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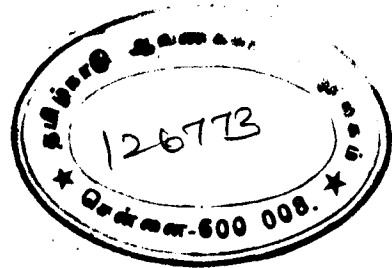


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TO OUR CONTRIBUTORS

JIE invites articles/papers on the impact of educational research on classroom practices, and policy decisions. Specific examples where this impact is apparent may be given.

GENERAL EDITOR

Reading — A Good Habit

READING by itself is a good habit. Becon recommended it for making a man perfect and since then numerous scholars and scientists have been commending it. It would, however, appear that reading has, of late, become a casualty at the hands of both media and modern worries. Studies after studies show that teachers even at the university stage are no longer interested in reading. A study of Bombay university teachers was quite revealing. Even the post-graduate teachers were found wanting in reading habits. Similarly, a study of eastern UP school teachers indicated the best reading to include local newspapers and light magazines. With the extension of television coverage, the problem seems to have multiplied several folds. In other words, the consumer society has taken its own toll and the consequences are that teachers have also joined in the rat race of power and glamour which do not by their very nature admit of the possibility of engaging oneself either in reflection or reading.

Interestingly, life was never a trouble-free zone. The hardships of life have always been bothersome. Therefore, it is no surprise if we also made an effort toward making life an interesting endeavour. But somehow for teachers reflection and reading are the twin equipments for improving their professional calibre. Teachers can ignore books only at the risk of becoming irrelevant professionally. One should not take any of those risks which degenerate teaching as a profession.

Mere slogans do not help matters. It should be necessary that a few positive steps are also recommended for promoting reading as a proper habit. Perhaps teachers' commonrooms and tea-clubs could be developed as places for good academic discussions. Inviting intellectuals from the nearby areas or localities would also help. Similarly, a new book a week or a month could be lectured upon by teachers themselves, if outsiders are not available to introduce the book.

Innovations in the development of reading as a habit should also be welcomed. We must make efforts to see that reading as a habit does not gradually become an inconsequential part of professional obligation.

GENERAL EDITOR

The Tragedy of Teaching Grammar

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As in literature teaching, where there are believers, non-believers, and the confused, in the field of grammar teaching, some people with blind, unyielding faith in the value of grammar as the basis of good writing advocate the teaching of grammar as a subject in the curriculum and some condemn it saying that there is probably no subject on the school timetable on which more time is expended unprofitably than English Grammar; quite a few are confused and have no clear idea regarding the nature, use and outcomes of grammar instruction and as a result grammar, as it is in the case of Shakespeare, is taught out of necessity because it is included in the syllabus and it is learnt since questions are asked in the examination.

Michael West lists some of the reasons for the 'popularity' of grammar among language teachers:

- (a) It is possible for a teacher to teach the grammar of a language although he has no real command over the language.
- (b) Grammar is popular with examiners. It is difficult to test fluent speaking ability or writing ability. Grammar questions are easy to set and correct.

- (c) Many examiners are elderly: they learnt their English under a grammatical system.
- (d) Directorates of Education demand grammar. They observe that children in the schools speak and write ungrammatically and say therefore teach them more grammar.
- (e) The educational theorist demands it. Grammar gives a training in reasoning.

Equally powerful arguments have been put forward against the teaching of grammar :

- (i) Much input produces little output; what was learnt was not applied, was or was not applied with sufficient point and frequency.
- (ii) Many of the definitions and explanations of the grammatical forms and functions were unsatisfactory.
- (iii) The traditional method was inadequate; the teaching of grammar concerns itself with picking out parts of speech, the parting of words in a sentence, word relationships and grammatical functions; the meaning of the sentence

escapes notice and slips through the net of comprehension. Grammatical analysis breaks up the unity of thought by its focus on detail and fails to relate the detail to the whole.

- (iv) In grammar teaching there is usually no application of what is studied. Grammatical rules may be thoroughly understood and learned by a pupil and yet not applied in practice.
- (v) The study of grammar is not necessary for children and it is not sufficient for adults; meaningful exposure is sufficient for children and necessary for adults.

Then we have the peace-makers who preach peaceful co-existence :

- (a) "... focus on grammatical competence in the classroom is not a sufficient condition for the development of communicative competence. It would be inappropriate, however, to conclude from these studies that the development of grammatical competence is irrelevant to or unnecessary for the development of communicative competence" (Canale and Swain).
- (b) "The answer to the question 'Ought we to teach grammar?' is therefore, psychologically 'yes' and linguistically 'perhaps'" (Pit Corder).

Michael West was not against grammar altogether. He pleads for the teaching of grammar related to vocabulary level; he lists the following points in favour of teaching grammar :

- (a) Grammar teaches us 'the concealed liabilities of a vocabulary'.
- (b) Grammar is a set of labour-saving rules, explanations and patterns which economize effort in language learning.
- (c) Grammar is a preventive and corrective medicine, safe-guarding or rectifying those points or word-use which are specially liable to error.

He further adds that "a grammar book bears the same relation to speaking as a book about tennis bears to playing tennis; both tell the learner what he ought to do. But he might know the whole contents of both yet be unable either to speak the language or play the game, because language, like tennis, is not a knowledge but a skill; a matter of immediate unconscious reaction acquired only by practice".

An examination of the sources of all these conflicts and confusions will reveal that there is no agreement regarding the crucial issues listed below :

1. What is grammar ?
2. How much grammar is to be taught, if it is to be taught at all, to whom and at what stage ?
3. For what purpose is it to be taught ?
4. If it is to be taught, how is it to be taught ?

What is Grammar ?

The term 'grammar' has meant various things at various times and often several things at the same time. This is one of the major sources of confusion. As part of the trivium, grammar was taught along with logic and rhetoric; it was an effective 'package deal' but the pact was broken and grammar got separated, lured by linguistics. Later, grammar became more and more descriptive, sometimes universal, sometimes specific, sometimes at the deeper level and sometimes at the surface level. Different models have been proposed with differing theoretical implications—structural grammar, different models of generative grammars, systemic grammar and what not. Each one has got his or her own definition of 'grammar' and often one gets lost in the jungle of jargon because each theory has its own jargon.

How Much Grammar and for Whom ?

Is grammar to be taught in a school or college where the medium of instruction is English ? If the speaker has a good command

of the language, what is the use of learning facts and the terminology about a process that is already an established habit and an effective mode of communication ? If, however, the speaker has not acquired even the basic vocabulary, why should he or she learn facts and the terminology about a medium of expression that he has not managed to use ?

For What Purpose ?

Is grammar to be taught for the sake of knowledge or, as Russel says, 'a source of discovery', perhaps as part of liberal education ? Is it for teaching the parts of speech, inflexions, paradigms, conjugations, definitions, sentence analysis and synthesis ? Is it for reference purposes to look up the relevant information in a grammar book or in a dictionary where information about verb patterns is given ? Is grammar taught for better speaking and writing—for practical use ?

If It is to be Taught, How to Teach It ?

As a result of the lack of clarity in the three areas mentioned above, methodological problems are left to the teachers. Though the 'average teacher' may appear to be a dreadful weapon with which one can beat any theory, it is good to know what 'the average teacher' makes of any theory. Whatever be the theory, a lot depends on who teaches what to whom and for what purpose.

In the Indian context there are three distinct methodologies. One is the training college methodology—the Herbartian steps and all that; the second is the methodology advocated by the ELTIs and ELT experts—structural, communicative, etc.; the third and the most important one is the methodology of the not so well equipped teacher, trying to teach his own variety of English under very, very difficult circumstances to a very large number of largely unmotivated groups of learners who do not know why they are learning English. The

training college teachers and ELT experts try to formulate and demonstrate a theory in an experimental set-up. As experiments they might work; but the 'average teacher' does not work in an experimental set-up.

Another important factor is that Indians (and perhaps, Orientals in general) love literature and grammar. That is why Shakespeare and the grammar-translation method became the two natural resources of English in India. Even after independence, in spite of the new found importance for the Indian languages, fervent nationalism and an aversion to everything English, Shakespeare and the grammar-translation method continued to flourish despite all the developments in the USA, refinement of the Direct Method in Japan by Palmer, the publications of French and Hornby, Michael West's Reading Method, and such other developments in the other parts of the world. Only in 1952, Jean Forrester brought to India the first structural syllabus produced by the Institute of Education, London University. The New Approach, as it was called, had some influence on the training colleges in India and the books of Ryburn, Champion, Palmer, Hornby and West were used in training colleges. But 'the average teacher' used his grammar method to teach a textbook based on the Direct Method or the Structural Syllabus. Most teachers are reluctant to do away with formal, explicit grammar and the learners expect it in a language class in the hope that 'grammar' will give them the ability to use the language. The position is essentially the same in the early eighties as those in the earlier decades, except for the labels. Sanskrit has always been taught with the help of literary texts (Kaavya) and grammar (Vyakarana). Hindi is taught to non-Hindi speakers in the same fashion. An Indian language is taught to an Indian who does not know the language, using literary texts, grammar rules and translation as a technique. Languages like French, German and Russian are taught in the grammar-literature-translation

method. This has become an essential part of the language teaching tradition.

The ELT 'experts' have been talking about TEFL, TESL, TESOL, EST, ETP, ESP and several other initials. What happens ultimately is EEP (English for Examination Purposes)! There are quite a few fashionable theories floating around. The latest catchwords heard in conferences, seminars and discussions on language teaching like the communicative approach, procedural syllabus, the monitor model, the acquisition/learning distinction, inter-language, care-taker speech, the usage-use distinction, signification and value, fluency versus accuracy are ELT curios now; teachers look at the people discussing these things as people watching a circus and return home saying: 'They can do it, but we can't'. Some who are enthusiastic, try to imitate the super-stars with varying degrees of success or disaster!

The realities of the situation have not been taken into account, unfortunately, by the 'experts'. The phenomenal increase in the number of students and teachers in India at various levels has created several problems like indiscipline among students as well as teachers, mass copying, teacher training, providing physical facilities, making available materials, etc.

In 1980-81 there were about 120 universities and 5000 colleges with a total enrolment of about 40 lakh students. This excludes the enrolment in PUG/Intermediate and Junior colleges, and Pre-professional colleges.

In 1980-81 there were about 13,50,000 primary school teachers, 8,50,000 middle school teachers, 9,02,000 secondary school teachers and 2,00,000 in the university departments and colleges; the number keeps on increasing year after year.

These teachers and learners have at least 14 major linguistic backgrounds with all sorts of variations in each language: according to the 1971 census there were at least 25 million users of English with varying degrees of profi-

ciency in the language. The learners are exposed to all varieties of English inside and outside the classroom. India is, perhaps, one of the very few democratic countries where English teaching is attempted on a massive scale. There are only a dozen ELTIs, about 500 Colleges of Education and about 900 Training Schools; it is almost impossible to train even a small percentage of teachers teaching English.

What is to be Done?

It seems that since the body of knowledge (i.e. English) to be transmitted is quite complex, the motivating factors (or the absence of them) may be as varied as there are individuals and the individuals to receive it are enormously large, and the sociological forces that are assumed to be at work in supporting environments are extremely complicated, the English teaching enterprise must be equally extensive and complex.

In any modern pluralistic society the English teaching enterprise must be pluralistic in planning and implementation and varieties of English learning opportunities must be made available to the learners. The theoreticians and syllabus-makers should abandon monomethodological approaches like one syllabus and one book for one nation or community—structural, notional, procedural or communicative. A pluralistic poly-methodological plan of action is to be advocated—may be grammar-translation, structural-direct, structural-bilingual, functional, notional, literature-based, communicative, whatever—leaving the choice to learners. Surely there is no one road; there must be many. At the same time, just advocating an eclectic or negotiated approach will mean asking the ill-equipped teacher and the learner, who are not in a position to select or negotiate, to be omniscient. The actual materials will have to be made available. Several syllabi and mini and maxi language-on-demand courses are to be evolved (with provision for

tests that could show the individual's style and progress of learning) so that any learner at any level who wishes to learn a foreign or second language for any purpose for any length of time using any medium he likes will be able to do so at his own rate and speed in school or out of school, using a method (or methods) that is best suited to him. If a learner feels that a bilingual or comparative method agrees with his personality and cultural style of learning, if someone else feels that he is interested in and can bear and learn from an intensive study and repeated reading of some good pieces of literature, the experts have no business to tell him that he is following the wrong method.

Instead, trying to teach the parts of speech and sentence analysis to one and all is as unrealistic as teaching Shakespeare and Shelly to

every one. In the class the teachers of English literature 'fall upon the thorns of life' and they bleed and the teachers of English grammar are in the subjunctive mood! In both the classes the learners remain illiterate in English. Language analysis as well as literary appreciation presupposes a sound knowledge of the language. Some have it but not all. Those who have the language sensibility, if they wish to learn grammar or literary appreciation, should not be denied the opportunity; but, for the majority what is needed is neither literary interpretation and appreciation nor grammar in the conventional sense but the ability to use English. If the ability to use English effectively can be built up, the teaching of grammar and literary appreciation can become productive at a later stage. As it is, the table of teaching grammar is a tragedy.

What is Intelligence?

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INTELLIGENCE is a house-hold word, very commonly used by people of all walks of life. There are two approaches to get at the meaning of intelligence : (a) Implicit Approach and (b) Explicit Approach.

Implicit Approach

As per this approach meanings of intelligence reside in the minds of the people. Since these meanings already exist, the psychologists have only to discover rather than create them. The data for research on the implicit approach are people's communications regarding their notions as to the nature of intelligence.

But whom should we ask about intelligence? In 1921, 14 experts were asked what they understood by intelligence (intelligence and its measurement, 1921, p. 123). Among the definitions given, were included the following:

1. The power of good responses from the point of view of fact (E.L. Thorndike).
2. The ability to carry on abstract thinking (L.M. Terman).
3. The ability to learn to adjust oneself to the environment (S.S. Colvin).

4. The ability to adapt oneself adequately to relatively new situations in life (B. Pinter).
5. The capacity for knowledge and knowledge possessed (V.A.C. Henmon).
6. A biological mechanism by which the effects of a complexity of stimuli are brought together and given a somewhat unified effect in behaviour (J. Peterson).
7. The capacity to inhibit an instructive adjustment (L.L. Thurston).
8. The capacity to acquire capacity (H. Woodrow).
9. The capacity to profit by experience (W.F. Derrborn).

In this approach intelligence will have as many definitions as the number of experts. But broadly speaking two themes run through all these definitions—(1) the capacity to learn from experience and (2) adaptation to one's environment. More recently, Ferguson (1954) has viewed intelligence in terms of ability to transfer training and Piaget (1972) has defined intelligence in terms of one's adaptation to the environment.

An other approach to study implicit theories has been suggested by Neisser (1979). In his view intelligence is organised around an ideal case, or "prototype". One's intelligence is defined by the degree of resemblance to this prototype. Since there exist multiple prototypes, there would be no validated concept of intelligence. This implicit theory approach would surely tell what people mean by intelligence and not what intelligence means.

Explicit Theories

Under this approach some basic units of ability have been proposed which explain individual differences in intelligent behaviour. The three basic units of ability as identified by different scholars are:

1. S—R Bond
2. The Factor
3. The Component

1. S—R Theories

It was proposed by Thorndike (1928). It viewed intelligence primarily in terms of the ability to learn, i.e. building of simple SR bonds. Gagne (1970) has identified eight kinds of learning which differ among themselves in both the quantity and quality of the SR bond involved. From the simplest to the most complex, these are:

- (a) Signal learning (Pavlovian conditioning)
- (b) SR learning (operant conditioning)
- (c) Chaining (complex operant conditioning)
- (d) Verbal association
- (e) Discrimination learning
- (f) Concept learning
- (g) Rule learning
- (h) Problem solving.

2. Factor Theories

In most traditional investigations of intelligence the basic unit of analysis has been the factor. The paradigm has been called differential, psychometric or factorial on the basis of

tetrads (a set of correlations) worked out by finding intercorrelations among mental tests placed in columns and rows in order. Charles Spearman (1927) gave the earliest factorial theory—the two-factor theory of intelligence. According to this theory, intelligence comprises two kinds of factors, general factor (g) and specific factor (s). General ability (g) as measured by the general factor is required for performance on mental tests of all kinds. Each specific ability (s) as measured by each specific factor is required for performance on just one kind of mental test. Thus there are as many (s) factors as there are tests but only a single general factor. Spearman suggested that the ability underlying this general factor could best be understood as a kind of mental energy.

Thompson (1939) disputed Spearman's claim that the general factor represented a single underlying source of individual differences. Instead he proposed that the appearance of a general factor was due to the working of a multitude of mental bonds including reflexes, learned associations between stimuli and the like. Performance of any particular task activates a large number of these bonds. Some bonds will be required for the performance of virtually any task requiring mental effort and these bonds in combination will give rise to the appearance of a general factor.

Thurston (1938) accepted Spearman's hypotheses of a general factor but he argued that it is only a second order factor or phenomenon, one which arises only because the primary or first order factors are related to each other. Among these first order factors or abilities Thurston included verbal comprehensions, word fluency, number, spatial visualization, perceptual speed, memory and reasoning. Guilford (1967) refused to acknowledge the existence of general factor at all, in human intelligence. He has proposed that intelligence comprises 120 elementary abilities, each of which involves the action of some operation upon some content to produce some product.

But the most widely accepted factorial description of intelligence is a hierarchical one. Jenson (1970) views intelligence as comprising two levels—associative learning ability (called level I) and conceptual learning and problem solving (called level II). Vernon (1971), accepting Spearman's (g) factor, proposes that intelligence can be described as comprising abilities at varying levels of generality. At the highest or most general level is a general factor, encompassing all tasks. This is followed by (1) major group factors including a verbal-educational factor and a practical mechanical factor, (2) minor group factors, and (3) specific factors.

Cattell (1971) has proposed a theory that the general factor (g) noted by Spearman comprises two sub-factors : (1) crystallised ability (measured by tests such as vocabulary and general information) and (2) fluid ability (measured by tests such as abstract analogies and abstract series completion).

Hakstian (1978) extending the work of Cattell (of course in collaboration with Cattell himself) argues for higher stratum capacities of visualization capacity, general perceptual speed, memory, and general retrieved capacity in addition to crystallised and fluid intelligence.

Cognitive Approach (the component approach)

There is no particular theory under this approach. A common element in most of the theories under this approach is a unit of analysis that can be described as elementary information process or component. This is a unit or

process that operates upon internal representation of objects or symbols. The component may translate a sensory input into a conceptual representation, transform a conceptual representation into another, or translate a conceptual representation into a motor output. What is labelled as a component depends upon the desired level of theorising. Under this approach researches attempt to analyse directly the processes involved in intellectual behaviour rather than trying to find behavioural correlates of such behaviour.

All these approaches are not mutually exclusive; on the contrary, they are complementary. S-R theorising concentrates upon the external or environmental contingencies that lead to various kinds of responses. And factorial and componential theorising concentrate upon the internal effects of these contingencies. Factorial models tend to be structural ones, although they often contain clear implications for understanding information processing, componential models tend to be process ones, although they often contain clear implications for understanding how information is structured. Sternberg (1980) proposes that factors can be understood in terms of components. But components should not be viewed as superseding factors since for at least some educational purposes (as predicting performance) factors are probably still the preferred unit of analysis. For other educational purposes (such as training performance) components are probably the preferred unit of analysis (Sternberg, 1981).

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Integration of Community with School

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IN the distant past formal education as it exists today was unheard of. Each family performed the duties that are now entrusted to teachers at school. Of course, life was less complex during those days and whatever the youngsters needed to learn and master was pretty well known to the elder members of the family. Education was looked upon as an apprenticeship period for every one to learn the family trade or skill. No two families vied with one another and caused disintegration of community. Even where similar training was imparted there was a feeling of partnership and goodwill that formed the substratum. The quality of life was sublime and simple even though, sociologically viewed, it might have seemed unsophisticated and slow-paced.

No society could remain forever static and complacent. With the blossoming and ever-broadening perspectives of knowledge, family-folks realised their inadequacy to be the sole mentors for their wards. Knowledge expanded in depth and diversity and the community realised that it would be prudent to hand over the responsibility of educating youngsters to established institutions. The founding fathers of formal institutions never fancied that some

day the forging links between community and school would be snapped. Schools have started functioning rather autonomously and some times arrogantly too disregarding the needs and aspirations of community wherein these were situated. To some extent parents have to be held responsible for this sordid state of affairs. Whoever declared that parents should abdicate their rights to mould their children to the formal institutions, that have sprung up like mushrooms? Many parents found an 'alibi' on the plea that they were preoccupied with family problems and professional commitments that left little time for the real 'education' of their children. Over the years it had bred irresponsibility among parents and non-accountability among school authorities. Hence the need for reintegration of community with school.

A child spends hardly five or six hours at school and even this gets distributed to acquiring tit-bits of several disciplines in different periods from different teachers. Rest of the day he is at home or among peer-groups in a residential locality. Occasionally he might stray away and seek refuge in a cinema-house or participate in healthy out-door or indoor

games. A few decades ago play-grounds in school would attract students outside school-hours and a few might linger on the grounds till dusk. A metamorphosis has taken place in recent times. Very few willingly play vigorous games and exercise their muscles. Either they hang around classrooms for extra-tuition or they rush back home to do home-work or work assigned by home. Many parents positively discourage their children playing at school beyond class-hours because in their considered opinion this is tantamount to waste of time. In their myopic view of education, schooling is equated with stuffing mind with whatever is printed in textbooks that could be regurgitated in examinations. They seldom realise that a sound mind in an unsound body is a dissonant phenomenon. It was not the case in the history of mankind. Education was conceived of as training the body as well as the mind. Proportionate time was allowed for both, with the result that youngsters were not only well-informed but robust as well! Community activities gave immense opportunities for exercising limbs and each community was a self-sufficient unit in all respects. It encouraged variety, virility and virtue that sound an anachronism today.

An apology for a nexus exists in some schools in the name of Parent-Teacher Association. This usually begins with a bang and ends with a whimper. The Head of a school is so preoccupied with the administrative rigmarole that he is left with little energy and enthusiasm to convene Parent-Teacher Association meetings. If at all such meetings are to be held, it has to be only during week-ends. Many parents, literate as well as illiterate, look upon such meetings as unwelcome intrusion into their plans for outing or simple relaxation at home. The thin attendance in a few meetings discourages the Headmaster from summoning subsequent meetings. It is a Herculean task for the Headmaster to collect his own colleagues in the context of the frozen

relationship that prevails in most institutions. Even if he is in a position to prevail upon them to attend such meetings, it is anybody's guess how the meetings would be conducted. A few overzealous parents might unwillingly cast aspersions on some teachers that would receive scorn and epithets of derision. The parents might regret their attending while the Headmaster would be sorry for summoning them. Far from bringing school and community closer together, the PTA meetings might widen the gulf all the more.

Another prevailing practice of establishing links with parents by school authorities is to send Progress Reports of their wards. In early stages of schooling both teachers and parents take to this practice religiously and the teachers would insist on parents' signatures on the Report Cards as a proof of scrutiny by parents. Many teachers would write comments—cryptic or descriptive—in addition to the entry of marks. The pupils would choose an appropriate occasion to produce the cards before the parents so that they could escape the avalanche of rebukes for their poor performance. The episode is soon forgotten and they relapse into their poor study-habits. Some parents undertake the pilgrimage to school to request the class-teacher to bestow special attention—which means private tuition beyond or before school-hours. Some students do benefit out of such remedial measures while some remain immune. This scourge of private tuition has become so pervasive that many teachers are tempted to shirk good teaching in regular classes and collect many students for private tuition. It has reached an all-time high in recent times that it would be next to impossible to check this unethical practice.

Here are a few suggestions for bringing school and community closer. Instead of waiting for an invitation from school, parents could visit school periodically, meet the class-teacher, exchange views on the progress of their wards in a way that would not hurt the pride

and self-respect of teachers. Parents belonging to affluent sections could visit the library, laboratory and play-rooms and voluntarily donate in the interest of all school children. Would not the Headmaster feel proud of having a few such parents? For various reasons a school may not be in a position to equip library or laboratory properly.

Educated parents—particularly housewives—could volunteer to teach some classes, if they have the requisite expertise, with prior consultation and also without causing embarrassment to regular teachers. It may so happen that teachers for a few subjects may not be appointed either because the previous incumbent has relinquished or a trained teacher may not be readily available. If the Headmaster has

the bio-data of parents, he could get in touch with them when such crises occur. Parents also would realise how difficult indeed it is to manage a class! They would refrain from unjust criticism of school in future.

Infinite are the ways and means of establishing closer links between the two powerful agencies—school and community—that make or mar the development of children. All that it calls for is a reciprocal trust and goodwill and also willingness to sacrifice one's time and resources, keeping in mind, that in the hoary past, parents had to perform the role of teacher. Poor standards should not be glibly attributed to poor teaching alone! Would it not be due to poor parentage as well!

Values in Relation to Religious and Moral Education

(DR) JAMNALAL BAYTI

A few problems stand so positively at the educators' elbow as those involving questions in values. Education is directly concerned with values at a number of points. To state one's aim of education is at once to state one's educational values. If a student is interested in his work, it means that he values it. Teachers attach values by marks or grades. The evaluation goes on continuously.

Kinds of Values

There are two major categories into which values can be divided—desired and desirable. The desired values become desirable when they pass through the social frame of reference.

All desires are not of equal worth. There is not enough time to realize even every worthy desire. So we must choose between desires.

Instrumental Values

These values are judged good. They are good for something. They help in achieving some other ends. In drawing up a curriculum, we must take into consideration what subjects or values should be included. If a student wants to become an engineer, then science and mathematics have the greatest value for him. These

subjects have an instrumental value for him, for they help him in becoming an engineer. Instrumental values are subjective and selective to people and situation.

Intrinsic Values

These values are judged good not for something else but in and of themselves. Their value is self-contained. Pupils write on desk and put their books. No other piece of furniture can be replaced for the desk. So, desk is of intrinsic value. This value inherent in desk is objective rather than subjective.

Aesthetic Values

It means values which may be subject to intensified appreciation. There is a tendency in education to restrict aesthetic values to a restricted range of subjects such as music, dancing, painting, modelling and literature, specially poetry.

But there are educators who think that this is a narrow range and even subjects like geography and mathematics can be appreciated by pupils. But this habit of intensive appreciation cannot be forced. It needs intellectual qualifications surcharged with emotions.

Example : Which book for general English is to be prescribed by the Board of Education ?

1. If economy is emphasised, a cheap book is to be selected.
2. If only educational advantage is emphasised, then a book suited to the age group is to be selected.

'Religion is the recognition of all duties commanded'

—Kant

'Religion is morality tinged with emotions'

—Mathew Arnold

Secular and Religious Philosophy and Education

The areas of religion and morals offer a peculiarly fertile field to stimulate the growth of diverse aims of truth, reality and values. Secular schools often direct instruction in religion but in secular schools moral education is imparted to students not directly but indirectly.

But there is a question : Can morals be taught satisfactorily apart from religion ? Those who think that morals cannot be taught apart from religion, provide religious and moral education privately at home, or the Church or the like. But here also there are marked differences of opinion on the nature of religion and morals.

Some think of religion in broad humanistic terms. Others understand it only in terms of supernatural. The former group motivates children to be moral because it leads to the most satisfactory social adjustment. The latter takes religion as the will of God.

Secularism

There are people who are inclined to turn away from religion. They wish that their students should try to meet the main social and scientific demands of the every-day world about them.

These secularists think that the future is

uncertain and the secular child is anxious about his adjustment in future like the religious child. But the secular child seeks this adjustment not in the worship of supernatural powers, but in the obedience to natural laws. The secularist trains his child in scientific methods, scientists are his highest priests and scientific doctrines are the basis of his religion.

But this does not mean that the secularists disregard spiritual values. They like that the school should be deeply spiritual. Democracy stands for the essential dignity and equality of man irrespective of his colour, creed and sex, so in such a set-up all should have equal access to spiritual values. Secular schools are the gift of democracy. It is not a loss to religion. Secular schools are bringing together children of all walks of life having different faith, caste, creed and sex. It is a significantly religious task. Religion divides whereas secularism unites. They (secular schools) are creating social unity, they are laying the basis on which any ultimate brotherhood of men must rest. Religion asserts priority of faith over reason and secularism is just the opposite of it.

Humanistic Religious Education

For most educators, this quest of 'plus' values beyond secularism centres in some conception of God. With the many questions that arise, the humanistic religious educator is inclined to make his approach to God through the agency of human experiences. The humanist does not care for holy scriptures but tries to make his acquaintance with God through science and relationship. He believes in a social theory of religious education. He knows two great commandments : Love God and Love Neighbour. To learn these two commandments, humanists depend upon education rather than priests and on human rather than divine initiative.

This is also the progressive philosophy of education, i.e. to place dependence on human

initiative and human experience. Here to teach and to learn religion is a creative experience. A youth not only comes to a religious understanding of God through his experience but he constantly reconstructs his notions about God.

But, is human nature sound and strong enough and is it not pride and lack of humanity on the part of man to assume that God is what pupils and teachers creatively learn He is ? Does not their anthropomorphism cause them to forget that it is God who created them and not they themselves ? To all these questions, the only answer a humanistic religious educator has to offer is that 'His approach to religion is through human experience'.

Theology of Education

Humanistic religious education is a step beyond secularism but is still sort of what religion properly demands of education. Humanist suspects that the failure of mankind to go further is due to the fact that humanism is infected with secularism. To humanists, religion is nothing if God does not come within human experience.

God is naturally the father of mankind. Man should bow down before his Maker. If it is so, he will not rely on human experience to realize God. It is gravely misleading to forget that God is our Creator.

A theologian educator starts with divine thought about man. For him, God is too high, too bright to be seen with the eyes with which every thing is seen. The teacher can inform the student about revealed truths, hold them up as a motive for his conduct, show him by example how to follow them.

Moral and Character Education

The primary question here is : Can a school teach morals successfully without placing them in religion's context ? The secular schools have long taught moral education—without mention of religion. Humanists say that social and

moral concepts are one and the same. To a theologian, moral law is divinely ordained.

Which of these theories is profound ! How can the contents of a curriculum be determined in moral and character education ? Then, how to make a child virtuous even after putting all the five things of morality and character in the curriculum ?

There is one question to be asked : Has youth a moral obligation to develop his talents ? This is of his own choosing. But if he fails, he will have to pay for it.

Moral education will prove useless if there is no opportunity for the child to practice what the school church preaches. There should be fieldtrips and other community activities.

Major Philosophies of Education

Religious Philosophy of Secularism

Secularism has no religious point of view and regards secularism as religion. This philosophy limits itself to nature and the judgment of play and social sciences. To it, morals are conduct patterns which men in association with other men over the centuries have found most productive of human happiness and welfare. All that lies beyond human experience is speculative.

Religious Philosophy of Humanism

A humanist is not satisfied with a secularist. He makes a search for God. But he does not have traditional supernatural approach. He puts his faith in man and man's experience. A humanist approaches moral education just as a secularist.

Religious Education Dominated by Theology

These educators worship a God who has created them and not a humanist God who has been created. The chief aim of education is to make men able to worship God.

Adjustment Pattern of Visually Handicapped and Sighted Students

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It is a bitter fact that there are many sections which are deprived and left away from the main stream of society in India. One of these sections is of the handicapped which forms a sizable group among them. Staggering figures indicate that about nine million blind are dumped into the dayless gloom. Of all the categories of handicapped, it is blindness that evokes an instant feeling of helplessness and a feeling of despair of leading a dependent future for the rest of life. Undoubtedly the lack of vision adversely affects their mobility, orientation and learning of efficient living skills.

The visually handicapped children and youth are those who learn through the use of Braille or related media without the aid of vision, even though they may be able to perceive light and use it for orientation and movement. So many factors may be responsible for this type of handicap as malformation, injury and other biological factors, etc.

The visually handicapped children and youth face some problems with social interaction that are caused indirectly by their inability to see. It is experienced that they have some

personality problems, as they have a lower level of aspiration (Ali and Khan, 1982), are more introverted and have more neurotic characteristics than the sighted children (Zerhan, 1965; Brown, 1938).

There is no distinct personality type produced by blindness, other's attitude and reactions to them are likely to shape the way they perceive themselves and relate to others. The visually handicapped have been exploited and are generally considered as the most useless and helpless persons of society. People either have an excessive pity feeling or a sense of rejection for them and they are not genuinely accepted as a part of society. A common mistake made by the whole society is to assume that a visually handicapped individual cannot pass his/her life independently. This deeprooted feeling tends to make their adjustment difficult (Sommers, 1944; Hubbard, 1945; Gupta, 1982; Sharma, 1977; Kaur, Singh and Jain, 1984). Sommers (1944) also studied mother's feeling towards the visually handicapped and the reactions were grouped into five categories: (1) genuine acceptance, (2) denial of

either of the parents of the child, (3) over-protectiveness and excessive pity, (4) distinguished rejection, and (5) over-rejection.

Except genuine acceptance, all the reactions hamper their adjustment. As Imamura (1965) observed, during the early years mother's excessive pity and over-protection tend to develop dependent behaviour. Scott (1969) lays the blame for dependency of blind on the organisations, agencies and programmes for the visually handicapped. They become dependent on agencies for a number of services and employment, etc. As Lowenfeld (1973 b) aptly remarked: "The pity felt by many for visually handicapped causes them to learn no other skills" because they are taught to play a dependent role. Besides this, sometimes they are neglected, rejected and are not accepted by peers or may in fact be ignored and isolated in the classroom (Drigger, 1983; Bateman, 1964). Ascroft (1963) concluded after reviewing the opinions and studies that negative attitude towards visually handicapped and their own negative self-regard may produce personality problems in them.

Apart from personal and social problems, the visually handicapped children have some cognitive problems due to the lack of vision experience. They have a limited capacity to perceive objects. They have to wait for contact, sound or smell to arouse their curiosity. They cannot see other children moving towards and reaching for the toys and other interesting objects. They are deprived of a visual model to imitate. No doubt these limitations affect their cognitive abilities. Their intelligence quotient is little below than average (Hays, 1941; Bateman, 1967; Livingstone, 1958). Their imaginativeness, comprehension of conceptual task and abstract thinking are poorer than sighted ones (Singer and Streiner, 1966; Friedman and Pasnak, 1973; Suppes, 1974). These shortcomings may create problems in learning and they may not be very well adjusted in the present educational settings. Therefore in the

present investigation an attempt has been made to measure the adjustment along with the emotional and social adjustment of the visually handicapped in comparison to the sighted students.

Procedure in Outline

The adjustment inventory for school students by A. K. P. Sinha and R. P. Singh and the socio-economic status scale by B. Kuppuswamy were administered to 80 students (40 visually handicapped and 40 sighted students) of the age-group 14-18 years belonging to two schools of Dehradun.

Analysis of covariance was employed to find out the significance of the difference between the means of different dimensions (emotional, social and educational) and total adjustment of the visually handicapped and sighted students. The effect of socio-economic status was eliminated in the present study.

Hypothesis

It was hypothesized that:

1. There is a significant difference between the emotional adjustment of visually handicapped and that of sighted students.
2. Sighted students are socially better adjusted than their counterparts, i.e. visually handicapped.
3. There is no significant difference between visually handicapped and sighted students on educational adjustment.
4. Visually handicapped students differ significantly on total adjustment (emotional, social and educational).

Method

Sample

The sample consisted of 40 visually handicapped and 40 sighted students (boys and girls) of the age-group 14-18 years, studying in a

middle school for the visually handicapped (Dehradun) and a local school for the sighted students, respectively.

Variables

The present investigation includes two variables, viz. Predictor variable (Adjustment—social, emotional, educational and total) and Control variable (socio-economic status).

Tools

The following tools were used :

1. Adjustment inventory for school students by A. K. P. Sinha and R. P. Singh to measure different dimensions, i.e. emotional, social and educational and total adjustment.
2. Socio-economic status scale for urban students by B. Kuppuswamy to measure the socio-economic status of the students.

Collection of Data

The data were collected by individual interview of the visually handicapped students as the Braille version of the tools was not available to the investigator.

The interview technique was also applied in the case of the sighted students to partial out the effect of the interview technique on their responses.

It was experienced by the investigator that children have a tendency of providing erroneous and false information about the designation and income of their parents/guardians. Therefore to avoid it and to know the correct and exact information about their socio-economic status, the investigators consulted office records also and thereby came to know the real income and occupation of the parents/guardians.

Data Processing

Analysis of covariance was employed to find out the significance of difference between

the mean scores of different dimensions of adjustment of the visually handicapped and the sighted students, eliminating the effect of socio-economic status on adjustment.

Analysis and Interpretation of Data

Emotional Adjustment

The adjusted mean scores of the visually handicapped and the sighted students are 5.969 and 4.380, respectively. The obtained F value (11.128) is significant at 0.01 level of confidence with a degree of freedom 1 and 77.

Thus our previous hypothesis about emotional adjustment is accepted. Our findings also find support in the studies of Sommers (1944), Sharma (1977) and Kaur, Singh and Jain (1984). However, the study of Sublok (1976) does not support this view.

Social Adjustment

The obtained adjusted mean scores of the visually handicapped and the sighted students are 9.20 and 6.72, respectively. The F value (13.96) has been found highly significant at 0.01 level of confidence with the degree of freedom 1 and 77. This finding approves the hypothesis that sighted students are socially better adjusted than visually handicapped students.

This finding is corroborated by the studies of Sommers (1944) and Fraiberg (1975) while it contradicts the findings of Kaur, Singh and Jain (1984).

Educational Adjustment

The adjusted mean scores of the visually handicapped and the sighted students are 5.287 and 3.612, respectively. The F value is 6.175, significant at 0.05 level of confidence. This indicates that sighted students are educationally better adjusted than visually handicapped. This rejects the hypothesis that there is no significant difference between visually handicapped and sighted students.

Total Adjustment

The obtained F value (6.22) is significant at 0.05 level of confidence. The adjusted mean scores of the visually handicapped and the sighted students are 19.94 and 15.23, respectively, indicating that sighted students are better adjusted than visually handicapped on total adjustment.

It approves the hypothesis that there exists a significant difference on total adjustment.

Conclusion

From the foregoing interpretation it has been concluded that visually handicapped students are poorly adjusted in emotional, social and educational adjustment than sighted students. The same condition prevails as regards total adjustment.

Suggestions

The following suggestions are being given here on the basis of the conclusions drawn from the findings of the present study :

1. Since visually handicapped children are emotionally maladjusted, it is of prime importance that parents, elder members of the family and their teachers should play a prominent role in providing them a feeling of emotional security. They ought to be treated as persons with respect for their right to help them to develop in them initiative and self-reliance, but always with awareness of their physical, emotional and intellectual limitations. To make the parents and teachers aware of their role, there is earnest need for establishing guidance and counselling services for parents and teachers.
2. Another major threat to adjustment of visually handicapped children is the lack of genuine acceptance by parents, sighted peers and society, which is

identified as one of the main reasons for their social maladjustment. It is suggested that the family as well as society should be properly disposed towards their genuine acceptance regardless of their handicap. All efforts should be directed, therefore, towards creating a proper understanding of the problem. Excessive pity and mercy will only aggravate their maladjustment. A rational approach providing a conducive environment has to be made to cultivate self-confidence, self-sufficiency and self-worth in them.

3. The findings of the present study show that visually handicapped students lag behind their sighted counterparts in the field of educational adjustment. Lack of visual experience, restricted mobility, ineffective educational setting and lack of dedicated teachers are the main precipitating factors responsible for their maladjustment. It is, therefore, suggested that they should be helped not only to make use of the remaining sight but also to utilize other senses such as tactual, kinesthetic, auditory, olfactory and gustatory to optimum as these will enhance their language and communication development. Special aids and equipment like Braille literature, large print books, low vision aids, Braille typewriters, tape recorders, recorded teaching material, talking books and other sensory modalities should be provided adequately for each of the educational settings for visually handicapped. An adequate number of dedicated and talented teachers should be recruited and trained for teaching the visually handicapped. The number of existing schools and vocational training centres is not enough to cope with the need. More such small settings need to be added at district or zonal

levels to make the facility available within the reach of most of the visually handicapped children.

4. To make the visually handicapped feel adjusted in the area of total adjustment, the aspirations of the visually handicapped should always be kept in mind, apart from providing other needs to them. A secure future will help them a lot in their adjustment. More vocational avenues and opportunities in public and private sectors should be made available to them.

Suggestions for Further Research

The investigators feel that the present study is not sufficiently representative and adequate, because they had limited time and financial

resources, and therefore suggest the following points for further research :

1. Other dimensions of adjustment should be included in future such studies.
2. Variables other than socio-economic status are also known to bias the relationship between psychological factors and visual handicap. Therefore attempts should be made to control the effect of other variables also.
3. Overall adjustment of visually handicapped should be studied in the context of the personality and attitude of parents and teachers to know the causes of adjustment problems.
4. Adjustment should be studied in the perspective of sex and duration of blindness.

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Effective Classroom Management

L.S. SINHA

TEACHER-EFFECTIVENESS in a classroom situation is, to a considerable extent, a reflection of the overall school atmosphere which, in turn, results from a variety of inter-acting factors like the leadership provided by the head and the ethos built up by the teachers in general. The concept of discipline which is upheld by the school as such also plays a vital role in the individual teacher's performance in the class he is called upon to engage. The supportive role played by the senior colleagues goes a long way in boosting the morale as also the efficiency of the younger ones by giving them timely guidance in many ways. Even so the approach of an individual teacher in the classroom contributes to his own effectiveness.

Very often a teacher enters the class sufficiently late, thereby giving a congregation of thirty and odd children an opportunity to loosen up and to get out of gear as it were. Whenever possible a teacher should be present in advance to receive the class and help in orderly seating, not necessarily in the traditional manner but in groups where specific activities may be assigned. Necessary preparation for the lesson—arrangement of teaching aids, blackboard work and arrangement of other teaching materials, etc.—should be made in advance. After the greetings

are exchanged, the lesson should be taken up promptly and in all seriousness. Thus the stage is set for work and the children understand that the teacher means business.

The content of the lesson with its well-defined objectives has to proceed systematically. The plan of the lesson should be thought out and executed, as far as possible, in a way involving some activity or active participation of the children who may preferably be divided into convenient groups. Laslett and Smith (1984) advocate what they term as Rota, Quota or Branching approach. Rota refers to groups being allotted specific activities like operating on worksheets, working with a cassette, collecting information or doing some drawing work. Thus three or four centres of work are created on which the groups take their turn in rotation. The Quota system, likewise, requires the groups to complete a specific assignment in accordance with their ability or aptitude, during the session. 'Branching involves starting all the class together on a particular activity like doing an exercise from the board or working together from a textbook, then, as this is completed, 'branching' groups into different activities or areas of the room. For the quicker workers who are likely to finish the common activity first,

there may need to be a number of further pieces of work. The above approach would necessitate classifying children in particular groups, seating them in a way that group work progresses smoothly and allocating to each group carefully thought-out activities.

It is not difficult to see the advantages of the above approach, which is more easily applicable to elementary stage, as against the passivity which marks the traditional classroom approach. The upshot of the system is that activity or active participation by children leads to more effective classroom management and contributes to better learning.

The questioning technique is an instrument in the hands of a teacher which he can employ in managing his class successfully. Evenly distributed questions engage the entire class purposefully and the children keep alert. Responses from the children should be carefully handled and an attempt should be made that poor responses are not denigrated so as to discourage weaker students. Whenever the responses are wrong or inadequate, it might be an occasion for the teacher for coming out with clearer exposition of the topic being dealt with. Right and good responses should be met with adequate recognition from the teacher who is expected to suitably praise them. While asking questions the teacher need not necessarily position himself near the table. He would do well to move round the class (here the arrangement of seats has to be suitably adjusted) and address a few sentences on the topic being discussed to one child in one part of the room and then pass on to another corner and address a few sentences to another child. Shifting of gaze in this manner and scanning different corners of the room has been described by Marland (1975) as the 'Lighthouse' technique.

The concept of reward or reinforcement and punishment is yet another device for managing the class effectively as also for promoting learning and inhibiting behavioural lapses. Very often a right answer is praised by the use of an

adjective 'good'. Laslett and Smith (1984) point out the desirability of using a variety of appropriate adjectives like—'great', 'superb', 'fine', 'splendid', 'original', 'interesting', 'beautiful', etc. However, care has to be taken that the praise is natural and sincere and at the same time balanced. Hopkins and Conrad (1976) are of the opinion that whatever ample praise is used in teaching, behaviour does seem to be better. There are various types of reinforcements that can be made use of by the teachers. The system of giving points or credits should be employed judiciously. Very often it is house-wise but all that need be done is that teachers should agree upon the specific areas for which the credit is to be given and work out the exact modalities. It has also to be borne in mind that whatever be the mode of reinforcement strict fairness has to be the guiding principle. Apart from this another device which some educationists call 'contingency-contracting' is also used as a reinforcement agent. This means that a certain facility is offered to the children in lieu of their performing a certain task set to them by teachers. It amounts to saying that 'first you work then you play'.

As for punishment, it has been found to have a negative effect. As a short-cut to a disciplinary problem that confronts a teacher in his routine classroom work it tends to serve as a negative reinforcement agent evoking anxiety or fear. Such feelings of anxiety and fear lead to a withdrawal from the learning and are generalized i.e. they affect other areas of behaviour. The worst form of punishment is the corporal punishment where the child develops feelings of hostility or antagonism against the teacher and his learning is seriously inhibited. E. Stones (1966) notes that 'punishment can be used to get rid of undesirable activity but it is of doubtful value in getting children to learn anything'. In a survey, the Americans, Kennedy and Wilcutt found that 'praise acted almost universally as a reasonably stable incentive to learning while blame was

an equally consistent inhibiting influence on learning'.

Disparaging remarks by the teachers is another form of punishment device which adversely affects the learning process. It serves to drive the child into his shell and dampens his enthusiasm considerably. The teacher should take particular care not to ridicule a child on account of his poor performance or any other short-coming he might have been able to discern.

Apart from the reinforcement devices or rewards of different nature there are other strategies which a teacher can employ towards a more successful classroom management. Insignificant irritants he would do well to ignore, for they are most often designed to attract attention. Whenever a teacher seems to be unduly concerned with very minor behavioural lapses on the part of children and pays attention to them, such a behaviour tends to be repeated, but when ignored is more likely to die out. E. Stones (1966) observes that 'Even in case of classroom misdemeanours, ignoring the activity, so long as it is not upsetting other children, may be more effective than giving the child attention'. Even as ignoring a minor act of misdemeanour leads to an atmosphere congenial to learning, so also awareness of the needs of children and attending to them promotes a healthy climate.

Some teachers are in the habit of issuing too many directives regulating the behaviour of children. This invariably proves distracting and the children's attention gets diverted too frequently from the main lesson. It would, therefore, be necessary that the teacher does not allow digressions to take place without sufficient justification.

The element of humour not only serves to diffuse the tension which might result as a consequence of a provocative behaviour but leaves the teacher in a more commanding situation. It brightens the whole atmosphere of the classroom permitting the teaching-learning

process to proceed smoothly. Otherwise too cheerfulness on the part of a teacher helps relieve the monotony of the classroom. It should be remembered that a lesson which is taught in a dull and mechanical way rarely goes home and is likely to be ineffective.

The factor of teacher-credibility plays a vital role in making the classroom management effective. The various small promises a teacher might make or may have to make in the discharge of his academic or non-academic responsibilities, should be scrupulously carried out. A teacher, for instance, promises to hold a test on a certain day but fails to do so or offers to complete the evaluation of a written assignment by a specified date but for some reasons defers it—all these erode his credibility. This boomerangs with children failing to respond adequately to the demands made on them.

Management of the class also becomes effective as soon as the teacher comes to know each child by name and addresses them by name. The child, in case of an act of indiscipline, is easily identified by name and readily responds to the teacher's directives. Knowing a child individually is also an evidence of the teacher's interest in him. Laslett and Smith even suggest methods to remember the names of children and to know them individually: 'A personal comment, using the child's name, can be written each time a book is marked. At least one question can be addressed to each child, every day, if not every lesson. A daily chat, however brief, about something not connected with lessons can be a source of insight as well as a way of establishing rapport'. A genuine interest in each child marked with sympathy would go a long way in ensuring classroom discipline.

Younger teachers in particular should form the habit of critically observing the lesson of a senior successful teacher-colleague and note carefully the devices and the tactics employed

by him in managing his class effectively.

Of particular interest to him would be the exchanges that take place between the senior teacher and the children, the strategies or tactics with which he handles situations involving confrontations and the way in which he

manages to deliver the lesson as such. It is true that each successful teacher has, or develops, his own personality which is largely instrumental in ensuring success for him, nevertheless, there are many devices and skills which the younger teachers can imitate.

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Students' Attitude Towards Correspondence System of Education

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IN India, correspondence system of education is emerging as an alternative to formal system at university level. The system aims at catering to the educational needs of (a) students who discontinue their formal education owing to bad pecuniary conditions and other circumstances; (b) students in geographically remote areas; (c) students who discontinue education because of lack of aptitude and motivation but who may later on become motivated; (d) students who cannot find a seat or do not wish to join a regular college or university department, although they have the necessary qualifications to pursue higher education; and (e) individuals who look upon education as a life-time activity and may either like to refresh their knowledge in an existing discipline or to acquire knowledge in a new area (UGC 1967). Within two decades (1962-82) of the introduction of this system, around 35 universities and other institutions of higher education have started offering several correspondence courses leading to the award of degrees/diplomas/certificates. Their enrolment remains around 1.5 lakhs, which is around five per cent of the total enrolment in all universities of the country.

In the context of the development of the correspondence system in the country, need arises to study the credibility of the system with reference to a rational framework. There may be several indices of judgement of the worth of the functioning of the system. The participants', especially the learners', attitude towards the system may be considered as one of the criteria for such evaluation. It is presumed that the correspondence course students hold positive attitudes towards the system at the time of entrance to these courses. They are usually self-motivated and take their own decisions in joining the system. However, after pursuing their studies for a period of time, they may change their attitude towards the system depending on the nature of the functioning of the system. It can be hypothesised that effective functioning of the system could enhance the attitude of students in a positive manner. Also, within the institution there may be variations in the pattern of the functioning of the courses, depending on the nature of the various disciplines. There may be changes in the attitudes of students toward the correspondence system when major variations are witnessed in the functioning of the system

faculty-wise. In this regard, it becomes worthwhile to study the attitude of students, taking into consideration the faculty-wise break-ups. Moreover, a study of the differences in the attitudes of students belonging to different disciplines would reflect on the functioning of the correspondence courses more objectively.

In addition to the nature of the functioning of the correspondence system, different characteristics of the students have an effect on their attitudes towards the system. For instance, it has been specified earlier that there are a number of students who are capable of pursuing higher education, but could not join the formal streams due to constraints such as advanced age, family responsibilities, employment positions and conservative outlook of family members (for women). Hence, students in these categories opt for the correspondence stream as an alternative to the formal system of higher education. In this context it is hypothesised that students belonging to higher age-groups (beyond the average age cohort of formal streams), employed persons, and women could have a comparatively more favourable attitude towards the correspondence system than possessed by students belonging to lower age-groups, unemployed categories and women. There may be another impinging factor, viz. students' institutional experiences prior to their joining their present courses. These may cause differences in their attitude towards the system. It may be possible that students with previous experience of correspondence studies may have a different attitude towards the correspondence system as compared to those who have had no correspondence study experiences prior to joining the system. As a whole, on the basis of the above, it can be hypothesised that the manner of functioning of the system can be the major determinant of the attitude of students. However, various, other variables such as the nature of courses, students' age, sex, employment, status and history and their previous institutional experiences may cause changes in the

attitude of students. The present study intends to focus on the study of the attitude of post-graduate (PG) students of correspondence studies towards the correspondence system.

Objectives of the Study

The study was conducted with the following objectives :

1. To study the attitude of PG students of correspondence courses towards the correspondence system.
2. To study the effect of different variables, viz. nature of the discipline, students' age, sex, employment background and prior institutional experience on the attitudes towards the correspondence system.

Hypotheses

The testing hypotheses of the study are :

1. There do not exist significant differences in the attitude of PG students enrolled in different disciplines.
2. There do not exist significant differences in the attitude of
 - students belonging to low, middle and upper age groups;
 - men and women students;
 - employed and unemployed students;
 - students having completed a previous course through the correspondence system, students completing previous courses through the formal system and students completing previous courses as external candidates.

Population and Sample of the Study

The students of all PG courses of the Directorate of Correspondence Courses (DCC) of the Himachal Pradesh University constituted the population for the study. The DCC of the H.P. University was chosen for the study because of the following reasons :

1. In India this is one of the correspondence institutions with an existence of over a decade and half.
2. It has been offering PG level courses in different disciplines ever since its inception.
3. Its enrolment includes students from different walks of life and from different regions of the country.

Out of five PG Level Personal Contact Programme Centres of the DCC, the Simla Centre was selected randomly for identifying the respondents of the study. It was decided to collect information from the clusters of students at all Master level Arts, Commerce and Education Courses at the DCC's Personal Contact Programmes. The final sample consisted of 75 M.A., 44 M.Com., and 54 M.Ed. students. It had 134 men and 39 women students. On the basis of the availability of complete and accurate information 100 sample students could be classified with regard to other background variables, viz. age, employment and prior institutional experience. The sample size of students belonging to different classified groups is given in the appropriate tables presented in the following section.

Instrumentation

For the purpose of measurement of attitudes of students towards correspondence education, an attitude scale was constructed and validated by the investigator. Thurston's method of 'equal appearing intervals' was adopted for the development of the scale. As per the first requirement for the construction of an attitude scale with equal appearing intervals it was necessary to develop a fairly large number of statements about the psychological object, so that they could represent all shades of feelings towards the object, i.e. correspondence system of education. A list containing 80 statements was prepared at the primary stage. Each was rated by judges on 11 points appearing on the

equal appearing scale (starting -5 to +5 with 0 as the indifferent position), i.e. -5, -4, -3, -2, -1, 0, +1, +2, +3, +4 and +5. In total, 14 experienced research fellows of the CASE were approached to rate the primary pooled statements. With reference to the necessary guidelines for judgement, the 'Thurston Scale' was explained to them in detail. On the basis of the responses of the judges, the numerical values against each item were subjected to the analysis of median (scale values) and quartile deviation (Q-value). The criteria used for the selection of the statements for the final form of the scale were (i) low Q-value and, (ii) scale values very close to each of the 11 positions of the scale. The final form of the attitude scale consisted of 16 statements. In the scale, there are two items each which are close to the scale positions 0, +3, +4, -2, -4 and one item each being very close to +1, +2, +5, -1, -3 and -5 positions.

Analysis and Interpretation

The items responded to by the students in the attitude scale were scored on the basis of the scale values as computed earlier. The mean value for attitude measurement of each individual was calculated. Further, these mean attitude scores at individual level were treated as the attitude score of each individual. Identifying different groups of students on the basis of sex, prior institutional experiences, age, employment and courses undertaken, the means and variances were computed for each group. With regard to testing the hypotheses it was decided to apply the students' 't' test. For application of this statistical technique the assumption of homogeneity of variances was to be tested. Observing that all the groups being classified under different sub-groups with regard to different variables had a homogeneity of variance at .01 level of significance, it was decided to apply the students' 't' test for testing the above-stated hypotheses. The pooled mean attitude scores of all group students was 1.73.

In the eleven-point attitude scale, with 0 as the midpoint, the above mean value can be said to be moderate. Also, the analysis of individual scores reflected that out of the 173 sample students only five (around 3%) had expressed a negative attitude towards the system. The rest of the students had perceived positive aspects of the system. This proves the credibility of the system to the overwhelming majority of its clients.

significant difference existed only in the cases of lower (below 25) and middle (25-35) age-groups. However, in rest of the cases, viz. lower and upper (35 and above) age-groups and middle and upper age-groups, no significant differences existed between their respective mean attitude scores. It can be observed from the same table that the mean attitude score of the upper age-group stood in between the mean score of the lower and middle age-groups.

TABLE 1

Significance of Difference Between the Means of Attitude Scores of Students of Different Disciplines

Sample	N	$\bar{X}$	V	SE (difference of $\bar{X}$)	't' Values
Arts	75	1.880	.650	Arts } .161	1.398
Commerce	44	1.655	.760	Commerce } .192	0.302
Education	54	1.713	1.073	Education } .184	0.982

TABLE 2

Significance of Difference Between the Means of Attitude Scores of Different Age-group Students

Sample	N	$\bar{X}$	V	SE (difference of $\bar{X}$)	't' Values
Below 25 (Low)	46	1.597	.454	Low } .148	2.399*
25 to 35 (Middle)	38	1.952	.469	Middle } .194	0.049
Above 35 (Upper)	16	1.709	.391	Upper } .190	0.589

*Significant at .05 level.

The first hypothesis, as stated above, was regarding absence of difference between attitude scores on the basis of the disciplines undertaken. In this context it can be observed from Table 1 that the obtained 't' value is not significant at .05 level of significance. Hence, the null hypothesis of non-effect of disciplines on the attitude of students is not rejected.

With regard to the relationship between the age and attitude of correspondence course students, it can be seen from Table 2 that a

TABLE 3

Significance of Difference Between the Means of Attitude Scores of Men and Women Students

Sample	N	$\bar{X}$	V	SE (difference of $\bar{X}$)	't' Values
Men	134	1.653	.956	.145	2.480*
Women	39	2.013	.553		

*Significant at .05 level.

TABLE 4

Significance of Difference Between the Means of Attitude Scores of Employed and Unemployed Students

Sample	N	$\bar{X}$	SE V (difference of $\bar{X}$)	't' Values
Employed	78	1.852	.477	
			.160	2.463*
Unemployed	22	1.458	.409	

*Significant at .05 level.

The perusal of Table 3 indicates that there existed significant difference between the mean

Table 5 indicates no significant difference between the mean attitude scores of students belonging to different groups classified on the basis of previous institutional backgrounds. In the cases of all the three groups, the mean scores varied within a small range of 1.75 to 1.83. The data do not reflect the effect of previous institutional experiences on the attitude of students towards the correspondence courses.

Discussion

The above facts indicate a few interesting relationships. One, most of the students (97%) who have been continuing with correspondence courses for a considerable period of time (for minimum two semesters) expressed positive

TABLE 5

Significance of Difference Between the Means of Attitude Scores of Students having Different Institutional Backgrounds

Sample	N	$\bar{X}$	V	SE (difference of $\bar{X}$)	't' Values
Regular	70	1.753	.585	Regular	.380
				Correspondence	.186
Correspondence	22	1.750	.557	Correspondence	.264
				External	.280
External	8	1.830	.493	Regular	.260
				External	.311

attitude scores of men and women students at .05 level; of course, both the groups had expressed positive attitude towards the correspondence system. The higher mean attitude score of women students than that of men students shows women's perception in more positive direction than that of men.

From Table 4, it can be observed that there was significant difference between the mean attitude scores of employed and unemployed students at .05 level of significance. As the mean score of employed students was higher than that of unemployed students, it can be commented that employed students expressed more favourable attitude towards the system than unemployed students.

attitude towards the system. Their mean scores reflected their positive attitude to a certain extent. It can be concluded that perception of the system in a positive manner is one of the indices of the successful functioning of the system. However, low credibility of the system among a small section of students (3%) need not be ignored. The study of the attitude of those students who have dropped out of the system might substantiate the result of the present study.

Two, the lack of difference between the attitudes of students of different courses indicates that differences in the functioning of different disciplines could not cause differences in the attitude of students. The homogeneity

in the attitude of students from different disciplines also shows the correspondence system in a positive light. It is considered as another positive indicator of the success of the correspondence system.

Three, the major research hypotheses regarding the effect of specific characteristics of students, viz. sex and employment background on the attitude of students have been confirmed by this study. It shows that the system is perceived as being most favourable among women students and employed students vis-a-vis male students and unemployed students. This is one of the indicators of the socially responsive nature of the correspondence system. However, with regard to the relationship between the age and attitude of students, no clear-cut conclusion can be drawn. It can be stated with reservations that the system is more popular among middle age-group students than lower and upper age-group students. There may have been several other interacting forces which could have been reflected in the attitude of

middle age-group students.

Lastly, it is found that students' previous institutional experiences did not have any effect on their attitude. It shows that correspondence education has been equally accommodative to students, irrespective of their differences with regard to previous institutional experiences. Hence, the system has proved its openness among all groups of students.

As a major outcome of the study it can be perceived that the correspondence system has proved its credibility among its own students, irrespective of students' differences with regard to courses, age, sex, employment background and previous institutional experiences. Moreover, differences existing in the degree of attitude among male and female, and unemployed and employed students indicate a positive feature of the correspondence system. Investigations of the above type could pave the way for further studies on relationships between other pertinent variables affecting the correspondence system of education.

Classroom Learning Atmosphere: Social and Psychological Factors

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THE way a child feels about his classmates, about his studies and about his teachers is one of the major factors determining how much he will benefit from his classroom experience. A classroom learning atmosphere that provides emotional support, encouragement and mutual respect is conducive to high self-esteem and to the utilization of academic abilities. Without supportive classroom relationships, children often lack interest in learning and the dual educational goals of academic learning and mental health are difficult to achieve. Both experience and research show that children tend to respond favourably to the learning situation when the teacher presents his method and objectives to them clearly and concretely. When he makes frequent checks of their reactions to classroom activities and when he takes their points of view into consideration, children who misperceive the teacher's intentions or who cannot find expression for their interests in academic procedures often fail to become involved in the learning process and to utilize their intellectual potentials.

Children who feel comfortable with their classmates are likely to utilize their academic

abilities more fully than those who do not. Research findings show that most children who have at least several good friends among their classroom mates enjoy better health and learn more effectively than children who have few or no friends or who are actively disliked.

Norms, standards or expectations exist in all social groups to cover virtually all aspects of human behaviour. Sub-groups or individuals often establish expectations of behaviour that are different from those of the larger group. Among the most familiar and controversial norms are those of teen-agers who are often more anxious to conform to the expectations of their classmates than to those of the influential adults in their lives. In the classroom it is important for the teacher to know that in addition to the expectations or standards he may have for the performance of behaviours of the children, the classmate group may have some standards of its own. These classmate group norms may be supportive of the teacher's expectations or they may be at cross purposes with them. The actual behaviour of the child will be the result of the extent to which he allows each of these various expectations to

influence him.

The behaviour of the teacher in the classroom is a continuing process of interaction with his students. At times the interaction is so complex and subtle that the teacher may be unaware of a certain aspect of it. Thus a discrepancy often exists between the teacher's goals and his actual behaviour in the classroom. Similarly, there is likely to be a marked discrepancy between the teacher's perceptions of his behaviour in the classroom and his students' perception of that same behaviour. When such a situation exists, the teacher's classroom practices are not contributing to the achievement of teaching objectives.

The school is only one of the many forces acting on the student's life. What he does in the school obviously depends upon more than the events in the classroom or outside the classroom in the school. The values, expectations and ways of behaving accepted by significant others in the child's world in past constitute the field of forces within which the teacher hopes to exert influence. These forces are parents' attitudes and expectations, socio-economic environment of the family and community, close friends, mass media of communication, etc. The teacher's job is not, of course, to launch a direct attack on problems that may be a part of the child's out-of-school environment but he should be aware of them.

Teachers know well the important effect of home conditions and parental attitudes on the child. They have found repeatedly that when the values of the family and the school are contradictory, the children's school work suffers. If a child feels that his parents do not care about his school life, he, too, is unlikely to care and consequently become an under-achiever and a behaviour problem in the classroom. The young child's early adjustments

to the learning atmosphere may come to characterize his entire school career and eventually his own influences as a parent. The longer poor adjustments are allowed to persist, the more difficult they will be to change.

A person's view of himself known as self-concept is one of the most vital areas of human growth. It may well be the central factor influencing his behaviour. The self is involved in social reactions, need satisfaction and in effective adjustment. When a child first enters school, he brings a self-concept with him. He was born with it but he develops it as one part of the process of growing up and continues to develop and modify it during his stay in school. Research has shown that there is a significant relation between parents' evaluation and acceptance of their children and the way the children regard themselves and are regarded by their classmates. As the child grows the other members of his family and later his classmates, teachers and other members of the community contribute further to the formation of self-concept. Many children have a high academic potential but consider themselves poor students whereas those whose academic potential is relatively low consider themselves good students.

Thus classroom interaction is more than a matter of teaching, telling and student listening or of teacher asking and student answering. It is our responsibility as a teacher to know more about our students than their IQs and their achievement level in various academic areas. The teacher should not only identify and understand but also attempt to control all the attitudes and relations that influence his students and the classroom climate. He should also create and maintain a classroom environment that supports learning. He should also plan and execute ways of modifying them.

Building the School Climate

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FERTILE soil, adequate rainfall and sunshine, in other words, a good geographical climate is needed for a better and high crop yield. Likewise, a good industrial climate leads to high and quality production of goods. Researches have shown that industrial climate brought about through participation of employees and workers in democratic atmosphere by permissive leadership not only raises levels of employee production and morale but it also creates conditions for friendly unaffected social relations which are the most indispensable condition for the activity to go on smoothly in an organization for realizing the goals of the organization. In the experiment by Coch and French (1948) the measured effect on production showed higher productivity and less resistance to change to meet the changed conditions with greater participation on the part of the employees. Deutsch's (1949) research showed that given a basic cooperative rather than a competitive situation one can expect mutual helpfulness, better understanding of one another's communication, improved coordination of efforts and other forms of behaviour considered cooperative. Luszki (1950) found that there is a positive relation between

sensitivity to the feelings and emotions of others (empathic ability) and the ability to see what is happening in a social situation. He reported that persons with good empathic ability are (i) better able to see what is happening in the role performance of others, (ii) have good personality adjustment, (iii) have insights into themselves which are similar to the evaluation made of them by others, (iv) have more stable positive and secure feelings about the self and somewhat favourable perception of others. Review of investigations bearing upon productivity, supervision and morale led Katz (1949) to conclude that 'workers do better when some degree of decision-making about their job is possible than when all decisions are made for them'. Experiments conducted by Bavelas (1942) have shown that application of skillful democratic techniques in industrial settings can result in extremely marked increases in group productivity which will persist over long periods of time. Investigations conducted by Jaques (1950), Wickert (1951), Roethlisberger, Dickinson and others (1939, 1950) and that by Levine and Butler (1952) all support the conclusion reported by Katz and others. It was found from these studies that labour content-

ment and efficiency rose when workers were (a) organised in teams having a sense of common purpose, (b) made participant in the system, when they had open discussion, group decision and could talk freely about whatever they wished, and (c) when they ceased to be reactive and contrary in respect to a desirable course of conduct for they themselves have had a hand in declaring that course of conduct to be desirable.

Researches in educational organizations have also yielded similar results. More teachers in schools with better (open) school climate have been reported to be satisfied, having high morale, positive attitude and commitment to the organization and the profession. Similarly, students in schools perceived as having better school climate have been found to excel in all school-related studies. Taylor (1968), Bruce (1974), Smith (1974) and Srivastava (1983) studied the relationship of teachers' satisfaction with perceived institutional climate and found the ratings of satisfaction with job/college to be related with the ratings of college environment. Likewise, students' satisfaction with college has been found to be related with the ratings of college by Berdie et al. (1970), Pervin (1967) and Srivastava (1980). Studies by Gandhi (1980), Puri (1984), Shukla (1984) all point to similar results concerning college environment and other teacher and student achievement variables. A good school climate therefore is a pre-requisite to the student success and teacher growth, on the one hand, and a measure of the administrative effectiveness of the principal/headmaster, on the other.

The climate of a social organization is a function of the dynamic interplay and interactions among the members of the organization. It is a complex system of situation determinants that exert an influence upon participating individuals. The climate or environment perceived by persons in an organization is a result of manner in which role incumbents at each hierarchical level of the organization

interact with each other. Within the school which is a socio-psychological system, the climate is the resulting condition from the social interaction between the teacher and the headmaster and all other human components of the school system. One of the approaches to the domain of the climate has been to encapsulate everything to be said about the climate within the single global concept of morale. Morale, according to Blankenship (1939), refers to a feeling of 'togetherness' and a sense of identification with and interest in the elements of one's job, working conditions, fellow workers, supervisors, employees and the company, and participation is a process of bringing about this togetherness through interaction among groups of people in a democratic setting. The interaction of organizational behaviours of role participants at the various hierarchical levels of the organization generates the feel, personality or climate of the school. Depending on these interactions schools differ in their feel. In some schools, the school community—principal, teachers and students—all find the school to be a happy experience. In some schools the teachers and students somehow tolerate the school. They are not happy with it and suffer from a brooding discontent. In some schools there is neither joy nor despair but a hollow ritual where teachers, students and principals alike are acting out parts with an attitude of indifference and without any sense of involvement with the institution and with the group with which they are working. And, in some schools the school community is so restive that it cannot tolerate the school in the form it exists and want to bring about all kinds of change in its organization and functioning. Why is there such a difference in these schools? What factors have led to difference in the climate of these schools?

Argyris (1957), Lewin (1948) and Stogill (1948) among others express the importance of the individual in maintaining the organization, who has needs of his own which must be

satisfied regardless of the needs of the formal organization. Schein (1965) also maintains that the success of the administrator of an organization depends very much upon the stimulation which he provides to the members of his organization to give their spontaneous cooperation in achieving the organizational goals.

Schools exist to provide better teaching-learning situation. Better teaching-learning depends on the better climate of the school which in turn depends to a large extent upon the headmaster's behaviour and personality. The position of the headmaster in a school is crucial. He plays a very important role in structuring the total environment conducive to the achievement of school education. His interaction with the teachers is one of the most important factors which affects the quality of school education. His ways of thinking, styles of working, strategies and values influence the teachers' ways of working and attitudes to a great extent which in turn influence the quality of total education. Shukla (1984) found close linkage between educational leadership and teachers' attitude towards their job. Teachers' attitude constitute an important condition of successful teaching. It has been found in a host of researches that one's positive-negative attitude towards the job affect the success on the job quite substantially—positive attitude contributing to success and negative attitude to failure. Positive attitude towards their job on the part of school teachers results into better efforts on teaching leading to better learning by pupils. But attitudes of school teachers may be seen as a function of the way teachers are treated by their supervisory authorities on their job. Although there are several other conditions and factors apart from the treatment meted out to them which affect their attitudes but administrative leadership and its styles do interact with teachers' attitudes. Research has shown that more positive or desirable educational leadership leads to more positive attitude towards the job.

The success and failure of the principal/headmaster in apparently similar circumstances is therefore due to his specific personal qualities and styles of leadership. The behaviour and personality of the headmaster play a significant role in creating the climate of the school, because climate is a function of the leadership behaviour and personality of the leader. Gupta (1981) attempted to forecast the school climate on the basis of some predictor variables. He found that (i) leaders who were high on 'consideration' that is, those who had a concern for the comfort, well-being, status and contributions of the staff members contributed to the promotion of open climate which while simultaneously providing satisfaction for the group members' social needs, moves the organization towards its goals, (ii) leaders who had the ability to forecast and predict outcomes accurately added to favourable climate in the school, (iii) leaders who were expedient pushed the school climate towards openness, (iv) tough-minded leaders, that is, leaders who tended to be practical, realistic, independent and responsible contributed to the emergence of open climate of the school, (v) leaders who were 'imaginative' self-motivated and imaginatively creative pushed the school climate toward openness, and (vi) leaders who were group dependent preferred to work and make decisions with other people and tended to go along with the group and as a result contributed to the creation of open climate in the school as against closed climate which offers little satisfaction in respect of either task achievement or social needs. These findings suggest that the prospective educational administrator should be equipped with the personality qualities and leadership styles and behaviour as have been found to help in the creation of open climate that is conducive to the development of positive attitudes towards the job on the part of school teachers and training programmes be designed for the educational administrators in developing congenial climate.

Today when most Indian organizations including educational institutions are confronted with turbulence in their environments and impatience among people within, there is need for the administrators to learn how to manage people, how to deal with changing interface and how to manage change. Training for educational administrators in India has so far gone by default. Educational administration has been studied more for knowledge than skill development. Students studying educational administration are rarely required to engage themselves in any field work connected with administration of education. They are never placed in an apprenticeship situation where they can observe and get opportunities to use the practices of successful educational administrators. With identification of personal qualities and styles of functioning and behaviours of leaders which contribute to building good school climate there is need to revise the syllabi in educational administration and incorporate in them some practical course content in the form of internship in educational administra-

tion like there is in B.Ed. for practice-in-teaching or in medicine, engineering, IAS and other allied services where trainee officers are made to undergo practical training in the field before they are given the responsibility of a full-fledged professional. Building climate requires both a skill and a temperament and this can be brought about through training in that the administrator learns to provide greater opportunities for communication between and among the staff members so that they can accept one another at face value. A well-trained educational administrator will build up with his teachers relationship that will not be characterized by close, over-the-shoulder supervision and inspection. Instead, he will have a professional relationship of mutual trust and respect with a concern for assisting the teachers in their job. His school will be characterized by high scores on the Esprit, Thrust, Consideration and low scores on Disengagement, Hindrance, Aloofness and Production Emphasis subtests of Halpin's questionnaire.

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Improving Engineering Teaching

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ENGINEERING education has been variously described as a profession, an art, a science, and a business, but primarily it is a profession in which men apply the known principles of physical science creatively for the general good of society.

The objectives of engineering education are clear in the statement by Warren K. Lewis, who said, "Our objective is the development of the capacity of student when faced with a new and unfamiliar situation, to handle it with competence involving skill, initiative, and leadership".

Principles of learning stress the importance of effective participation on the part of the learner; his motivation through the formulation of a goal; the clear definition of task assignments; the evaluation of his progress; and his repeated practice in application. It can be appropriately defined: "Learning is a change in performance as a function of practice, the change having a direction that satisfies current motivation of the individual". The basic principles of learning are:

i. Learning is a process by which increa-

sing ability is developed through the effective activity of the learner;

- ii. The learner must have a goal;
- iii. Objectives for task assignments should be as clear and as immediate as possible;
- iv. The learner must know wherein he succeeds or fails;
- v. True education requires understanding and mastery of the material to be learned;
- vi. Repeated practice in different applications is essential.

Engineering is not easy. For success it demands hard, purposeful work. Resourcefulness, and at times, inspiration are needed, but for continuing professional success there must always be present the ability to work hard, intelligently and purposefully.

Effective learning is the result that the good teacher is after, because, after all, if there is no learning there is no teaching. The improvement of teaching involves many things. It is evident that knowledge of subject matter alone does not provide complete qualifications. The

components to the job of good teaching are¹:

- i. How to win and hold the goodwill of students.
- ii. How to keep student interest at a high level.
- iii. How to make teaching practical, functional, or worthwhile.
- iv. How to direct the exchange of ideas.
- v. How to persuade, convince or influence students.
- vi. How to speak effectively in the classroom.
- vii. How to illustrate or demonstrate ideas.
- viii. How to direct student practice or performance.
- ix. How to improve the learning techniques of students.
- x. How to fit instruction to various abilities and needs.
- xi. How to teach many students at one time and manage large classes.

Engineering should be taught as a dynamic body of knowledge, which is constantly expanding. Successful teachers give careful consideration to methods of stimulating interest and arousing the students' enthusiasm in the subject. These can best be developed by a method of teaching which gives him ample opportunity to express his ideas. For example, the teacher might start the class by proposing a specific problem, to illustrate a fundamental principle, and then solicit suggestions from the students on methods of attack.

Engineering education provides the opportunity to use several methods of instruction in a given field. The methods commonly employed are: the lecture-recitation procedure, which is used chiefly to aid the student in obtaining an understanding of the basic laws; laboratory work, to strengthen such understanding and also to develop skill in experimental techniques; and design work, which is used both to show how engineering principles are applied in situations simulating practice and also to

illustrate how principles from related fields can be combined to yield a solution.

It is often assumed that the major purpose of examinations is to evaluate the performance of students. Examinations do, of course, serve the purpose of keeping the student aware of the quality of his work and of acquainting him with his mistakes and weakness. The results of an examination may also acquaint the teacher with his own shortcomings as evidenced by his students' work. If properly planned, examinations serve other important educational purposes. They can stimulate the student to review the course, thereby achieving a better organisation in his mind of the subject matter. They place the student on his own responsibility and require him to think for himself.

In summing up, a technological college can do a good job if it takes up the following tasks:

- i. Rotation of teachers among courses that each may acquire a better overall picture of the structure and content of the curriculum.
- ii. Informal meetings of staff members may be instituted for the discussion either of problems related to specific courses or for the consideration of more general education problems.
- iii. Younger teacher should meet experienced staff member to audit his work in order that the young teacher may gain from suggestions and constructive criticism.
- iv. The use of men from industry, who come to the colleges either for short or for extended periods of time, may bring to the colleges fresh viewpoints.
- v. Teaching loads should be kept within prescribed limits in order to permit teachers at all levels to engage in activities contributing to their professional development. General observation supports the conclusion that, in general,

teaching loads in engineering are too heavy either as measured on a scale involving the amount of time available for constructive improvement of teaching or in comparison with other fields of instruction.

- vi. Good teaching should be recognised and rewarded.
- vii. Special schools or training programmes for the specific purpose of aiding teachers to improve their methods of instruction be established. They must have strong staff in engineering, science and the humanistic-social studies relating to engineering, as well as teachers either from faculties of education or selected from the engineering group because of their known skill in teaching.
- viii. In medical profession, medical teachers work both as doctors as well as teachers. Engineering teachers should be treated on a similar pattern to help teachers to increase their technical

competence.

- ix. Above all, technical institutions are facing an acute shortage of good teachers. Young graduates with talent and aptitude are not attracted towards this profession. They find this job less paying, less glamorous, with limited career development opportunities. There exists a world of difference in service conditions, facilities and salaries between institutions and industries. To attract promising teachers there should be scope of career development and increase in salary in comparison with other professional fields.

When all is said and done, it should not be lost sight of that it is easier to achieve the target so far as knowledge and information are concerned while the acquisition of skills depends to a large extent on the inherent abilities of the student.

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1. Crawford, C. C. Presented at the Meeting of the ASEE, Biloxi, Mississippi, March, 1951

Book Reviews

Language and Literature Teaching : From Practice to Principle
 Christopher J. Brumfit, Pergamon Institute of English, Oxford, 1985
 pp. xii+161, Price : US \$ 8.95

LANGUAGE teachers in training often complain about the 'irrelevance' of theory but at the same time they demand a repertoire of practical techniques. As an experienced teacher and teacher-trainer, Professor Brumfit knows this, just as he is aware of the fact that many teachers often end up not knowing why they do what they do. They need to understand a basic point: theory is rooted in practice, and therefore, there is no separation of the two.

Brumfit's book, intended for classroom teachers and teacher-trainers to guide them in building a teaching/training programme consonant with practical experiences and choice of theory, is a collection of twenty-three papers written for various conferences, workshops and meetings and published in reputed language journals from 1979 to 1983. The collection not only provides a clear exposition of some of the prevalent approaches but also constitutes "an extended commentary on major issues in language and literature teaching, and teacher education for those fields, in the past decade".

The papers in the volume seek to "derive useful general principles, compatible with our

fullest understanding of theory, from our current practice". Brumfit believes: "Unless innovation builds on current practice, it is unlikely to succeed, and any reformer needs to understand the strengths, as well as the weaknesses, of the existing situation" (p. xi).

He seems to echo, what he calls elsewhere, "deepend strategy" in which the language learner is thrown into a situation and asked to do something he cannot yet do, and is hence brought to realise what it is that he needs to learn. He is then taught what he now sees to be necessary. Principles, thus, grow out of practice.

Teachers should be able to choose what is best for their own situation, considering the type of students, school, academic and administrative set-up, etc. in a spirit of "optimistic caution". Brumfit rightly suggests: "We should be imaginative and wide-ranging in our search for ideas to improve what we are doing; we should even look hard at the packages which people are anxious to sell us, for there may well be good in them, though not the whole truth that is claimed" (p. xii).

With a concern for the interface between theory and practice, the author organises his papers in five sections: Communicative language teaching, the context of language teaching, criticisms of current practice, towards a methodology for literature teaching, and towards a methodology for teacher training. Though distanced by time and place of presentation, all the papers relate to each other and provide a sense of continuity.

The five papers in the first section deal with the present state of English language teaching referring in particular to communicative movement, needs analysis, notional/functional syllabuses, task-based teaching and ESP, use of new kinds of materials and methodologies that correspond with the dynamic needs of learners. As a practical teacher, Brumfit sees teaching as a part of human relationships, and emphasises the need to teach learners "to use the language for their own purposes" (p. 6), that is, to allow them to experience using their own English language rather than the English that belongs to the teacher.

He favours language teaching for *accuracy* and *fluency* (which he neatly explains to distinguish teaching from learning), adopting appropriate methodological procedure but *without ignoring teacher's experience and intuition*. He draws attention to the implications of the view that language is a fluid, dynamic and negotiable system just as he attempts to integrate this view with the practical possibilities of conventional language teaching and considers some of the readjustments and difficulties that are emerging in practice.

The three papers in the second section seek to contextualise language teaching in a broader view than that of teaching technique. The first paper relates to English as an International language (EIL), concentrating not on its formal features but its "ability to be used for the negotiation of meaning" across cultures. (p. 38) and how to make its "teaching easier, quicker

and cheaper" (p. 37). It is however, difficult to digest what Brumfit sees as "paradox" for the development of EIL that "the more multi-cultured English becomes the more it will be perceived as a threat and the more it will, in the end, lead people to wish for some alternatives to English" (p. 40). The second paper examines the bases of applied linguistics and the theoretical view of language that distinguishes applied from pure linguistics. Raising certain methodological issues for applied linguistic discussion, he wishes to emphasise the interaction between language *use* and language *development*, "for the process of using and the process of developing... will be seen to be intimately related" (p. 46). The third paper, informative as it is, examines approaches to language teaching across the educational spectrum in Britain, including mother tongues, second languages and foreign languages. He refers to the already-in-practice the skills model, the growth model and the heritage model as prefatory to his own model which attempts to "depict the expansion of linguistic capacity which will necessarily be associated with socialization and education" (p. 56).

The papers in the third section are diverse in level and type, but they are all part of a critical commentary on current argument and practice. The first paper is a plea for moving away from syllabus, definition to syllabus designing, which must be "responsive to learning theory", systematic, practical, realistic, conceiving the notional, functional, and situational specifications "as a spiral round a basically grammatical core" (p. 66). The second paper seeks to distinguish a number of different aspects of syllabus organisation besides commenting on Wilkins's notional syllabus. The third paper rounds off Brumfit's statements on the relation between syllabus specifications and teaching with discussion mainly centering upon methodological solutions to the problems of communicative teaching.

The next three papers concern the humanistic

movement in language teaching. Brumfit maintains that no method can ever provide a complete solution to teaching problems and as such, there is a need for "an integrated profession, not one which trains for particular methods only (even for the Council of Europe) but for a broad interpretation of all interesting and potentially usable developments (p. 89).

The seventh paper relates to the use of graded material its compilation/simplification procedure, reliability, flexibility and use of lexicon. The last paper, entitled 'Seven Last Slogans', offers certain stimulating points for teachers, teacher-trainers, authors, publishers, administrators and others.

The three papers in Section Four seek to answer the question how to develop literary experience by reading/teaching literature. Brumfit emphasises that development of literary competence is not possible without developing reading/comprehension fluency and ability to generalise. Seeing the importance of teaching learners to *read* literature rather than to *study* it, he presents a framework to develop a more matured "habit of wide, serious reading" in learners so that they can discuss, individually and in groups, books "in relation to their experience of other books in similar traditions, as well as in relation to knowledge and experience gained outside literature altogether" (p. 111).

The final four papers in the last section concern teacher training methodologies for language teachers. The first paper, which exemplifies a training scheme integrating practical experience, basic theoretical concept and student activities to make learning inductive rather than deductive, derives from a workshop in Mexico City. The second paper, which derives from the author's practice in the ESOL Department of London University Institute of Education, identifies seven general principles for creating coherence in ELT teacher education. The next paper, which also

derives from the London Institute, describes the procedures Brumfit developed for an intensive microteaching programme (for EFL teachers) which emphasises microteaching "as a source of discussion and analysis, with the general aim of sensitizing students to the process of integrating practical decisions with systematic and principled thinking about both specific teaching demands and general educational theory" (p. 146). The last paper, written with Richard Rossner, examines the context of teacher education in terms of a model 'hierarchy of decisions' which "is not sufficiently respected either in the career structure of the profession itself or during teacher training" (p.151). Brumfit through this decision-making pyramid rightly seeks to impose some order on the teacher-training process.

He suggests that the content of a training programme for language teachers should be conceived as being determined by the needs of the students (as perceived by them as a result of their experience and practice), appropriately analysed and reflected on. Various activities could be developed into a scheme, which "leads to a process of making explicit the theories which in fact inform practice and permits the critical examination of these theories".

On the whole, Brumfit's collection of articles is effective, and it should interest any serious teacher of language/literature in EFL/ESL situation as he is sensitive to the practical experience of teachers as well as the needs of learners in developing/following a teaching/training methodology. Most of his thoughtful suggestions, if honestly followed even within the conventional frame of education that we have in our colleges and universities, language and literature teachers would not only escape the 'unreasoning enthusiasms' of theorists but also stimulate as practical teachers the course of English studies in the right direction.

R.K. SINGH

Improvement of Instruction in Vocational Commerce Subjects : Methods of Teaching

(Dr) Prabhakar Raizada, New Delhi, NCERT, 1985

VOCATIONAL commerce education provides students with intensive training in theory and practice of trade and commerce-based occupations. Its main purpose is to ensure a steady flow of skilled workers to clerical and middle level supervisory positions in offices, business and industry. Purposive and meaningful training in this practice-oriented area depends much on the selection and use of proper methods and techniques of teaching.

In recent years vocational commerce education has increasingly become popular among students since job opportunities in this sector have increased considerably with the rapid development of economy. But commerce educators in general and vocational commerce teachers in particular are not adequately familiar with the principles of skill building and different methods of teaching skill subjects. To this end the present booklet on methods of teaching vocational commerce subjects is a welcome entry. This booklet, as indicated in its preface, has been designed to help prospective vocational commerce teachers in developing efficient and purposeful procedures for the development and teaching of commercial skills effectively.

Coverage-wise, the booklet is quite comprehensive. It refers to historical development, objectives of teaching vocational commerce subjects, procedure for designing curricula, methods and approaches of teaching, evaluation, needed physical facilities, teacher qualities, planning of instruction on annual basis, supervision and guidance with particular reference to vocational commerce education.

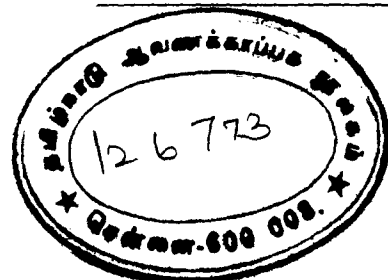
Since there is no one best method of teaching a vocational commerce subject, the teacher has to be familiar with all the different methods and techniques to choose the one which suits him and his group or class.

Discussion on various methods devised from time to time for effective teaching of skill subjects in this publication makes useful reading. This is more so because it is an outcome of the process of training of in-service commerce teachers drawn from different states and the resulting feedback obtained from them.

It contains a variety of information about tools and techniques useful to commerce teachers and evaluators. In addition, it gives a complete list of rooms, furniture, equipment and material with their specifications required for introducing vocational commerce stream for a group of 40 students. It also deals with commerce teacher's qualities and discusses self evaluation tools and techniques. It details steps on how to prepare an annual plan for teaching vocational commerce in schools. It also contains a list of jobs available for vocational commerce students, both in self and wage employments.

A useful publication for vocational commerce teachers and institutions. However, it would have served more useful purpose if it had discussed taxonomies of psycho-motor development such as those developed by R.H. Dave (1971), Simpson (1966) or Hannah and Michaelis than merely giving Bloom's taxonomy under the objectives of vocational commerce education.

MANJIT SEN GUPTA



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