on the causes of papilloedema or ascites when the student still does not know how to recognize either of these physical signs.

If all the suggested differences between the good and bad teacher are taken together, one fact can be seen to emerge: the good teacher has clear objectives in his teaching and uses the most efficient methods to attain these objectives. He is full-time teacher in a medical setting. His teaching is well organized, whereas that of the bad teacher is not.

The really bad teacher is the obsolete member of the staff who has been teaching the same course for years, who is set in his ways and resists all attempts at change. He forces students to attend his lectures, is incoherent and incomprehensible, and brooks no interruptions in the form of questions. In his marking of examination papers (which are drawn up from a small, often generally known, selection of questions) he always fails a certain percentage of this class, irrespective of their competency. At centres overseas students are far more aggressive in their protestations and criticisms, especially as they relate to their curriculum, and on their initiative changes are being made. South African students are far more submissive and apathetic in this regard, yet some changes are being implemented. At the one South African university where an Educational Technology Unit has been established, the medical faculty has made by far the most use of their methods and materials. This is a great encouragement, for the good teacher is not to be isolated from his subject or from the department he teaches in, and the enthusiasm of a teacher is soon exhausted in a lethargic department. Good teachers are by and large found in good departments.

The greatest improvement in the quality of teachers will undoubtedly be when the media (television, audiovisual machines, and programmed courses) free the teacher totally from the role of teaching. He can then devote all his time to becoming a director of learning; to define educational objectives; to design learning experiences; and to evaluate the successes or deficiencies of his students, as they related to his objectives and methods. In this way the teacher becomes a director of learning and not a mere purveyor of facts.

The teacher has an immense potential influence on the student’s performance even in later life, and it is certainly a fortunate student who, during his formative years, has walked in the shadow of a teacher fulfilling the criteria discussed. It is likely that the most important factor in the education of the good teacher has been his exposure to a good teacher while he was still a student.

Even in populous districts the practice of medicine is a lonely road which winds uphill all the way, and a man may easily go astray and never reach the Delectable Mountains unless he early find those shepherd guides of whom Bunyan tells: Knowledge, Experience, Watchful, and Sincere.

Sir William Osler.

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