

THE UNIVERSITY OF CALGARY

An Evaluative Study of the
C-Group Component of EDPS 419

BY

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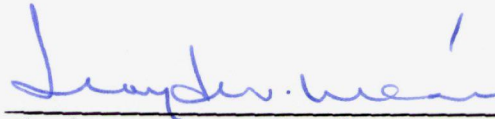
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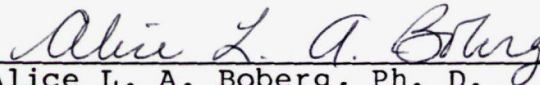
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Evaluative Study of the C-Group Component of EDPS 419," submitted by Steven James Osborne in partial fulfillment of the requirements for the degree of Master of Science.



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ABSTRACT

To date, teacher training programs have done little to facilitate the development of their students' communication and human relations skills. An exception to this rule is the Educational Psychology (EDPS) 419 "Communication Skills in Guidance" course offered as an option in the teacher training program at the University of Calgary. This study examined the largest component of that course, its communication or "C"-groups, in order to determine their effectiveness and efficiency in promoting course goals.

Evaluation of the C-groups consisted of an analysis of several outcome measures (skill scores, total scores, bonus points, final scores, and scores suggested by the academic staff), the results of a researcher designed questionnaire administered to the students, and the results of a faculty sponsored course evaluation (also completed by the students). Results were submitted to statistical analysis to determine if significant correlations existed and, where appropriate, to try to determine the strength and basis of relationships. A factor analysis of the skill scores was performed to determine if, in fact, separate and discernable skills were being scored. All results were examined for heuristic and informational value.

The results of this study indicate that improvements could be made to this course offering. Students remain confused at the end of the course about the distinctiveness of each skill, yet they also state that the skills used are both adequate and appropriate for their use. The grading system is shown to be in need of review since it provides highly skewed, poorly differentiated feedback for the students. The written feedback provided is shown to hold much more value for students and it is suggested that the time spent determining weekly skill scores could be put to better use. It is further suggested that better training of group observers would also enhance this process. The fairness of grading each student's lab performance is also put in doubt as it was noted that the student's group of membership accounts for a high proportion of the variation in outcome measures. The tendency of students to rate all aspects of their experience highly is also discussed.

In conclusion, this study provides support for the continued use of C-groups in EDPS 419 and provides suggestions for improving effectiveness and efficiency. The need for further research in the areas of group-specific values, group process, and long-term outcome is high-lighted.

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CHAPTER ONE

THE PROBLEM

From the all-important arms control talks of the super-powers to the day-to-day and minute-to-minute intercourse of parent and child one process has the power to determine our futures, that of interpersonal communication. Unless we wish to take leaps on faith and inference we cannot know the minds of other persons except through effective communication, and yet seemingly little is done in our formal educational institutions to develop this central life skill (Egan, 1977). We are taught to write and to think clearly, but rare is the lesson in empathic responding or active listening. Rather we are left to our own devices to learn, usually through haphazard trial and error in the all-too-often threatening environment of our daily lives, how "best" to communicate with others (Ellis & Whittington, 1981). In truth what we learn is how to survive the moment.

In Educational Psychology (EDPS) 419, "Communications Skills in Guidance", an attempt is made to take students beyond the level of "survival" in communication. Through both lecture and laboratory (Communication or "C"-group) formats these future teachers are asked to examine their styles of communication, those of their peers and of the

models provided. They are asked to experiment with various skills and styles and to consider the possibility of change -- change in the direction of effective, open communication. To facilitate this process, instructors and facilitators attempt to provide a safe environment, the C-group, in which students may give and receive feedback as they experiment with their interpersonal styles. Within the C-group an interactive, here-and-now process strongly resembling that of the classic T-group is maintained.

Group members are also provided with external, objective feedback and evaluation from a trained observer who, weekly or biweekly, rates each student on his or her use of the following communication skills:

- responsibility and initiative
- here-and-now orientation
- honest, supportive feedback
- concreteness
- non-defensiveness
- self-disclosure
- respect and listening
- empathic responding.

Along with these ratings the observer provides written comments describing the specific behaviours of students and suggesting alternatives for consideration. On completion of the course, each student is given a summative score on each skill as

well as up to eight bonus points to allow for other contributions made to the group.

The questions examined by this study arose from the model described above. In order to be consistent with the feedback model professed, it must first be asked if the feedback provided to the students is both effective and efficient. In other words, is the course administration providing the student with information he or she will find useful and, if so, are they doing so in an uncomplicated, understandable, and efficient way? It must also be asked if this feedback clearly and consistently relates to the stated course objectives and, finally, if there is room for improvement in either of these areas or in their relationship. It is hoped that by considering these questions as they relate to EDPS 419, lessons may be learned that could be applied to the use of T- or C-groups in other areas of academic or interpersonal learning.

DESCRIPTION OF C-GROUP LABORATORY METHOD:

Each C-group examined in this study was composed of between seven and ten students registered in the undergraduate course EDPS 419 and one facilitator, a graduate student completing a practicum course, EDPS 673, in group counselling. A simple empathy test was devised by the course instructor and administered to prescreen the students, who were then seeded in groups to assure heterogeneity of this skill for

each group. In addition, it was assured each group had at least one male member. The groups met for the first time during a short pretraining session with the group observer (also an EDPS 673 practicum student). The pretraining session took the form of a large group lecture/discussion during which the observers described the feedback model to be used and showed video-taped excerpts of previous C-groups. These excerpts were chosen to exemplify typical and/or ideal behaviour at various stages of group development. After the large group meeting the C-groups moved to their group rooms and were familiarized with the setting, with the taping facilities and procedures, and were given the opportunity to ask clarification questions of the observer. During this time the facilitator and a course supervisor (a graduate teaching assistant) observed the interaction from behind a one-way mirror.

For the next ten weeks each group met for an eighty minute session after which they were joined by the observer for twenty to forty minutes of focussed feedback. This feedback usually focussed on group or interpersonal process and was provided in such a way as to encourage interaction and discussion. After each lab the students were required to submit a completed Lab Report form (see Figure 1) to their group observer. This form could then be read by the observer, facilitator, supervisor, or instructor and served

as an additional check on the student's mood, perceptions, and concerns about the labs and fellow group members.

(Insert Figure 1 about here)

Initially biweekly, and later weekly, an evaluation form (see Figure 2) was completed by the observer for each group member and delivered to him or her.

(Insert Figure 2 about here)

Group members were also given the option of viewing videotapes of their groups' previous session(s) for the purpose of clarification of feedback or process. At the end of the course the observer prepared a summative evaluation for each student indicating achievement on each skill and providing written feedback on their performance. The facilitator/observer teams then conferred with their supervisor and with the course instructor to adjust the student's final scores so that between-group differences were appropriate (i.e. to minimize inter-evaluator effects). Finally, the teams assigned up to eight bonus points to each student reflecting perceived level of involvement, level of effort, and overall quality of contribution to the group's progress. Each of the eight skills were rated on a four-point

Figure 1: EDPS 419 Lab Report Form.

Name _____

Session No. _____

Overall, how would you rate this session. Indicate your answer by checking the appropriate space.

Very harmful	_____
Harmful	_____
Of no value	_____
Minimal value	_____
Of some use	_____
Very useful	_____
Extremely useful	_____

Take a moment to think about today's session. Can you briefly describe any events that happened to you which were really important. These may be good or bad. If possible, explain what made the event important.

- 1.
- 2.
- 3.

Were there any events which you feel stand out as being of major importance to another member. Briefly describe these.

- 1.
- 2.
- 3.
- 4.
- 5.

Figure 2: EDPS 419 Lab Evaluation Form.

Rating form for EDPS 419 Laboratory			
Student's name	Rater's name		
Facilitator's name	EDPS 419 Section		
Group time	Meeting No.		
The indicated point on the continuum best describes the student's skill in communication as demonstrated in today's group. The numbers 1-8 correspond to the behavioural objectives outlined on the C-Group goal sheet.			
1. Responsibility and Initiative			
1	2	3	4
2. Here-and-Now Orientation			
1	2	3	4
3. Supportive, Honest Feedback			
1	2	3	4
4. Concreteness			
1	2	3	4
5. Non-defensiveness			
1	2	3	4
6. Genuine Self-disclosure			
1	2	3	4
7. Respect, Listening Skills			
1	2	3	4
8. Empathic Responding			
1	2	3	4

scale for a possible total score of thirty-two and therefore the Final Lab Score, with bonus points, could total up to forty points. The remaining sixty points of the student's course grade were assigned to a midterm exam (20 points), a journal of the student's lab experience (30 points), and a final exam (10 points).

CHAPTER TWO

LITERATURE REVIEW

Bochner and Kelly (1974) have provided an excellent discussion and analysis of what they see as the historical evolutions (socio-cultural and environmental) leading to the present conditions of interpersonal communication. They suggest that an innate drive for interpersonal competence is most often thwarted and that, in fact, our present social climate facilitates interpersonal incompetence thereby inhibiting interpersonal functioning. If one accepts such a thesis and also that of Gazda, Asbury, Balzer, Childers, and Walters (1977) that, although "interaction, relation, and transaction" with others is the single most important aspect of our existence, many of our most difficult problems in living are interpersonal in nature, then it follows that it would be reasonable, desirable, commendable, and even inescapable that educators ought to be facilitating their student's development of ". . . the skills necessary for establishing and maintaining effective interpersonal relationships" (Gazda et al., 1977, p. 6). These skills are known as social skills, human relations skills, and most commonly as interpersonal skills.

INTERPERSONAL SKILL TRAINING:

The development of these skills involves behaviour change by the learner. Research has suggested that knowledge alone seldom produces significant changes in a person's behaviour (Dinkmeyer, 1971). Rather it has been suggested that for complete learning to occur the learner's cognitive and affective domains must be linked (Dinkmeyer, 1971; Oatley, 1980). In terms of interpersonal skill development, Buchanan (1971) suggests we go beyond factual knowledge of skills to a level of "affective expertise" wherein we gain the ability to understand and reflect another person's feelings and their meanings (i.e. empathize). Others, for example Saba (1975), believe that in order for people to achieve this ability they must first experience and understand their own feelings. The resultant self-awareness may be valuable in and of itself as it can lead to greater reality orientation and to better recognition of personal limits (Houts & Serber, 1972), and because it may allow for the valuable process of disconfirming one's "implicit theories" and for experiencing discrepancies from one's expectations (Oatley, 1980, p. 96).

Training in interpersonal skills must take these factors into account. It should facilitate cognitive and affective learning as well as the development of greater self-awareness by the student. It should, as pointed out by Bochner and Kelly (1974), ". . . have as its objective the development

of interpersonally competent individuals" (p. 286). The end products should be individuals who feel competent and in whom others can observe this competence (Bochner & Kelly, 1974).

Considering the wide range of possibilities, it is suprising how much agreement there is in the literature on just what skills ought to be learned, that is, on which skills comprise the core of interpersonal competence. From the broad terminology of Bochner and Kelly (1974) (empathic communication, descriptiveness, owning feelings and thoughts, self-disclosure, and behavioural flexibility) to the specific micro-skills of Gazda et al. (1977) this common core of skills recurs. They approximate Carkhuff's core conditions for effective counsellors (Conklin, 1975) as well as the eight skills used in Educational Psychology (EDPS) 419. The core consists of: empathic responding, self-disclosure, confrontation, genuineness, immediacy, respect, concreteness, and attending skills (see Egan, 1976, 1977; Ellis & Whittington, 1981; Gazda et al., 1977; Moracco, 1981; Morris & Cinnamon, 1976).

INTERPERSONAL SKILL TRAINING IN TEACHER EDUCATION:

A short quote from Combs (1970) connects interpersonal skill training and teacher education:

The overwhelming problems of our time are human problems. Their solutions depend upon effective human understanding and interaction. If America's schools

do not produce sensitive, compassionate, caring persons equipped to meet these problems, they will have failed all of us, students, parents, the nation itself. One promising movement aimed at achieving these ends is sensitivity education. (p. 235)

The facilitation of such learnings requires that teachers are themselves competent communicators and the need for the development of this competence through teacher training is well known (Saba, 1975). Moracco (1981) has cited the changing characteristics of our school populations, the effects of recent legislation on teachers and pupils (U.S.A.), the stresses of modern day living, a reconceptualization of the philisophical basis of education, and the research evidence indicating the effectiveness of human relations training in his call for more complete programs. Gazda (1972) takes a more forceful stance as he suggests that a mastery of human relations skills should be considered as essential in the training and development of teachers as is mastery of the academic subject matter. McLaughlin, Erickson, and Ellison (cited in Kogler Hill & Courtright, 1981) found in their study that ". . . affective communication skills were the main ingredient in effective teaching" (p. 217). Argyle (1969) has also cited studies concluding that socially competent teachers are more effective in teaching. These teacher's interpersonal skills facilitate their student's learning, help in classroom management, and ease professional

decision making (Cooper, 1985). Others have noted the benefits of communication skill training in maintaining classroom discipline and in providing positive role models for students (Gazda et al., 1977).

Gazda et al. (1977) noted in the conclusion of their study that three primary conditions must be met if a teacher is to be effective in facilitating the total growth and development of his or her students. These were 1) adequate preparation of the teacher in the subject matter to be taught, 2) the teacher must have a general knowledge of classroom techniques and learning theory, and 3) ". . .the teacher must have a well-developed repertory of interpersonal skills through which to establish, maintain, and promote effective interpersonal relationships in the classroom" (p. 7). Dinkmeyer (1971) adds his proposal that the first priority of teacher education be a concern for the "emerging self" of the student teacher, that these students must be provided with experiences in which they "encounter themselves, their feelings, attitudes, and perceptions" (p. 618). Such requirements might satisfy what Gazda et al. (1977) see as the broad purpose of education, the facilitation of integration of the student's total personality, an integration maximizing "knowledge and skill development for productive living" (p. 5).

The logic behind calls such as Moracco's and those from Ellis and Whittington (1981), Gazda (1972), Ottaway (1966), Rogers (1968), and Shapiro (1967) for increased use of human relations training in schools, colleges and universities is now quite apparent. There remains some confusion in the literature, however, as to the degree to which this call has been heeded. Despite such strong references, interpersonal skills training is included in only a very few teacher education programs (Moracco, 1981), lending support to Gazda et al.'s (1977) observation that teacher education programs have given insufficient attention to the human relations aspects of teaching. It should be noted that while there has been a growing emphasis in recent years toward inclusion of such training in teacher education programs (Pipes, Higgins, & McEwen, 1984) there remains much room for improvement. A short quote from Gazda (1972), suggests just how important such improvement might be:

The placing of very healthy teacher-models in all classrooms may be tantamount to a peaceful revolution and it may well prevent a more violent educational revolution which could destroy what is good about our current system. (p. 118)

There remains a vital question to be considered; How best do we facilitate the learning of these skills? Several factors must be taken into account. In learning these skills, students first must unlearn a great deal (Abercrombie, 1970).

They need repetitive practice to assimilate new behaviours (Houts & Serber, 1972), and they need the opportunity to explore, gain new perspectives and to act on those perspectives. They need instruction, practice, feedback, encouragement, and support (Egan, 1977). While lectures certainly have value in this process, hands-on practice is obviously called for (Carkhuff, Berenson, & Pierce, 1977). In designing such experiences facilitators should remember that they will most likely be effective when they combine cognitive appraisal with emotional experience (Yalom, 1975). A guiding maxim comes to us from the ancient Chinese:

I hear and I forget,

I see and I remember,

I do and I understand.

Donaldson and Scannell (1978) provide empirical support for this maxim. They report that humans remember five to ten percent of what they see, thirty to fifty percent of what they see and hear, fifty to seventy percent of what they say, and seventy to ninety percent of what they say and do. The very definition of the word 'skill' suggests the ability to use one's knowledge effectively and readily (Egan, 1977). With these points in mind a short examination of the value and use of small groups for interpersonal skill training is in order.

INTERPERSONAL SKILL TRAINING IN GROUPS:

While there are many programs available for the learning of interpersonal skills (including Kagan's Interpersonal Process Recall; Ivey's Microcounselling; Randolph, Howe, and Achterman's Modified Reflective Listening Technique; and Carkhuff's Human Resource Development) (Conklin, 1975), most make some use of the group training technology. In less structured forms small groups have ". . . provided the setting for the creation of personal change for many thousands of years", we are now, through research, simply making better use of the technology (Smith, 1980, p. 1). Studies have shown that active participation in discussion can have more influence on a given individual's behaviour than does attendance at a lecture (Abercrombie, 1970). Ottaway (1966) states that lectures alone are ineffective as a learning technique in the behavioural sciences and, while not unimportant, should serve only as an auxiliary aid in the learning of practical techniques. Bochner and Kelly (1974) echo part of this concern as they state their belief that individual behaviour change is produced by "active individual participation" in the learning process. Combined with Pyke and Neely's (1975) statement that communicator training ". . . must take place in a social context . . ." (p. 28) we readily see how Becvar (1974) arrived at the conclusion that the ideal forum for communication skill training is

the small group. Groups offer the possibility of massive reinforcement for the learner, thereby encouraging the steps of observation and experimentation necessary for affective and cognitive learning (Houts & Serber, 1972). Group process also holds the promise of teaching the learner how to continue to learn, an academic aim worthy of strong support (Abercrombie, 1970).

Although there is disagreement in the literature as to the origin of Training ("T-") Groups it seems likely they arose indirectly from early psychotherapy groups run by practitioners such as Slavson (in the 1930's) (Babington Smith, 1979) and Bion (in the 1940's and '50's) (Higgin, 1976). In Europe the Tavistock Institute, building on the ideas of Bion, began to use non-therapeutic groups after the second world war (Higgin, 1976) while in the United States, Leland Bradford and others were serendipitously developing the acknowledged fore-runner of the first "true" T-groups in Bethel, Maine (Babington Smith, 1979; Golembiewski & Blumberg, 1973; Lubin & Eddy, 1973; Yalom, 1975). From their experiences in 1946 Bradford and his colleagues organized the first Basic Skills Training (B.S.T.) group which ran in the summer of 1947. Egan (1970), described this new technology as ". . . the infant offspring of an adolescent science" (p. 4) while Lubin and Eddy (1973)

described it as the result of the ". . . wedding of social action and scientific inquiry" (p. 58).

Not unlike human offspring T-groups underwent a great deal of growth and development in their early years. Originally, T-groups were used only as a forum in which to carry out training under controlled conditions (Babington Smith, 1979). During the 1950's and 1960's, however, there came a "liberation movement" in the group world and a modified version of the T-group, the Sensitivity Training Lab, became the main form of experiential group (Cooper, 1976). These labs were non-specific in regard to any particular skill and soon their practical use had ". . . outrun both theoretical formulation and organized research" resulting in their being viewed rather suspiciously, even with hostility, by many behavioural scientists (Egan, 1970). Despite the controversy surrounding it this "fad-like phenomenon" grew to a "feverish peak" in the early 1970's and had become a part of the zeitgeist by 1976 (Mill, 1976).

During this development the Institute at Esalen in California became a principle source of innovation, the most notable being "encounter" or "personal growth" groups. Such groups went well beyond the original interpersonal focus of T-groups to focus more on intrapersonal phenomena (Higgin, 1976; Mill, 1976). Bioenergetic Analysis, Gestalt Therapy, Rolfing, Transcendental Meditation, and others took their

place on the stage beside the now conservative T-groups (still being run by the National Training Laboratories formed by Bradford et al.). The T-group and its descendants had become a multi-million dollar "buyer-beware" business and were in danger of losing all scientific credibility. Experiential groups began to be seen as no more than entertainment for their members (Houts & Serber, 1972) as authors such as Becvar (1974) began to report the transitory effects and minimal generalisation produced. T-groups maintaining the basic characteristics of creating a miniature society, emphasizing inquiry, exploration, and experimentation with behaviour, helping members learn, developing a psychologically safe environment, and allowing learners to determine their own learnings have, however, survived and grown (Brown, 1976).

In 1968 Carl Rogers stated that he believed the intensive group experience to be one of the ". . . most effective means yet discovered for facilitating constructive learning, growth, and change. . . ." More recently, Cooper (1979) stated:

For the present, the full potentialities of the T-group method have certainly not been worked out, although much research evidence is now available to support its use as a highly important method of enhancing self-awareness and awareness of the dynamics of group behaviour.
(p. 7)

With these points in mind the quick adaptation of T-groups for use in interpersonal skill training comes as no surprise.

Often called the Laboratory approach (Egan, 1977) this complex technology is well defined by Schein and Bennis (cited in Golembiewski & Blumberg, 1973):

. . .an educational strategy which is based primarily on the experiences generated in various social encounters by the learners themselves, and which aims to influence attitudes and develop competencies toward learning about human interactions. (pp. ix-x)

Portions of this definition are echoed by other authors as they note that, through experience, feedback, and experimentation small groups can help their members gain personal insight into social relationships, develop more effective behavioural skills (Berger & Harrison, 1976), and learn about the motives, feelings, and strategies behind their styles of relating (Bradford, Gibb, & Benne, 1964). Participants can also learn about the many forces at work in groups and can study their own performances in relation to those forces (Lubin & Eddy, 1973). They can improve their "quality of cognition" , "clarify their identity", and increase their self-esteem (Acklen, 1975; Golembiewski & Blumberg, 1973) In a small group members can extend their personal emotional experience, can practice new behaviours (Oatley, 1980), and can learn from their own experience rather than be taught someone else's (Abercrombie, 1970).

Of all these possibilities, the last is perhaps the most important. It is an implicit value, an unstated goal of the group approach to emancipate the student from the usual authority-dependency relationship, to help him or her develop his or her own intellectual and affective independence and maturity (Abercrombie, 1970, p. 5). Like the ancient Chinese, Abercrombie (1970) noted the advantage in ". . .facilitating the understanding, as distinct from the mere acceptance, of information -- in helping the students to comprehend it, grasp it, make it his own" (p. 8). Knowledge "about" (theoretical, second-hand), while valued, is secondary to knowledge "of" (experiencing, discovery) (Adair, 1979, p. 6). Such personalization can legitimize the student's feelings and thereby facilitate his or her experiencing, expressing, and examining of the emotional aspects of communication (Lubin & Eddy, 1973, p. 67) as well as increase their sense of agency in the learning process (Egan, 1970, p. 360).

Criticisms of the laboratory method generally fall into one of three categories; 1) those that note the laboratory method's heavy reliance upon emotional and behavioural processes rather than cognitive ones, thereby making it hard to communicate the experience to others, 2) those that document the minimal or negative experiences some members have in T-groups, and 3) those that focus on the differences between

the underlying value system of group training and that of the "dominant culture" (Golembiewski & Blumberg, 1973). Criticisms also suggest that individuals suffer because groups are geared to the "generalized needs of the majority member" and that learnings are more dependent on the dynamics of the method and the specific group than on the individual's personal and organisational learning needs (Berger & Harrison, 1976, p. 129).

Criticisms aside, most evaluative research has found that group training achieves its goals. Short term effects are consistently reported, trainees routinely express positive attitudes toward the experience, and both short and long term effects are "at least" as positive as most comparable interventions (Ellis & Whittington, 1981). Gosling, Miller, Turquet, and Woodhouse (1967), noted that intensive research on group functioning demonstrated that the group method was time efficient and effective for facilitating the learning of interpersonal skills. Persons in groups change in response to the feedback and models they have experienced (Lubin & Eddy, 1973). Though results are generally positive there are some disagreements in the literature as to just how positive changes have been and as to which changes ought to be measured. It seems, none-the-less, that results do provide substantial proof of both immediate and longer-term effects for group training (Smith, 1976). Group work does, apparently,

increase individual learning and comprehension of subject matter (Garrison, 1982), it is a "powerful medium" for change at many levels (Benne, Bradford, Gibb, & Lippit, 1975, p. 292) and can be "a most effective tool" (Levy, 1969, p. 160).

T-GROUPS IN TEACHER EDUCATION:

While Cooper (1979) suggests experiential learning groups have been one of the major educational innovations of the last thirty years, and Yalom (1975) notes Bradford (one of the central figures in the development of T-groups) always considered T-groups "part of a technology of education" (p. 463), there are few descriptions in the literature of their use in educational settings. This confusion is illustrated by the fact that while Abercrombie (1970) notes group methods are being used only "here-and-there" in University teaching (p. 16), others are noting an increase of such programs (Cooper, 1979; Golembiewski & Blumberg, 1973; Ottaway, 1966) and still others their prevalence (Brown, 1976). A short listing of the programs described in the literature may be of value at this point.

Carkhuff, Berenson, and Pierce (1977), and McGuire and Priestly (1981) outline courses used to teach interpersonal skills, the latter specifically to teachers, but neither course has at its core the small group method. Other authors describe the use of groups in teaching academic subjects (small group discussion) for "purely instructional purposes"

(Rudduck, 1978; Simons, Squires & Rudduck, 1976) while others note they use interpersonal skills, feedback, and group process alongside the academic material (for example in the teaching of preclinical medicine, genetics, and the German language) (Barnett, 1958). Examples of training with a more central focus on interpersonal skills and human relations are to be found at Indiana State University (Group Dynamics Laboratory) (Brown, 1976), Northeastern College in Chicago (Dinkmeyer, 1971), and at the University of Maryland (Baltimore County) (Calliotte, 1971). Most of these groups differ significantly from the EDPS 419 model and are not described in detail.

Of the models described in the literature that do approximate the EDPS 419 model, Kogler Hill's (1981) description of the interpersonal communication course at Cleveland State University is perhaps the closest match. She describes a lecture/laboratory combination used to train 1300 students per year in the skills of empathy, concreteness, self-disclosure, owning feelings, and behavioural flexibility. Abercrombie (1970), Banks (1978), Golembiewski and Blumberg (1973), Grossman and Clark (1973), and Kogler Hill and Courtright (1981), also describe courses similar to EDPS 419 with the latter three being courses specifically geared to teacher education. An increase in the number of such courses offered might be expected soon if other governments follow the lead of those in Georgia, Iowa,

Wisconsin, and Minnesota who now all require by law that teacher education programs include human relations training (Moracco, 1981). Persons interested in developing such courses at the university level may wish to refer to Conklin (1975) or Katz (1973).

The paucity of interpersonal skill courses for future teachers pales in comparison to that of evaluations of such courses. While studies have been made of the use of T-groups in the training of teachers (Ottaway, 1966) few have been reported in the literature. Most of the published studies report, at best, inconclusive results. Blackburn (1976) has examined the results of Minnesota's mandatory human relations training program on the attitude of teachers and found no differences resulted from such training in terms of the creation of a positive learning environment or the respect of human diversity. He did find some improvement in the ability of trained teachers to identify and deal with discrimination. Smith's (1976) research has suggested that student groups may have more problems to cope with if they are to have a positive outcome and that these groups seem to have a higher incidence of adverse effects (nine percent for students as compared to only one percent for groups of professionals). He was quick to note, however, that better controlled studies were still needed. In his control group study, Webb (1970) found group training to

have no significant effects on either the effectiveness or competence of his subjects (teachers).

Other studies have provided positive results, including that of Rogers (1968) in teacher education. Most of these studies found that students improved their relationships and competence in the classroom (Shapiro & Shiflett, 1974), and that trained teachers also benefitted in the area of classroom control (Griepenstroh & Miskel, 1976). Marshall (1970) notes that:

Sensitivity training may not keep the juniors from behaving as too many teachers have always behaved, but perhaps they will not enjoy it so much. (p. 253)

Robinson and Wilson (1985) concluded that their human relations training model was a useful tool in inservice education. They noted it provided increased facilitation skills for their subjects (teachers) regardless of personal characteristics such as age, sex, race, years of experience, and educational level. Acklen's (1975) study also adds support to the movement to include affective education in teacher education programs.

Many recommendations have been made as a result of the evaluative studies completed to date, the most common of these being that more studies be made. Ottaway (1966) and Saba (1975) have both suggested that human relations training be carried out as early as possible in teacher training

programs so that pre-screening might eliminate problems before students enter a classroom as a teacher and so that they might do some "self-selection" using the feedback they received in their groups. Saba (1975) suggests this early training be augmented by a full program in human relations that would run the length of the teacher training program and beyond (to include inservice follow-ups). Rogers (1968) suggests that pervasive use of the group method might change the entire educational system for the better, though as pointed out by Simons, Squires, and Rudduck (1976) there may be much conflict in the early stages of such a program when so-called "co-operative" groups are run in the all-too-often competitive climate of our current educational system.

The confusion and lack of evaluative studies of interpersonal skill or human relations training programs (Cooper, 1979; Pipes, Higgins, & McEwen, 1984; Stanford, 1973) warrants further examination. What is the value of such studies? What are their purposes and goals? What methods are available for such studies? What effects does evaluation have on the participants and process of training groups?

EVALUATION OF GROUP TRAINING:

Evaluation can be carried out to test the effectiveness of a program and/or to facilitate improvement of that program (Fink & Kosecoff, 1978). The four generally accepted parts

of evaluation involve measuring 1) the reaction of participants to the program, 2) their learnings and 3) their behavioural change as well as 4) assessing the results of the program (i.e. were the proposed objectives met) (Donaldson & Scannell, 1978). Glaser (1962) lists seven types of measures available for evaluation; 1) the solicitation of opinion, 2) administration of attitude scales, 3) measurement of knowledge, 4) elicitation of related behaviour, 5) elicitation of "What would I do" behaviour, 6) elicitation of life-like behaviour, and 7) observation of real-life behaviour. These steps provide feedback that may then be used to modify the program and, hopefully, improve its effectiveness (Coche, 1983; Cooper, 1979).

Since instruction can either improve or worsen a learner's competence (Bochner & Kelly, 1974) and if ". . . the ultimate test of success is, after all, whether the participant has improved. . ." on the appropriate criteria then some form of evaluation must be carried out (Coche, 1983). Coche (1983) points out, in his call for formal evaluation in group psychotherapy, that this task can provide much information of value to all parties concerned. Feedback can be provided to the facilitator that may enhance his or her self-esteem, respectability, and credibility as a practitioner or, as with other group members, that may provide a basis for self-evaluation and subsequent learning, change,

and growth (Borman & Borman, 1980; Coche, 1983). Evaluation research may be considered to be a necessary sub-process of the action-feedback-action dynamic that is characteristic of the laboratory method (Chin, 1975).

Most studies have examined only the short-term effectiveness of group training (Pipes, Higgins, & McEwen, 1984) and, when completed, often rely heavily on participant feeling and reaction for evaluative data (Conklin, 1975). Calls have been made for a significant portion of evaluation (and assessment) to be based instead upon direct behavioural measurement (Bochner & Kelly, 1974). Towards this end Blake and Mouton (1962) point out that it is possible to apply "measurement yardsticks" to interaction processes. They note that feelings and perceptions can be measured and that this is of great significance in increasing the effectiveness of group training (p. 69). Abercrombie (1970) suggests that the quantification of this data would allow for more research to be completed and for researchers to look beyond simple measures such as that of "factual material learned". The value of objective, quantifiable measurement is high-lighted again by Golembiewski and Blumberg (1973) who note that defensive climates are characterized by evaluation while supportive climates emphasize description (p. 102). Such data can also replace or augment more subjective forms of feedback for group participants thereby reducing the

judgmental nature of that feedback, a process Sharan and Sharan (1976) believe is much needed and which Blake and Mouton (1962) have noted can enhance participant learning.

If they hold so much promise, why then are so few evaluative studies of the laboratory method completed? Belasco and Trice (1969) suggest one possibility:

Of all the scholarly activities one can engage in, probably the least popular is that of evaluation. The need for evaluation is universally accepted at the cognitive level (but). . . In short, although a conscience is necessary, no one wants one that plagues him too closely. (p. v)

Lakin (1972) focuses the problem in the area of group training:

Most researchers and most trainers view research as an academic intrusion upon an experience which is really quite personal. Before-and-after type tests are resisted because of the intense personal emotional involvement. This may reflect a somewhat antirational ambience which for some is associated with therapy-like experiences. During the experience of training, thinking and planning may seem to some individuals as if strategic considerations are made too important in relationships. They want to be free to really 'let go', and resent the need to think in other than personal terms about their experiences. As these views interact with the dynamics of the group itself they determine the individuals attitudes toward attempts to objectify his experiences. The uncomfortable relationship between participant and researcher, based upon their differences in perspective, often leads to incomplete data collection. The same emotional factors which facilitate group cohesion generate attitudes of coolness, even distrust and hostility

toward outsiders. In the training situation this means members of other groups and ancillary staff. (p. 204)

Other authors have echoed the concerns of Lakin in noting that students may 'play it safe' rather than be "creatively exploratory" when they know their contributions are being assessed (Simons, Squires & Rudduck, 1976), that risk taking is more likely to occur in a safe environment and that assessment may threaten that safety (Rudduck, 1978). Groups can become much more difficult to facilitate (Ottaway, 1966) and final results may prove to be detrimental to the entire lab group (Bretherick, 1977). Although a "confusing multitude" of instruments are available for outcome evaluation (Coche, 1983) their use may in fact be detrimental to the group. Woodhouse (1967) notes in his study, however, that while some anxiety was produced by evaluation it had no measured repercussions. It has also been stated that assessment of skills may be difficult by any means without a stronger paradigm on which to base the measurements (Bochner & Kelly, 1974).

In order to carry out program evaluation, outcomes assessed ought to logically relate to the prespecified objectives of the program. Ideally, the effectiveness of the program is measured by the degree to which individual, behaviourally phrased, pre-determined goals have been reached (Coche, 1983). Unfortunately, objectives of interpersonal

skill training programs are frequently stated in vague and general terms (Conklin, 1975; Smith, 1976), hence one of the most common calls for improvements in such programs is that for clearer, behaviourally phrased objectives (Abercrombie, 1970; Houts & Serber, 1972). When such goals are clearly stated they are reported to have desirable effects (Knutson, Wheelless & Divers, 1977, p. 337). Measurement of goal or objective attainment can take many forms. These include the use of instruments (for example knowledge tests, psychological tests, or behavioural checklists), the use of peer, trainer, observer, or self-ratings.

The instrument most commonly used for group program evaluations is the questionnaire (Donaldson & Scannell, 1978). Examples of its use may be found in the studies of Abercrombie (1970), Oates (1971), and Todd (1981). Though best suited for knowledge assessment (Bochner & Kelly, 1974) paper-and-pencil tests (the second most popular evaluation instrument) can also be used for skill assessment (Carkhuff, Berenson & Pierce, 1977). Psychological tests such as the M.M.P.I., Adjective Checklist, the Rorschach and others have also been used to monitor outcome of small groups (eg. Coche, 1983). Blake and Mouton (1962) describe an extreme in the use of instruments for assessment. In their model the trainer is replaced by a series of self-administered instruments which serve to generate feedback for the participant. This

example also demonstrates the common practice of using combinations of instruments for assessment.

Although used quite commonly (for example by Dalton, 1983; Woodhouse, 1967), assessment by the facilitator or trainer has a number of inherent problems. The trainer's comments may be seen as oracular or even "delphic" and hence may be accepted without question by participants (Gosling & Turquet, 1967). In Kogler Hill and Courtright's (1981) study lab grades, assigned by the group facilitators (on the basis of effort, participation, logs/diaries, commitment/support, and attendance), were used as outcome measures with apparent success. One must wonder if the findings from studies of participant-observers as raters would also apply to facilitators as raters. In their study Borman and Borman (1980) found that participant-observers were poor evaluators as they were too close to the group situation and, further, that their evaluations usually produced "social tensions" in the group. They note one alternative may be the use of a non-participant observer. These persons are said to provide a more balanced evaluation that is more likely to be taken at face value by the group members. These observers can provide both direct feedback and, later, evaluation for the group (Bochner & Kelly, 1974). They can aid the group by focussing on the group's process and then describing it, critically evaluating it, and by making recommendations for

change to the group (Borman & Borman, 1980). A further option for in-group evaluation/assessment is the use of peer ratings or rankings (Bochner & Kelly, 1974). Blake and Mouton (1962), for example, had the participants in their study rank one another (from 'most to least') on various aspects of personal behaviour and then provided the mean rank as feedback to each participant (p. 68).

Perhaps the most controversial form of evaluation/assessment is the use of participant self-ratings. Lakin (1972) notes that most evidence of the effectiveness of training comes from self-reports. Criticism of this approach is well exemplified by Coche (1983) who states that self-reports of either great or little improvement are often not borne out by objective behavioural observation. Lakin (1972) noted in his study that participants reported more change in themselves than did those who observed them, yet he maintains that the self-report is a useful "learning and focussing aid" (p. 197). While cautioning that claims for the value of sensitivity training groups cannot be justified solely on the basis of self-reports (especially as the area of significance is interpersonal rather than solely individual), he adds that they should not be discarded entirely. A more conservative approach, he suggests, of using such measures only as indicators of the direction of

learning and of maximizing their utility through concurrent use of other, less subjective measures would be wise (p. 198).

There remains, then, a diversity of opinion on this matter ranging from that of Bochner and Kelly (1974) (that we should not use self-reports at all) through that of Sharan and Sharan (1976) who state that only the learner can determine if they have achieved their goals, and of Abercrombie (1970) who calls for an increased use of self evaluation (p. 12) to that of Palmer (1979) who states:

The immediate test of the usefulness of the course remains the personal assessment of those who take part. (p. 57)

There may at least be agreement on Golembiewski and Blumberg's (1973) point that:

Whatever the laboratory approach helps us to learn, that is, its ultimate payoff inheres in whether or not it improves the quality of life of the learner and of those inside his lifespace. (p. xi)

This final quote raises one final issue, that of learning transfer. Although argued that the final utility of a training program must be measured in terms of transfer to real life, very little is in fact known about transfer from group training (Ellis & Whittington, 1981, p. 151) and the lack of research in this area is commonly criticized (Todd, 1981). In contrast to previously cited studies (eg. Smith, 1976), Smith (1980) has suggested that change resulting from group training fades

out substantially in subsequent months (p. 46). Again the need for more study is high-lighted.

CHAPTER THREE

METHODOLOGY

In order to allow for a maximum return of learning a flexible, emergent approach to this study was taken from its very inception. Initial research questions were stated in broad, exploratory terms and were refined and built upon as the data were collected. It was expected that such an approach would provide leads for fruitful research and analysis as well as the working room in which to follow those leads. Initial questions dealt with the feedback being provided for the 106 students of Educational Psychology (EDPS) 419 and with the relationship between this feedback and the stated course objectives. It was asked if there was room for improvement in these areas in terms of effectiveness and efficiency. This chapter will report the methodology of the study from initial data collection through to final statistical analyses.

The final grades and ratings assigned to each student were treated as one measure of the effectiveness of the C-groups. The first step taken therefore involved the collection and analysis of all data descriptive of the group members final academic standing for the group component of both the Fall and Winter sections of EDPS 419. Each student

was assigned an identification number, coded for sex and group membership, so that all names could subsequently be deleted from the researcher's records.

As indicated in an earlier section of this paper, each student was given a final rating (from one to four points) on each of the eight communication skills (responsibility and initiative, here-and-now orientation, honest and supportive feedback, concreteness, nondefensiveness, genuine self-disclosure, respect and listening skills, and empathic responding). These ratings were then totalled (maximum total of thirty-two points) and, as there were different observers for each of the six groups, each with his or her own grading bias, this total was then adjusted by the supervisory team (group facilitator, observer, supervisor, and course instructor) in an attempt to minimize inter-rater effects. The number of bonus points awarded to each student was also recorded and a "Final Lab Score" (adjusted skills total plus bonus points) calculated. Descriptive statistics were prepared for all of the above mentioned measures using the Statistical Package for the Social Sciences' (S.P.S.S.) "condescriptive" facility (Nie, Hadlai-Hull, Jenkins, Steinbrenner, & Bent, 1975).

In an attempt to clarify the nature, value, and results of this rather complex grading procedure a number of rankings were determined. First, students were ranked by adjusted

total within their section (Fall or Winter) and within the study population (Fall and Winter combined). An average or "mean" rank was then calculated for each lab group (Winter term only) and the groups ranked by this measure. Second, in both semesters the course instructor was asked, as the only person observing all groups, to rank each group member within his or her group on the basis of ability to "communicate effectively". Further, the instructor was asked to assign each student a score (out of one hundred) indicating achievement of this ability. This score provided common ground for comparison of members of different groups and was also used as an outcome measure. Each supervisor, facilitator, and observer was then asked to complete this same procedure, before assigning final grades, for his or her groups only. These rankings and scores could then be compared and inferences drawn about both the student in question and about the proclivities of raters performing different roles within the course.

In order to assess the impact of bonus points on a student's rank in the class, rankings based on the adjusted total and on the Final Lab Score were derived and compared. Finally, because the group mean ranks were very diverse (suggesting the possibility of some system-level bias in grading) two further S.P.S.S. analyses were performed. 1) Several one-way analyses of variance were performed to

determine if rater bias or scoring procedures may have significantly effected the student's final grade. 2) A discriminant analysis was performed on data from the top- and bottom-ranked groups to determine in what ways they might be differentiated. These differences were then examined for their potential to be reduced, eliminated, or otherwise manipulated in future course offerings in such a way as to promote student achievement. These analyses were also the first to use data from the EDPS 419 Questionnaire.

THE QUESTIONNAIRE:

A twenty-one item exploratory questionnaire was developed for this study to elicit written feedback from the group members of the Winter term of EDPS 419 (see Figure 7 in Chapter 4). The questionnaire focussed on evaluation of the group component in terms of its structure, execution, and processes, and on the students' perceptions of their own growth and achievement throughout the course. Forced-choice and open-ended questions were used, with the majority of questions calling for both a forced-choice (quantified) response (Yes/No or 7-point Likert scale) and clarifying remarks. The items were developed by the investigator after a pre-analysis of the Fall-term data and with a view to minimizing any duplication of effort vis a vis the Faculty of Education Course Evaluation (see below). The questionnaire was completed by fifty-three of the fifty-six

Winter term students several days after their tenth (final) lab session. Descriptive statistics were completed for all quantifiable data, rankings were calculated where appropriate, and all results were examined for informative and heuristic value. Comments made were reviewed, grouped and illustrative examples were chosen for each question.

ADDITIONAL ANALYSES:

At this time several correlation analyses were also performed using the "Pearson corr" facility of S.P.S.S.. Correlations between sex and selected variables were examined to determine if the student's gender may have played a role in the determination of grades or in the student's evaluations and perceptions of the group experience. Scores on the individual communication skills were tested for intercorrelation and for correlation with selected variables to determine if 1) the skills were independently rated and 2) if specific skills might correlate more or less strongly than others with outcome measures. Because of the minimal differentiation and high inter-correlation of communication skill scores obtained, a factor analysis (S.P.S.S.) of these scores was employed to determine if, in fact, separate and discernable skills were being rated or if there were perhaps more basic, underlying constructs influencing all scores.

The degree of correlation between the various measures of outcome (Instructor's Score, Final Lab Score, Self-assigned

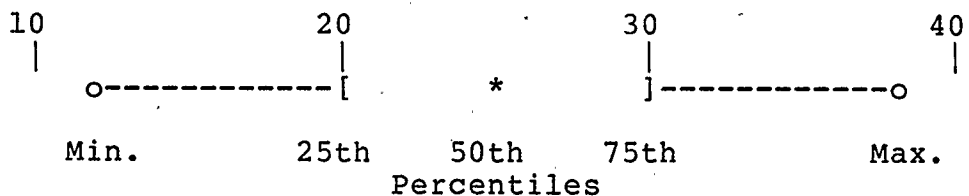
Score, etc.) was checked to determine unity of perception between the various raters (including the student). Outcome measures were also checked for correlation with selected variables measured by the questionnaire to determine if specific outcomes might have certain correlates which, in turn, might be open to manipulation in such a way as to enhance the learning opportunities for future students.

Finally, the results from a course evaluation completed by Winter term students for the Faculty of Education were obtained and reviewed. These results had already been submitted to statistical analysis by the Faculty and were reported in context with other faculty offerings (see Figure 8 in Chapter 4).

CHAPTER FOUR

RESULTS

Summary statistics descriptive of the final standing of all 106 students in the Fall and Winter sections of Educational Psychology (EDPS) 419 are provided in Figures 3 and 4. Modified box and whisker plots (Tukey, 1977; Velleman & Hoaglin, 1981) of the data are used in these figures (and in Figures 5 through 7) to schematically display, on an appropriate scale for each variable, the range of values, clustering of values, degree of homogeneity, and the presence of outliers. Each plot indicates the 50th percentile with an asterisk, the range from the 25th to the 75th percentile with a box, the extreme values (high and low) with two circles, and the complete range with whiskers joining these circles. An illustration of the box and whisker plot is shown below:



(Insert Figures 3 and 4 about here)

Figure 3: Box and Whisker Plots of Final Skill Scores for Fall and Winter Sections of EDPS 419.

VARIABLE	MEAN	S.D.	PERCENTILES			MIN	MAX	PLOTS			
			25th	50th	75th			1	2	3	4
Responsibility and Initiative	3.1	.54	2.8	3.0	3.5	1.0	4.0	0-----		*-----	0
Here-and-Now Orientation	3.1	.63	2.8	3.0	3.5	1.0	4.0	0-----		*-----	0
Honest, Supportive Feedback	3.2	.58	2.8	3.0	3.5	1.0	4.0	0-----		*-----	0
Concreteness	3.1	.60	2.8	3.0	3.5	1.0	4.0	0-----		*-----	0
Non-defensiveness	3.0	.65	2.8	3.0	3.5	1.0	4.0	0-----		*-----	0
Genuine Self-disclosure	3.2	.56	3.0	3.3	3.5	1.0	4.0	0-----		*-----	0
Respect, Listening Skills	3.2	.55	3.0	3.2	3.5	1.0	4.0	0-----		*-----	0
Empathic Responding	2.8	.64	2.5	3.0	3.0	1.0	4.0	0-----		*-----	0

Fall n = 50, Winter n = 53. Total n = 103.

Figure 4: Box and Whisker Plots of Outcome Variable Statistics for Fall and Winter Sections of EDPS 419.

VARIABLES	MEAN	S.D.	PERCENTILES			MIN	MAX	PLOTS				
			25th	50th	75th			0	8	16	24	32
Total Skill Score	24.7	4.1	22.6	25.0	27.5	8.0	32.0					
Adjusted Skill Score	24.3	3.9	22.0	25.0	27.0	8.0	32.0	0-----	[	*	]	-----0
Instructor's Score	66.8	13.1	60.0	68.0	75.0	10.0	95.0					
Supervisor's Score	71.4	15.2	62.0	74.0	82.0	10.0	95.0	0-----	[	*	]	-----0
Observer's Score	71.9	16.3	65.0	75.0	83.0	10.0	98.0	0-----	[	*	]	-----0
Facilitator's Score	73.4	14.4	65.0	75.0	85.0	10.0	95.0	0-----	[	*	]	-----0
Bonus Points Awarded	4.9	1.6	4.0	5.0	6.0	0.0	8.0					
Final Lab Score	29.3	5.2	26.0	30.0	33.0	10.0	39.0	0-----	[	*	]	-----0

Fall n = 50, Winter n = 53. Total n = 103.

These results demonstrate minimal differentiation in the communication skill scores obtained, with their means ranging from 2.8 to 3.2 on a four-point scale, and a maximum standard deviation of .66. The Total Scores obtained, though ranging from 8 through 32 of a possible 32 points, were quite negatively skewed (-1.149) and had a standard deviation of 4.1. The Adjusted Skills Totals differed little from this pattern (Skewness = -1.086). Scores assigned by the instructor, supervisor, observer, and facilitator were highly skewed with the instructor providing the lowest mean score (67.1) and the facilitators the highest (73.4). The addition of bonus points (mean = 4.9) to the Adjusted Skills Total provided a Final Lab Score with a mean of 29.2 of a possible 40 points, a standard deviation of 5.2 and somewhat less of a negative skew ($-.820$).

Figures 5 and 6 provide a similar breakdown of outcome measures for the Winter term students only.

(Insert Figures 5 and 6 about here)

Isolation of this data changes the pattern of results very little, though less skewness is seen in most score distributions (eg. Total Score, scores assigned by instructor, etc.). A Group Mean Rank (the mean of all Adjusted

Figure 5: Box and Whisker Plots of Final Skill Scores for Winter Section of EDPS 419.

VARIABLE	MEAN	S.D.	PERCENTILES			MIN	MAX	PLOTS			
			25th	50th	75th			1	2	3	4
Responsibility and Initiative	3.2	.54	2.9	3.0	3.6	2.0	4.0				
Here-and-Now Orientation	3.1	.54	2.9	3.0	3.6	2.0	4.0		0-----	[*]-----	0
Honest, Supportive Feedback	3.4	.52	3.0	3.4	3.8	1.8	4.0		0-----	[*]-----	0
Concreteness	3.2	.59	2.8	3.2	3.7	1.8	4.0		0-----	[*]-----	0
Non-defensiveness	3.0	.71	2.8	3.0	3.5	1.0	4.0	0-----	[*]-----		0
Genuine Self-disclosure	3.4	.48	3.0	3.5	3.6	2.3	4.0		0-----	[*]-----	0
Respect, Listening Skills	3.3	.48	3.0	3.2	3.5	1.8	4.0		0-----	[*]-----	0
Empathic Responding	2.9	.64	2.5	3.0	3.3	1.0	4.0	0-----	[*]-----		0

n = 53.

Figure 6: Box and Whisker Plots of Outcome Variable Statistics for Winter Section of EDPS 419.

VARIABLE	MEAN	S.D.	PERCENTILES			MIN	MAX	PLOTS				
			25th	50th	75th			0	8	16	24	32
Total Skill Score	25.4	3.9	23.6	25.8	28.2	14.7	32.0					
Adjusted Skill Score	25.0	3.4	23.0	25.0	28.0	18.0	31.0			0-----[*]-----0		
Instructor's Score	68.5	10.0	62.0	70.0	75.0	40.0	85.0					
Supervisor's Score	71.6	12.2	62.0	73.5	80.0	45.0	95.0			0-----[*]-----0		
Observer's Score	75.3	11.1	65.0	76.0	85.0	50.0	98.0			0-----[*]-----0		
Facilitator's Score	76.2	10.0	68.0	75.0	85.0	60.0	92.0			0-----[*]-----0		
Bonus Points Awarded	5.3	1.5	4.0	5.0	6.0	2.0	8.0					
Final Lab Score	30.6	4.6	27.0	31.0	34.0	22.0	39.0					

n = 53.

Skill Score ranks of a group's members) is reported in Table I, for each of the Winter term groups. Large differences in these ranks are apparent.

(Insert Table I about here)

THE QUESTIONNAIRE:

Data derived from the EDPS 419 Questionnaire are statistically summarized in Figure 7. These data are from the Winter section only, with 53 of 56 students responding.

(Insert Figure 7 about here)

Item 1 sought to determine the degree to which students valued the preparation offered by the pretraining session. With a mean of only 3.3 on a 7 point Likert-type scale there is evidence that the session was valued only minimally by most students. No comments were proffered by the students for this item.

Item 2 examined the various forms of feedback offered to the students. Response to this item indicated a definite trend toward valuing the feedback of fellow group members over that from other sources. The observers written comments (on the evaluation forms) were ranked second in importance

TABLE I
WINTER TERM GROUP MEAN RANKS
FOR ADJUSTED SKILL SCORES

Group	n	Mean	Standard Deviation	Range	Rank
1	8	26.3	15.2	(3 - 49) 46	3
2	10	43.4	10.5	(24 - 53) 29	6
3	10	8.1	5.9	(1 - 16) 15	1
4	10	32.6	16.5	(3 - 55) 52	5
5	8	21.1	9.1	(8 - 32) 24	2
6	10	26.4	12.8	(3 - 43) 40	4

Figure 7 : EDPS 419 Questionnaire and Results.

Ed.Ps. 419 Course Evaluation

****Please feel free to add written comments where you wish.****

Any Questions? Call Steve at _____ (days) or _____ (eves)

First name _____

Date _____

Group number _____

1. To what extent do you believe the pretraining session prepared you for your group experience?

Not at all	1	2	3	4	5	6	7	Very much		
									Mean = 3.3	Percentiles;
	0-----[		*						S.D. = 1.3	25th = 2.0
									Min. = 1	50th = 3.0
									Max. = 6	75th = 4.0

2. During the course you have received many forms of feedback. Please rank the following types of feedback in order of their importance to you (#1 = most important).

4.3 Evaluation/feedback forms (scores) COMMENTS:

2.9 Evaluation/feedback forms (written comments)

3.1 Feedback from the facilitator

3.5 Feedback from the observer

2.3 Feedback from group members

4.6 Viewing the videotapes

N/A Other?

3. How much personal growth do you believe you have experienced as a result of this course? Please comment on the factors to which you attribute that growth.

None at all	1	2	3	4	5	6	7	A great deal		
									Mean = 5.5	Percentiles;
	0-----[					*			S.D. = 1.1	25th = 5.0
									Min. = 1	50th = 6.0
									Max. = 7	75th = 6.0

4. Were you ever concerned for your own psychological safety in the laboratory sessions? For other's? Please describe;

Yes = 27 No = 26

5. How effective was this course, in your opinion, in facilitating your learning of the communication skills?

Not at all	1	2	3	4	5	6	7	Very effective		
									Mean = 5.6	Percentiles;
	0-----[					*			S.D. = 1.2	25th = 5.0
									Min. = 2	50th = 6.0
									Max. = 7	75th = 6.0

6. Were there any important or "key" events that greatly affected your learning in the lab sessions? In the course in general? Please describe;

Yes = 43 No = 6 Omit = 4

Figure 7 (Continued): EDPS 419 Questionnaire and Results.

7. Do you believe that at any time during the course you "suddenly" acquired insight or skills? At what point? Please describe;

Yes = 28 No = 25

8. How often have you been able to make use of learnings from this course in other settings? Please describe;

Never								All the time	
	1	2	3	4	5	6	7		
	0-----[*]-----0								
								Mean = 5.2	Percentiles;
								S.D. = 1.3	25th = 5.0
								Min. = 2	50th = 5.0
								Max. = 7	75th = 6.0

9. Please list your fellow group members in order of perceived personal growth (#1 being the person you believe grew the most);

1. _____ COMMENTS;
 2. _____
 3. _____
 (etc.)

10. How much did the group experience increase your understanding of the concepts and principles of inter-personal communications?

Not at all								A great deal	
	1	2	3	4	5	6	7		
	0-----[*]-----0								
								Mean = 5.8	Percentiles;
								S.D. = 1.1	25th = 5.0
								Min. = 3	50th = 6.0
								Max. = 7	75th = 6.0

11. On the scales below, please indicate with a circle ("O") your perception of your starting (initial) skill levels.

12. On the same scales, please indicate with an "X" the skill level you feel you have now attained. (i.e. final ratings).

1. Responsibility and Initiative

1 ----- 2 ----- 3 ----- 4					
	1	2	3	4	
Initial (I)	0-----[*]-----0				
Final (F)	0-----[*]-----0				
					I / F Mean = 2.4 / 3.5 S.D. = .7 / .5 Min. = 1.0 / 2.1 Max. = 4.0 / 4.0
					Percentiles; 25th = 2.0 / 3.1 50th = 2.5 / 3.6 75th = 3.0 / 4.0

2. Here-and-Now Orientation

1 ----- 2 ----- 3 ----- 4					
	1	2	3	4	
Initial (I)	0-----[*]-----0				
Final (F)	0-----[*]-----0				
					I / F Mean = 2.2 / 3.4 S.D. = .7 / .5 Min. = 1.0 / 2.1 Max. = 4.0 / 4.0
					Percentiles; 25th = 1.8 / 3.0 50th = 2.0 / 3.5 75th = 2.6 / 3.9

Figure 7 (Continued): EDPS 419 Questionnaire and Results.

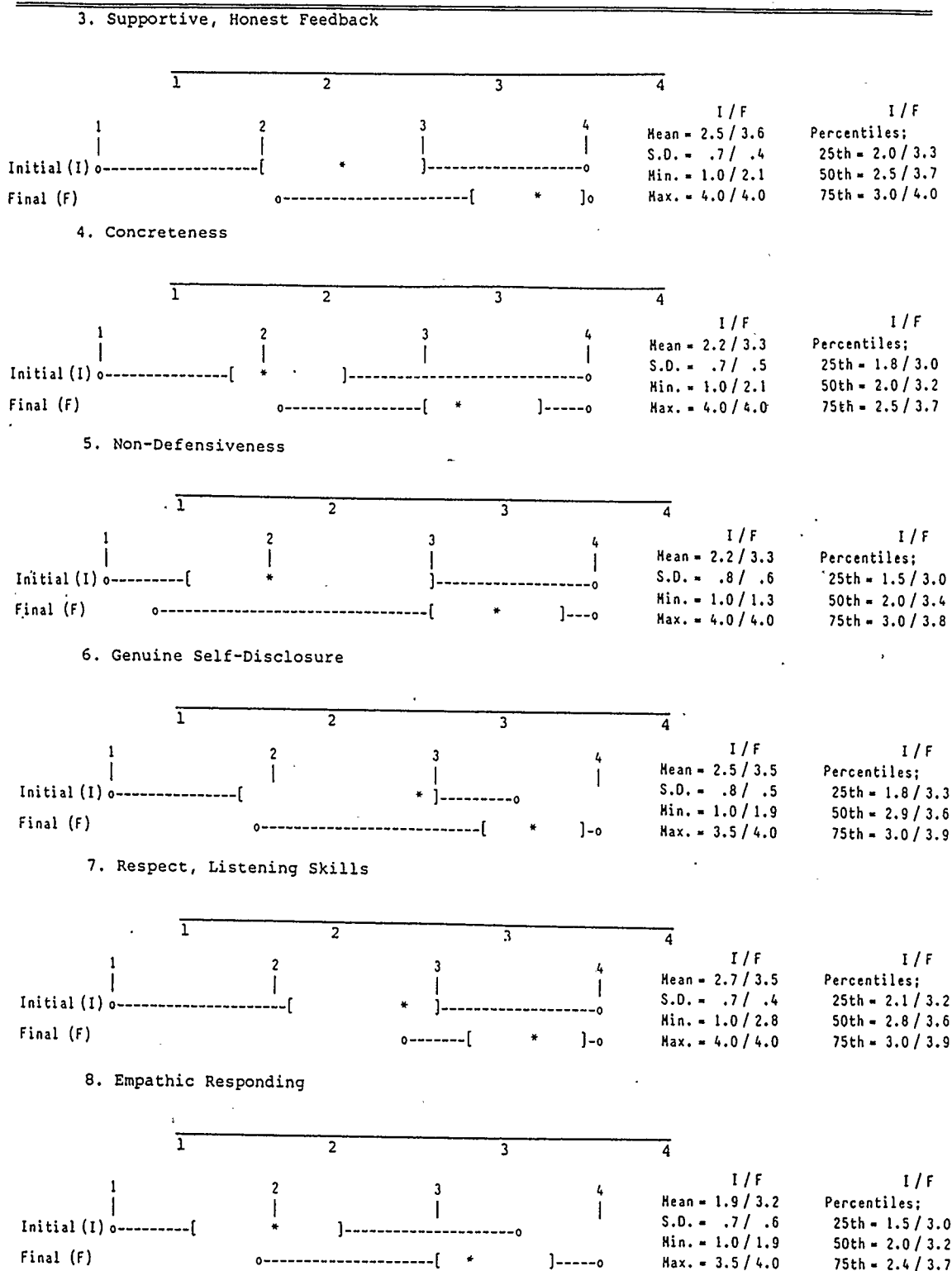
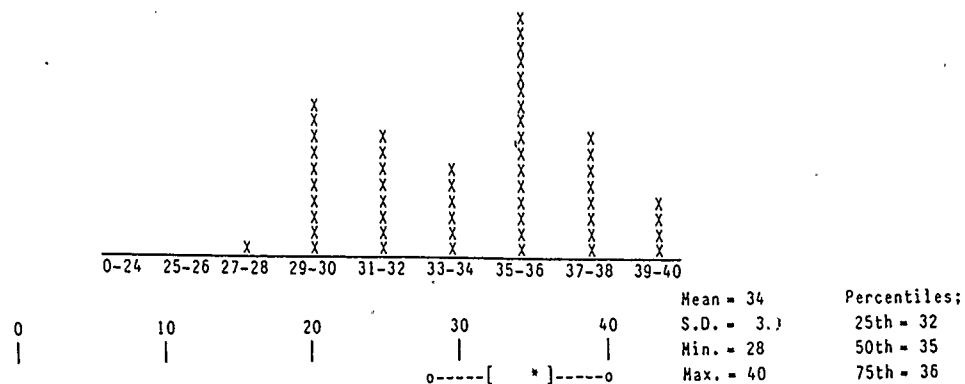


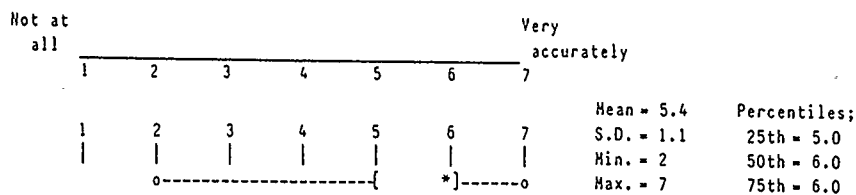
Figure 7 (Continued): EDPS 419 Questionnaire and Results.

13. If you were giving yourself your final lab grade, what would it be?

"I would give myself ____/40 points" Comments?



14. How accurately do you believe the lab evaluation/feedback forms, as completed by your observer, reflected your learning and effort in this course? Comments?



15. How might the observer-to-group feedback process be improved?

16. Eight communication skills are listed below. Please rank these skills in terms of your perception of their importance for effective communication (Rank 1-8, with #1 being the most important).

4.8 Responsibility and Initiative

6.1 Here-and-Now Orientation

COMMENTS:

4.2 Supportive, Honest Feedback

5.0 Concreteness

5.5 Non-defensiveness

4.7 Genuine Self-Disclosure

2.1 Respect, Listening Skills

2.9 Empathic Responding

17. Do you believe the eight skills rated were appropriate and adequate for your learning? Were they either too specific or too general? Please comment;

Appropriate = 40 Not Appropriate = 13

18. Do you believe a pass/fail grading scheme would be more or less fair/appropriate for the lab portion of this course? Please comment;

More Fair = 13 Less Fair = 40

Figure 7 (Continued): EDPS 419 Questionnaire and Results.

19. Please rate the;		Very poor							Excellent
Group facilitation		1	2	3	4	5	6	7	
Mean = 5.9	Percentiles;								
S.D. = 1.1	25th = 5.0	1	2	3	4	5	6	7	
Min. = 3	50th = 6.0								
Max. = 7	75th = 7.0			0-----[			*	]0	
Group observation		1	2	3	4	5	6	7	
Mean = 5.9	Percentiles;								
S.D. = 1.0	25th = 5.0	1	2	3	4	5	6	7	
Min. = 2	50th = 6.0								
Max. = 7	75th = 7.0			0-----[			*	]0	
Group learning experience		1	2	3	4	5	6	7	
Mean = 6.1	Percentiles;								
S.D. = .9	25th = 5.0	1	2	3	4	5	6	7	
Min. = 4	50th = 6.0								
Max. = 7	75th = 7.0				0-----[		*	]0	

20. Would you recommend this course to a friend? Please comment;

Yes = 50 No = 3

21. Do you have any other suggestions for course improvement? Any comments or criticisms?

Thank you for your participation, suggestions and comments.

closely followed by in-session feedback from the facilitator. Feedback from the observer was ranked fourth followed by the scores provided on evaluation forms and the viewing of videotapes. All forms of feedback received rankings from 1 through 6 indicating some diversity of opinion among the students.

Items 3, 5, 8, 10, 13, 19, 20, and a combination of items 11 and 12 provided measures of perceived outcome. Item 3 surveyed self-perceived personal growth, and provided very positive results with most students indicating they had in fact experienced much growth. Comments focussed on the unique opportunity provided by the group setting to critically examine one's communication style ("How can that NOT promote growth"), on increased self-awareness, skill learning and, significantly, on the "close, caring group cohesiveness" (safety) that allowed for experimentation and self-discovery.

Item 4 also examined the issue of psychological safety in the groups. Fourteen persons said they had feared for their own safety and thirteen for that of others, with six indicating their fear was a short-lived one time event. Only two students stated that they were always or often fearful. Those expressing fear for their psychological safety or for that of others' cited perceived dangers in self-disclosure and emotional attachment as reasons and added

that they feared being attacked, being hurt, or crying in the group. Those persons indicating they never feared for their psychological safety or for that of others mentioned having a sense of always being "welcomed by their group" and of believing that the "facilitator was always in control".

Item 5 took a more academic look at outcome than did Item 3, and results suggest the course was effective in the eyes of the students in facilitating their learning of communication skills. The few comments made suggest that the opportunity for focussed practice and immediate feedback were significant positive factors in learning while "large group size" and "the confusion of group process" were negative factors. Item 8 examined generalization of learnings to other settings and the results indicate that most students were frequently using the communication skills with family and friends and at work, with some saying they were using them "all the time and everywhere". One student commented that "these skills should be a part of everyday living" and that the ability to use them had given him "control of (his) life". The only negative comments made were those suggesting the student was either "too busy" or had made no effort to use his or her learnings elsewhere. An academic perspective was also taken by Item 10, an elicitation of self-ratings on concept learning, and positive results again prevailed.

Items 11 and 12 provided a simple method of quantifying the student's self-perceived growth on individual skills. Having asked the student to indicate initial and final skill levels a measure of growth or learning was then easily calculated. Item 13 provided an overall total score, again from the student's perspective. Little differentiation was seen between the eight self-assigned scores on the various skills, and Total Scores were strongly grouped in the mid-thirties.

Item 19 provided an opportunity for students to rate three different aspects of the course. Group facilitation, observation, and the group learning experience were all rated very highly with only a few students providing lower scores. Item 14 more closely examined one component of the observer's role, that of evaluation of group members. Results indicate the students were quite satisfied with the accuracy of these assessments and comments on the specific, useful, motivational, and honest nature of this feedback were numerous. Negative comments were concerned with inconsistencies in the rating scales, the inability of observers to rate learning not "outwardly apparent", and the possibility of ratings reflecting effort rather than actual learning. Item 15 encouraged students to offer suggestions for improvement of the feedback process. In terms of group (focussed) feedback it was felt that more time should be taken, that tape excerpts

should be used more often, and that individual feedback should be offered in the focussed feedback session. In terms of individual (evaluation form) feedback, several students asked for private meetings with the observer, for more detailed written comments (possibly including footage numbers for the video-tape for later viewing), and for more "constructive" comments.

Item 20 was based on the assumption that a student would only recommend a positive, valued experience to a friend and comments made supported this contention. Many students had already recommended the course to others, with some suggesting the course be made mandatory for all education students. Others were less enthusiastic and suggested all prospective group members be provided with clear and complete information on the course before registration and that they themselves would only recommend the course to friends interested in "this kind of experience". The few negative respondents suggested that the course was poorly organized for its purpose and that the grading scheme was too subjective.

A number of items examined factors potentially affecting the student's learning. Items 6 and 7 sought information on and frequency of critical incidents in the group sessions, and a strong pattern of results emerged. For most persons indicating they had experienced sudden insight, that experience centred on the reception of positive or negative

feedback, often confrontational in nature, that identified for them a specific problem in their interpersonal style. Many cited the roles that support, encouragement, and safety had played in these events. Those responding negatively to these items often commented that they viewed their learning or growth as ongoing or "developmental" rather than sudden or insightful.

Items 16 and 17 focussed on the relative importance and overall appropriateness of the eight communication skills taught and assessed. A definite pattern in rankings of the skills by "importance for effective communication" emerged with the skills of listening and empathic responding clearly viewed as most important by the students. The rest of the skills were closely ranked with only one, here-and-now orientation, standing out by virtue of its last place, "least important" ranking. Most students viewed the skills as both appropriate and adequate. The typical comment made was a negative one suggesting that all of the skills could be better defined for the students.

Item 18 simply asked the students if they thought a pass/fail grading system for the lab component would be more or less fair or appropriate than the present scheme. Only 13 students stated such a system would be more fair and commented that it would put less pressure to perform on the students, that the present grading scheme is too

subjective, that other forms of feedback (than grades) were more important to them, and that, as it is a "group effort" it should be a "group mark". Those students not in favour of a pass/fail system commented that grades were "necessary" for greater achievement and effort, for motivation, and for proper criticism. It was also stated that grades were "scaled better", that with a pass/fail system nobody would ever be failed, and that the possibility of a "fail" grade could bring too much pressure to bear on a student.

Finally, Item 21 was an open-ended invitation for student input in regards to improvements that might be made in the course. Very few comments were made by more than one person. The most prevalent comments were those suggesting that no change was necessary, that the course was well designed. Several students suggested that individual meetings with the group observer would be a valued adjunct to the evaluation procedure, though many realised the prohibitive cost in time of such a procedure, while others asked for more structure in early sessions, and for smaller groups. Calls for closer ties between the text, lecture, and lab were made as were those for "less pressure from the administration" and more frequent evaluation. There were individual calls for improvements such as more frequent group sessions, better pre-screening, better pre-training, development of EDPS 419

into a full-year course and less subjectivity in the marking scheme.

ADDITIONAL ANALYSES:

Correlational studies of the Winter term data provided a wealth of information in the form of both statistically significant and insignificant correlations. The major results are summarized in Tables II, III, and IV.

(Insert Tables II, III, and IV about here)

Results indicated that student gender correlated very weakly with all measures of outcome or process with few results approaching statistical significance ($p < .05$) (see Table IV). The communication skill scores, even though the basis for the Adjusted Skills Total, correlated only moderately ($r = .53$ to $.72$, $p < .001$) with that measure (see Table II). This correlation is considered spurious due to the variables' mathematical dependence. Skill scores correlated even less strongly, though still significantly, with the scores completed by the course staff ($r = .29$ to $.71$, $p < .05$) and with the Bonus Points awarded ($r = .25$ to $.53$, $p < .05$). Their moderate (spurious) correlations with the Final Lab Score ($r = .48$ to $.73$, $p < .001$) reached significance in all cases.

Scores and rankings completed by the members of the supervisory teams correlated moderately ($r = -.41$ to $+.85$)

TABLE II
OUTCOME VARIABLE CORRELATIONS

	ADJUSTED SKILL TOTAL	FINAL LAB SCORE	BONUS POINTS AWARDED	INSTRUCTOR'S SCORE	INSTRUCTOR'S RANK	SUPERVISOR'S SCORE	SUPERVISOR'S RANK	OBSERVER'S SCORE	OBSERVER'S RANK	FACILITATOR'S SCORE	FACILITATOR'S RANK
RESPONSIBILITY AND INITIATIVE	.56**	.54**	.43**	.53**	-.54**	.51**	-.47**	.67**	-.65**	.44**	-.52**
HERE-AND-NOW ORIENTATION	.55**	.53**	.30*	.45**	-.36**	.45**	-.29**	.56**	-.51**	.39*	-.38*
HONEST, SUPPORTIVE FEEDBACK	.59**	.59**	.41**	.42**	-.34*	.52**	-.25*	.54**	-.45**	.42**	-.30*
CONCRETENESS	.64**	.65**	.46**	.52**	-.48**	.55**	-.40**	.65**	-.57**	.44**	-.43**
NON-DEFENSIVENESS	.57**	.62**	.51**	.49**	-.35**	.43**	-.19	.40*	-.28*	.31*	-.20
GENUINE SELF-DISCLOSURE	.61**	.66**	.46**	.44**	-.29*	.64**	-.29*	.50**	-.31*	.46**	-.30*
RESPECT, LISTENING SKILLS	.73**	.73**	.53**	.63**	-.56**	.62**	-.46**	.71**	-.64**	.54**	-.50**
EMPATHIC RESPONDING	.53**	.48**	.25*	.43**	-.41*	.30*	-.27*	.48**	-.50**	.36*	-.32*
TOTAL SKILL SCORE	.69**	.69**	.48**	.56**		.57**		.64**		.48**	
INSTRUCTOR'S SCORE		.68**	.51**			.55**		.68**		.62**	
INSTRUCTOR'S RANK							.72**		.75**		.72**
SUPERVISOR'S SCORE				.55**				.74**		.75**	
SUPERVISOR'S RANK					.72**				.72**		.85**
OBSERVER'S SCORE				.68**		.74**				.74**	
OBSERVER'S RANK					.75**		.72**				.79**
FACILITATOR'S SCORE				.62**		.74**		.74**			
FACILITATOR'S RANK					.72**		.85**		.79**		

Empty cells represent meaningless or non-useful correlations.

*p<.05 **p<.001

TABLE III
SCORE CORRELATIONS

	FACILITATOR'S FEEDBACK (RANK)	SELF SCORE (RESP. AND INIT.)	SELF SCORE (HERE-AND-NOW)	SELF SCORE (FEEDBACK)	SELF SCORE (CONCRETENESS)	SELF SCORE (NON-DEFENS.)	SELF SCORE (SELF-DISCLOSURE)	SELF SCORE (LISTENING)	SELF SCORE (EMPATHIC RES.)	SELF-ASSIGNED FINAL SCORE	RATING OF EVALUATION	RATING OF OBSERVATION
RESPONSIBILITY AND INITIATIVE			.10									
HERE-AND-NOW ORIENTATION			.28*									
HONEST, SUPPORTIVE FEEDBACK				.28*								
CONCRETENESS					.29*							
NON-DEFENSIVENESS						.23						
GENUINE SELF-DISCLOSURE							.31*					
RESPECT, LISTENING SKILLS								.26				
EMPATHIC RESPONDING									.36*			
TOTAL SKILL SCORE	.33*									.30*	.35*	.24
INSTRUCTOR'S SCORE												.18

Empty cells represent meaningless or non-useful correlations.

*p<.05 **p<.001

TABLE IV
QUESTIONNAIRE CORRELATIONS

	FINAL LAB SCORE	RATING OF PERSONAL GROWTH	SELF-ASSIGNED FINAL SCORE	SEX OF RESPONDANT
RATING OF PERSONAL GROWTH	.02			
PSYCHOLOGICAL SAFETY		.35*		-.18
RATING OF COURSE EFFECTIVENESS	.06	.55**		
PRESENCE OF SUDDEN INSIGHT		.30*		
DEGREE OF SKILL GENERALIZATION	.17	.22		
RATING OF CONCEPT LEARNING		.43**	.04	
SELF-ASSIGNED FINAL SCORE	.07			.18
RATING OF FACILITATION				.20
RATING OF LEARNING EXPERIENCE	.05			

Empty cells represent meaningless or non-useful correlations.

* $p < .05$

** $p < .001$

and were significant ($p < .001$). The Instructor's Score, used as an outcome measure, also correlated moderately and significantly ($p < .001$) with the Bonus Points Awarded ($r = .51$) and with the Final Lab Score ($r = .68$). A weak correlation of Instructor's Score and Self-assigned Score ($r = .18$) was not significant ($p = .198$) (see Table III).

A weak correlation between Final Lab Score and skill generalization ($r = .17$) approached significance ($p = .11$) but Final Lab Score did not correlate significantly with self-perceived personal growth, rating of course effectiveness, self-assigned final score, or rating of the group learning experience (see Table IV). The student's self-rating of concept learning also did not correlate significantly with self-assigned final score. Further, their self-assigned final ratings for each of the skills correlated only weakly with actual skill scores ($r = .10$ to $.36$) and were statistically significant in only 5 of 8 pairs ($p < .05$) (see Table III).

The Total Skill Score, though the major basis of the Adjusted Skill Score, correlated only moderately with that measure ($r = .69$, $p < .001$) (see Table II). Due to the mathematical dependence of these variables this correlation should be considered spurious. Similar correlations between Total Skill Score and other outcome measures occurred. This score correlated very weakly ($r = .03$ to $.35$) with all

questionnaire variables examined and only reached significance ($p < .05$) in three cases (ranking of facilitator's feedback, self-assigned final score, and rating of observer's feedback).

The student's self-perceived personal growth rating correlated weakly with perceived psychological safety, course effectiveness rating, occurrence of sudden insight, and self-rating of concept learning ($r = .35$ to $.55$, $p < .05$) (see Table IV). The weak correlation between this measure and skill generalization ($r = .22$) approached significance ($p = .12$).

No other correlations determined approached statistical significance.

The results of a factor analysis of the eight communication skill scores for all students (Winter and Fall terms) using principal factoring with iteration (PA2 in S.P.S.S.) are reported in Table V.

(Insert Table V about here)

High inter-correlation of the skill scores led to the determination of just one factor (Eigenvalue = 5.66) accounting for between 62 and 79 percent of the variation between skill scores. With only one factor determined, rotation would make no statistical sense.

TABLE V
FACTOR ANALYSIS OF SKILL SCORES

Factor	Eigenvalue	Amount of Variation
1	5.66	100 %

Skill	Factor 1	Communality
Responsibility and Initiative	.84	.71
Here-and-Now Orientation	.86	.75
Honest, Supportive Feedback	.84	.70
Concreteness	.89	.79
Non-defensiveness	.80	.63
Genuine Self-disclosure	.80	.64
Respect and Listening Skills	.89	.78
Empathic Responding	.81	.66

Analyses of covariance involved the use of the S.P.S.S. subprogram "ONEWAY" and Scheffe's a posteriori contrast test ($\alpha = .10$). Data from the six Winter term groups showed significant inter-group differences on four of five measures of outcome (Total Skill Score, Adjusted Skill Score, Final Lab Score, and Bonus Points Awarded). No significant differences between groups appeared on the measure of Instructor's Score. Results of the analyses are summarized in Table VI. is to be found in Table VII.

(Insert Tables VI and VII about here)

A stepwise discriminant analysis (S.P.S.S.) of the top- and bottom-ranked groups determined a canonical discriminant function (Eigenvalue = 63.67, $p < .001$) with a canonical correlation of .992. A classification run using this function correctly grouped 100% of all cases ($n = 19$). Six variables were selected by the program for their ability to discriminate between the two groups. In order of selection the variables were;

Genuine Self-disclosure

Ranking of Evaluation Form Comments (Item 2)

Non-defensiveness

TABLE VI
ONEWAY ANALYSIS OF COVARIANCE:

<u>TOTAL SKILL SCORE</u>					
Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Probability
Between groups	5	507.74	101.55	15.978	0.0000
Within groups	47	298.71	63.36		
Total	52	806.45			
<u>ADJUSTED SKILL TOTAL</u>					
Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Probability
Between groups	5	263.80	52.76	7.164	0.0000
Within groups	47	346.13	7.36		
Total	52	609.92			
<u>BONUS POINTS AWARDED</u>					
Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Probability
Between groups	5	25.67	5.13	2.798	0.0271
Within groups	47	86.22	1.83		
Total	52	111.89			
<u>FINAL LAB SCORE</u>					
Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Probability
Between groups	5	536.32	107.26	9.089	0.0000
Within groups	47	534.70	11.80		
Total	52	1091.02			
<u>INSTRUCTOR'S SCORE</u>					
Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Probability
Between groups	5	642.40	128.48	1.306	0.2775
Within groups	47	4622.84	98.34		
Total	52	5265.25			

TABLE VII
 MULTIPLE RANGE TESTS
 (SCHEFFE'S PROCEDURE):

<u>TOTAL SKILL SCORE</u>								<u>ADJUSTED SKILL TOTAL</u>							
GROUP								GROUP							
	2	6	4	5	1	3	<u>Mean</u>		2	4	1	6	5	3	<u>Mean</u>
	2						18.90		2						21.33
G	6	*					25.31	G	4						23.56
R	4	*					26.40	R	1						25.13
O	5	*					26.50	O	6						25.22
U	1	*					27.44	U	5	*					26.63
P	3	*					28.15	P	3	*	*				28.20

<u>BONUS POINTS AWARDED</u>								<u>FINAL LAB SCORE</u>							
GROUP								GROUP							
	2	4	6	5	1	3	<u>Mean</u>		2	4	6	1	5	3	<u>Mean</u>
	2						4.33		2						25.67
G	4						5.11	G	4						28.67
R	6						5.22	R	6						30.44
O	5						5.25	O	1						30.50
U	1						5.38	U	5	*					31.88
P	3	*					6.60	P	3	*	*	*	*		35.80

(*) denotes pairs of group means significantly different ($\alpha = .10$).

Self-assigned Final Score for Empathic
Responding

Honest, Supportive Feedback

Self-assigned Final Score for Concreteness

The final data presented is that from the Faculty of Education Course Evaluation. Results, in their original form, are reported in Figure 8. Percentile statistics (last two columns) can be interpreted with the following guide: Global percentiles are versus all Instructors in the faculty; Size percentiles are versus all courses of a similar size in the faculty; Dept. percentiles are versus all instructors in the department (EDPS); and Level percentiles are versus all classes at a similar level in the faculty (400 level).

(Insert Figure 8 about here)

Figure 8: Faculty Evaluation Results for EDPS 419.

University of Calgary

Instructor and Course Evaluation System

Instructor Report

Page 1

For: (Course Instructor) Dept: EDPS Course: 419 Section: 02 Semester: WINT Year: 85

Demographic Data (in percents);

No. of forms returned: 34 printed: 58

1. Pre-course opinion toward:		5. This course was:	specifically required	required but a choice	elective	omit
	pos no op neg omit		5	17	55	20
instructor	26 50 0 23					
course	38 41 0 20					
2. Course in:	major minor other omit	6. Status:	1st 2nd 3*prof 4th 4hon af*deg dip mas ohd other omit			
	11 5 58 23		0 11 5 41 0 14 0 2 0 2 20			
3. Sex:	male female omit	7. Expected grade:	A B C D F omit *exp. grade mean*			
	11 64 23		17 55 2 0 0 23 * 3.2 *			
4. Education route:	ece elem sec other omit	8. Attendance:	less than 50% 50-69% 70-84% 85-100% omit			
	0 23 29 11 35		0 2 8 55 32			

Global core item results;

Item:

Response labels, percents, & frequencies():

Summary

Statistics

Percentiles

	Weights	6	5	4	3	2	1		mean	sd	Global	Dept
		Excellent					very poor	omit	mdn	cons	Size	Level
1. Rate the course content;		23	29	38	5	0	0	2	4.7	0.90	046.1	053.0
		(8)	(10)	(13)	(2)	(0)	(0)	(1)	5.0	0000	045.8	045.6
2. Rate the instructor;		35	44	11	2	2	0	2	5.0	0.93	051.4	059.1
		(12)	(15)	(4)	(1)	(1)	(0)	(1)	5.0	0000	041.6	055.1
3. Rate the course in general;		17	38	29	8	0	0	5	4.6	0.88	049.0	063.2
		(6)	(13)	(10)	(3)	(0)	(0)	(2)	5.0	0000	054.1	049.6

The upper portion of this page contains percentages of student who marked each response option for the demographic items. For demographic number 7 the expected grade mean is calculated using a weight of 4 for A, etc. (G.P.A.). Global item results are presented next (1-3). Labels, percents, and frequencies; top rows contain percentages; bottom rows contain numbers of students marking each option. The summary statistics are calculated using the weights indicated above each response option. For global items the range is 1-6 with 6 the most favourable. For most other items the range is 1-5 with 5 most favourable.

Figure 8 (continued): Faculty Evaluation Results for EDPS 419.

Instructor and Course Evaluation System		Instructor Report (Course Instructor)				EDPS 419: 02		no. forms: 34 WINT 85		Page 2	
Instructor selected items results:		Response labels, percents, & frequencies:						Summary Statistics		Percentiles	
catalog item 004		Strong Agreement		No Agreement		omit		mean	sd	Global Size	Dept Level
04. Was there agreement between announced course objectives and what was taught?		29	47	20	2	0	0	4.0	0.78	028.5	042.8
	weighting scheme +5+4+3+2+1	(10)	(16)	(7)	(1)	(0)	(0)	4.0		012.5	032.2
catalog item 101		Very Fair		Very Unfair		omit					
05. The grading procedures for this course were:		20	38	32	2	0	5	3.8	0.81	034.2	057.1
	weighting scheme +5+4+3+2+1	(7)	(13)	(11)	(1)	(0)	(2)	4.0		033.3	033.8
catalog item 160		A Great Deal		Very Little		omit					
06. How much do you feel you have accomplished in this course?		47	35	14	2	0	0	4.2	0.82	069.5	063.2
	weighting scheme +5+4+3+2+1	(16)	(12)	(5)	(1)	(0)	(0)	4.0		091.5	072.4
catalog item 220		Much More		Much Less		omit					
07. Compared to other courses, how much effort did you put into this course?		26	35	29	5	2	0	3.7	1.00	040.5	036.7
	weighting scheme +5+4+3+2+1	(9)	(12)	(10)	(2)	(1)	(0)	4.0		070.8	042.5
catalog item 169		Yes, Sig-nificantly		No, Not Much		omit					
08. Did this course improve your understanding of concepts and principles in this field?		61	29	2	5	0	0	4.4	0.81	065.7	065.3
	weighting scheme +5+4+3+2+1	(21)	(10)	(1)	(2)	(0)	(0)	5.0		075.0	063.7
catalog item 191		Yes, Greatly		No, Not Much		omit					
09. Did this course increase your interest in the subject matter?		38	41	14	5	0	0	4.1	0.87	056.5	055.1
	weighting scheme +5+4+3+2+1	(13)	(14)	(5)	(2)	(0)	(0)	4.0		075.0	058.2
catalog item 242		Excellent		Poor		omit					
10. The instructor's knowledge of subject was:		82	8	2	0	0	5	4.8	0.44	071.0	071.4
	weighting scheme +5+4+3+2+1	(28)	(3)	(1)	(0)	(0)	(2)	5.0		070.8	069.2

CHAPTER FIVE

DISCUSSION

The stated goals of Educational Psychology (EDPS) 419 are: 1) to increase the student's understanding of the process of interpersonal communication and the nature of interpersonal conflict, 2) to develop the student's skills in observing and analyzing interpersonal communication, 3) to develop the student's awareness of his or her present ways of communicating and the impact this style has on others, 4) to experiment with alternative and potentially more effective ways of communicating, and 5) to develop skill in the prevention and resolution of interpersonal conflict. The C-Group component of EDPS 419 exists to provide an environment in which these goals may be actively pursued. In the pretraining session and in lectures students are provided with background information and conceptual definitions of a core of communication skills and are then asked to examine and experiment with these skills and with their pre-course communication styles in order to determine if and how they might develop a more effective style. It is hoped that, as stated by Oatley (1980), the group experience ". . . can be the seeds of new directions and personal growth for (the students) in their ordinary lives" (p. 85).

Throughout this process students are provided with several forms of feedback, both formal and informal. It is the value, content, and effectiveness of this feedback that largely determines each student's learning. This study was concerned with this feedback and with its ability to promote learning for the students of EDPS 419.

STUDENT ACHIEVEMENT:

Despite the hours spent in lectures and labs defining and clarifying the eight communication skills, and despite the weekly separation of the skills on evaluation forms, most students seem to be left at the end of the course still confused about the distinctiveness of each skill. This confusion seems to pervade the grading system itself as demonstrated by the minimal differentiation in skill scores and the results of the factor analysis, a result suggesting that just one factor underlies all eight skills (at least in the eyes of the grader). This bias may also be held by the students as they too, in self-assigning skill scores, tended to differentiate only minimally. The only evidence that students did differentiate between skills lay in their response to items 16 and 17. Here the majority of students indicated that the eight skills were adequate and appropriate for the course purposes, and that they saw certain skills as more or less important than others, that they saw more or less value in each. It was expected that the students

would rank empathic responding and the listening skills as most important due to the heavy emphasis placed on these skills by the supervisory staff and especially by the course instructor. The last place ranking of here-and-now orientation also was not suprising as most students tended to view it as a group-specific skill and hence as less important to everyday communication. There remains room for improvement, however, as students also took the opportunity to call for better definition of all eight skills.

A number of factors confound efforts to assess the outcomes of EDPS 419. The first, mentioned previously, is the minimal differentiation in weekly skill scores given each student. Does this reflect a common bias on the part of the observers doing the scoring towards high grades? All scores were quite negatively skewed. Could it be a reflection of the behavioural descriptions provided for use in scoring? Several observers have suggested these are very hard to use and that they seem excessively harsh at the low end. Could it be that the group members abilities are much the same? The course is an elective and may attract a certain type of student. Personal experience suggests that the most reasonable explanation is a combination of a poor grading outline and a bias on the part of the graders. It may be difficult for a neophyte counsellor to give a low grade to a struggling group member without feeling guilty

and punitive. An easy escape may be to fall back on the suggested outline, an outline that lumps the vast majority of students at three on the four-point scale, and then to compensate by providing more complete, honest, and supportive feedback through written comments. It is suggested that this may explain why students, the same students who prefer grades to a pass/fail system, do not value weekly skill scores as much as any of the other forms of feedback offered them. After all, what informational or motivational value is there in a "3" if almost everybody in the group gets one? It should be noted that students given higher scores tended to rate the observer's completion of evaluation forms more positively than those with lower scores, suggesting the possibility that their reaction to grades may overwhelm that to the written comments provided. Nevertheless, it seems that personalized, behavioural description and even prescription seems to hold much more of value for the student. This description may still be based on the eight communication skills since students did view them as both adequate and appropriate, suggesting some conceptual value.

The lack of attention apparently paid to the weekly skill scores may be evidenced by the weak correlations between actual final skill scores and those self-assigned by the students. It may be hoped that the feedback provided each week would leave the students with a realistic understanding

of their standing in the course, yet this does not seem to be the case (though the wording of items 11, 12, and 13 leave some doubt about this interpretation).

Self-assigned scores, scores suggested by members of the supervisory teams (Facilitator, Observer, Supervisor, and Instructor), and assigned grades all seem to be poor reflectors of the value students placed on the experience or of the learning they say they experienced. The complex scoring system, requiring many hours of work every week by each observer, results in a total skill score that correlates only weakly with the students' perception of their achievement. This score is then manipulated to the point that the adjusted skill score bears little resemblance to it ($r^2 = .49$). The final lab score, while now less skewed, still does not correlate with the students' self-perceived personal growth, their rating of the course's effectiveness and group experience, or their self-assigned scores. The score finally assigned does not reflect the students' valuing of the group experience, an outcome Palmer (1979) would hold to be unacceptable. It should be noted, however, that the students themselves assigned scores that did not correlate well with the value they placed on the course or with how much they felt they learned. It seems all of these grades are based more on internal biases than on the realities of the situation.

Adding to the confusion of the grading system is the great diversity in group mean ranks. Significant differences in outcome measures occur between groups and a high canonical correlation, derived in the discriminant analysis, suggests a high proportion of the variance in the discriminant function can be explained by group membership. The possibility arises that a student's grade is largely determined by factors beyond his or her control, be it a grading bias of his or her particular observer, the unique process of his or her group, the effectiveness of his or her facilitator, or some other group-level phenomenon. Smith (1976) notes that the trainer and/or group composition can have very important effects on outcome. This raises a serious question about the fairness of the current grading scheme, and provides support for schemes such as that of Hatch and Wilson (1974) that provide points for participation only. Combined with the evidence suggesting group members value scores less than all other forms of feedback offered, the wisdom of spending so much time and energy deriving weekly scores is questioned.

Another factor complicating the evaluation of outcome is the proclivity of students to rate highly. While Calliotte (1971), Golembiewski and Blumberg (1973), Kogler Hill (1981), Pipes, Higgins, and McEwen (1984), Roelofs and Sears (1971), and Schutz and Allen (1973) note subjects tend to be very satisfied with group training, consideration must be given

to the data provided by the Faculty Evaluation. Examination of this data suggests that while their ratings may appear high in terms of the scale range, they are typical in terms of percentiles. This is true of the ratings of the instructor and of the course as a whole, but does not hold for ratings of developed interest in the subject area (which increased for most students), and for instructor knowledge (rated highly). Perhaps most importantly, students also rated their learning of concepts and principles as well as their overall accomplishment in the course quite high in comparison to other courses. These ratings are supported by the results of the EDPS 419 Questionnaire and suggest that most students, although coming into the course with a neutral attitude, left the course believing they had learned a great deal, had grown a great deal, and had begun the task of transferring their learnings to their everyday lives. This result is consistent with reports such as that of Schutz and Allen (1973) and Gosling and Turquet (1967), who note that group members change and learn and that of Cooper (1976) who notes that group members transfer these learnings to other situations. The questionnaire results suggest that much of the credit for these learnings should be given to the group component of the course.

From both a practical and theoretical standpoint then, the major criticism to be leveled at the C-Groups centres

on the grading procedure. While students seem to prefer a graduated system neither they nor their group observers seem able to differentiate the skills well enough to make scoring them individually worthwhile. Students rate the present scoring system as poor in comparison to other courses and, significantly, they also suggest that the course material covered did not match the course objectives as well as other courses' do. This, combined with the evidence that the course material was valued, suggests that the course objectives may be in need of review.

Two further concerns are worthy of mention. The first involves the minimal value placed on the pretraining session by most students. This information should be tempered by the findings reported by Fleming (1982) suggesting that the positive effects of pretraining dissipate as a group develops. It may be the case that students would have reported more value in the pretraining session had they been questioned at an earlier stage of group development. Still, there may be reason to modify the pretraining, perhaps in the manner discussed in a later section of this chapter. A second concern involves the significant number of students who reported feeling psychologically at risk at some time in the group sessions. While only two students seemed to have long term concerns all of these persons may have had their learning potential jeopardized by unsafe conditions, although

the weak correlation between the student's personal growth rating and perception of psychological safety provides no evidence of such hinderance. Present monitoring of student concerns seems adequate, however, with the majority of students indicating they felt safe in their group most of the time. As long as supervisory staff continue to read all students lab reports regularly and to watch for signs of distress in the group sessions no problems should go unresolved.

CHANGES TO EDPS 419:

With so many students suggesting that no changes be made to the Lab component of EDPS 419, any changes that are considered should be carefully scrutinized for their potential to interfere with what is, apparently, a highly valued experience for most students.

The first change that might be considered involves the provision of more and better information prior to and at the beginning of the course. Such information would in itself serve to prescreen students, who might otherwise find themselves committed to a process they do not truly appreciate. Egan (1970) notes that the provision of information early in the proceedings allows students to focus their energy on the pursuit of their goals rather than the clarification of expectations. Newman (1974) notes that a task engendering change will simply not get done unless it is both understood and recognized. Students should, however, realize that some

early ambiguity is a necessary part of the group experience (Egan, 1970; Golembiewski & Blumberg, 1973). The information provided should include clarification of the assessment procedure to be used so that disruption and dysfunctional anxiety is reduced to a minimum (Simons, Squires, & Rudduck, 1976). While there will always be some anxiety attached to evaluation it need not be any greater than necessary. This information giving could become part of a prescreening interview conducted by the course instructor and/or the graduate teaching assistants (Supervisors). It might include provision of the "ground rules" of the groups, minimal expectations for participation, and information about the availability of follow-up resources (Cooper, 1976). It might also include formal or informal contracting for participation, a contract which might then be used as part of the assessment procedures. Weekly goal setting should also be encouraged (Brown, 1976). The information provided would hopefully include improved course objectives (both general and specific behavioural).

Major changes might also be made to the assessment procedures used for the lab component. At present a final lab score that reflects neither the mathematical derivation of weekly scores nor the opinion of supervisory staff is labouriously derived. Grades seem to hold value for most students, however, and so should be retained. The method

used to derive and present them, however, should be made more efficient. A number of options might be considered, with the best ones subjected to trials for evaluation or presented to the students at the beginning of the course and put to a vote. The primary goal of EDPS 419, which is not to make people change but rather to provide the feedback and support necessary for an individual to test whether changes will improve his or her quality of life, ought to be a prime consideration in the formulation of options. Options might include a format in which points are given for participation only, a format in which written comments are provided weekly (with the eight skills as a basis) and grades given only at midterm and course-end and then only for overall performance or, finally, a format involving the contracting of individual goals by each student (with comments and grades based on the degree to which the student has achieved these goals). Each of these options provides the students with grades while lessening the frustration of those responsible for the grading.

In any case, observers should be better trained/prepared to adequately differentiate between skills and to provide written evaluations and comments that are as facilitative of student development as possible. Such training might also allow for more effective and efficient use of the focussed feedback session thereby satisfying the students request

for more time to be spent on this activity. It is noted that the use of non-participant observers in EDPS_419 is consistent with the recommendations in the literature and should also be noted that performing this role is of great value to the graduate student as it facilitates the development of his or her group observation and processing skills. Considering the results of the analysis of variance, however, the possibility of having the course instructor assume responsibility for the assigning of grades should be explored.

Students have suggested extending the course to a full year (eg. Fall and Winter terms) from its present half year format. Carkhuff, Berenson, and Pierce (1977), in fact, suggest more hours of instruction than presently offered in EDPS 419 are necessary to achieve the skill application level of learning. An extended period might also ensure that each student has the opportunity to receive the sort of feedback that so many have said was the critical incident in their learning and personal growth. Since at present forty-one percent of students are not taking EDPS 419 until after their professional year, and hence are not able to use this training in their student teaching experience, the course might also be offered earlier in the teacher training program. It might also be supplemented with a follow-up or refresher course in the professional year or as an inservice course (Ellis & Whittington, 1981). Most of these changes

would involve significant increases in cost (time and money) and therefore may be difficult to implement. There should also be a follow-up procedure adopted, perhaps again in the form of an interview with the course instructor or supervisors, during which it could be assured each individual has achieved closure or has remedial steps clarified. Those students requesting follow-up counselling could also be routed to the appropriate resource at this time (Brown, 1976; Rogers, 1968).

FUTURE RESEARCH:

As noted previously, researchers may experience much resistance when they work with groups. Lakin (1972) suggests this resistance might be lessened if steps are taken to clarify to the participants the value of the research ". . . in contributing to goal setting as well as in providing objective information about the training method". Two of the more obvious areas in need of elucidation are those of transference and of the utility changes trainees undergo have for their performance in their organizational roles (Smith, 1976). Little is known about the process of transference as it occurs following the group training of teachers. If some form of assessment could be carried out on both graduates of a group-based interpersonal communications course and a suitable control group in their work environment some measure of transference and of course value might be determined.

Both short and long term approaches could be taken thereby ascertaining the durability of learnings.

Further research of the values implicit and explicit in the group training approach is also required. Are these values congruent with those that typify effective teaching? Are they consistent with those typical of the workplace of graduating students? What costs and/or benefits await the student who adopts these values? Several researchers (eg. Berger & Harrison, 1976; Cooper, 1976, 1979; Golembiewski & Blumberg, 1973) have warned of the danger of training a person only to find the result is a worker who no longer can function in the workplace. They have changed while the environment has remained unchanged.

One final area of interest is that of "process" studies. Lakin (1972) notes more process studies are needed before the more common "effect" studies, commonly suffering from statistical shortcomings, might be improved. Such studies might more clearly identify the particular conditions or processes within a given group that either facilitate or hinder a student's development (Smith, 1976). They might elucidate the nature of the factor or factors that seemingly underlie many communication skills and thereby facilitate the development of more effective approaches to training. They might also clarify whether or not certain types of

groups or group process are more or less effective with certain types of learners (Heck, 1971).

CONCLUSION:

The typical teacher preparation sequence includes a smattering of educational philosophy and history, an overview of one or several educational psychologies, a methods course which is often only a bag of tricks, and a student teaching experience which may or may not allow the student to function fully as a teacher in the classroom. . . . Nowhere in this sequence are the unique responsibilities of the teacher as an individual discussed. (Buchanan, 1971, p. 65)

I have come to believe that teaching, as such, is largely useless and futile and yet it is the central focus of almost all educational effort. I believe it is learning and the facilitation of learning which should be our central focus and I believe the encounter group, when it permeates a whole educational system, discourages teaching and promotes a vital, personal, human facilitation of learning. (Rogers, 1968, p. 74)

. . . (the) T-group is more than an educational technology. It has its roots in a system of values relative to mature, productive, and right relationships among people. (Bradford, Gibb, & Benn, 1964, p. 1)

Abercrombie (1970) has suggested that the use of group technology for learning can do much to bring the often diverse objectives of teachers and students closer together, the ". . .utilitarian with the liberal, and the cognitive with the affective". Through such "confluent" education (Brown,

1971) theory is translated into action (Egan, 1970) and learners can develop a sense of self and of others that is ". . . rooted in (their) own personal learning rather than in historically derived scripts and externally implanted conventions, oughts, and musts" (Oatley, 1980). It has been said that such insight into human behaviour cannot be achieved as effectively in any other way (Ottaway, 1966). It may be time for educators to realise, as have many parents through the years, that learnings hold much more importance and value if they are understood, internalised, and are "rediscovered anew" by each individual (Cooper, 1979). While they should not replace all other methods of education, groups have much to offer as an addition to our educational technologies (Abercrombie, 1970).

Despite attacks such as that quoted in Egan (1970), wherein an undergraduate was told of a laboratory course in sensitivity training "We don't give credit for love-ins", it seems the violent reaction so often seen to occur when a therapeutic technique is introduced into academic work may disappear as attitudes toward mental health become more rational and sophisticated (Abercrombie, 1970, p. 18). Since the outcome of training is viewed from at least three perspectives (that of the trainer, that of the trainee, and that of society as a whole) (Coche, 1983), it might be noted that in facilitating the development of a student's personal

sensitivity we may foster both a growing sense of social responsibility and the development of the skills necessary to meet that responsibility (Cooper, 1979, pp. 46-47), a goal surely all concerned would find desirable.

There remains much to be learned about groups and about their use in developing human potential. This process may be painful, but the pain would hopefully be soothed by the awareness and understanding learning can bring. The position taken by Blumberg (1973) is that more productive ways of facilitating good relationships can be discovered, and that the quest for this goal is of primary importance for both our present and future. Training in communication skills may be augmented by multi-cultural, non-sexist, non-racist, and psychological education (Moracco, 1981) with teachers serving as facilitators of learning rather than just disseminators of information (Gazda, Asbury, Balzer, Childers, & Walters, 1977). A combination of Newman's (1974) and Golembiewski and Blumberg's (1973) statements provides a glimpse of the ultimate goal of all these efforts, that being a person who is able to use both mind and heart without forsaking one for the other in order that he or she might improve the quality of his or her life as well as that of others. Courses such as EDPS 419 have the potential to promote this goal if they are given the chance, but only if

they remain sensitive to the needs of both the participants and to those of society at large.

People need authentic human relations, perhaps even hunger for them, and a T-group can provide that experience. . . . How sad, however, that a T-group is necessary. (Golembiewski & Blumberg, 1973, p. 9)

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