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THE TEACHING OF INTERPERSONAL RELATIONSHIP
SKILLS BY USING THE PROGRAMMED
INSTRUCTIONAL METHOD.

A thesis presented in partial fulfilment
of the requirements for the degree of Master of
Education at Massey University.

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ABSTRACT

This thesis examines the acquisition of interpersonal skills by a sample of undergraduate students enrolled in the education course at Massey University. A programmed text developed by the experimenter, was used to train the subjects in these skills.

Three groups, two experimental and one control, with eight subjects each served as the sample for the study. The first experimental group worked with a programmed text, a tutor and audio-visual materials. The second experimental group, worked with the programmed text alone. The third, acting as a control group, did not have any materials or training sessions.

It was expected that the second experimental group with only a programmed text would develop as effective interpersonal skills as the first group, without the addition of audio-visual resources and a tutor.

Analysis of the data revealed that the subjects in the first experimental group showed the greatest improvement in interpersonal skills. The second experimental group had significantly better results than the control group but nevertheless was inferior to the first experimental group.

It was concluded that whilst the most productive means of inculcating communication skills was by the interaction of a programmed text, a tutor and audio-visual materials, a programmed text alone was of value in developing interpersonal skills.

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Chapter I

INTRODUCTION

Within Thai society one can frequently witness a traditional style of relationship between young people and members of the older generation. Young people, according to Thai custom, are expected to show complete respect and obedience to their elders. This is generally manifested in a passive, non-questioning, and submissive attitude in the presence of their superiors. This cultural pattern is evidenced clearly in the interactions between teachers and students. The authoritarian teacher is very much the basis of the Thai educational system. Teacher attitude and behaviour in the classroom serves to reinforce the traditional pattern of respect and obedience by students.

It is usual to find students who appear to be good listeners, but who are rather inactive in their interactions with teachers. It would appear that this passivity has its source in the traditional culture where an individual's outwardly quiet disposition is regarded as a positive expression of respect towards elders. A more active stance is usually perceived by teachers, lecturers, parents and older members of the society as an indication of disrespect. Active student participation in classroom interactions hardly occurs. The role of the teacher involves the use of power with confidence to manage and control events in the classroom.

This particular type of interaction has similarities with more traditional relationships between teachers and students in western societies. Hargraves (1972:139) indicates that the teacher has power which derives from many sources - from his status as an adult, from his traditional authority as a teacher, and from his expertise in the subject matter he is teaching. The traditional interaction between teacher and student can be demonstrated as in Figure 1.

Figure 1.

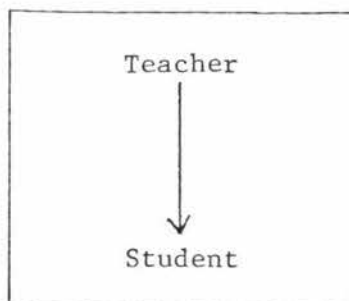


Figure 1. Traditional teacher-student relationship.

Figure 1 illustrates one way communication between teacher and student in traditional approaches. It does not allow a humanizing approach to learning and teaching which would be characterized by both parties being actively involved. This approach is continued by a lack of understanding of the importance of active and reciprocal student-teacher interactions.

The consequences of teacher dominated pedagogy within the Thai educational system would seem to be:

- unquestioned teacher control over organization and transmission of knowledge.
- uncritical and passive student reactions to bodies of knowledge.
- absence of meaningful and beneficial active communication between teacher and student.
- prevalence of student apathy, lack of personal development and meaningful learning.

An increase in the teachers' awareness of the importance and value of developing effective two-way communication would assist in changing these kinds of consequences towards more active involved learners.

Schofield (1972:80) stated that "the art of teaching is a process by which an individual, aided by certain material resources, initiates students into mastery of selected knowledge, skills or

attitudes. Therefore ... careful attention must be given to all the components of the process: communication, material resources, the student and the body of knowledge, skills and attitudes, which are constantly changing."

From this standpoint, the following model of teaching can be demonstrated:

Figure 2.

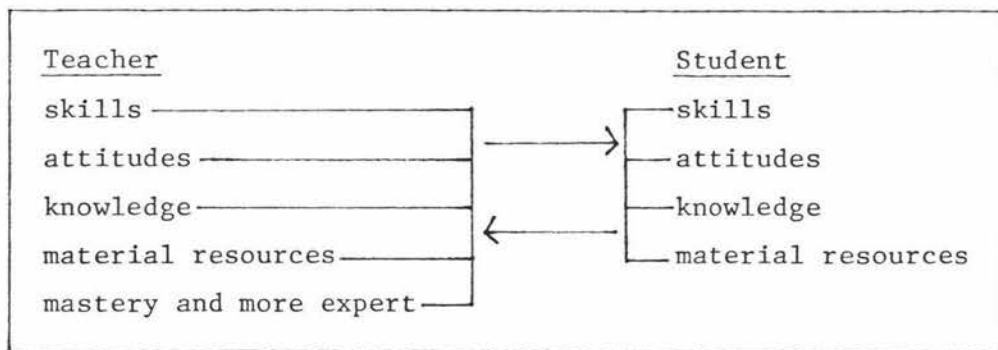


Figure 2. Schofield's teacher-student interaction model.

This teaching model shows an awareness of the importance of communication. It also highlights the recognition of students as vital elements in the teaching-learning process.

Gage (1968) indicated that the most effective teacher at any level of education is one who humanizes his classroom, treats every student with respect, and makes each individual feel significant as a person. He also provides students with well-defined standards of values, demands for competence, opportunity to discover knowledge and concepts for themselves and guidance towards the solution of problems.

Maslow (1971:189) stated that "the thing that the teacher or helper should do is to accept the person and help him learn what kind of person he is already. What is his style, what are his aptitudes, what is he good for, not good for, what can we build upon, what are his good raw materials, his good potentialities?"

The foundation for meaningful teaching and learning is effective communication. This is largely the responsibility of the teacher. Teachers must help students to explore, understand and act on their personal worlds making use of the students' own ideas, attitudes and skills.

A major question is the appropriateness of this type of interaction within the Thai educational system and society. To consider the students' frame of reference may be threatening to the Thai teacher who may fear a loss of respect leading to disciplinary problems. Traditional Thai society believes that only strict teachers can promote good classrooms.

To emphasize interpersonal relations in the classroom situation could lead to a change from power based on age and status to mutual respect with an acknowledgement of a skills difference. Presently some directors or other managerial staff are younger than their workers. The older and lower status workers do maintain respect for younger leaders - a respect based on their knowledge and skills. This indicates that in Thai society there are some examples of alternative relationships.

For minimizing disciplinary problems in school, there are some research findings that demonstrate the advantages of effective communication. Stoffer (1970), for example, indicated that the problems of discipline often arise from the teacher's lack of understanding of the pupil's immediate experience, infringement either purposely or accidentally on the student's dignity, or insincere communication.

Harbach and Asbury (1976) found that negative behaviours decreased when teachers initiated facilitative conversation and communicated empathic understanding¹ to students with behaviour problems.

1 Empathic understanding here involves the teacher's ability to understand the student's experiences from "inside" and a sensitive awareness of the way the process of education and learning is seen by the student.

This evidence suggests that the advantages of effective communication far outweigh any disadvantages for disciplinary control, and there is nothing at this point to suggest that it would be different in Thai society.

The implications for social change arising out of this approach would be far reaching and may be resisted for a time. However, with increased western influence on the Thai society, traditional teacher-student relationships are weakening or declining. Relationships are now becoming less rigid and less formal. One contributing factor for this is that there are increasing numbers of teachers who have been trained in psychological and educational theory. This knowledge is derived from western textbooks. Also, a teacher is not the only source of knowledge as in the past. Students can learn from other media.

In line with this, it is suggested that Thai teachers should pay attention to and develop the skills of effective communication in order to accentuate the positive aspects of such changes which are taking place.

Training in interpersonal skills usually requires the aid and interaction of experts in training situations. In Thailand, where this sort of expertise is scarce, an alternative approach to teaching may initially be necessary. This author will be returning to Thailand in the near future and would like to work in the area of teacher behaviour. A question is whether any alternative approach would aid in the acquisition of interpersonal skills at an adequate level. Programmed instruction may be an appropriate method. It has the advantages in that:

- it allows the students to work at their own pace.
- it is a useful substitute for experts especially if experts are unavailable.
- it provides frequent opportunity for students to actively respond to subject matter, and offers immediate feedback to them as to the accuracy of responses.
- training in skills needs time for learners to incorporate the ideas. A programmed text may be used as a means of introducing the knowledge of effective communication.

The purpose of this study is to determine the effectiveness of using a programmed text in the field of training in interpersonal skills. It is hoped that the outcome of this investigation would provide useful indications as to the value of using only a programmed text, especially in a situation where there is a scarcity of training resources and personnel.

Chapter II

REVIEW OF LITERATURE

In recent years numerous investigations have been undertaken relating teacher behaviour to pupil growth and achievement gains, in the hope of improving teacher effectiveness in the classroom situation. Studies by Aspy (1972); Carkhuff (1971); Cantrell, Stenner and Katzenmeyer (1977); Christensen (1970); Cromack (1973); Flanders (1965); and Rosenshine (1973) have revealed the vast opportunities for improving teaching and learning situations when teachers' behaviour, attitude and relationship with students are made effective. Previous research involving teacher behaviour and student learning needs to be examined before any improvements can be suggested in enhancing teachers' effectiveness in communication skills. Such improvements should be directed to increasing student achievement and enhancing positive student-teacher attitudes.

Research in Classroom Interaction

Several studies have been done concerning the interaction of teachers and students: Withall (1949) categorized behaviour for observing teacher and student interaction by dividing teachers into two groups - "learner-centred" and "teacher-centred". He stated that "It seems reasonable to assume that the teacher's behaviour influences the conditions of learning ...". He undertook an analysis of the teachers' verbal behaviours during regular classroom sessions, by studying each of the teacher's statements in terms of voice, facial expression and immediate context of words spoken. It was possible for the researcher to reduce all the responses of the teachers into 7 categories (see Table 1). These categories encompassed all types of statements that teachers utilised in the classroom.

Table 1.
Withall's Interaction Analysis Categories

-
-
1. Learner supportive statements that have the intent of reassuring or commending the pupil.
 2. Accepting and clarifying statements having an intent to convey to the pupil the feeling that he was understood and to help him elucidate his ideas and feelings.
 3. Problem-structuring statements or questions which proffer information or raise questions about the problem in an objective manner with intent to facilitate learner's problem-solving.
 4. Neutral statements which comprise polite formalities, administrative comments, verbatim repetition of something that has already been said. No intent inferable.
 5. Directive or hortative statements with intent to have pupils follow a recommended course of action.
 6. Reproving or deprecating remarks intended to deter pupils from continued indulgence in present "unacceptable" behaviour.
 7. Teacher self-supporting remarks intended to sustain or justify the teacher's position or course of action.
-

Categories 1, 2 and 3 were said to be learner-centred and categories 5, 6 and 7 were said to be teacher-centred. These seven categories provide guidelines for interpreting teacher behaviours in the classroom interactions.

In 1960, Flanders made an extended study of the method of Withall by including student's behaviours as well as those of the teachers. Flanders also changed the terms "learner-centred" and "teacher-centred" to "indirect influence" and "direct influence". The categories are presented in Table 2. (Flanders, 1970:34)

Table 2.

Flanders' Interaction Analysis Categories

Teacher talk	Response	<p>1. <u>Accepts feeling.</u> Accepts and clarifies an attitude or the feeling tone of a pupil in a nonthreatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included.</p> <p>2. <u>Praises or encourages.</u> Praises or encourages pupil action or behaviour. Jokes that release tension, but not at the expense of another individual; nodding head, or saying "Um hm?" or "go on" are included.</p> <p>3. <u>Accepts or uses ideas of pupils.</u> Clarifying, building, or developing ideas suggested by a pupil. Teacher extensions of pupil ideas are included but as the teacher brings more of his own ideas into play, shift to category five.</p>
		<p>4. <u>Asks questions.</u> Asking a question about content or procedure, based on teacher ideas, with the intent that a pupil will answer.</p>
	Initiation	<p>5. <u>Lecturing.</u> Giving facts or opinions about content or procedures; expressing <u>his own</u> ideas, giving <u>his own</u> explanation, or citing an authority other than a pupil.</p> <p>6. <u>Giving directions.</u> Directions, commands, or orders to which a pupil is expected to comply.</p> <p>7. <u>Criticizing or justifying authority.</u> Statements intended to change pupil behaviour from nonacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.</p>
Pupil talk	Response	<p>8. <u>Pupil-talk - response.</u> Talk by pupils in response to teacher. Teacher initiates the contact or solicits pupil statement or structures the situation. Freedom to express own ideas is limited.</p>
	Initiation	<p>9. <u>Pupil-talk - initiation.</u> Talk by pupils which they initiate. Expressing own ideas; initiating a new topic; freedom to develop opinions and a line of thought, like asking thoughtful questions; going beyond the existing structure.</p>
Silence		<p>10. <u>Silence or confusion.</u> Pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.</p>

Categories 1, 2 and 3 show a responsive style (indirect influence) and categories 5, 6 and 7 show an initiative style (direct influence). In other words, teaching interactions, using these two sets of categories can be grouped as: (a) responsive, (b) initiative and (c) both. The initiative interaction (direct influence) can be presented as shown in Figure 3.

Figure 3.

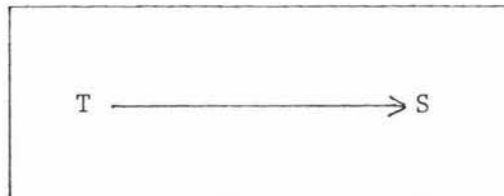


Figure 3. Initiative interaction (direct influence) which conveys largely one way communication.

This model represents the traditional teacher-student relationship as mentioned previously.

Responsive interaction (indirect influence) can be presented as shown in Figure 4.

Figure 4.

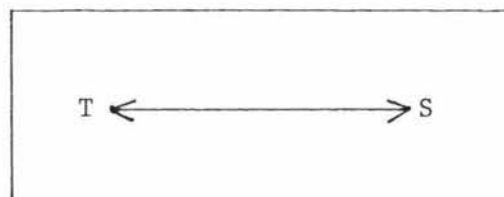


Figure 4. Responsive interaction (indirect influence) which conveys largely two way communication.

By listening and talking responsively to students, perceiving their feelings and accepting their ideas, the teacher shows respect for them.

Advantages of Indirect Influence

Flanders (1967) found that teachers' use of indirect verbal behaviours such as acceptance, clarification of the students' ideas, feelings, encouragement and praise, were associated with more positive pupil attitudes towards school and higher student achievement in junior high social studies and mathematics classes. Flanders also found that teacher criticism, and rejection resulted in less positive attitudes and lower student achievement.

A similar investigation by Amidon and Flanders (1961) found that eighth grade students learned more geometry when they were taught by a teacher who employed the indirect influence style than by a teacher who taught with a more direct influence style. Flanders (1970) concluded from the evidence that indirect teaching is associated with improved student learning and/or better pupil attitudes towards teachers and schools. These results have shown the advantages of indirect influence which would suggest that the direct influence should be avoided.

Sears, et al. (1972) conducted a five year study designed to discover what classroom teacher behaviours will improve achievement, self-concept and internal locus of control (the sense of power over and responsibility for one's own success and failures) in low socio-economic status children. Following the first year study, data were available on six first grade classrooms in a low income school district. They showed that:

1. Achievement was greater when the teacher directed attention more often to individual children than when they spent more time with groups or with the class as a whole.
2. Achievement was greater when these private interactions were related to the students' work rather than their behaviours, (and when the teacher gave the children undivided attention).
3. Achievement was greater when the teacher spent a greater amount of time giving individual information publicly (thus, even

in discussion, reading groups and other public situations interaction with individuals were specially important).

Some educators such as Dunkin and Biddle (1974) have investigated the effect of "indirectness teaching" on pupil learning and studies. Most of the results suggested that indirectness was associated with desired pupil learning. Dunkin and Biddle summarising the work of Tisher and Soar also pointed out that there were two particular things to look at: (i) teacher indirectness was found to be associated with greater achievement of pupil with low achievement orientation (Tisher, 1970) (ii) teacher indirectness was found to have a positive linear relationship with pupil development in creativity. And in the case of vocabulary and reading there seemed to be an optimal level of teacher indirectness which promoted pupil achievement; beyond this level pupil growth in vocabulary and reading decline. (Soar, 1968) (See Figure 5.)

Figure 5.

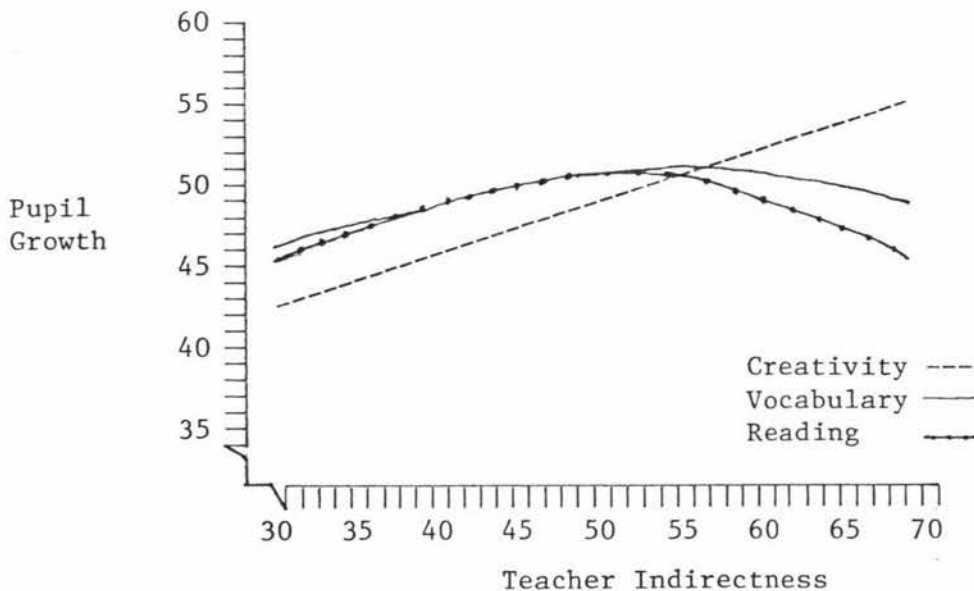


Figure 5. Robert Soar's Teacher Indirectness Related to Pupil Growth.

In conclusion: the direct style of teaching seems to provide fewer advantages than the indirect interaction.

The teacher who accepts, reflects feelings, and praises the pupil and his ideas may be seen as a facilitator of the pupil. To facilitate the student to participate in a learning situation, there is an awareness of the role of the teacher as one who can employ effective communication. The research described above presented the model of the teacher in two way communication with the student.

The role of the teacher must be more than that of an instructor, imparting knowledge to the students. Effective teachers should involve themselves in encouraging their students to participate in the learning situation.

Teacher As Facilitator

A facilitator is usually referred to in work with regard to helping in counselling or therapeutic programmes. However, this role can also be employed in a classroom interaction to indicate effective communication for helping students learn.

Rogers (1968:164-166) outlined the characteristics of a teacher-facilitator as including such attributes as making personal contact with the student and "being himself" in his relationships with the students. He accepts the students as individuals, has trust in them and establishes a climate for self-initiated and self-directed learning through empathic understanding. It includes the ability of a teacher to understand the students' experiences from "inside" a sensitive awareness of the way the process of education and learning is seen by the students. It involves recognizing the views and understanding of the students from their own points of view rather than from that of the teacher's. Rogers believes that in meaningful and effective teaching the teacher's knowledge and use of such attributes is of vital importance.

Carkhuff (1969:115) outlined the characteristics of a facilitator as: a person who is living effectively himself and who discloses himself in a genuine and constructive fashion in response to others. He communicates an accurate empathic under-

standing and a respect for all of the feelings of the other persons and guides discussions with those persons into specific feelings and experiences. Whilst he is open and flexible in his relations with others, and has a commitment to the welfare of others, he is quite capable of active, assertive and even confronting behaviour when it is appropriate.

To become a facilitator of others, interpersonal skills are needed. Interpersonal skills are the behaviours of one person with another, that enhance effective relations. Examples of these skills within one model are attending, responding, personalizing and initiating behaviours (Carkhuff, 1975). There are certain attitudinal qualities that go along with these behaviours. Carkhuff indicated two of the important attitudes within such skills are Empathy and Respect.

Empathy

Empathy, as mentioned, is as a tool which enables the teacher to understand the personal meanings of students and to anticipate the students' behaviours in a particular situation.

Respect

Respect is the ability to respond to other people in such a way as to let them know that you are for them and that you believe in their ability to deal constructively with their life. Berenson, Carkhuff and Myrus (1966) indicated that respect, is essentially the same as positive regard. Thus, in respect, there are attitudes involving warmth and regard.

Dixon and Morse (1961) found empathy related to positive pupil and supervisory perceptions. Teachers identified as having high empathy capacity were perceived by their pupils as significantly more student centred, empathic, congruent and unconditional in their regard.

Aspy (1972) found that a teacher's classroom behaviour related to the students' level of cognitive functioning. In the study, each teacher's performance was evaluated by three procedures: (1) Carkhuff's Scales for empathy, genuineness and respect; (2) Flanders' Interaction Analysis; and (3) the level of cognitive functioning achieved by students as measured by the Stanford Achievement Test. The results indicated that the teacher whose students attained higher cognitive levels provided significantly higher levels of positive regard.

In 1972 Aspy and Huston studied the effects of teachers who utilised students' goals as the basis for classroom activity. Those teachers who were able to do this reached the highest level on the Carkhuff empathic, respect and genuineness scales (see Appendix A), and had more instances in the classroom of student initiated ideas.

Aspy (1972) evaluated the interpersonal relationship skills of third grade teachers in elementary schools. There were teachers who were offering high levels of interpersonal facilitation and also teachers who were functioning at low levels in the same interpersonal area as measured by Carkhuff's empathy scale. There were 120 third grade students working with these two groups of teachers. All students were matched for sex, socioeconomic level and I.Q. The results showed that the students who worked in high level conditions had a significantly lower rate of absenteeism than those working in low level conditions.

In the second investigation Aspy (1972) used the Carkhuff scales to evaluate the level of interpersonal functioning of first grade teachers. A group of 50 students worked with these two types of teachers. The results indicated that the students in high level conditions gained an average of nine I.Q. points whilst students in low level conditions revealed no significant change.

In the third study (Aspy 1972) also used the Carkhuff empathy, respect and genuineness scales to measure teacher effectiveness in interpersonal skills. Groups of third grade students were assigned to work with the two sets of teachers. The 60 students were matched for sex, socioeconomic status and I.Q. Standardized Achievement tests for pre- and post-training were used during one academic year. Aspy found that those students receiving high level conditions made

significantly more gains on their achievement tests than those working with low level conditions.

Aspy's investigations illustrated that when the teacher employs effective interpersonal skills, students improve their attendance, and gain an increase in I.Q. points and achievement levels over students whose teacher did not.

Truax and Tatum (1966) found that teacher levels of empathy and positive regard were significantly related to positive changes in pre-school children's adjustment to school, teachers and to peers. The amount of teacher empathy and positive regard were measured by the Relationship Inventory Scale (Barret-Lennard, 1962).

Christensen (1960) found significant relationships between measures of school learning achievement (vocabulary and arithmetic) and teacher warmth. Students showed higher levels of attainment when a warmer relationship was employed than when working with teachers communicating little warmth.

Flanders (1965) related warm teacher behaviours to greater work involvement and interest, increased creativity, greater self-direction, more positive social emotional adjustment and greater group cohesiveness.

In 1962 Reed found that teacher warmth was positively related to pupil interest in Science. Carkhuff (1971:296) found warmth to be related to pupil initiated work, general achievement and learning in American Government Classes.

St John (1971) studied 36 white urban sixth grade teachers whose classrooms contained both black and white students. St John found that the warmer teachers were most successful with black children. The students showed more growth in reading when their teachers were rated highly on traits such as kindness, adaptability and optimism, and when the teacher did not consider the test score to be a good indication of student ability. It may be concluded that a warm relationship with the pupil will help satisfy the pupil's needs for emotional security. Warmth would therefore serve as a rewarding experience for students.

Brophy, Good and Biddle (1974) concluded in their investigation on classroom behaviour that the warmer and more enthusiastic teachers produced higher achievement gains and also a more positive atmosphere

in their classrooms than teachers with less warmth and enthusiasm in their teaching approach. In other words, this investigation revealed that when the teacher employed effective interpersonal skills, there was an achievement gain in learning and better attitudes towards school and teacher.

So far the research findings have indicated in general that the greater the teachers' understanding of their students (empathy) the higher the commitment to bring out their full potential (respect), and the better the communication of this understanding and respect to them, the more the students learn.

The Human Resource Development (HRD) Teaching Model

It may be concluded that teacher-student interaction which emphasizes effective interpersonal skills can be regarded as a basis for important human benefits. The steps involved in utilising effective communication will be presented through one model in the following manner. In order to facilitate constructive learning outcomes, teaching should utilise relationship and teaching specialty skills. These skills, based on the Human Resource Development (HRD, Carkhuff, 1971) Model of effective communication, can be illustrated as:

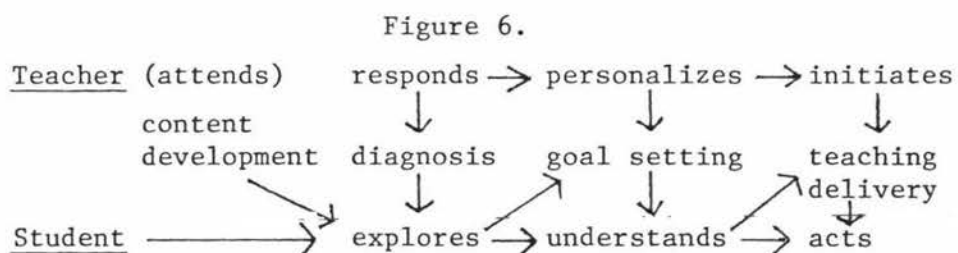


Figure 6. HRD Teaching Model (Carkhuff and Berenson, 1977)

Carkhuff (1977) outlines the interpersonal model, detailing the skills of teaching in relation to the interaction steps as follows:

Figure 7.

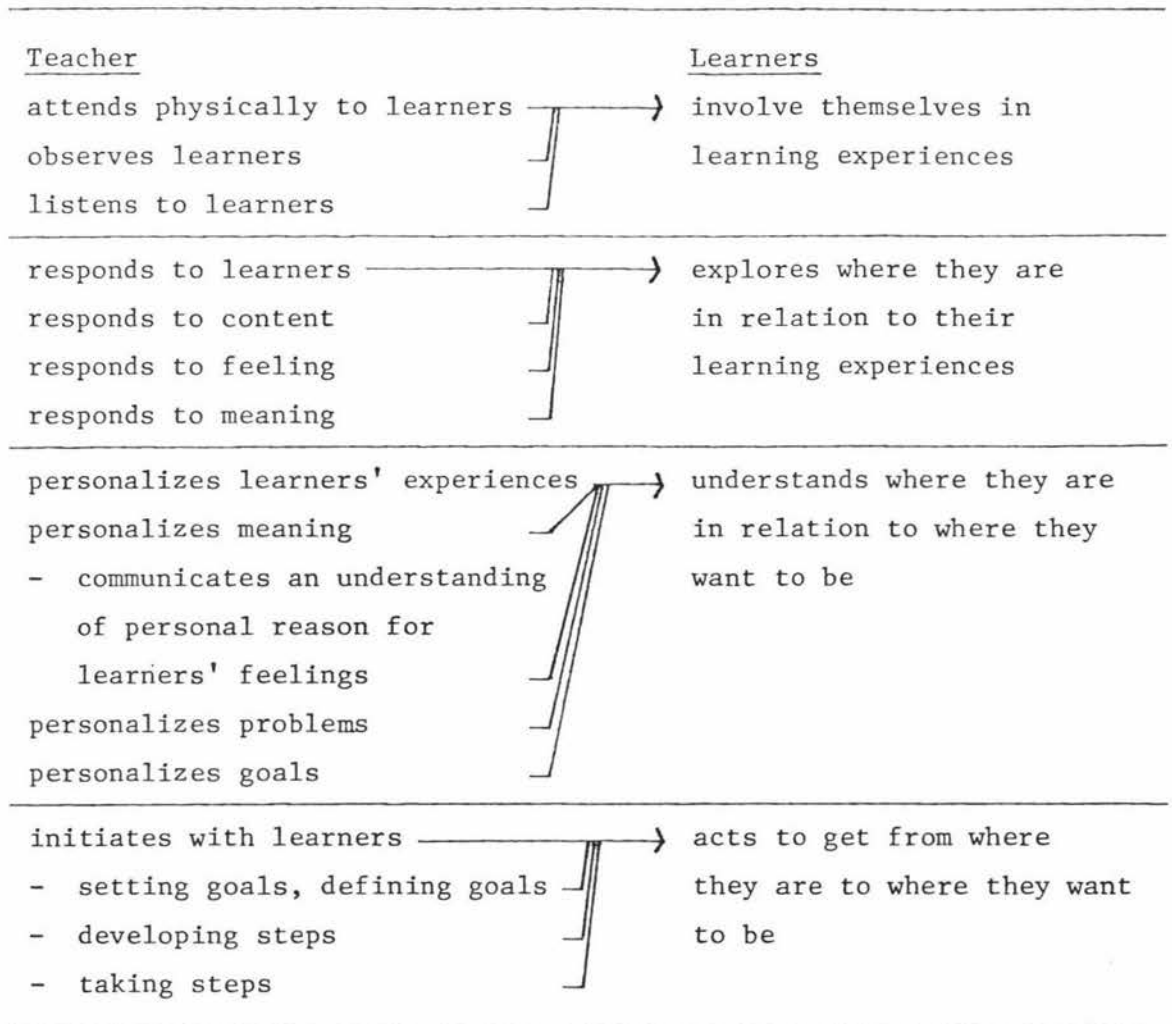


Figure 7. Carkhuff's Interpersonal Model in Learning and Teaching.

If teachers employ interpersonal skills as in the model which has been presented, this will lead to effective communication in the classroom, and help the students achieve their goals.

Flanders interaction analysis model of teaching is quite similar to Carkhuff's interpersonal model. Both Flanders and Carkhuff see the two major dimensions of interaction to be responsiveness and initiative. Flanders has suggested that teachers should employ both dimensions in their teaching. As the responsive dimension frequently was not employed by teachers, many of their attentions have been on

increasing responsiveness. For Flanders there is no explicit connection between the responsive and initiative dimensions. But Carkhuff uses a more systematic approach in teacher-student interactions. Carkhuff regards responsiveness and initiative as being connected in phases. Teacher initiative is based on the teacher's understanding gained from responding to students (see Figure 8).

Figure 8.

Flanders	Carkhuff
<p><u>Teacher</u> <u>RESPOND</u></p> <ul style="list-style-type: none"> - accepting feeling, clarify - praise - minimal encourages - jokes to relieve tension <p style="text-align: center;"><u>INITIATE</u></p> <ul style="list-style-type: none"> - lecture, teacher ideas - give direction - justifying authority 	<p><u>Teacher</u> <u>RESPONSIVE</u></p> <ul style="list-style-type: none"> - empathy, (feeling and cause of feeling) - respect, warmth (positive regard) - personalizing, deficit goal <p style="text-align: center;"><u>Always follows on</u></p> <p style="text-align: center;"><u>INITIATIVE</u></p> <ul style="list-style-type: none"> - programme to reach goal - teaching delivery (teaching method, learning strategies) - begin steps ... towards goals

Figure 8. Flanders' Interaction Analysis Model and Carkhuff's Interpersonal Model in Teaching and Learning situations.

Acquiring Interpersonal Skills

Interpersonal skills can be acquired through Systematic Human Relation Training. Systematic Human Relation Training emphasizes actual training experiences for improving a trainee's ability in effective discrimination and communication. Discrimination is the ability to distinguish the differences between effective and ineffective responses. Communication is the ability to provide helpful responses directly to the people (cf. Carkhuff 1969).

Carkhuff (1969:93) stated that "those who communicate at high levels are best equipped to help persons in need. With the proper training such individuals can learn to communicate even more effectively."

Contingent to effective communication is the possession of the ability to discriminate responses (cf. Carkhuff 1969:94). Thus Systematic Human Relation Training provides a programme which aims at the development of effective communication and discrimination.

Training Effects

In the past, teacher training programmes have adequately prepared teachers to deal with the formal aspects of instruction. That is, the standard procedures of transmission and evaluation of knowledge. Other aspects, such as effective communication have been largely neglected.

To improve a teacher's ability in communication with students, there are experimental programmes in the development of effective human relation skills and flexibility in appropriate verbal behaviours.

Hough and Ober (1966) utilised five combinations of programmed instruction: (1) reading, lecture and classroom discussion of human relations in teaching (skill training in interaction analysis as a means of analyzing verbal teaching behaviour, (2) dyadic programmed instruction in human relations skills, (3) reading, lectures, and classroom discussion of human relations in teaching, (analysis and discussion of verbal teaching behaviour but no instruction in the skill of interaction analysis), (4) dyadic discussion of educational case studies, (5) dyadic programmed instruction in human relations skills.

Results indicated that the subjects who were taught interaction analysis (treatments one, two and five) were found to use, in their teaching simulations, more verbal behaviours found to be associated with higher student achievement and produced more positive student attitudes towards their teacher and school.

Berenson (1971) found that teachers trained in Systematic Human Relations demonstrated the highest levels of interpersonal functioning and were rated significantly higher in total competency, classroom

management, understanding children and understanding the learning process. It was found that these teachers were significantly more indirect in their approach to motivation and control, and used little direct influence.

Griffin and Banks (1969) conducted Systematic Human Relation Training for teachers. Following training, the elementary students were unanimous in evaluating the learning experiences as the best in their school year.

Hefele (1971) studied the effect upon deaf students' academic achievement of teachers who received Systematic Human Relation training and teachers who did not receive such training. The students of trained teachers attained significantly higher levels of performance in language skills, reading skills, motivation of learning and general achievement than the students of untrained teachers. Carkhuff (1971) found that student teachers who were trained in interpersonal skills were significantly more indirect in their approach to motivation and classroom control than those who were not so trained. With training people can improve their communication skills. What are the training procedures that can bring about this development?

The Development of Relationship Training Programmes

Training methodologies are not always clear. Particulars such as the length of training sessions, types of instruction, number of trainees practice trials, and amount and kind of trainer modelling are sometimes not given (Gormally and Hill, 1974). Carkhuff (1975) mentioned that past experience indicates that significant and meaningful gains can be made with as little as 10 hours of training. On the other hand, to really learn the skills and transfer them into all aspects of their lives, trainees would require something approaching 100 hours of training. This would include practical experience and supervision. Some training programmes can have a brief time - 10 - 20 hours of training, but this interpersonal training would emphasize only the initial skills (i.e. attending, listening and responding).

Aspy (1977) presented a study of teacher training which made use of training procedures developed by Carkhuff for working with counsellors. The programme involved: a 15 hour didactic experiential model of training with five hours of didactic instruction about the key conditions (empathy, congruence and positive regard); five hours of rating standard audiotape recordings of classroom interaction; and five hours of role playing in groups to promote minimally facilitative levels of interpersonal functioning. Pre- and post-training testing revealed that the majority of teachers entered at levels below minimally facilitative conditions and during training moved upward to achieve facilitative levels.

Carkhuff, Kratochvil and Friel (1968) effectively trained counsellors in empathy, regard, genuineness, concreteness and self-disclosure by using tape excerpts to rate their levels of communication and discrimination skills.

Ivey (1971) elaborated a successful microcounselling programme by using videotape and audiotape models to train counsellors in each behaviour.

Perry (1975) trained counsellors in empathy (1) by using responses to a client presented on a tape and (2) through the conducting of an interview with a client played by an actor.

Although the above cited studies refer to programmes developed to train counsellors, the present research benefited from the application of their methodology more than the content, in training student teachers.

The decision to model the present programme upon the methodology of Carkhuff and others was influenced by the success of these researchers' models in training counsellors in interpersonal skills and its theoretical extension into teaching behaviour. However, it was noted that if the model was to be successful in helping teacher trainees acquire the necessary skills then the materials and exercises to be used in the training must be relevant to them as learners.

The programme used in this study, consisting of (a) taped excerpts (audiotape and videotapes), (b) role playing procedures, and (c) discussions with a tutor, was developed keeping such relevancy factors in mind.

This present study was aimed at investigating a training process which required less aid and interaction with tutors. One approach that requires little tutoring help and interaction is programmed instruction. As previously pointed out, the utilisation of programmed instruction in training interpersonal skills is unavoidable, especially in a situation where the limitations of technical expertise would prevent resorting to more sophisticated teaching aids.

Programmed Instruction Methodology

Several researchers have indicated the effectiveness of training in interpersonal skills when trainees were trained by working with programmed instruction.

Berlin and Wyckoff (1963) developed a programmed instruction package which is called The HDI General Relationship Improvement Programme. This programme is designed to be used by two people for improvement of interpersonal skills. The objectives of the programme are to increase awareness of self and others and skill in showing to others unconditional positive regard, empathy and congruence. The effectiveness of this programme has been shown by Hough and Ober (1966) in the training of pre-service teachers. They employed this programme in conjunction with instruction in interaction analysis. The results indicated that those students who had been so trained had significantly more accepting and clarifying behaviours during their simulated teaching and generated significantly more student initiated responses and significantly fewer teacher initiated responses.

Higgins, Ivey and Uhlemann (1970) studied the effectiveness of teaching direct mutual communication skills. There were three groups. Group 1 received a full training procedure. A five minute interview was videotaped. The subject completed the programmed text on direct mutual communication integrated with videotape models of effective communication involving two individuals; two supervisors discussed and demonstrated via "live modelling" the communication skills being taught; the subject was shown his initial interview and was asked to indicate instances of direct or indirect communication; after a further five minute interaction in which he demonstrated the skills he had learned, the videotape was reviewed and skills of communication

were practised; then the subject demonstrated the skills in a third interaction. Group 2 went through the same procedures as the first group except that no supervisor was present and no videotape feedback was given. The control group had a similar set of sessions as group 1 except they received the material on interpersonal communication selected from a popular mental health text. They received no supervisor, no programmed text, no videotape model, and no feedback. Measuring scales indicated that group 1 improved most in their rating scores, and group 2 who received only the programmed text revealed important changes from the first to the second sessions. Higgins, Ivey, and Uhlemann (p 25) raised the question, "Would experimental group 2 with more adequate and detailed programming and addition of feedback have demonstrated as much improvement? If this is so, it seems possible that a completely programmed approach to direct mutual communication may be feasible and that only a technician or paraprofessional may eventually be required to teach this skill under the supervision of trained clinicians." The measures used in this experiment was the Affective Sensitivity Scale (Kagan and Krathwohl, 1967). The other measure was a semantic differential scale in which the couples evaluated the effectiveness of their relationship.

Bullmer (1972) studied improving the accuracy of interpersonal perception through a direct teaching method. The programmed, self-instructional text *Improving Perceptual Skills* was employed as the means for teaching the terms and concepts pretraining to interpersonal perception. The subjects were tested at the conclusion of the experimental period for accuracy of interpersonal perception. The differences between groups on the perception measure were significant and favoured the group who received programmed instruction.

Saltmarsh (1973) studied the effects of programmed learning experiences. The experimental group completed the programmed instruction and the tape-directed interaction. These materials focused on training in empathic skills. The control group engaged in discussion based on two readings (Rogers 1961; Saslow 1967), which presented concepts about relationship building for effective counselling, and viewed a videotape showing relationship establishment. The results indicated that the treatments subjects demonstrated

significantly higher scores on the Michigan State Affective Sensitivity scale than control subjects. Using this as a measure of empathy, it was found that programmed instruction had a positive effect on individual's levels.

Authier and Gustafson (1975) undertook a study to determine the effects of supervision on the learning of basic interviewing skills (i.e. skills such as attending behaviour, open invitation to talk, reflection of feeling, paraphrasing, summarization). One group of subjects were trained via a supervised microcounselling format that included a training manual and videotapes. The other group were trained via the same materials but without any supervision. They found no significant differences between the two training conditions.

Cormier, Cormier, Zerega and Wagaman (1976) investigated the comparative effectiveness of a written self-paced module and a classroom lecture, for acquiring interpersonal skills. One group of counselling trainees studies a written self-paced module whilst the other group was assigned to classroom lectures. The results indicated that the written self-paced module group performed significantly better than the classroom lecture group on both post-test and retention-test scores. This investigation supports the notion made in this present study that the use of a programmed text is an effective method for acquiring interpersonal skills.

In summary, the literature reviewed indicates that there are several advantages in promoting two way communication in the classroom, Flanders indirect or responsive style of teaching is one illustration of a two way communication pattern. The skills of effective communication, especially those based on the interpersonal model of Carkhuff, are beneficial to the promotion of two way communication in the classroom. Interpersonal skills are capable of being learned through various methods of training.

However, Thailand is a developing country which has problems to do with available personnel resources. In light of this the present study investigated the following two hypotheses:

- (H1) that there will be no significant difference in interpersonal skills, as measured by the texts of discrimination and communication, between subjects who have been trained in interpersonal skills by a programmed text and subjects who did not receive training.
- (H2) that there will be no significant difference in interpersonal skills as measured by the tests of discrimination and communication between subjects who were trained with a programmed text, tutor and supplementary materials (audio, video tapes) and a group which had been trained using a programmed text only.

Chapter III METHODOLOGY

Subjects

Subjects in the sample consisted of nine male and 15 female students enrolled in Bachelor of Education classes in the Department of Education, Massey University. Subjects' ages ranged from 18 to 37 years. All volunteered to participate in this training programme.

Subjects were assigned to one of three groups, mainly on the basis of timetabling considerations. Prior to the commencement of the experiment, all subjects were pre-tested to ensure that there were no differences in prior familiarity with the interpersonal tasks.

Teaching Materials

Programmed text: a programmed text in interpersonal skills was designed by the experimenter (see Appendix B). The skill competencies to be taught by the programme were identified on the basis of Gagne's method of learning hierarchies for intellectual skills Gagne (1977:142-143). These hierarchies have been described as "the psychological organization of intellectual skills ..., often comprised largely of rules ..., two or more concepts may be prerequisite to (and in this sense subordinate to) the learning of a single rule. Similarly, two or more rules may be prerequisite to the learning of a superordinate rule. Once the latter is learned, it may combine with another rule, and so on. The entire set of rules, organized in this way, forms a learning hierarchy that describes an on the average efficient route to the attainment of an organized set of intellectual skills which represents 'understanding' of a topic."

Hunt (1976:38) described the components of a hierarchy as comprising a "box" or group of "boxes" which are statements of the intellectual operations which form the evidence that the subject knows or can perform the type of operation required of him. The detailed operations within the "box" of a learning hierarchy present the internal condition of learning, that is, the competencies that are to be learned, and subordinate competencies that will need to be recalled when a new higher order behaviour is being learned.

The learning hierarchy of this programme is presented in Appendix C.

The interpersonal skills were developed from Robert R Carkhuff's HRD model of teaching skills. The skills to be taught in the programme were:

- attending skills
- listening skills
- responding skills

These are initial skills necessary for effective communication.

The programme was administered to the subjects in the experimental groups in three parts.

- Part I: attending and listening skills, (a) giving attention to students (b) observing and being aware of verbal and non-verbal behaviours of students.
- Part II: responding skill (a) learning to distinguish effective and ineffective response from level 1.0 (very ineffective) to level 3.0 (minimally effective) (b) learning to formulate effective responses level 3.0 (minimally effective).
- Part III: responding skill (a) learning to distinguish effective and ineffective responses from level 1.0 (very ineffective) to level 5.0 (very effective) (b) learning to formulate effective responses from level 3.0 (minimally effective) to level 5.0 (very effective).

This programmed text was used by both experimental groups, but Experimental Group 1 had additional resources.

Audiotaped resources: an audiotape was prepared for Experimental Group 1 to practice the ability to identify different feelings and also to practice paraphrasing. The tape had on it a series of student problem statements as might be said to the teacher. These statements were scripted then role played onto the tape by a male student. (The scripts of the excerpts are presented in Appendix D)

Videotaped resources: Two videotapes were recorded on ½ inch videotape. These videotapes provided models of good and bad attending behaviours in classrooms, and assisted in promoting discriminations between the two. Together they were 7 minutes long. These were shown on the first and second sessions for subjects in Experimental Group 1.

To practice responding skills, other videotapes had been recorded of individuals' presenting an initial problem statement direct to the camera. With these excerpts, Experimental Group 1 subjects practiced (a) identifying feelings, (b) overall responding (communication) ability by writing down their responses to each excerpt being presented as if they were talking directly to the individual. (The scripts of the excerpts from this exercise are presented in Appendix E.)

Tutor: the tutor's role throughout these sessions was to observe and provide feedback on each subjects' role playing practice as a teacher. She presented positive reinforcement when desirable response behaviours were observed whilst undesirable or inappropriate behaviours were just pointed out to the subjects.

Teaching Procedures

Experimental Group 1: This group studied the programmed text in conjunction with audiotapes, videotapes and the experimenter as a tutor. There were three training sessions.

Session 1. This part of the programmed text involved skills of attending and listening. It took 1½ hours and was conducted one week after the pre-test. The subjects were assigned to work with part one of the programmed text at their own rate. Two types of exercises were used by dividing students into two groups of four.

1. Practising listening skills by working with audiotaped excerpts then paraphrasing the content.
2. Role playing interaction. One individual took the role of teacher, a second the student, and the third and fourth students were observers. (The observers were given a checklist for noting the presence and absence of good behaviours in attending and listening. The checklist is presented in Appendix F.) The teachers conversed with the students on any topic they wished. Following the interaction, the observers, the student and the tutor provided feedback to the teacher about their behaviours. Each individual had an opportunity to play each role.

Session 2. This was conducted one week later and also took 1½ hours. The subjects were given programmed text material which taught responding skills using the format "You feel ... (feeling word) because ... (reason for feelings)". They were introduced to various feeling words and also a scale for measuring the effectiveness of responses from level 1.0 (very ineffective) to level 3.0 (minimally effective). Two types of exercises were again used:

1. Subjects were asked to provide feeling words to the recorded excerpts on the videotape, each of which implicitly involved different feelings.

2. Subjects took turns role playing the teacher's role for about 3-5 minutes whilst the remaining subjects acted as students or observers. During this exercise, there were various types of interaction - general conversation or questions and answers between teacher and students. Subjects' behaviours while acting the role of teacher were being constantly evaluated by the observers. Feed back on communication was provided immediately after each subject finished their role play.

Session 3. In this session of 1¾ hours, the third part of the programmed text was given to the subjects. In this part, effective communication from level 3.0 (minimally effective) to level 5.0 (very effective) was introduced. From these levels the teacher would begin to respond to the personalized feelings and meaning expressed by the student. Two types of exercises were used:

1. Videotaped excerpts of a student talking direct to the camera were shown, and the subjects were asked to write down responses to each excerpt by using the format "You feel ... because ..."

2. The total group of subjects worked together. Subjects were asked to take turns in pairs to be teacher and student alternately. The one who played the teacher's role practiced responding to the feeling and meaning of the student. The other subjects were observers. Feed back was immediately provided when each pair finished.

Experimental Group 2: Subjects were given the programmed text in three parts; one part in each consecutive weeks to be completed on their own. With this programmed text, the following instruction was given:

Instruction

- This is the first session of the interpersonal relationship skills programme.
- You will be asked to complete one session per week over the next three weeks.
- During this period you should practice in your daily activities, the skills outlined in this programme.
- Here is the session for the first week.
Session 2 and 3 will be delivered to you at the end of the first and second weeks respectively.
No additional experimental input was provided.

Control Group: Subjects were not provided with any materials during the training sessions period. They were administered pre, post, and retention tests only.

Testing Instruments

Communication test - for measuring effective communication, additional videotaped excerpts of problem statements were used as stimuli for the test situation. These excerpts were recordings of problem statements made by a student direct to a camera. There were five excerpts, and these were used in all three tests (pre, post and retention). Subjects were asked to respond as helpfully as possible to these excerpts. The scripts of these excerpts are presented in Appendix G.

Discrimination test - for measuring effective discrimination, a series of five excerpts were presented to subjects in writing, each with five possible responses that might be made by a teacher. Subjects were asked to rate these various responses. These excerpts and responses are presented in Appendix H.

Rating Scales: Two rating scales were used - one for communication another one for discrimination. The communication rating scale was derived from Carkhuff's five point scale of overall effectiveness (Carkhuff, 1977). Raters used this scale to assess the responses made by the subjects to the videotaped stimuli. The scale is differentiated in the following way.

- Level 1.0 No response or response unrelated to student (very ineffective communication).
- Level 1.5 Response particularly related to student - often with poor guidance.
- Level 2.0 Response to content - often reasonable guidance (ineffective communication).
- Level 2.5 Response to feeling(s).
- Level 3.0 Response to student's feeling and content (interchangeable; minimally effective communication).
- Level 3.5 Personalizing the meanings of the student.
- Level 4.0 Personalizing understanding of the student's goal.
- Level 4.5 Defining the student's goal in terms of steps.
- Level 5.0 Developing a step-by-step programme to achieve the student's goal.

The rating scale for discrimination was used by students for measuring the effectiveness levels of the various responses in the discrimination test. This is a generalized version of the five point scale used for communication (Carkhuff, 1977). The scale is differentiated in the following way.

- Level 1.0 very ineffective
- Level 2.0 ineffective
- Level 3.0 minimally effective
- Level 4.0 very effective
- Level 5.0 extremely effective

Testing Procedures

The following procedure for testing was utilised. The eight members of Experimental Group 1 were tested as a separate group whilst the members of Experimental Group 2 and Control Group were tested together. These last two groups were not informed at that point which group they would be in.

- The pre-test was administered one week before the training sessions.
- The post-test was administered after the training sessions had finished.
- The retention test was administered one week after the post-test.

Communication test: The subjects were given a written form providing instructions about working with the videotaped excerpts. The instructions were to "Imagine this is an adult student that you have had some prior contact with. He comes to you and makes the statement presented on the videotape. Write down the most helpful response you can make to the student, (as if you were actually saying it)".

The videotaped excerpts were then shown to the subjects. They responded by writing their responses on a sheet of paper as described above. The excerpts were shown once only. At the end of each excerpt, the videotape was stopped to let the subjects write their responses. This method proceeded until the subjects had finished all five excerpts.

The responses from the pre, post and retention tests were coded and randomly ordered. The responses were then independently rated by two trained and experienced raters, who employed the overall effectiveness scale (Carkhuff, 1977). A final rating for each response was obtained by averaging the ratings of the two raters.

Inter-rater reliability using Pearson r was .63 (pre-test, .94 (post-test), and .92 (retention-test). The lower reliability in the pre-test was probably due to the narrower range of levels in this test. Even so a level of .60 is generally considered acceptable as seen in Rogers' process and outcome research with the counselling of schizophrenic patients, where he trained raters until they were able to achieve this level (cf. Rogers, 1967).

Discrimination test: This was conducted after communication test. The subjects were given a sheet of paper which presented five excerpts, along with five responses for each excerpt. The subjects were asked to rate each response according to their level of effectiveness. The following instruction was provided: In responding to each expression, assume that you have worked with this student several times previously". Please rate the following

alternative teacher responses to this expression from 1 to 5:

- 1 very effective
- 2 ineffective
- 3 minimally effective
- 4 very effective
- 5 extremely effective

The excerpts used in the test included several directly from Carkhuff (1969, 1977), and others devised by a counsellor trainer skilled in this field. Different excerpts were used for pre, post and retention tests.

To measure subjects in levels of discrimination, their ratings were compared to the ratings by Carkhuff (1969, 1977) and those by the counsellor trainer. The differences between the ratings made by the subject and those made by the "expert" gave an indication of their effectiveness in this skill.

Statistical Analysis

The pre-test was designed to determine the base line of the interpersonal skills - that is, the level of skill performance already possessed by the subjects prior to any instructional intervention. In this way, the effects of the treatments could be judged by comparing the differences between the pre-test scores and the post-test performance. Similarly, comparisons could be made between post-test scores and retention-test scores.

The analysis of variance technique was used to determine the statistical significance of mean score differences between the three groups. In selected cases t-tests were compared between pairs of groups in order to test the possibility of significant differences between a particular pair. Finally, using dummy variable codings for treatments, a multiple regression analysis was computed to assess both the various contributions made by selected variables on criterion performance as well as the interaction effect of treatments with the learning tasks.

Chapter IV

RESULTS

Prior to the commencement of the experiment, all subjects were pre-tested on their ability to discriminate high-level responses and to communicate high-level responses, in order to determine whether differences in performance existed prior to the investigation. On completion of the training sessions a post-test was administered, followed by a retention-test one week later.

The mean scores of all three groups (Experimental Group 1, Experimental Group 2 and Control Group) on the three tests (pre, post and retention) indicated the relative performance of each group on the achievement measures (see Tables 3 and 4). A comparison of mean scores for each of these groups is illustrated in Figures 9 and 10. These show the effects of the instructional intervention for the two experimental groups on both tasks (discrimination and communication). As was expected, subjects in the Control Group showed little change in performance across the three tests.

For the discrimination task, low scores indicated a high level of performance, whilst high scores indicated a low level of performance. On the other hand, for the communication task, a low score indicated an ineffective level of performance with the reverse being true for a high score. The maximum range of scores for the discrimination tasks were 1.6 - .7 (pre-test), 1.3 - .1 (post-test) and for the communication tasks were 1.5 - 2.7 (pre-test), 1.55 - 3.85 (post-test).

Table 3.
Means and Standard Deviations of the Discrimination
Scores for all Groups

Test	Group	Experimental Group 1		Experimental Group 2		Control Group	
		\bar{X}	S.D	\bar{X}	S.D	\bar{X}	S.D
Pre-test		0.98	0.18	1.0	0.28	1.03	0.27
Post-test		0.21	0.10	0.41	0.17	0.91	0.31
Retention-test		0.39	0.16	0.68	0.29	0.89	0.19

Table 4.
Means and Standard Deviations of the Communication
Scores for all Groups

Test	Group	Experimental Group 1		Experimental Group 2		Control Group	
		\bar{X}	S.D	\bar{X}	S.D	\bar{X}	S.D
Pre-test		1.76	0.07	1.58	0.63	1.67	0.17
Post-test		3.33	0.04	2.76	0.36	1.64	0.11
Retention-test		3.35	0.30	2.56	0.36	1.68	0.17

Figure 9.

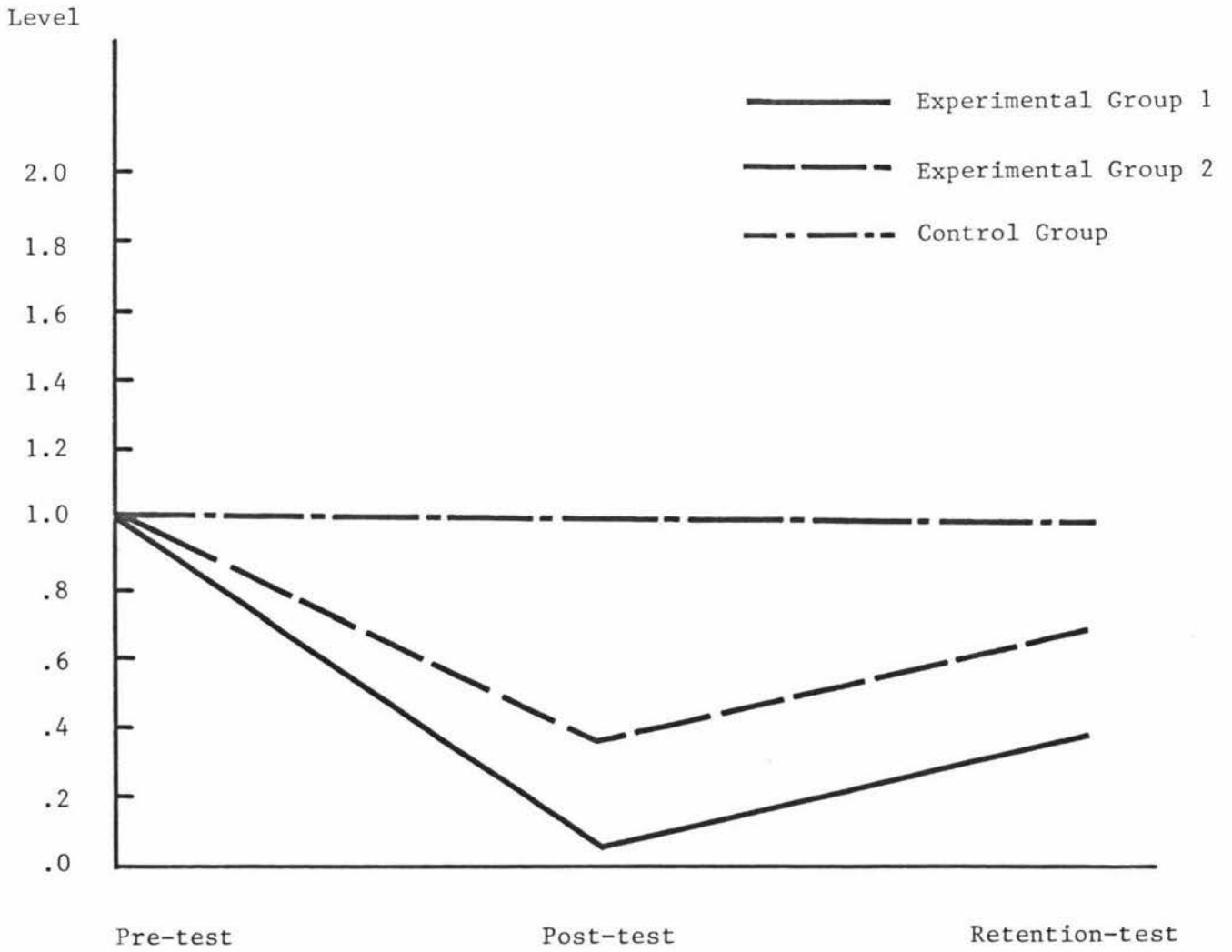


Figure 10. Mean scores from the discrimination tasks.

Figure 10.

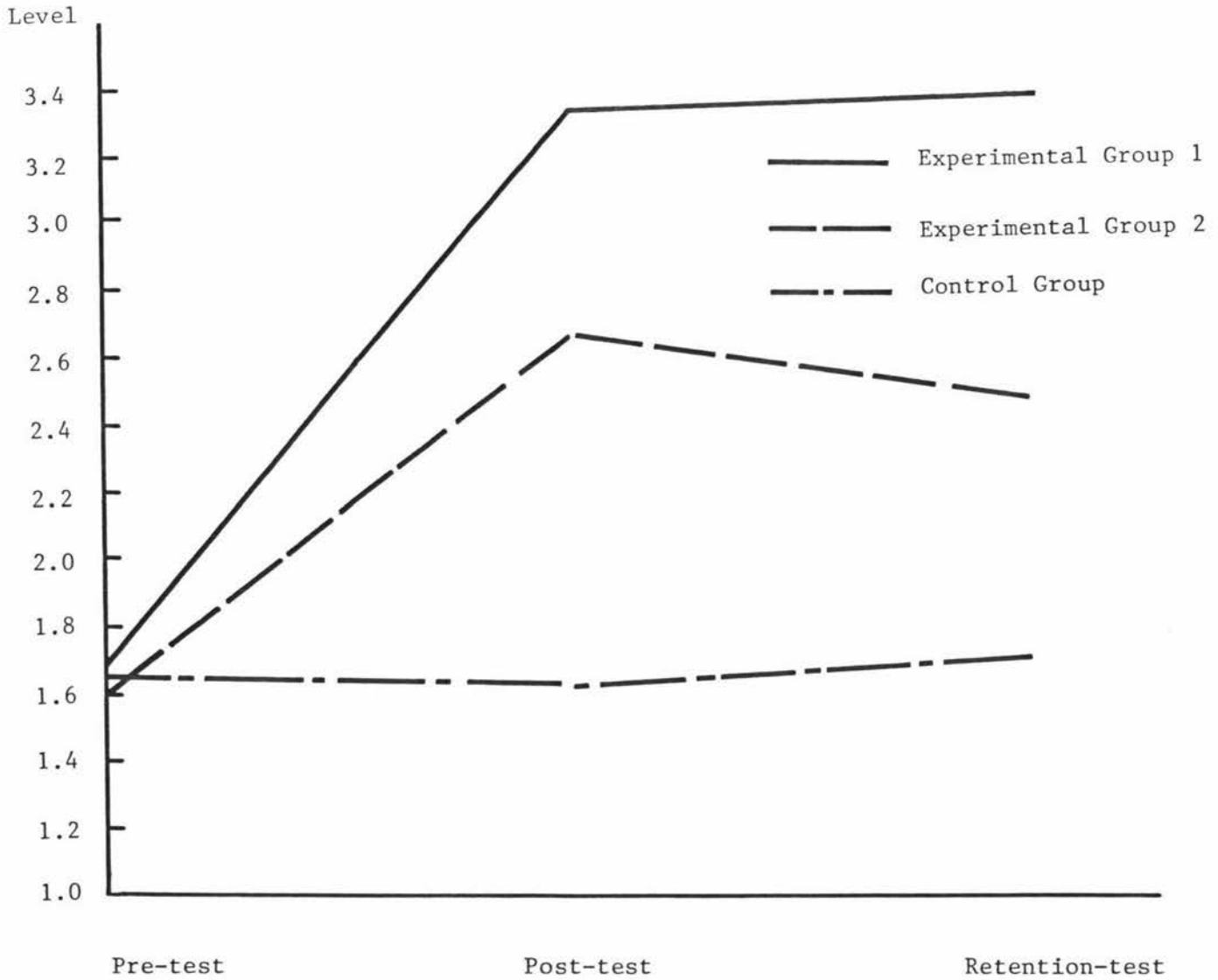


Figure 11. Mean scores from the communication tasks.

In order to measure the level of significance the statistical technique of analysis of variance was employed. The results from the discrimination and communication tests demonstrated no significant differences between the groups on either tasks, $F = .09$, $p > .01$ (discrimination) and $F = 1.26$, $p > .01$ (communication); see Table 5. The assumption that each group was similar in their interpersonal skill performance prior to training was confirmed.

Table 5.
Analysis of Variance of Discrimination and
Communication Pre-test

Source of Variation	Discrimination			Communication		
	df	Mean Square	F Ratio	df	Mean Square	F Ratio
Between Groups	21	0.005	0.08	2	0.235	1.26 N.S
Within Groups	21	0.062		21	0.186	

At the completion of the training, all subjects were post-tested on their ability to discriminate high level responses and to communicate high level responses. That is, they were tested to see whether the teaching strategies in the experiment had had any effects on their interpersonal skill performance. An analysis of variance (see Table 6) indicated that subjects in both Experimental Group 1 and Experimental Group 2 had significantly improved their interpersonal skills. The instructional intervention had succeeded in effecting these skills. The F ratio for the discrimination task was $F = 23.08$, $p < .01$ and $F = 47.02$, $p < .01$ for communication. These results indicated a very large improvement in interpersonal skills for the students who had been exposed to the experimental treatments.

Table 6.
 Analysis of Variance of Discrimination and
 Communication Post-Test

Source of Variation	df	Discrimination		Communication		
		Mean Square	F Ratio	df	Mean Square	F Ratio
Between Groups	2	1.040	23.08	2	13.02	47.02*
Within Groups	21	.045		21	.28	

Note: * $p < .01$

The first null hypothesis for the study stated that there would be no significant differences in interpersonal skills, on tasks of discrimination and communication, between subjects who were trained in the skills by programmed instructional method (Experimental Group 2) and those who received no training (Control Group). The results of a t-test on the discrimination post-test showed that the group who used the programmed text (Experimental Group 2) performed significantly better than did the Control Group ($t_{14} = 3.18$, $p < .05$). Similar results were found for the communication post-test where the t-test result for the Experimental Group 2 when compared with the Control Group was $t_{14} = 5.47$, $p < .05$. Thus the first hypothesis could not be sustained.

The second hypothesis stated that there would be no significant differences in interpersonal skills, on tasks of discrimination and communication, between subjects who were trained with a tutor and supplementary materials, audiotape, videotape and programmed text (Experimental Group 1) and those subjects who were trained with only the programmed text (Experimental Group 2).

The results of a t-test on both post-test tasks showed that Experimental Group 1 performed significantly better than Experimental Group 2 (discrimination, $t_{14} = 4.10$, $p < .05$, and in communication $t_{14} = 3.38$, $p < .05$). This means that the tutor and audio-visual materials contributed significantly to the learning of interpersonal skills. Thus the second hypothesis also had to be rejected.

One week after the subjects finished the training sessions, a retention-test was administered. For both the discrimination and communication tasks Experimental Group 1 was consistently more effective than Experimental Group 2 although both groups have lower retention-test scores than post-test scores (see Tables 7 and 8). The performances of the Experimental Groups in the discrimination retention-test was significantly lower than in the post-test (see Table 7).

Table 7.
Comparison of Post-Test and Retention-Test
Discrimination Scores

Group	Post-Test		Retention-Test		t_{14}
	\bar{x}	S.D	\bar{x}	S.D	
Experimental Group 1	.21	.10	.39	.16	2.57*
Experimental Group 2	.41	.17	.68	.29	2.36*
Control Group	.91	.31	.89	.19	.15

Note: * $p < .05$

For the communication tasks, there was no statistically significant difference between post and retention tests for either Experimental Group 1 or Experimental Group 2 (see Table 8). This indicates that the subjects in the experimental groups performed as effectively on the retention-test as they did on the post-test.

Table 8
Comparison of Post-Test and Retention-Test
Communication Scores

Group	Post-Test		Retention-Test		t_{14}
	\bar{x}	S.D	\bar{x}	S.D	
Experimental Group 1	3.33	0.04	3.35	0.30	0
Experimental Group 2	2.76	0.36	2.56	0.36	.01
Control Group	1.64	0.11	1.68	0.17	.09

In summary, it has been shown that programmed instruction was capable of significantly improving the learning of effective discrimination and communication of high level interpersonal skills. Also, the presence of a skilled tutor utilising audio-visual materials was more effective than the programmed material alone.

Whilst the sample is small, is it possible from the data to evaluate the relative contribution of the two teaching methods? How much does the presence of a skilled tutor add to the learning of "interpersonal skills"?

Frankel (1970) and Goldberg (1970) found that supervisors were unnecessary for their subjects' acquisition of the reflection of feeling skill. However, their research designs did not include the effect of a supervisor. They compared only the pre- and post-tests of performances in reflecting of feeling skill after the subjects have been trained (using an audiotape and videotape without supervision). They did not compare these subjects with a supervised group.

The present research included a tutored group as well as a non-tutored group using a programmed text. Stepwise multiple regression was used to find how much each training method added to the learning of interpersonal skills.

Tables 9 and 10 present a comparison of different variables (such as programmed text, programmed text with tutor, ... etc) and show the influence of these variables on the discrimination and communication post-test performance. The programmed instruction material variable was entered into the regression first to determine the total contribution of this variable. The remaining variables were entered into the regression analysis in a stepwise-like manner. Those variables accounting for greater variance were entered into the equation before those contributing less.

Table 9.
Multiple Regression of the Variables Influencing
Discrimination Post-Test Performance

Variable	Multiple R	R Square	RSQ Change	Simple R	B
Programmed text	0.242	0.058	0.058	-0.242	-0.604
Programmed text Supervisor	0.845	0.714	0.656	-0.581	-0.694
Discrimination Pre-test	0.870	0.757	0.043	0.259	0.369
Sex	0.879	0.774	0.017	-0.116	- .966
Age	0.882	0.779	0.003	0.168	.116
Teaching Experience	0.883	0.778	0.002	0.189	- .908
Communication Pre-test	0.884	0.781	0.002	0.024	- .751

Table 10.
Multiple Regression of the Variables Influencing
Communication Post-Test Performance

Variable	Multiple R	R Square	RSQ Change	Simple R	B
Programmed text	0.120	0.015	0.015	0.120	1.388
Programmed text Supervisor	0.906	0.822	0.807	0.718	1.676
Sex	0.935	0.874	0.052	0.323	0.688
Teaching Experience	0.950	0.902	0.028	-0.048	.395
Discrimination Pre-Test	0.959	0.920	0.017	-0.097	-0.429
Communication Pre-Test	0.960	0.921	0.002	0.026	-0.132

Tables 9 and 10 provide a summary of the multiple regression analysis. As can be seen, programmed instruction contributed only a small amount of variance on discrimination and communication (about 6% on discrimination (Table 9), and 2% on communication, (Table 10)). A large amount of variance in the discrimination post-test (approximately 66%) was accounted for by the inclusion of supervision (Table 9), independently of the programmed text. This effect was even greater for the communication post-test (approximately 81%, Table 10).

These results indicated that the tutor was the most powerful contributor to the improvement of interpersonal skills.

For the discrimination task (Table 9) previous knowledge is the third most important contributor, with only about 2% of the total variance contributed by the remaining variables.

For the communication task (Table 10) sex was the third most important contributor to the criteria performance. In general females scored higher than the male subjects. Less than 5% of the remaining variance was accounted for by the other variables.

Finally, the effects of the interaction of instructional treatments with prior familiarity is demonstrated in Tables 11 and 12.

Table 11.

Summary of Multiple Regression Analysis of
Treatments and Pre-Test on Discrimination Post-Test

	df	Prop. of variance	F
Pre-test	1	.04	3.47
Treatments	2	.71	28.78*
Pre-test x Treatments	2	.02	.78
Residual	18	.22	

Note: * $p < .01$

Table 12.
 Summary of Multiple Regression Analysis of
 Treatments and Pre-Test on Communication Post-Test

	df	Prop. of variance	F
Pre-test	1	.00	.07
Treatments	2	.82	55.36*
Pre-test x Treatments	2	.04	2.99
Residual	18	.13	

Note: * $p < .01$

The results show that the treatments contributed most of the variance in the criteria performance but that there was no significant interaction between teaching methods and prior familiarity with the interpersonal skills to be taught. Prior familiarity with communication skills was not a significant contributor to the final outcome.

In conclusion, the results showed that the subjects in Experimental Group 2, who worked with the programmed text, had improved significantly at the end of the training sessions. There was also a little improvement in the discrimination skills of the subjects of the Control Group who received no treatment. The subjects of Experimental Group 1, who worked with the programmed text in conjunction with the audio-visual material and tutor, showed the greatest improvement in performance in interpersonal skills and displayed the greatest skill retention. The ramifications for teaching resulting from these outcomes will be discussed in the next chapter.

Chapter V

DISCUSSION AND CONCLUSION

This study found that students learning interpersonal skills through the use of multiple resources such as a tutor, programmed instruction and audio-visual materials and those who worked only with a programmed text, significantly improved their performance. The teaching effects from the multiple resources were greater than the effects from the programmed text alone. A conclusion from this study was that programmed instruction did facilitate the development of communication skills. However, more effective outcomes were found when programmed instructional materials were used in conjunction with other teaching strategies such as models, role playing and interaction with a tutor.

There are several reasons why the non-tutored group in this study may have shown less improvement than the tutored group. The students working alone may have had difficulty maintaining attention and without feedback, there would be restriction in judging the appropriate behaviours required during the assessment of and practice in effective communication. In the case of the tutored subjects, modelling of the audio-visual examples, and the feedback of the tutor and peers appears to have facilitated more effective levels in the skills under attention.

Whilst there was no significant decline in the level of communication skills over the retention period for both experimental groups, there was a significant decline over the retention period for discrimination abilities. As the period of retention was so short, this factor is of some concern.

One reason which may be involved is that of the differences in the skills themselves. Communication skills involve more specific behaviours. There is a particular training format that is used for making responses (see Appendix B). This format involves a pattern of words within which the essence of effective communication responses are made. This essence includes responding to feelings

and the reasons for such feelings. For higher level responses, there occurs a slight change in the format, with the variations being subtle yet important. Thus for making minimally effective responses, subjects base their communication on a specific format, and similarly for higher level responses. Discrimination skills, however, involve various high and low level responses that do not necessarily match the elements of effective communication formats. Therefore the task is more complex and retention of the basic rules would be more difficult.

There are other likely reasons for the significant reduction in performance on discrimination abilities over the retention period. Firstly, the training programme emphasized communication skills more than those of discrimination. The major aim of the programmed text was to improve communication skills. This is clearly best done by practising such skills (Carkhuff, 1969), and this involves applications by the students' into their day to day lives. They would, however, have had little opportunity to practice discrimination tasks in real life. Secondly, the short training period is perhaps also a contributing factor. The subjects had only three weeks to learn several new and difficult skills. All subjects, and particularly those who worked with the programmed text alone, may not have had long enough to fully internalise the distinctions between effective and ineffective communications. Students who worked with the programmed text and a tutor had five hours of structured training, which also was short considering the nature of the skills involved.

Previous research suggests that a high level of discrimination is a prerequisite of high level communication abilities (Carkhuff, 1969). Even though there was a drop off in discrimination levels over the brief retention period, nevertheless the performance of the experimental groups was still at a very high level. The relationship between communication and discrimination abilities as specified by Carkhuff is not therefore in question from this study.

Limitations Of This Study

Some of the limitations of this study have already been raised and need only be summarized. It has been suggested that significant and meaningful gains in interpersonal skills can be made from a minimum of ten hours of training (Carkhuff and Pierce, 1975). This present study involved only five hours of structured training. Even so, the results here have indicated that with a shorter training period, subjects can demonstrate a significant improvement in their performance, but within a more restricted training and application context.

An additional limitation is that the three groups of subjects were not balanced for sex. For example, seven females and one male comprised the multiple resources group, two females and six males were in the programmed text group and six females and two males in the control group. The results indicate the possibility of a trend which may suggest that females are likely to achieve higher levels of performance than males under these conditions. This however, would need further study and consideration. In the present study, sex matching could not be undertaken because of the difficulty in obtaining sufficient subjects who had sufficient time to participate in the experiment.

This study could be regarded as having limitations in scope and applicability. The training and assessment focused on specific behaviours which are not readily transferable to real-life settings. The test materials were presented in written rather than oral form and as such there is no evidence to support the notion that effective, oral communication in spontaneous settings would necessarily occur at higher levels. Nevertheless, the aim was to focus on a basic foundation for interpersonal skills rather than go beyond that at this point.

The retention-test period was minimally spaced after the duration of training only one week after the experimental sessions finished. This may not be long enough to indicate whether an improvement or decline in ability could be sustained over time.

Issues For Further Study

Several modifications to the experimental conditions could be examined. Firstly, the introduction of a tutorial session following each period of self-study using the programmed text might be of value. Students who worked alone with programmed learning could benefit from a chance to either interact in a group situation or have contact with a tutor after finishing the sections of the programmed text. The skills they had learned could then be clarified and reinforced and the practical implications elaborated by the tutor. The addition of a short course with supervision at the conclusion of the self-learning programme would perhaps be another useful variation.

It would be of interest to determine also whether a programmed text could be effective in both pre-service and in-service teacher training. Although in this study, length of teaching experience seems to have had little effect on the efficacy of the training procedures, this could well be examined further.

Other areas for study arise out of the limitation of this work. The retention-test period should be longer than one week after the completion of training. This would provide more meaningful data concerning the effects of different methods of training on the retention of interpersonal skills. Also the programme and assessment tasks should focus more on natural contexts such as actual classroom settings where interaction is both oral and spontaneous. This would give an indication of whether training in interpersonal skills using a programmed text with and without a tutor, and audio-visual materials helps subjects effectively transfer these skills to real situations.

The Implication For Thailand

The results have suggested that interpersonal skills can be introduced at a basic level using a programmed text, and that the text is more effective if it is used in conjunction with a tutor and audio-visual resources. In Thailand, there is a lack of trained personnel in interpersonal skills. In order to overcome an immense

manpower deficiency in these skill areas, any system developed on programmed instructional delivery methods could provide a solution in the short term to develop an initial cadre of skills. This might be later followed by more intensive workshop sessions involving a tutor already trained in interpersonal skills.

The present investigation has indicated the effectiveness of using a programmed text with New Zealand students. There is a need to discover whether this training approach would be suitable for Thai students. Such a study with Thai students would give an indication of whether these skills could be emphasized within Thai society overall. Training programmes of this kind may come across some resistance from the Thai people at least in the beginning. This would be because of the traditional manner of teacher-student interactions which tends to be a one-way communication process. That is, students are placed in a passive listening role in deference to the teacher. But the notion of interpersonal skills implies a two-way communication process. It is hoped that as the experience of Thai society becomes more participative, so the need for the successful realization of interpersonal skills will be felt throughout the education system.

BIBLIOGRAPHY

- Amidon, E & Flanders, N (1961) The Effects of Direct and Indirect Teacher Influence on Dependent-Prone Students Learning Geometry. In E J Amidon and J B Hough (eds) Interaction Analysis: Theory, Research and Application. Reading, Mass: Addison-Wesley, pp 210-216.
- Archer, J & Kagan, N (1973) Teaching Interpersonal Relationship Skills on Campus. Journal of Counselling Psychology, 20 (6), 535- 540.
- Aspy, D N (1972) Toward a Technology for Humanizing Education. Illinois: Research Press.
- Aspy, D N & Hutson, B (1972) Promotion of Student Success. Journal of Educational Research, 66 (2), 57-60.
- Aspy, D N & Roebuck, F (1977) Kids Don't Learn From the People They Don't Like. Amherst, Mass: Human Resource Development Press.
- Authier, J & Gustafson, K (1975) Application of Supervised and Non-Supervised Microcounselling Paradigms in the Training of Paraprofessionals. Journal of Counselling and Psychology, 22 (1), 74-78.
- Barret-Lennard, G T (1962) Dimensions of Therapeutic Change, Psychological Monograph, 76 (43) (Whole No. 562).
- Berenson, D H (1971) The Effects of Systematic Human Relation Training Upon Classroom Performance of Elementary School Teachers. Journal of Research and Development in Education, 4 (2), 70-85.
- Berenson, B G, Carkhuff, R R & Myrus, P (1966) The Interpersonal Functioning and Training of College Students. Journal of Counselling Psychology, 13 (4), 441-416.
- Berenson, S R, Carkhuff, R R, Berenson, D H, & Pierce, R M (1977) The Do's and Don'ts of Teaching. Amherst, Mass: Human Resource Development Press.
- Bruner, J S (1962) The Process of Education. Mass: Harvard University, Cambridge.

- Bullmer, K (1972) Improving Accuracy of Interpersonal Perception Through a Direct Teaching Method. Journal of Counselling Psychology, 19 (1), 37-41.
- Cantrell, R P, Stenner, A J & Katzenmeyer, W G (1977) Teacher Knowledge, Attitude, and Classroom Teaching Correlates of Student Achievement. Journal of Educational Psychology, 69 (2), 172-179.
- Carkhuff, R R (1967) Toward a Comprehensive Model of Facilitative Interpersonal Process. Journal of Counselling Psychology, 14 (1), 67-72.
- Carkhuff, R R (1969) Helping and Human Relations: a primer for lay and professional helpers (Volume 1). New York: Holt, Rinehart and Winston.
- Carkhuff, R R (1969) Helping and Human Relations: a primer for lay and professional helpers (Volume 2). New York: Holt, Rinehart and Winston.
- Carkhuff, R R (1969) Helping Communication as a Function of Helpee Affect and Content. Journal of Counselling Psychology, 16 (2), 126-131.
- Carkhuff, R R (1971) The Development of Human Resource: education, psychology and social change. New York: Holt, Rinehart and Winston.
- Carkhuff, R R & Berenson, B G (1968) Beyond Counselling and Psychology. New York: Holt, Rinehart and Winston.
- Carkhuff, R R & Berenson, B G (1976) Teaching as Treatment. Amherst, Mass: Human Resource Development.
- Carkhuff, R R, Berenson, D H & Pierce, R M (1977) The Skills of Teaching Interpersonal Skills. Amherst, Mass: Human Resource Development.
- Carkhuff, R R, Collingwood, T & Renz, L (1969) The Prediction of the Effects of Didactic Training in Discrimination. Journal of Clinical Psychology, 25, 460-461.
- Carkhuff, R R & Pierce, R (1975) Trainer's Guide: The arts of helping. Amherst, Mass: Human Resource Development.
- Carkhuff, R R & Pierce, R (1976) Teacher as a Person. Washington, D C: National Education Association.

- Carkhuff, R R & Truax, C B (1965) Training in Counselling and Psychotherapy: an evaluation of an integrated didactic and experimental approach. Journal of Counselling Psychology, 29 (4), 333-336.
- Christensen, C M (1960) Relationships Between Pupil Achievement, Pupil Affect-Need, Teacher Warmth and Teacher Permissiveness. Journal of Educational Psychology, 51 (3), 169-174.
- Cogan, M L (1968) Behaviours of Teachers and the Predictive Behaviour of their Pupils. Journal of Experimental Education, 27, 89-124.
- Cormier, W H, Cormier, L S, Zerego, W D & Wagaman, G L (1976) Effects of Learning Modules on the Acquisition of Counselling Strategies. Journal of Counselling Psychology, 23 (2), 136-141.
- Cromack, T (1973) Reinforcing and Questioning Behaviour of Teachers as a Measure of Teacher Effects. Final Report. Project No. 2A 099, Grant No. OEG-1-71-0019(509). U S Department of Health, Education and Welfare, Office of Education.
- Dixon, W R & Morse, W C (1961) The Prediction of Teaching Performance: Empathic Potential. The Journal of Teacher Education, 12 (3), 322-329.
- Dunkin, M J & Biddle, B J (1974) The Study of Teaching. New York: Holt, Rinehart and Winston.
- Flanders, N A (1967) Teacher Influence in the Classroom. In E J Amidon and J B Hough (eds), Interaction Analysis: Theory, Research and Application. Reading, Mass: Addison-Wesley, pp 103-116.
- Flanders, N A (1967) Some Relationship among Teacher Influence, Pupil Attitudes and Achievement. In E J Amidon and J B Hough (eds). Interaction Analysis: Theory, Research and Application. Reading, Mass: Addison-Wesley, pp 217-242.
- Flanders, N A (1970) Analyzing Teaching Behaviour. London: Addison-Wesley.
- Frankel, M (1970) Videotape Modelling and Self-Confrontation Technique: An Evaluation of Their Effects on Counselling Behaviour. Unpublished doctoral dissertation, University of Rochester.

- Gage, N L (1963) A Method for Improving Teacher Behaviour. Journal of Teachers Education, 14, 261-266.
- Gagne, R M (1977) The Condition of Learning (3rd ed). New York: Holt, Rinehart and Winston.
- Gazda, G M (1971) Systematic Human Relations Training In Teacher Preparation and Inservice Education. Journal of Research and Development in Education, No. 4, 47-51.
- Gazda, G M, Asbury, F R, Balzer, F J, Childers, W C & Walters, R P (1977) Human Relations Development: a manual for educators. Mass: Allyn and Bacon.
- Goldberg, E (1970) Effects of Models and Instruction on Verbal Behaviour: An Analysis of Two Factors of the Microcounselling Paradigm. Unpublished doctoral dissertation, Temple University.
- Good, T L, Biddle, B J & Brophy, JE (1975) Teachers Make a Difference. New York: Holt, Rinehart and Winston.
- Gormally, J (1975) A Behavioural Analysis of Structural Skills Training Model. Journal of Counselling Psychology, 21 (6), 539-547.
- Griffin, A H & Banks, G (Fall, 1969) Inter-City Workshop for Better School. American International College Alumni Magazine.
- Harbach, R L & Asbury, F R (1976) Some Effects of Empathic Understanding on Negative Student. The Humanist Educator, 15 (1), 19-24.
- Hargreaves, D H (1972) Interpersonal Relations and Education. London: Routledge and Kegan.
- Hatch, E J & Bernard, G Jr (1977) A Pupil Relationship Enhancement Programme. The Personal and Guidance Journal, 54 (2), 103-105.
- Hefele, T (1971) The Effects of Systematic Human Relations Training Upon Student Achievement. Journal of Research and Development in Education, No. 4, 52-69.
- Higgins, W H, Ivey, A E & Uhlemann, M R (1970) Media Therapy: A Programmed Approach to Teaching Behavioural Skills. Journal of Counselling Psychology, 17 (1), 20-26.
- Hough, J B (1967) An Observation System for the Analysis of Classroom Interaction. In E J Amidon and J B Hough (eds), Interaction Analysis: Theory, Research and Application. Reading,

- Mass: Addison-Wesley, pp 150-157.
- Hough, J B & Ober, R (1967) The Effects of Training in Interaction Analysis on the Verbal Teaching Behaviour of Pre-Service Teachers. In E J Amidon and J B Hough (eds), Interaction Analysis: Theory, Research and Application. Reading, Mass: Addison-Wesley, pp 329-345.
- Hunt, G (1976) The Interaction of Achievement Orientation and Content Familiarity With Hierarchically Structured Programmes. Unpublished doctoral dissertation, Massey University.
- Ivey, A E (1971) Microcounselling: Innovation in Interviewing Training. Springfield, Illinois: C C Thomas.
- Kagan, N & Krathwohl, D (1967) Studies in Human Interaction (Research Report No. 20) Michigan State University, Educational Publication Services.
- Kerlinger, F N (1964) Foundations of Behavioural Research. London: Holt, Rinehart and Winston.
- Kerlinger, F N & Pedhazur, E J (1973) Multiple Regression in Behavioural Research. New York: Holt, Rinehart and Winston.
- Knapp, M L (1976) Communicating With Students. Improving College and University Teaching, 24 (3), 167-168.
- Kratochvil, D Carkhuff, R R & Berenson, B G (1969) Cumulative Effects of Parents and Teacher-Offered Levels of Facilitative Conditions Upon Indices of Student Physical Emotional and Intellectual Functioning. Journal of Educational Research, 63 (4), 161-164.
- Maslow, A H (1971) The Farther Reaches of Human Nature. New York: Viking.
- Nie, N H Hull, C H, Jenkins, J G, Steinbrenner, K, & Bent, D H (1975) Statistical Package for the Social Sciences (2nd ed). New York: McGraw-Hill.
- Perry, M A (1975) Modelling and Instructions in Training for Counsellor Empathy. Journal of Counselling Psychology, 22 (3), 173-179.
- Popham, W J (1967) Educational Statistics. New York: Harper and Row.

- Reed, H B (1961) Effects of Teacher Warmth. Journal of Teacher Education, 2 (3), 330-334.
- Reed, H B (1961) Teacher Variables of Warmth, Demand and Utilization of Intrinsic Motivation Related to Pupils' Science Interests: A Study Illustrating Several Potentials of Variance-Covariance. Journal of Experimental Education, 29 (3), 205-230.
- Rogers, C (1961) On Becoming a Person. Boston: Houghton.
- Rogers, C (1967) The Therapeutic Relationship and Its Impact. Westport, Connecticut: Greenwood.
- Rogers, C (1969) Freedom to Learn. Columbus, Ohio: Charles E Merrill.
- Rosenshine, B (1973) Teacher Behaviour and Student Attitudes Revisited. Journal of Educational Psychology, 65 (2), 177-180.
- St John, N (1971) Thirty-Six Teachers: Their Characteristic and Outcomes for Black and White Pupils. American Educational Research Journal, 8, 635-648.
- Saltmarsh, R E (1973) Development of Empathic Interview Skills Through Programmed Instruction. Journal of Counselling Psychology, 20 (4), 375-377.
- Saslow, G (Spring 1967) Rationale on Counselling. Paper Presented at the Portland Continuing Education Centre, Division of Counselling. University of Oregon Medical School, Portland Oregon.
- Schell, J E (1976) An Evaluation of Experimental Methods to Increase Empathy in Association Degree Nursing Students. Applied Educational Research and Evaluation, Nova University.
- Sears, P S et al (1972) Effective Reinforcement for Achievement Behaviour in Disadvantaged Children. The first year. Technical Report No. 30 Stanford Center for Research and Development in Teaching, Stanford University.
- Soar, R S (1965) Pupil Needs and Teacher-Pupil Relationships: Experience Needed for Comprehending Reading. In E J Amidon and J B Hough (eds). Interaction Analysis Theory and Application. Reading. Mass: Addison-Wesley, pp 243-250.

- Soar, R S (1968) Optimum Teacher-Pupil Interaction for Pupil Growth. Educational Leadership, 26, 275-280.
- Soar, R S (1972) Teacher Behaviour Related to Pupil Growth. International Research of Education, 18, 508-526.
- Stoffer, D L (1970) Investigation of Positive Behaviour Change as a Function of Genuineness, Warmth and Empathic Understanding. Journal of Educational Research, 63, 225-228.
- Therrien, M & Fischer, J (1978) Written Indicators of Empathy in Human-Relations Training: A Validation Study. Counsellor Education and Supervision, 17 (4), 272-277.
- Tisher, R P (1970) The Nature of Verbal Discourse in Classroom and Association between Verbal Discourse and Pupils' Understanding in Science. In W J Cambell (ed), Scholars in Context: The Effects of Environments on Learning. Sydney: Wiley.
- Toukmanian, S G & Rennie, D L (1975) Microcounselling Versus Human Relations Training: Relative Effectiveness with Undergraduate Trainees. Journal of Counselling Psychology, 22 (4), 345-352.
- Truax, C B and Carkhuff, R R (1967) Toward Effective Counselling and Psychotherapy: Training and Practice. Aldine, Chicago.
- Truax, C B and Tatum, C (1966) An Extension from the Effective Psychotherapeutic Model to Constructive Personality Change in Pre-School Children. Childhood Education, 42, 456-462.
- Withall, J (1949) The Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms. Journal of Experimental Education, 17 (13), 347-361.

Appendix A.

Carkhuff Scales used by David Aspy, 1972.

Communication of empathy in interpersonal interaction

- Level 1.0 The verbal and behavioural expressions of the teacher do not attend or relate to the verbal and behavioural expressions of the student(s) and also they communicate significantly less of student's feelings than the student has expressed himself/herself.
- Level 2.0 While the teacher responds to the expressed feelings of the student(s) he or she does so in such a way as to subtract noticeable affect from the communication of the student.
- Level 3.0 The expressions of the teacher in response to the expressed feelings of the student(s) are essentially interchangeable with the latter in that they express essentially the same affect and meaning. This is the minimal level of facilitative conditions.
- Level 4.0 The responses of the teacher add noticeably to the expression of the student(s) in such a way as to express feelings a level deeper than the student was able to express himself or herself.
- Level 5.0 The responses of the teacher add significantly to the feeling and meaning of the expressions of the student(s) in such a way as to (a) accurately express levels of feeling below what the second person was able to express or (b) in the event of on-going deep self-exploration on the student's part, be fully with the student in his or her deepest moments.

The scale of Communication of respect in interpersonal interaction

- Level 1.0 The verbal and behavioural expressions of the teacher communicate a clear lack of respect (or negative regard) for the student(s).
- Level 2.0 The teacher responds to the student in such a way as to communicate little respect for the feelings, experiences and potentials of the student.

- Level 3.0 The teacher communicates a conditional respect and concern for the student's feelings, experiences and potentials. This is the minimal level of facilitative conditions.
- Level 4.0 The teacher clearly communicates a positive respect and concern for the student's experiences.
- Level 5.0 The teacher communicates the very deepest respect for the student's worth as a person and his or her potentials as a free individual.

The scale of Genuineness in interpersonal interaction

- Level 1.0 The teacher's verbalizations are clearly unrelated to what she is feeling at the moment, or her only genuine responses are negative in regard to the student(s) and appear to have a totally destructive effect upon the student.
- Level 2.0 The teacher's verbalizations are slightly unrelated to what he is feeling and usually represent a prescribed role or professional manner. When he is genuine his responses are negative and he is unable to employ them as a basis for further inquiry into the relationship.
- Level 3.0 The teacher provides no "negative" cues between what she says and what she feels but provides no positive cues to indicate a really genuine response to the student. This constitutes the minimal level of facilitative functioning.
- Level 4.0 The teacher presents some positive cues indicating a genuine response (whether positive or negative) in a non-destructive manner to the student(s).
- Level 5.0 The teacher is freely and deeply himself in a non-exploitative relationship with the student(s).

Appendix B.
Interpersonal Relationship Skills
(Programmed Text).

A Programmed Text Approach to Teach Interpersonal Skills.

OBJECTIVE OF THE PROGRAMME

At the conclusion of the lesson you should be able to:

- 1 recognize effective attending behaviours
- 2 discriminate between effective and ineffective attending behaviours, using a rating scale of 1-5
- 3 specify the aim of listening behaviours outlined in the programme
- 4 recall verbal content accurately,
- 5 identify the feelings expressed by the speaker,
- 6 determine appropriate words to describe the speakers feelings.

THE APPLICATION OF THESE OBJECTIVES WILL ENABLE YOU TO:

- 1 increase your ability to effectively communicate in the classroom situation.
- 2 increase your ability to effectively communicate in general.

INTERPERSONAL RELATIONSHIP SKILLS

Interpersonal relationship skills will enable you to develop effective learning and teaching relationships. The emphasis of these skills is on EFFECTIVE COMMUNICATION. In the learning and teaching situation, interpersonal relationships are expressed mainly in terms of attending, listening to, and responding to students.

ATTENDING SKILLS

Here are two classroom situations:

- a. Diana is a school teacher. When she teaches, she has a relaxed natural posture and makes use of expressive gestures. She faces her students naturally and squarely, and she laughs and smiles with them as she moves about amongst them. When Bob asks her a question, she leans forward to him. She maintains eye contact with any student who asks or answers a question. Her students enjoy asking questions being asked and they feel relaxed and actively participate in Diana's lessons.

- b. Robert is an older teacher. When he teaches, he keeps his body tense, and stands for long periods facing the blackboard. He is never relaxed when he gives his lessons. When Bill drops his pencil he stares at him. Jane and Linda have to stand for a while, because they were talking while he was teaching. Mostly his class is very quiet. The students sit erect and keep quiet.

In these situations three main sets of behaviour are apparent:

The teacher who has a relaxed natural posture, maintains eye contact, faces her students squarely and moves about amongst her students.

The teacher who does not have a relaxed posture, maintains little eye contact and never moves about amongst his students.

The first group of students enjoy participating in the lesson, whilst the second group of students are very quiet and display little participation.

NOW:

1. What are the two main behaviours in the first situation which help increase effective attending?

.....

.....

2. What happens when the teacher has a relaxed natural posture?

.....

.....

3. What are the main behaviours from the second situation which make participation in the lesson less enjoyable for the students?

.....

.....

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

YOUR ANSWERS SHOULD BE LIKE THESE:

1. The teacher maintains eye contact and inclines toward the student to whom she is talking

The teacher moves about amongst the students.

2. The students also feel relaxed.

3. The teacher doesn't have a relaxed natural posture and doesn't interact with his students.

- - - - -

Please choose an appropriate answer from the alternative given in the brackets for each question.

1. When a teacher moves about amongst her students and leans forward when answering questions, how is the student likely to feel?

(uncertain / involved)

2. What feelings of interaction are students likely to have when the teacher maintains eye contact?

(teacher is involved with them / teacher does not want to talk to them)

3. What occurs when you keep your posture relaxed, and lean forward maintaining eye contact with the people you are talking to?

(you can control them more easily / you can pick up more information from both the verbal and non-verbal communication)

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

ANSWERS

1. involved
 2. teacher is involved with them
 3. you can pick up much more information from both their verbal and non-verbal communication.
- - - - -

For effective attending behaviour, the following points are relevant:

- the teacher develops a more natural posture by physically relaxing,
- the teacher inclines toward the student she is talking to when she is standing, and also maintains eye contact with him,
- the teacher faces the students squarely and maintains eye contact with them,
- the teacher moves about amongst the students,
- (if you are sitting you should consider placing your hand in your lap);

We may conclude that the purpose of attending behaviour is:

- to observe the non-verbal behaviour and facial expressions of the students;
- to make the students feel that the teacher is involved with them;
- to pick up cues and much more information from the students;
- to build a secure atmosphere and facilitate free expression.

ACTIVITY

Put a "G" after the sentences which indicate effective attending behaviours and put an "A" after the sentences which indicate an aim of attending skills.

1. The teacher has assumed a natural posture by physically relaxing
2. Observe facial expressions and non-verbal behaviour.....
3. The teacher moves about amongst the students
4. Make the students feel that you are involved with them.....

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

ANSWERS

1. G

2. A

3. G

4. A

NOW : ANSWER THESE QUESTIONS:

State the points which describe what you would do in order to employ effective attending behaviours.

1.

2.

3.

4.

Specify the aims which encouraged you to perform these behaviours.

1.

2.

3.

4.

- - - - -

A good teacher recognizes that he has to hear and see the students as much as possible. To indicate to students that you are involved with them and also that you are trying to understand and listen to them carefully you should:

- repeat back to the student the essence of what he has just said;
- restate a word or phrase that the student has said;
- reply using the phrase "Are you saying that....."

State which of the teacher's responses in the following excerpts indicate that he has listened carefully. Tick either true (T) or False (F).

EXCERPT I

Student: "I've seen some plants that can stay indoors without seeing the sun. My mother has got three at home in the sitting room. She bought them months ago."

Teacher: "Are you saying that there are some plants that can grow inside and that you have three of them in your lounge at home?" (T) (F)

EXCERPT II

Student: "Last night I tried to finish this homework, but I don't understand the problem so I had to leave it."

Teacher: "It seems to me that you tried very hard with your homework, but the difficulty of the problem prevented you from finishing it." (T) (F)

EXCERPT III

75.

Student: " I don't think Tony gets the right answer because he forgets to add some of the numbers."

Teacher: " What do you mean?" (T) (F)

EXCERPT IV

Student: "I don't know what group I should be in : no one wants me to join their group."

Teacher: "Why don't these people allow you to join them?"

(T) (F)

EXCERPT V

Student: "Where is Tahiti?"

Teacher: "You would like to know where Tahiti is? Shall we have a look at the map together?"

(T) (F)

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

Your answers should be like these:

76.

EXCERPT I T

EXCERPT II T

EXCERPT III F

EXCERPT IV F

EXCERPT V T

Effective attending and listening by the teacher will reflect his genuine concern. This will encourage the learner to involve himself in the learning process.

Choose one of the following situations which shows that the teacher has employed effective listening behaviours to help him to comprehend the essence of what the student has said.

SITUATION A

Teacher: "Sandy soil cannot hold water long enough to enable sufficient absorption by trees. Can you tell me what a tree grown on this soil would be like?"

Student I: "Big tree or small tree."

Student II: "Yeah... I don't think a small tree will need much water."

Teacher: "Listen to my question. I asked what a tree grown on sandy soil would be like?"

SITUATION B

Teacher: "In the rainy season, sloping areas will have much greater problems with soil erosion than will plains. If you have sloping land, what are you going to do in order to prevent soil erosion?"

Student I: "We could build a low wall."

Student II: "I think we should grow some plants."

Teacher: "You think that building a wall or growing some plants would prevent soil erosion?"

From the two situations you have just read choose which of these situations shows that the teacher has employed effective listening behaviours

A

B

We can conclude that the purpose of listening skills are to:

- try to hear what the learner is saying
- comprehend the essential points being made
- understand what the learner feels about what he has said.

NOW: Which of the teacher behaviours will increase the effectiveness of the listening. Answer Yes/No.

The teacher:

1. Inclines toward the student whom she is talking to
2. Stands fixedly at the front of the room
3. Moves about the room
4. Maintains eye contact and inclines toward the student she is talking to
5. maintains eye contact, faces the students squarely, and inclines toward them
6. Faces or writes on the blackboard whilst listening to the student

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

ANSWERS

1. Yes
 2. No
 3. Yes
 4. Yes
 5. Yes
 6. No
- - - - -

You have now had experience using attending and listening skills. These are vital for observing the behaviours and expressions of students. The responding skill involves acknowledging how the person experiences his/her feelings, and trying to understand the reason for them - together they give meaning to the persons' experience. This skill involves your communicating the essential qualities understanding of a respect, and warmth.

Please read carefully through the description of the following two situations.

Situation I:

Leslie is an active girl. Usually she sits erect, eyes bright and excited. One day, the teacher notices that she is very quiet. When the class finishes, he asks her to come to his office. He comments on her behaviour, and she states "You never give me a chance. You don't care about me. You always choose someone else."

He pauses and asks himself "If I had that experience how would I feel?" He believes that he would feel sad and discouraged. Then he thinks ... Why would I feel this way? .. Because I don't feel as if the teacher cares about me .. I don't have a chance to do anything."

Thus he responds to Leslie by stating "You are discouraged because you want to be a part of class activity but you feel that I don't give you a chance."

Situation II:

Richard comes to his teacher and says "I do my home work every night, but this stuff is too hard to do." The teacher pauses for a while and asks himself ... "How would I feel if I was in that situation?" He believes that he would feel frustrated.

Thus he responds to Richard by saying "You feel frustrated because the homework seems so hard to do."

From these two situations we see that the teacher has applied the following principles:

- pay attention to student behaviours and presentation,
- pause for a while and ask "How would I feel if I had that experience or if I was in that situation?"
- use verbal and non verbal cues to decide whether the situation (or the student) would be (or feel) happy, sad, angry, confused, worried, discouraged, etc.
- respond by using the above feeling words along with the essence of the presentation which indicated the reason for the students feelings.

(The format "You feel (or you are).... because"helps to ensure that both elements (feeling/reason) are included in the response.)

NOW: Try to determine these implicit feelings in the following situations, and choose an appropriate response for each.

Situation I:

Student: I've got the best grade in English today."

Your response: "You feel (Happy/worried/discouraged/
angry/confused/other

Situation II:

Student: "I love being in your class. You're the best teacher I ever had."

Your response: "You feel (happy/worried/sad/discouraged/
angry/confused/other

Situation III:

Student: I'm really disappointed. I was really looking forward to being in your class, but it just hasn't worked out. I really thought I would learn a lot, but I just haven't."

Your response: "You feel (happy/worried/sad/
discouraged/angry/confused/other"

Situation IV:

Student: "I can't see why you gave me a C for my mathematics. I spent much more time with it than some other kids who got A's. It's all been a waste of time."

Your response: "You are (happy / worried / sad / discouraged / angry / confused / other)"

Situation V:

Student: "I hate him. I'm not going to do the lousey homework he's given us he is not worth it."

Your response: "You feel (happy / worried / sad / discouraged / angry / confused / other)"

Situation VI:

Student: "I don't think I can get my work finished in the time you have set. I have also got other papers to finish at the same time as this one."

Your response: "You feel (happy / worried / sad / discouraged / angry / confused / other)"

Situation VII:

Student: "At first you said that we were free to choose our own topics of interest. Now you mention that we have to present the outlined beforehand incase we pick an unsuitable theme."

Your response: "You feel (happy / worried / sad / discouraged / angry / confused / other)"

Situation VIII:

Student: "Nobody wants me to work in their group. I don't know where to go".

Your response: "You feel (happy / worried / sad / discouraged / angry / confused / other)"

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

Your answers should be like these:

83.

- Situation I: happy, proud, elated, surprised.
- Situation II: pleased, satisfied, elated, thrilled, happy.
- Situation III: discouraged, disappointed, disillusioned, depressed, despondent.
- Situation IV: discouraged, annoyed, angry, despondent.
- Situation V: angry, fed-up, brassed off.
- Situation VI: worried, anxious, concerned, frustrated.
- Situation VII: confused, frustrated, annoyed, angry.
- Situation VIII: sad, despondent, confused.

The responses of the teacher in these situations are helpful to the student, because they reflect the students' feelings and the reason for them. In doing so they communicate teacher understanding and acceptance of such emotions and experiences.

These responses can be rated by using the 1.0-5.0 scale proposed by Carkhuff. This scale rates the quality and effectiveness of the teacher's communication.

The situations which you experience at the beginning of this unit would be rated as level 3.0 on Carkhuff's scale.

This is because these responses of the teacher showed that he responded to feeling and meaning interchangeably (i.e. nothing is added or taken away from the students communication).

Please read the following excerpts:-

Excerpt I:

Student: "I don't think I can solve this problem. Last night, I didn't even have time to review the reference that you loaned me."

Teacher: "Your parents should understand that you have a lot of homework to do."

In this excerpt, the teacher ignores what the student is saying. It could score level 1.0 (on a 1.0-5.0 scale for rating the effectiveness of teacher's response). It indicates very ineffective communication, because the response is not related to the student's expression.

Excerpt II:

Student: "Sometimes when you ask me questions, I know the answer but I'm not quite sure how to say it. I'm afraid I may give the wrong answer."

Teacher: "You never seem to speak out and you take a long time to think. Next time, you should just say it. Don't sit quietly when you talk, I will know then how much you understand the lesson."

In this excerpt, the teacher ignores the feelings of the student, but responds to the content and also gives superficial advice to him. It would be rated as level 2.0 on a 1.0-5.0 scale. It also indicates ineffective communication to the student, because he responds to content (also giving some guidance).

Part of the valuable scale (1.0-5.0) presented by Carkhuff (1977) suggests that:

- Level 1.0 No response or response unrelated to students' expression.
- Level 2.0 A response to content (often including some guidance).
- Level 3.0 An interchangeable response to feelings and content.

By using these categories, please rate the following on levels 1.0-3.0.

Situation I:

Student: "I could get good grades too, if I did what she does during the test."

Teacher: "I will let you talk about your grade but not other students."

..... "You feel angry about seeing another student cheating on the test."

..... "Next time tell me before I mark the test."

..... "You feel upset when you see someone do better than you by using the wrong method."

Situation II:

Student: "I'm falling behind in your course work. I just don't know how I'm going to catch up."

Teacher: "We are all under pressure at this time of the year."

..... "I know there is a great deal of work for you to do."

..... "You feel frustrated because you can't catch up with the course work."

..... "If I were you I would go to the library now and get started on this work."

(CHECK YOUR RATING ON THE NEXT PAGE)

ANSWER FORM FOR YOUR RATING SCALE:

Situation I:

Teacher responses	ratings
1	1.0
2	3.0
3	2.0
4	3.0

Situation II:

Teacher responses	ratings
1	1.0
2	2.0
3	3.0
4	2.0

Sometimes responses can be made which fall in between levels.

For example:

Situation I:

Student: "I get very low marks from this course. I don't know why it is?"

Teacher: "You feel sad. (or) You feel confused. This response will be rated at higher than level 2.0 but not at level 3, because the teacher responds to feeling only. It would be rated therefore at level 2.5.

Situation II:

Student: "I get low marks from this course. I don't know why it is?"

Teacher: "When you get low marks like this you have to try harder."
This response will be rated at higher than level 1.0, but not at level 2.0, because it is related directly to the content of what the student expressed, but not fully. It would be rated therefore at level 1.5.

These kinds of responses which fall BETWEEN levels can be designated as .5 of the major levels.

NOW: we can summarize the levels of rating scale so far as:

Level 1.0 No response or response unrelated to student. (very ineffective communication).

Level 1.5 Response partially related to student - often with poor guidance.

Level 2.0 Response to content - often reasonable guidance (ineffective communication).

Level 2.5 Response to feeling (s).

Level 3.0 Response to student's feeling and content
(Interchangeable) (Minimally effective communication).

Please rate from 1 to 3 the following alternative teacher responses to the expressions.

Situation I:

Student: "I wonder if you can help me to choose some papers for next year. I think I did it on my own I'd just bungle things again."

Teacher:

..... "Everyone seems to be changing their mind around here lately."

..... "You feel concerned that you will make a mess of it again."

..... "Why do you have to change the line you have been taking."

..... "You feel confused about your papers to take and apprehensive that you will make the wrong choice again."

..... "If you are having trouble choosing, may be you have to ask what you are doing here at all."

Situation II:

Student: "I keep thinking that we will do something in this class, but we don't. It's a big waste of time."

Teacher:

..... "You feel angry."

..... "We will next time. It's not an easy thing to plan for you now."

..... "You feel angry because the class hasn't met your expectations, it isn't."

..... "All you kids do nowadays is complain."

..... "When you feel that you don't like the way I do things, it would be better to tell me in the class."

Situation III:

Student: "I was very nervous during the test and I think it affected how I performed."

Teacher:

..... "How many tests do you have to sit in this term?"

..... "You feel worried because your nervousness may have caused you to do poorly."

..... "Did you finish it in time?"

..... "You were probably not ready for the test. You had better spend much more time at studying."

..... "Every body feels like this about tests."

Situation IV:

Student: "I think that I can make a better living illegally than by getting a job. Going to college just isn't worth it when I can make money in other ways."

Teacher:

..... "What are you going to do?"

..... "You should think about the quality of your future life too."

..... "You feel disillusioned."

..... "You feel very disillusioned about college, you don't think you can gain anything from your studies."

..... "You feel confused because you're not sure just which step to take at this point in your life."

(CHECK YOUR RATING SCALE ON THE NEXT PAGE)

ANSWERS FOR YOUR RATING SCALE:

Situation I:

Teacher responses	ratings
1	1.0
2	2.5
3	1.0
4	3.0
5	2.0

Situation II:

Teacher responses	ratings
1	2.5
2	1.5
3	3.0
4	1.0
5	2.0

Situation III:

Teacher responses	ratings
1	1.0
2	3.0
3	1.0
4	1.5
5	2.0

Situation IV:

Teacher responses	ratings
1	1.0
2	2.0
3	2.5
4	3.0
5	3.0

ACTIVITY

Try to formulate responses by using the principles you have learned. Make your responses at level 3.0 minimally effective communication. Use the format "You feel (feeling word) because (reason).

Situation I:

Student: "I've got an A for my English paper today."

Your response: You feel because
.....

Situation II:

Student: "I love being in your class. You're the best teacher I have ever had."

Your response: You feel because
.....

Situation III:

Student: "I'm really disappointed. I was really looking forward to being in this class, but it just hasn't worked out. I thought I would learn a lot, but I just haven't."

Your response: You feel because
.....

Situation IV:

Student: "I hate him. I'm not going to do the lousey homework he's given us. I can't do it anyway."

Your response: You feel because
.....

Situation V:

Student: "I can't see why you gave me a C for my Maths paper. I've spent much more time on it than some of the others who got A's. It's all been a waste of time."

Your response: You feel because
.....

Situation VI:

Student: "I don't think I can get my work finished in the time that you have set. I have also got other papers to finish at the same time as this one."

Your response: You feel because
.....

Situation VII:

Student: "At first you said that we were free to choose the topics of our interest. Now you mention that we have to present the outline beforehand, otherwise we might develop a theme different from what you want."

Your response: You feel because
.....

(CHECK YOUR ANSWERS ON THE NEXT PAGE)

YOUR ANSWERS SHOULD BE LIKE THESE:

1. You feel pleased because you did so well in your English.
2. You feel satisfied because you think I'm okay as a teacher.
3. You feel discouraged because this class hasn't come up to your expectations.
4. You feel angry because your teacher has given you homework you can't do.
5. You feel discouraged because you think you deserve a better mark considering the amount of time you put into it.
6. You feel worried because every thing **is** done at once and you don't think you'll finish this work on time.
7. You feel resented because I seem to have changed my mind and confused what you have to do.

In the level 3.0 (minimally effective) the response communicates the teachers' understanding of the student's experience. It is low in initiative (i.e. it is not directed towards the achievement of particular goals held by the student), but still helps the student to recognise that the teacher understands where s(he) is.

Now we can move to level 4.0 (personalize level). At this level the teacher begins to respond to the more personal feelings and the meanings expressed by the student with whom he has been able to respond effectively at level 3.0 (interchangeably level).

For example:-

Alfred is a student who has a problem with reading. The teacher has been helping him since the beginning of the term. But he still reads poorly. Thus when teacher asks student to read in the class Alfred usually sits still and lowers his head down.

Alfred may feel better if the teacher asks him to come to see him and says "You feel ashamed because you can't read as well as you should and you want to be able to read better."

This would be the most effective communication, as it indicates an understanding of where the learner is, and also where he or she wants to be. When the teacher personalizes, he is operating at level 4.0 in the 1-5 rating scale.

Look at another response from the teacher:-

When teacher asks student to read in the class, he sees Alfred sit still and lowers his head. The teacher knows about his problem with reading. He understands that Alfred feels ashamed about reading.

Thus he says, "You feel ashamed about reading now and would rather not." The teacher asks him to come along later to his office, and says, "You feel ashamed because you can't read as well as you should and you want to be able to read better. Why don't you try to read one paragraph now, so that I can pick up any weak points. After that we can provide some practice exercises for you, to help you overcome these difficulties."

In these responses, the teacher begins to initiate in an understanding content. He communicates an understanding of where the learner is and where he needs to be. "This very effective communication is rated as level 5.0 of the 1-5 rating scale.

Here is Carkhuffs' 1-5 rating scale:

- 1.0 very ineffective communication (unrelated)
- 2.0 ineffective communication (content only)
- 3.0 minimally effective communication (interchangeable)
- 4.0 effective communication (deficit - goal)
- 5.0 very effective communication (initiative programme steps)

Assume that the interaction between student and teacher has been progressing over a period of time.

Please try to rate from 1 to 5 these following situations and responses.

Situation I:

Student: "I do my homework every night, and I really try hard. But I still can't understand the stupid stuff."

Your rating

..... "You feel dumb because you can't handle it and you want very much to be able to."

..... "You feel angry because you can't do your homework."

..... "I'm picking up something of your frustration. You want to get it right but it eludes you."

..... "It makes you feel scared because you want to succeed and you wonder if you'll make it."

..... "You feel upset because you can't handle it and you really want to. We'd better go to work out the problem that makes you get stuck."

Situation II:

Student: "I can't see why you gave me a C on my social studies paper. I spent alot of time on it."

Your rating:

..... "You feel confused because you don't know why you got a mark after such effort and you need to work it out."

..... "You're pretty bitter because you think I might be short changing you."

..... "It's really frustrating for you because you can't get a higher grade as you aimed at. Shall we go back to the problem in the test, which are not clear for you. The discussion about these problems may help you on the next time.'

..... "You may get higher grades next time if you continue to work hard at it."

..... "You're furious."

Situation III:

Student: "I don't think I can get my work finished in the time that you have set. I have also got other papers to finish at the same time as this one."

Your rating:

..... "You feel torn because you have other work to finish at the same time."

..... "You feel worried because you don't think you'll finish work on time and you really want to keep up."

..... "You feel depressed because you have to finish your work about the same time. You really meant to get it done but you run out of time."

..... "I used to experience this situation when I was in the college."

..... "You feel worried because you can't get all your work done in time. And you want to finish it. Shall we have a look at how far you have done on my paper, see how much does it leave? We may set a new time for it."

(CHECK YOUR RATING ON THE NEXT PAGE)

ANSWERS.

Situation I:

Teacher responses	Ratings
1	4.0
2	3.0
3	3.5
4	3.5
5	5.0

Situation II:

Teacher responses	Ratings
1	4.0
2	3.0
3	5.0
4	2.0
5	2.5

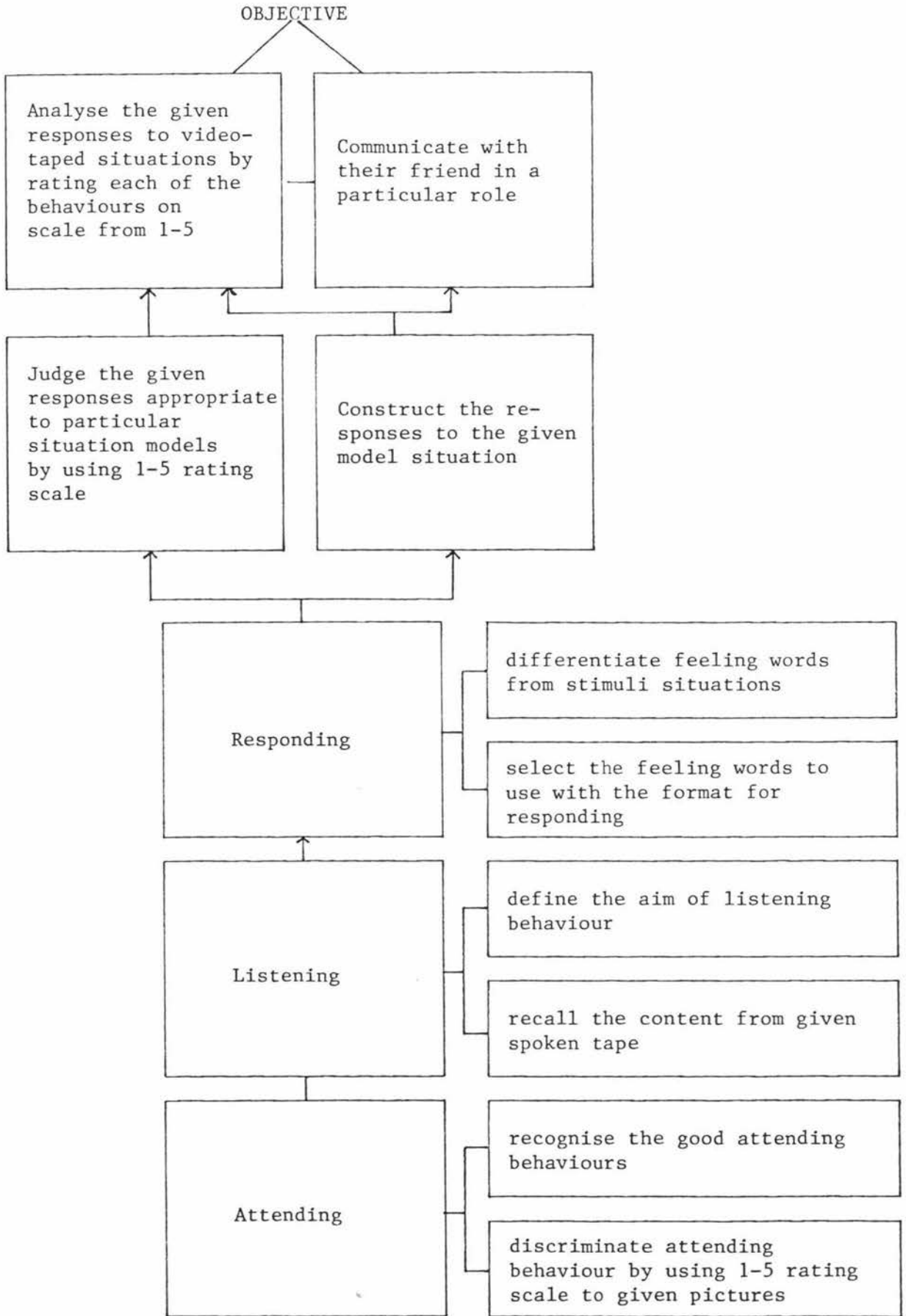
Situation III:

Teacher responses	Ratings
1	3.0
2	4.0
3	4.0
4	2.0
5	5.0

Appendix C.
Learning Hierarchy of the Programmed Text.

OBJECTIVE

Given a set of models which embody attending, listening and responding skills, students will be able to discriminate and communicate by using these skills when responding to (a) videotape stimuli and apply these skills when (b) the interaction with groups of children in micro-teaching sessions.



Appendix D.
Script Excerpts from the Audiotape.

Paraphrase Exercise

The exercise of paraphrase serves three important purposes.

1. Listen to hear everything that is said.
2. Getting the key points from the student statements.
3. Introduce trainees to the fact that they must be able to recall what has been said before they can do a good reflecting upon the content of the expression.

From these points the students feel that:

1. You are with them, you are trying to understand what he is saying.
2. Make the content much more concise.
3. Make sure that you understand the content.

Excerpt 1

Student: "If I have to make 80% in the final exam, I don't think I can make it. I think we should have 40% from the project and we make 60% in the final exam. I really can't work well under the exam situation."

Excerpt 2

Student: "I've been working on this exercise twice. But I still make a lot of mistakes. I feel very bad that I can't handle the work as quickly as other people. In the other papers some teachers let me try an easier exercise than other people have to do. I don't know why I'm so slow."

Excerpt 3

Student: "I just don't know what to do. Everybody says stay in school and get a good education. But these teachers don't give a damn whether you learn anything or not. They just come here to get their pay cheques."

Excerpt 4

Student: "I really like my mechanical drawing classes, and I think I'd probably turn out to be a pretty good engineer. Then again, I really enjoy my volunteer work at the hospital. I do well in Biology and Chemistry, so I'll probably do quite well in nursing. Maybe I'll find some others."

Excerpt 5

Student: "I just wonder what's wrong with me. I don't seem to be able to do better. Surely, I can't be that bad with all the papers - but - I really don't know what I did wrong on this paper. I'm thinking about stopping this hard work with all these subjects. It doesn't seem to be getting me anywhere."

Appendix E.
Script Excerpts from Videotape for Practising
Communication Exercise.

Excerpt 1

Student: "Tell me what's going on? It seems to me that I have lots and lots of work to do, and I don't even know where to start. I left home early every day and I had planned what I was going to do. But when I arrived here, everyone kept on telling me ... to do this, do that."

Excerpt 2

Student: "I don't think I can go back to that stuff at all for the meantime. I spent two years on my thesis, and then they asked me to rewrite it. It's really been a terrible experience to me." (The student smoked whilst he was talking.)

Excerpt 3

Student: "I feel so terrified. The final exam is coming in three months' time and nobody has suggested how I should prepare. I know that this exam might be very hard and much different from the high school one. I'm so scared."

Excerpt 4

Student: "I got a very low mark on my test last time, yet I worked hard. What should I do to get a better mark?"

Excerpt 5

Student: "I can't make a decision about enrolment at all. There are a lot of courses at each stage. I don't even have a clue which course is a prerequisite of which. It's a very wide area and difficult for me to focus on any particular area."

Appendix F.
Attending Behaviour Checklist.

ATTENDING BEHAVIOUR CHECKLIST

Rate the following behaviours according to this scale.

Does a lot 3
 Does sometimes 2
 Never or hardly ever 1

	Observer Assessment	Own (Student) Assessment
A. Face and head movements.		
1. Uses affirmative head nods.	_____	_____
2. Calm yet expressive use of facial movement.	_____	_____
3. Turning eye away when involved in discussion.	_____	_____
4. Spontaneous eye movement and eye contact.	_____	_____
5. Look directly at other person when she(he) talks.	_____	_____
6. Extraneous facial movements.	_____	_____
B. Hand and arm movements.		
7. No gesturing (arms rigid).	_____	_____
8. Uses hand movement for emphasis.	_____	_____
9. Inappropriate arm and hand movements.	_____	_____
C. Body movement.		
10. Slouching.	_____	_____
11. Relaxed posture but not slouching.	_____	_____
12. Sitting in fixed, rigid position.	_____	_____

Observer Assessment	Own (Student) Assessment
------------------------	-----------------------------

13. Body positioned towards
other.

14. Faces other people
squarely.

D. Listening.

15. Pauses before responding.

16. Distracted by other things
in the environment.

17. Pick up the information
being asked.

Appendix G.

Script Excerpts From Videotape For Communication Test.

NAME

Imagine this is an adult student that you know or you have had some prior contact with. He comes to you and makes the statement presented on the videotape.

Write down the most helpful response you can make to the student (as if you were actually saying it).

Excerpt 1

Your response: _____

Excerpt 2

Your response: _____

Excerpt 3

Your response: _____

Excerpt 4

Your response: _____

Excerpt 5 *

Your response: _____

Excerpt 1

Student: "Hm ... Yes well I've come to see you because I've um .. I've finished that paper that you wanted me to do. But it .. ah .. doesn't seem to have worked out quite the way that I .. think that you wanted it to be. I'm .. I'm a little bit concerned that may be if I've .. If the approach I've taken is not really ... the one you would have hoped for, and so I thought before I actually hand it in I should really come in .. and .. talk it over with you a wee bit first ... just to be able to .. ah .. be a bit more clear about all that."

Excerpt 2

Student: "Oh yes .. um .. I wanted to come and see you because I'm finding the way in which your classes are going are very frustrating for me because .. ah .. you .. you just seem to go on and on and on and you talk very quickly and you don't give us any chance to make any notes and I find, for me any way ... um ... it's very frustrating. I'm not getting the notes down that I want to get down .. and altogether it just ... well ... I'm so far behind what's going on that ... ah ... it really bugs me. I just wanted to come and see you about it and ... ah ... and just tell where I am with it."

Excerpt 3

Student: "Well ... I'm not really having much success with your paper ... um ... I thought when I ... when I first got into the work that you're setting I thought that it would be something I could handle. But the marks that have come back have been such that I wonder really, whether I'm ... well I guess ... whether I'm able to handle the material at all. It um .. well you know the results I got in the last paper and .. ah... they were so poor that um ... I dunna ... I'm just ... I'm just really at a loss of quite what I should do and thought I may be ... may be I should come and just ... say something to you a wee bit about it, because .. ah ... I really don't know whether I should even sort of stay on anymore ... um ... Well, I just thought, I just thought, I'd say that with you."

Excerpt 4

Student: "Thank you for the advice you gave me for the examination. I'm, I'm really ... I'm just delighted. I went in there and you know how what it was like for me before when I, when I used to go into exams. I was so nervous and ... ah ... time went by and I just sort of, I got panicky, but ... the advice you gave me about being able to ... do a little work plan, answer the paper in some note form, and then just sit down and write it ... it worked. It was just so incredible because at previous times it has been so bad and this time it was so good, and well ... I just wanted to come to you again and say thank you ... it was marvellous .. thank you."

Excerpt 5

Student: "Oh yes .. I wanted to come in and ... ah ... raise with you again about the issue of that project that you've set us ... um ... I'm having a great deal of difficulty because it seems to me so ... it's such a general topic you've set us and the fact you've given us a great deal of freedom, ... I find ... well ... it's nice, I, I like that ... I like that kind of freedom. But it seems to me that ... ah ... it's so difficult to ... ah ... to really pin down what it is that you are after, that I'm not really sure where I should begin. I've tried a couple of times to get underway with the project, but each time I've done that, it just seems to melt away to nothing, because there's no real guideline that you've set for us to follow."

Appendix H.
Discrimination Tests.

Discrimination Pre-Test.

NAME

In responding to the expression, assume that you have worked with this child several times previously.

Please rate the following alternative teacher responses to this expression from 1 to 5.

- 1 very ineffective
- 2 ineffective
- 3 minimally effective
- 4 very effective
- 5 extremely effective

Student: "I do my homework every night. But the stuff is just so stupid and boring that it's hard to do."

Teacher:

- _____ a "Don't give up because you have what it takes. I know because I was in the same position at one time in my life."
- _____ b "You feel angry because that stuff is so stupid and boring."
- _____ c "It will work out it always does."
- _____ d "It makes you feel dumb because you can't handle the stuff and you really want to. Let's sit down and work out a study programme, first thing you have to do is survey any assignment that you have."
- _____ e "You feel worried because you can't do it and you want very much to be able to."

Student: "You never give me a chance. You always pick someone else. You don't care about me."

Teacher:

- _____ a "You're really discouraged because you want to be a part of this but you haven't been able to find a way."
- _____ b "You feel sad because I let you down."
- _____ c "You haven't been working as hard as you should. You're just going to have to buckle down and do your work. All you have to do is work harder and I'll pick you."
- _____ d "Why do you feel that way?"
- _____ e "You're discouraged because you want me to like you but you haven't had the chance. Talking with me is the first step. Next you have to understand what behaviour I

expect from you."

Student: "I've been working hard but the stuff that has reading in it is holding me back."

Teacher:

- _____ a "You feel really bad because the reading is real hard."
- _____ b "You're disappointed because you aren't moving ahead very fast."
- _____ c "You're sad because things just aren't working out."
- _____ d "You're sad because you just haven't been able to handle things."
- _____ e "You feel really bad because you haven't been able to handle the reading and you want to be able to handle it."

Student: "How can I get my English done when I don't even know how to study? Can you help me?"

Teacher:

- _____ a "You should really try hard to study harder. The more you work, the better you will do."
- _____ b "It's pretty upsetting to you because you don't know the first thing about studying and you really want to."
- _____ c "The road of life is strewn with kids who never learned how to study."
- _____ d "You feel pretty bad because studying has really got you down."
- _____ e "You feel pretty frustrated because you can't study and you know you need to. There's a study programme that some experts have worked out that's called the SQ3R method. Next, you ask questions about it. Then you need to recite and review. Now, let's take a look at this method and see if we can make it work for you."

Student: "Sometimes she acts like she is my best friend and the next day she acts like she doesn't even know me."

Teacher:

- _____ a "I believe that you should not be her friend any more."
- _____ b "You feel sad."
- _____ c "You feel that she doesn't treat you right."
- _____ d "You feel hurt because she doesn't treat you right."
- _____ e "I believe that you should go to her and speak to her since she matters so much to you."

Student: "I don't know. Nothing ever works out right. I guess I'm just going to quit school when I get old enough."

Teacher:

- _____ a "You feel disappointed."
- _____ b "You had better stay in school or you'll never get anywhere."
- _____ c "You feel disappointed because nothing seems to work for you in school."
- _____ d "You should explore what you can do in and out of school before you quit."
- _____ e "You feel sad because everything's going badly."

* * * * *

Please look at the pictures on the next page and rate (from 1 to 5) the following alternative teacher attending behaviours and also the learners' behaviours.

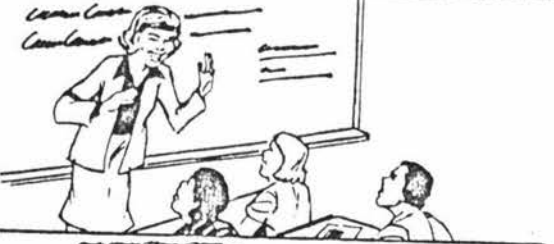
Teacher Behaviors

Please rate (from 1 to 5) the following alternative teacher attending behaviours and also the learners behaviours.

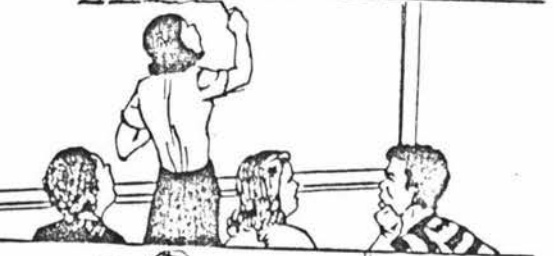
Your Rating



a



b



c



d



e

Student Behaviors



a.



b.



c



d.



e

Discrimination Post-Test.

NAME

In responding to the expression assume that you have worked with this student several times previously.

Please rate the following alternative teacher responses to this expression from 1 to 5.

- 1.0 very ineffective
- 2.0 ineffective
- 3.0 minimally effective
- 4.0 very effective
- 5.0 extremely effective

(If any response falls between levels it can be designated as .5 of the major levels.)

Student: "I have only a month left before my final exam. I haven't finished lots of assignments, and I don't think I can get them done in time."

Teacher:

- _____ "You feel worried."
- _____ "You feel panicky because you haven't been able to finish your assignments and you want very much to be able to get them done before your finals."
- _____ "How many of them have you got to finish?"
- _____ "You feel worried because you have to finish these assignments and you want to be ready for your final exam. But you haven't got much time left."
- _____ "You should have planned it ahead."

Student: "I don't know why we have to keep reading this stuff! One book's just like the next."

Teacher:

- _____ "You feel fed up because you find this stuff very boring."
- _____ "You feel bored."
- _____ "You feel bored because you have found nothing of real value in these books. You really want to get something useful from them but you can't."

_____ "You feel bored because these books don't give
you any material of interest."

_____ "How many of them have you really read fully?"

Student: "Why is this wrong? It looks right to me. I can't
seem to get the hang of this stuff."

Teacher:

_____ "You had better check through the problem and your
answer again."

_____ "You feel disappointed."

_____ "You feel frustrated because things don't seem to be
going right for you."

_____ "You feel bad because you can't seem to get the right
answers in this work and you want to be able to do
well. Let's go through this problem and your answer
and see where things seem to be going wrong."

_____ "You feel confused because you can't work out what is
going wrong, and it's important for you to know
where you are falling down."

Student: "This programme is so long. I don't think I will
get it done in an hour. I don't think I can keep at
it."

Teacher:

_____ "Aren't you interested in it?"

_____ "You feel irritated."

_____ "You feel bad because I don't give you enough time."

_____ "How long do you want to work on it?"

_____ "You feel frustrated because you can't apply yourself
to this programme and you want to be able to give it
your best attention."

Student: "I've worked very hard to learn how to add and subtract and to multiply and divide. But I get messed up when you give me problems where I have to do all of these things."

Teacher:

"You're lost because you don't know the order of the operations and you want to learn them."

"You feel confused because you don't know the order of the operations and you want to. Now, there is an old expression that will help you: 'My Dear Aunty Sally means that you do the operations in the following order: multiply, divide, add, subtract'."

"Girls usually have trouble with maths and you shouldn't worry about it."

"That's something that you just have to keep working very hard at until you get a 'feel' for it."

"You feel confused because of all the operations."

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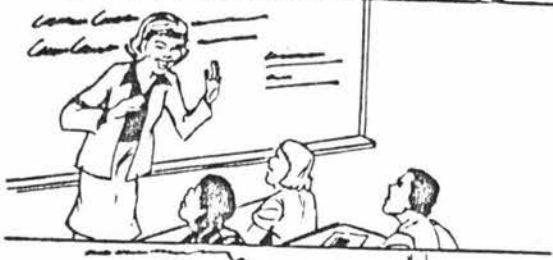
Teacher Behaviors

alternative teacher attending behaviours and also the learners behaviours.

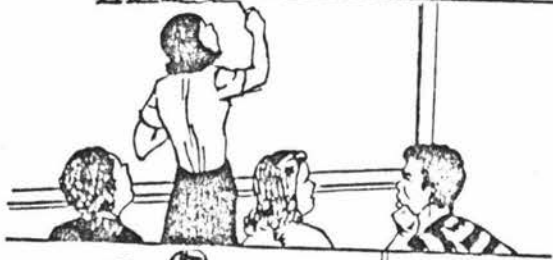
Your Rating



a



b



c



d



e

Student Behaviors



a



b



c



d



e

Discrimination - Retention-Test.

NAME

In responding to the expression, assume that you have worked with this student several times previously.

Please rate the following alternative teacher responses to this expression from 1 to 5.

- 1.0 very ineffective
- 2.0 ineffective
- 3.0 minimally effective
- 4.0 very effective
- 5.0 extremely effective

(If any response falls between levels it can be designated as .5 of the major levels.)

Student: "I don't understand why you have asked me to rewrite this essay. You said that the content is alright - but you don't like the format. You have never really talked about the format before."

Teacher Responses:

- _____ "Do you want to hand it in just like it is then?"
- _____ "You feel angry?"
- _____ "You feel annoyed because I didn't seem to give you precise enough instructions."
- _____ "You feel frustrated because you can't understand why I have emphasized something that seems new at this point and you want to understand so that you can decide what to do about it."
- _____ "I don't want you to work too hard on it but I'm sure you would like to get as good a mark as you can."

Student: "I have worked very hard to get an A in your class and my work seems O.K. to you, but you don't seem to like me enough to give me such a high mark."

Teacher Responses:

_____ "You feel disappointed."
 _____ "Do you think that I'm being unfair to you?"
 _____ "You feel upset because you believe that I'm prejudiced against you."
 _____ "You feel frustrated because you can't seem to work out why you aren't getting an A in the paper and it's important to you to know whether it is to do with my relationship to you so you can confront me on that."
 _____ "You're quite wrong. How I feel about you personally does not matter a bit."

Student: "That was a real interesting talk in class yesterday about the theory of evaluation. Do you have some more information that I could borrow to read?"

Teacher Responses:

_____ "You feel really eager about this topic."
 _____ "You're satisfied because you're involved in something you are really interested in and you want to know some more about it. I'll give you the list of references which you can follow up in the library or we could talk about it some more if you wanted to."
 _____ "Certainly, I have a list of references. I'll give it to you and you can get more information from them."
 _____ "I'm glad that you're interested in it."
 _____ "You are pleased."

Student: "I worked pretty hard on this homework assignment. Would you look over it before class and tell me if it's o'kay?"

Teacher Responses:

_____ "It's up to you to decide if it's o'kay or not before you hand it in. We'll check through it together in class later."

_____ "You feel uncertain."

_____ "You feel worried because you've worked hard on it and you want to get it right. But you're not so totally sure about it."

_____ "You feel puzzled because this homework was very hard for you to complete."

_____ "You feel anxious because you found it hard to complete. You would like to get it right but you're not quite sure. O'kay we'll look through it together now."

Student: "Everytime I tell you about my experiments, you just say 'yes, it's alright ... it's o'kay'. You never really look at them fully. I really need to hear some fuller criticism of them."

Teacher Responses:

_____ "You feel frustrated."

_____ "You feel disappointed because it seems to you that I'm not interested in your work."

_____ "I understand how you feel, when I have more time I'll work on it."

_____ "You feel frustrated because you haven't been able to get satisfactory attention from me and you really need that to know just where you are with your work."

_____ "You feel annoyed because I didn't give you any feedback or criticism on your work at all."

Student: "I failed on the last test because I was really sick. I was going to tell you but you were so busy."

Teacher Responses:

_____ "You should have asked me for the chance to sit it another time."

_____ "You feel sad."

_____ "You feel down because you failed the test."

_____ "You feel frustrated because you thought that you would have passed the test, if you were not sick. You wanted to ask me for advice about what to do but you didn't get the chance."

_____ "You feel disappointed because you failed the test and I seemed so busy you couldn't approach me about your being sick. You don't know where that leaves you on the test and it's important for you to find out."

* * * * *

Your Ratings

Teacher Behaviors

alternative teacher attending behaviours and also the learners behaviours.

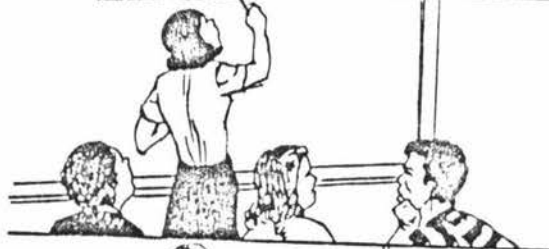
Your Rating



a



b



c



d



e

Student Behaviors



a



b



c



d



e