THE INSTRUCTIONAL SKILLS PROGRAM

by

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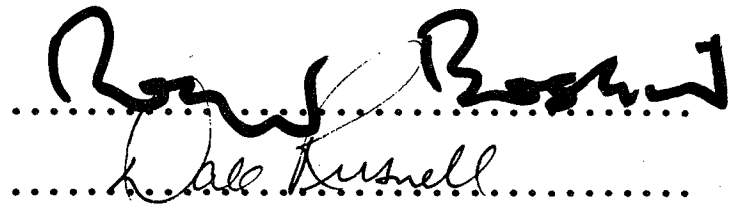

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INTRODUCTION

What are the technical skills and personal qualities of the *good* instructor?

If the skills and qualities of a *good* instructor can be defined, can they be developed in a large number of instructors by means of a planned intervention?

These questions underly this paper and the program described herein. This paper is concerned with *good instruction*.

There has been a need for instructional skills training in the post-secondary, non-university system in British Columbia for several years. That need has been voiced a number of times in the past decade by task forces, committees, and councils. The Instructional Skills Program described herein has been developed during the past two years to provide a vehicle whereby that need can be fulfilled.

This paper has a two-fold purpose:
(a) as a factual account, the paper is a status report - a description of the current state of evolution of the program, as well as the history and background which constitute a context in which to understand the process

of and the reasons for that evolution;
(b) as a theory piece, the paper is an exploration of the theoretical basis of the program - it articulates the conceptual foundation upon which the program has been built.

Because of the continually evolving nature of the Instructional Skills Program, it can only be depicted as it exists at the moment. Similarly, the underlying thinking can only be articulated at its present state of evolution.However, it should be added that most of the changes in the program which are anticipated during the coming one to three years are of the sort which might be described colloquially as 'fine tuning'. The principal components of the program at the levels of diffusion strategy (Rogers and Shoemaker, 1971), method (Verner, 1964, p.36.), and techniques and devices (Verner,1964, pp.36,37) appropriate to the desired learning outcomes (Gagné, 1975), are based on a synthesis of empirically or phenomenologically validated learning theory, accepted principles of adult education practice, and widely held tenets of humanistic philosophy. These conceptual underpinnings of the program and the manner in which they have

been synthesized and operationalized in the program are set out in detail in the chapters which follow.

CHAPTER 1

BACKGROUND: THE HISTORICAL AND DEMOGRAPHIC CONTEXT OF THE INSTRUCTIONAL SKILLS PROGRAM

The Instructional Skills Program has evolved to its present state as a result of the history and demography of the post-secondary, non-university system in British Columbia. Background information germane to the development of the program and salient facts about college/institute instructors are presented in the first two sections of this chapter. This information base establishes the need for the program and provides the reader with information necessary to understand the context in which the program functions.

DEVELOPMENT OF THE POST-SECONDARY SYSTEM IN BRITISH COLUMBIA

Between the early 1960's and the mid 1970's, the post-secondary educational system in the province of British Columbia experienced a period of explosive growth unlike any other in the history of the public education system in the province. As the post-war baby boom worked its way through the public school system, it created a huge demand on the traditional post-secondary educational institutions. Neither universities nor

vocational, trade, and proprietary schools were capable of assimilating the large number of students seeking post-secondary education in the early 1960's. But the problem was not merely one of numbers. In addition to the need for more facilities to handle the ever-increasing number of high school graduates, there was also a demand on the part of business and industry for a work-force with better technical, technological, and career skills. There was, as well, a shift in the attitude of Canadian society generally: whereas education had previously been regarded as a terminal enterprise engaged in almost exclusively by the young, the idea of adults returning to school to upgrade existing skills or to acquire new capabilities gained considerable acceptance during this period. This attitudinal shift in society is reflected in the acceptance into common usage during the 1960's of such terms as 'lifelong learning', 'lifelong education', 'recurrent education', and '*éducation permanente*' in the adult education and post-secondary education literature. Increased leisure time, the women's movement, the rise in popularity of adult education programs, the Adult Occupational Training Act of 1967, and other phenomena of the sixties combined to create a demand for educational

programs not available in existing academic and vocational post-secondary institutions.

Responding to this demand, the British Columbia community college system developed over an eleven year period between 1965 and 1975 (see Table 1 for summary). As well, the capacity of the university system more than doubled during this period with the establishment of the University of Victoria as an autonomous institution in 1963, the founding of Simon Fraser University in 1965, and the continued expansion of the University of British Columbia.The accelerating demand for technology and career program graduates was partially met through the founding of the British Columbia Institute of Technology in 1964.

POST-SECONDARY INSTRUCTIONAL STAFF

In the early days of the community colleges, the main concern regarding staff was one of quantity. The colleges were brand-new, the universities had not prepared personnel for the role of instructor in the college system, and as a result, former secondary school teachers took on the job.

In 1973 a survey of college faculty members was undertaken as part of an impact study by Dennison, Tunner, Jones and Forrester. It has generally been accepted that the Master's degree is the minimum requirement for faculty in

TABLE 1

GEOGRAPHICAL DISTRIBUTION AND STARTING DATES OF THE COMMUNITY COLLEGES IN BRITISH COLUMBIA

Community College	Location	Year Opened
Vancouver Community College	Vancouver	1965
Selkirk College	Castlegar, Nelson +	1966
Capilano College	North Vancouver	1968
Okanagan College	Kelowna #	1968
College of New Caledonia	Prince George #	1969
Malaspina College	Nanaimo #	1969
Douglas College	New Westminster, Surrey, Richmond, Coquitlam *	1970
Camosun College	Victoria *	1971
Cariboo College	Kamloops #	1971
Fraser Valley College	Abbotsford, Chilliwack +	1974
East Kootenay Community College	Cranbrook #	1975
North Island College	Comox, Campbell River	1975
Northern Lights College	Dawson Creek #	1975
Northwest College	Terrace #	1975

* These major urban institutions are each located on several campuses.

\# Many of the colleges extend their services to outlying communities through the operation of college "centers" in several communities.

\+ Both of these non-urban colleges operate two distinct, geographically separated campuses.

the academic transfer area. However, one-fifth of academic transfer faculty members did not possess this qualification and had either a Bachelor's degree or a public school teaching certificate. In the career/technical area, seventy per cent of faculty had degree qualifications, over half of them a Master's degree or higher. In the vocational area, over half of faculty held trade certificates or similar credentials. Nearly half of the vocational and career/ technical faculty came from business or industry. About twenty per cent of academic transfer faculty and ten per cent of faculty from other fields came from the public school system.

Overall, about one-half of faculty members previously held teaching positions (Dennison, et al., 1975, p.115). That is to say, about one-half of all faculty members surveyed by Dennison, et al. had little or no previous teaching experience, most held no teaching credentials, and very few had received any training for their roles as college instructors. The findings of Dennison, et al.(1975) are summarized in Tables 2 and 3.

TABLE 2

QUALIFICATIONS OF COLLEGE FACULTY

(PERCENTAGES)

Qualifications	Academic Transfer	Career/ Technical	Vocational	Total
Trade Certificate	-	18	36	11
Bachelor's Degree	16	33	12	21
Master's Degree	63	34	6	46
Doctoral Degree	17	3	-	9
Teaching Certificate	2	2	25	5
Other	2	10	21	8
TOTAL	100	100	100	100

(Dennison, et al., 1975)

THE NEED FOR AN INSTRUCTOR TRAINING PROGRAM

"The functional emphasis of the colleges is on teaching rather than on research" (Campbell, 1969, p.167). Teaching is the primary vehicle through which the conventional college delivers its service to the community. If the appropriate exchange of knowledge, skills, and attitudes does not take place between the instructor and the student, the

TABLE 3

PREVIOUS POSITIONS HELD BY COLLEGE FACULTY

(PERCENTAGES)

Previous Position	Academic Transfer	Career/ Technical	Vocational	Total
TEACHING				
University	20	5	3	13
Vocational School	-	4	22	5
Technical Institute	2	6	2	3
College	9	3	4	6
Public School System	27	10	14	19
Library				
Public, college, university	-	2	-	2
Graduate Student	24	4	-	2
Business or Industry	6	46	46	26
Government Enployee	3	12	4	6
Other	9	8	5	8
TOTAL	100	100	100	100

(Dennison, et al., 1975)

college cannot have the impact on its community that it was meant to have. It is, therefore, critical that the community college instructor possess knowledge regarding his discipline and a high degree of expertise in the

technology of instruction.

Although it is of the highest importance for community college instructors to develop instructional skills applicable to the unique characteristics of their student body, only one sub-group of college instructors has had a program specifically designed to develop their teaching capabilities. Sponsored by the British Columbia Ministry of Education and administered through the Centre for Continuing Education at the University of British Columbia, the "Instructor's Diploma Program has been designed to provide certification for full-time instructors in vocational schools and other post-secondary institutions and for instructors in certain approved specialties within secondary schools" (Univ. of B.C., p.1). The Instructor's Diploma Program represents the only major attempt to develop the instructional skills of even a single segment of college and institute instructors throughout British Columbia.

The need for such training has been recognized for several years. In 1974, the Task Force on the Community College in British Columbia pointed out that "the principles of life-long learning which the colleges should encourage in the community should find expression in the college personnel policies"(L'Estrange,et al., 1974, p.32). The

task force recommended "that each college actively promote the professional development of its members" (p.32), and "that a variety of training programmes be developed to assist present and potential college instructors, staff, and administrators to carry out the new programmes and services" (p.33) which the task force was recommending in its report. After nine years of continuous, explosive development, the young community college system in British Columbia was reminded publicly that its attention must be turned to the problem of developing its human resources.

Two reports during the next four years examined *professional development* needs in the colleges and institutes of the province. The first of these, written as a result of the deliberations of the *Ad Hoc Committee on Faculty Certification and Professional Development*, recommended "that the Department of Education recognize the need for professional development by approving institution budget allocations for such purposes" (Pankratz,et al., 1976, p.11). Further, the committee recommended "that the Department of Education substantially increase its financial support for more workshops and seminars on the improvement of teaching skills and other educational processes,throughout the province" (p.11).

More recently, the B.C. Council of College Principals observed that "all personnel of the colleges and institutes need systematic and continuing opportunities to develop professionally, if the college system is to be able to realize qualitative development" (B.C. Principals, 1978, p.2). They went on to point out that"with the emerging stability of the system . . . the opportunity is now ripe for the institutions themselves, in collaboration particularly with the Ministry of Education, to take collective responsibility for their own . . . institutional development programs" (p.3).

The Ministry of Education responded positively to the Principals' proposal "that the Ministry . . . give immediate . . . financial support to the establishment and maintenance of a system-wide program of professional development . . . for the colleges and provincial institutes of the Province" (p.3).

In the summer of 1978, the Program Services Division, Ministry of Education, commissioned the author of this paper to conduct a study of the developmental needs of staff in community colleges and Provincial Institutes in British Columbia. The unpublished report produced as a result of that study included:

1. a description of the principal features which

a comprehensive approach to staff development in British Columbia would need to have;

2. a thorough review of all current Ministry-funded staff development projects;
3. recommendations for the commitment of available staff development funds for the remainder of the 1978 - 1979 fiscal year;
4. recommendations for the purchase of print-support material related to the staff development function for distribution to the colleges and institutes in British Columbia; and
5. a set of medium-range (one to three years) staff development objectives.

The 1978 study provided an information base for the personnel of the Program Services Division in the Ministry of Education to engage in the short-term commitment of available funds during the remainder of the 1978 - 1979 fiscal year, as well as a longer range projection of financial requirements to fund staff development initiatives in the colleges and institutes during the ensuing three to five years. Having interviewed a wide range of personnel from within the post-secondary, non-university system across the province, the writer observed that no training program in

existence provided college/institute instructors the opportunity to develop the skills required to carry out their classroom functions. He recommended that priority be given to short-term funding of instructor development programs. More specifically, it was recommended that the Program Services Division of the Ministry of Education fund a new project entitled 'Instructional Skills for Post-Secondary Instructors'. That recommendation resulted in the Ministry of Education committing funds for the purpose of developing and implementing a workshop-based training program designed to develop the classroom instructional performance of post-secondary instructors. This paper will describe the evolution of that training program, the content and process of each of the workshops which comprise the training program, and the theoretical and conceptual principles and models on which the program is based.

CHAPTER 2

PRINCIPLES OF INSTRUCTION

What are the technical skills and personal qualities of the *good* instructor?

This question cannot be answered objectively - the phrase 'the *good* instructor' implies making a value judgment about what 'good' means within the context of an instructional situation. What is regarded as 'good' by an empirical researcher (e.g., a psychologist) may not be by a phenomenologist (likely a philosopher). Thus, to respond to the question implies assuming a stance - subscribing to certain specific principles or tenets while rejecting others.

In fact, even the phraseology of the question implies the principal bias of the position taken in this paper. A 'good' instructor possesses certain definable technical skills *and* particular describable personal qualities which co-exist within the individual in a state of dynamic balance - a state of balance characterized by tension rather than by harmony. Technical skills alone are not enough, for a good instructor must be able to interact in a warm, sensitive manner with his students. On the other hand, such personal qualities as warmth, empathy, and humaneness do not of themselves result in good instruction if that instruction is

unplanned and inappropriate to the desired learning outcomes. This dynamic balance between technical skills and personal qualities is succinctly summarized by Shuell and Lee (1976, p.148):

> . . . a good teacher knows what he wants his students to learn, knows something about the dynamics of human behavior, is familiar with and respects the unique characteristics of each of his students, has an effective way of conceptualizing the learning/teaching process, enjoys teaching, is reflective and open to new, and possibly better, ways of doing things, and is willing to continue learning himself.
>
> (Shuell and Lee,1976,p.148)

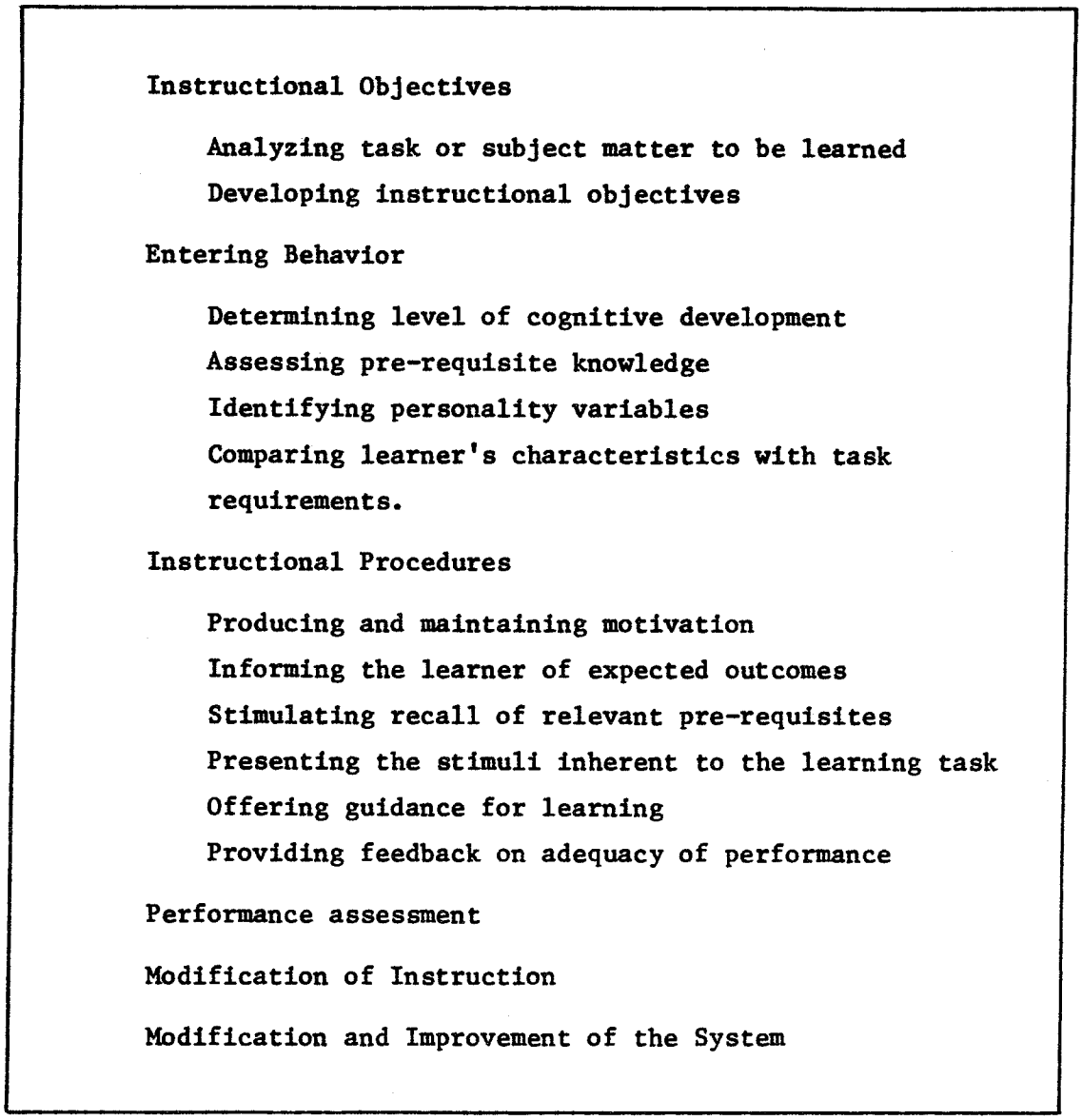
THE TECHNICAL SKILLS OF A GOOD INSTRUCTOR

A good instructor must be able to plan instruction, carry out instructional/learning events, and evaluate learning gains. This simple statement, based on the teaching model outlined in Figure 1,entails mastery of several specific competencies:

1. writing instructional objectives in behavioural (or performance) terms (Shuell and Lee,1976,pp.85 - 101; Mager, 1975; Gronlund, 1978; Kemp, 1977, pp.23 - 42);
2. preparing lesson plans in which
   (a) the choice of instructional techniques, learning activities, and instructional devices are congruent with desired learning outcomes (Gagné, 1975;

FIGURE 1

A MODEL OF TEACHING



(Shuell and Lee, 1976, p.80)

Kemp, 1977,pp. 55 - 83); and

(b) instructional/learning activities are sequenced in accordance with empirically validated principles of instructional design (Gagné and Briggs,1974);

3. employing a variety of commonly used instructional techniques and devices in the instructional setting in a manner appropriate to the needs or demands of the situation (Gagné and Briggs,1974; Stephens and Roderick, 1974; Dickinson,1973); and
4. assessing both the learner's competence prior to the instructional event and his mastery of the objective(s) following it (Gronlund,1977; Mager,1973; Gagné and Briggs,1974; Dickinson,1973; Kemp,1977).

THE PERSONAL QUALITIES OF A GOOD INSTRUCTOR

Along with a high level of technical competence in the skills of instruction, the good instructor exhibits a number of personal qualities which, taken as a whole, constitute a style. These qualities include:

1. a positive disposition - "being a good teacher boils down to have a positive attitude toward learning, toward oneself, and toward one's students" (Shuell and Lee, 1976, p.148);
2. sensitivity to each learner's own unique learning style

and his needs (Dickinson,1973; Kemp,1977);

3. the ability to listen to what is being communicated at levels other than the purely verbal (Greenleaf,1973);
4. openness to change - the ability to experiment, take risks, and self-disclose when appropriate (Pfeiffer and Jones,1972):

> Being a good teacher is an ongoing process; a teacher should also be a student; he should never stop learning. In many ways, a teacher serves as a model for his students; if he is willing and eager to learn, this attitude is likely to be echoed by a similar attitude in his students.
>
> (Shuell and Lee,1976,p.147);

5. the ability to be nurturing, supportive, and encouraging - to lead by following as well as by directing (Greenleaf, 1973); and
6. a caring disposition (Mayeroff,1971).

While technical competence is essential to the performance of the tasks described in each of the six stages of the Shuell and Lee learning model, the learning which takes place as a result of the instructional procedures (the third stage of the model) is dependent to a considerable extent on the style (or personal qualities) of the instructor. Although instructor style is particularly relevant to the instructional tasks of (a) producing and

maintaining motivation, (b) offering guidance for learning, and (c) providing feedback on adequacy of performance, the bearing and disposition of the instructor suffuse the instructional event and affect every aspect of it. The manner in which the instructor interacts with the learners and facilitates interaction among the learners contributes to the establishment and maintenance of a climate conducive to learning (Shuell and Lee,1976, pp.144 - 146; Legge, 1974).

Stephens and Roderick (1974, pp.12,13) provide a review of the personal qualities of a good instructor (and add a few of their own) in their description of the characteristics of a good teacher of adults:

> he will like people, and act intelligently towards them; despite his own intelligence he will not be contemptuous towards students who are of limited ability; he will be good humoured; he will view every class as a group of varied personalities who need the maximum aid he can give, mainly in educational terms, but also sometimes in social terms; he will be tactful and fair, energetic and articulate, imaginative and adaptable.

CHARACTERISTICS OF GOOD INSTRUCTION

Good instruction is grounded in sound, validated principles of learning, as Shuell and Lee (1976,p.147) point out:

> Instruction . . . should be based on principles of learning, both affective and cognitive. The purpose of teaching is to help someone else to learn, and this can be accomplished only if what we do is based on valid principles of learning.

In order to be able to create consistently high quality, effective learning situations, an instructor must understand how people learn and why they learn as they do. The principles of learning which were synthesized into a coherent learning theory by Gagné (1975) form the basis for the Instructional Skills Program. The elements of Gagné's learning theory relevant to the Instructional Skills Program are outlined below.

1. Learning

The purpose of instruction is to promote learning. "Learning is a change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth" (Gagné,1970,p.3). Learning occurs as a consequence of the interaction between the learner and his environment - "all learning involves changing one's behavior under the influence of one's environment"(Levine, et al.,1977,p.23).

2. The Learning Event

A learning event . . . takes place when the *stimulus situation* affects the learner in such a way that his

performance changes from a time *before* being in that situation to a time *after* being in it" (Gagné,1970,p.5).

3. The Processes of Learning

In order to effect performance change in an efficient and predictable manner, the instructor must purposefully structure every possible aspect of the learner's environment. Not only must distractions be minimized, but variables must be structured to account for the phases of the act of learning. The phases of an act of learning and the processes associated with them are outlined in Figure 2.

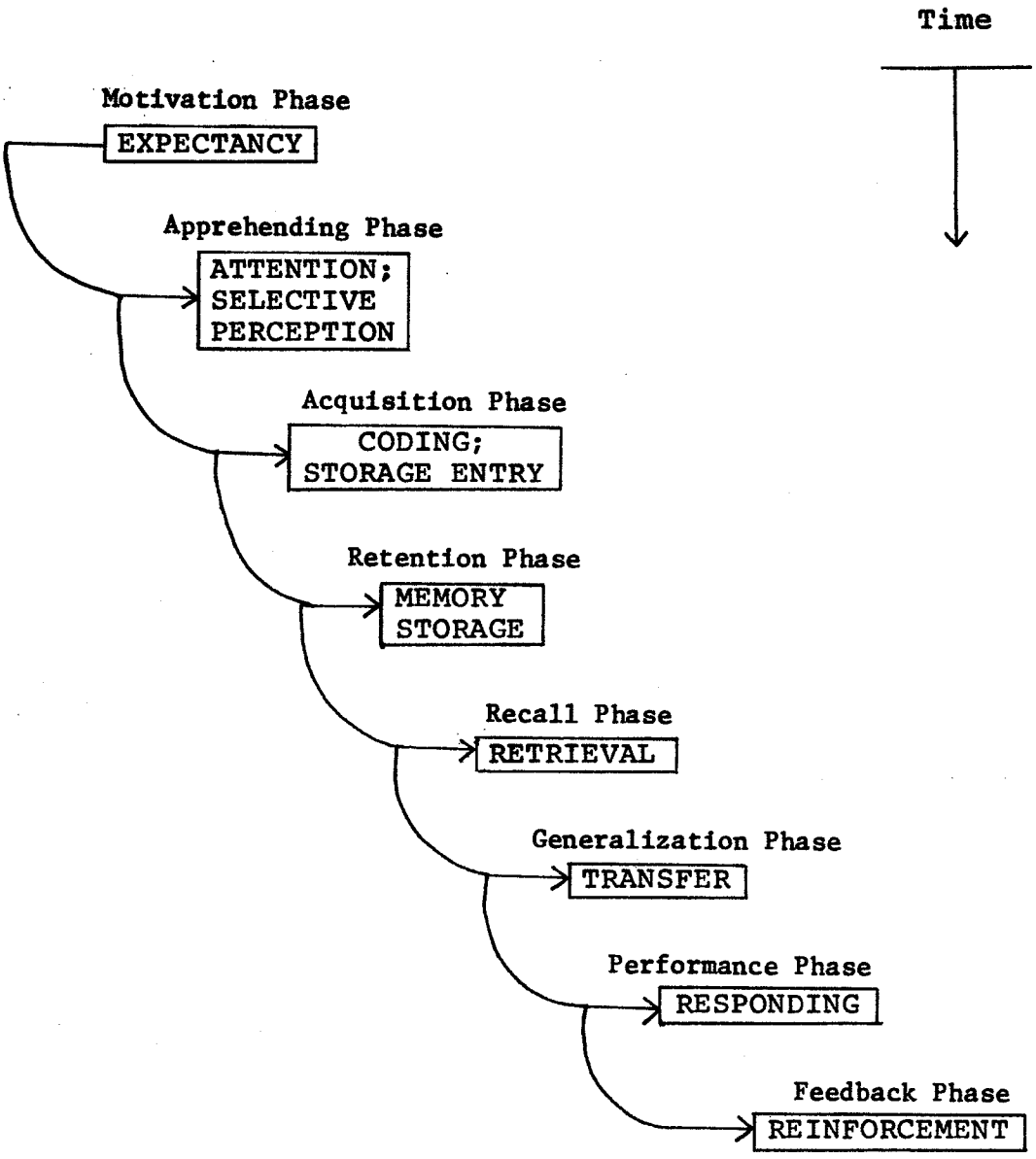
4. Learning Outcomes

A key component of Gagné's learning theory is his concept of learning outcomes. Following from his definition of learning as a more or less permanent change in human disposition or capability, Gagné describes the outcomes of learning as "human capabilities which make possible a variety of performances" (1975,p.50). He further asserts that "types of human capabilities can be identified as categories that cut across subject matter fields, and indeed are independent of them, so far as their formal characteristics are concerned" (1975,p.51).

FIGURE 2

THE PHASES OF AN ACT OF LEARNING AND

THE PROCESSES ASSOCIATED WITH THEM



> There are five major categories of learning outcomes - that is, five classes of learned human capabilities . . . they are
> (1) *verbal information*,
> (2) *intellectual skills*,
> (3) *cognitive strategies*,
> (4) *attitudes*, and
> (5) *motor skills*.
>
> (Gagné,1975,pp.51,52)

5. Conditions for Learning

As was pointed out in sub-section 3 above, "the process of learning has several distinguishable phases. Its purpose is the establishment of internal states or capabilities. The five major varieties of these learning outcomes were described in" (Gagné,1975,p.71) subsection 4 above.

> The process of learning must be supported by events occurring both outside and inside the learner. Support for learning outcomes can be conceptualized in a general way - it must enhance motivation, direct attention, provide the means of coding and retrieval, promote retention and transfer, and furnish feedback to complete the learning act.
>
> (Gagné,1975,p.71)

Good instruction must account for the differential properties of the five categories of learning outcomes in Gagné's typology. Because each outcome category possesses unique characteristics, the optimal conditions for learning will be different for each. In order to provide appropriate support for each act of learning, the instructor must structure the environment and interact with the learner in such a way that the external and internal conditions are

conducive to the learning. The external conditions which support each of the five categories of learning outcome are presented in Table 4.

Generalizing from the information shown in Table 4, "some of the ways in which external events are used to influence learning occur again and again" (Gagné,1975,p.92). These include:

(a) stimulating recall;

(b) direct presentation of stimulation;

(c) activation of a mental set; and

(d) providing feedback (Gagné,1975,pp.92 - 95).

All four of these general ways of influencing learning are employed in each of the three workshops which comprise the Instructional Skills Program. The manner in which each is used to create learning conditions appropriate to the various learning outcomes will be explored when each of the workshops is described.

TABLE 4

A SUMMARY OF EXTERNAL CONDITIONS WHICH CAN CRITICALLY INFLUENCE THE PROCESSES OF LEARNING

Class of Learning Objective	*Critical Learning Conditions*
Verbal Information	1. Activating attention by variations in print or speech 2. Presenting a meaningful context (including imagery) for effective coding
Intellectual Skill	1. Stimulating the retrieval of previously learned component skills 2. Presenting verbal cues to the ordering of the combination of component skills 3. Scheduling occasions for spaced reviews 4. Using a variety of contexts to promote transfer
Cognitive Strategy	1. Verbal description of strategy 2. Providing a frequent variety of occasions for the exercise of strategies, by posing novel problems to be solved
Attitude	1. Reminding learner of success experiences following choice of particular action; alternatively, insuring identification with an admired "human model" 2. Performing the chosen action; or observing its performance by the human model 3. Giving feedback for successful performance; or observing feedback in the human model
Motor Skill	1. Presenting verbal or other guidance to cue the learning of the executive subroutine 2. Arranging repeated practice 3. Furnishing feedback with immediacy and accuracy

(Gagné, 1975, p.92)

CHAPTER 3

A TRAINING PROGRAM FOR POST-SECONDARY INSTRUCTORS

If the skills and qualities of a *good* instructor can be defined, can they be developed in a large number of instructors by means of a planned intervention?

We now turn our attention to the second of the two questions posed in the Introduction to this paper. Given the historical, geographical, and demographic variables outlined in Chapter 1, the task described in this chapter is the design of a training program with the goal of providing post-secondary instructors with the opportunity to develop the technical skills and personal qualities of a good instructor delineated in Chapter 2.

THE GENESIS OF THE INSTRUCTIONAL SKILLS PROGRAM

In 1975, Dennison established that most post-secondary non-university instructors have not had any training in the core skills of instruction (pp.114,115). That fact still prevails today. Instructors have been hired in almost every case on the basis of demonstrated expertise in their respective disciplines, not because of any demonstrated competence as instructors.At the time of hiring, whatever training most new instructors receive generally takes the form of a short

half-day to one-day induction and orientation session, or it is the result of collegial interaction. Neither strategy is intended to develop actual skills of instruction. Thus it was that in 1978, the writer recommended that the highest priority be given by the Ministry of Education to the funding of training programs related to the development of new instructors. That study contained a recommendation for a program to train instructional staff coming into the post-secondary, non-university system. The following is a description of the program as it was envisioned at that time.

PROJECT TITLE: Instructional Skills for Post-Secondary Instructors

PROJECT DESCRIPTION: A modularized workshop for both new and experienced post-secondary instructors which can be conducted on-site by a trained instructional team from each college or institute.

The project would be carried out in six stages over a six-month period as follows:

Phase 1

Selection of design team

Design of workshop modules

Selection of evaluation team

Design of evaluation strategies, instruments

Phase 2

Selection of pilot workshop instructors

Planning of pilot workshops

Selection of pilot workshop participants

Conduct of pilot workshop

Evaluation of pilot workshop

Phase 3

Redesign of workshop modules

Design of supplementary workshop for instructional teams

Phase 4

Selection of instructional teams by each participating institution

Conduct of workshops (two) for instructional teams

Evaluation of workshops

Phase 5

Implementation of workshops at various institutions by campus-based instructional teams

Support and coaching of instructional teams by original design/implementation team as required

Phase 6

Follow-up evaluation of the project

Final report of the project

LOCATION OR CONTRACTING AGENCY: To be determined

DURATION: Six months . . .

FUNDING SOURCE: Professional Development - Ministry of Education ....

PROJECTED COMPLETION DATE:

Phases 1 to 4 - March, 1979

Phases 5 & 6 - March, 1980.

While several aspects of the Instructional Skills Program have evolved considerably since the writer's original conception of the project, many of the essential components were already envisioned at that early date.

PROBLEM: THE GEOGRAPHICAL DISTRIBUTION OF THE TARGET POPULATION

One of the problems which influenced the design of the program was that of the geographical dispersal of college and institute instructors throughout the province of British Columbia. With fourteen community colleges and six Provincial Institutes located in as broadly divergent areas of the province as Terrace in the north-west, Dawson Creek in the north-east, Cranbrook in the south-east of the province, and Victoria in the south-west, a delivery methodology had to be found which would make it possible for large numbers of people to be trained on a continuing

basis. Because of the large numbers of people involved and their wide-spread distribution throughout the province, it was obvious from the outset that it would be impossible to conduct a training program (a) which was centralized in the Lower Mainland (or, for that matter, in any other single major population centre of the province) and (b) which remained dependent upon a small number of individuals or an institution to deliver the program to the target group.

OVERVIEW OF THE PROGRAM

In view of these factors, the strategy developed was based on the principle of training personnel from within the target group to train remaining members of the group. Once funding approval had been granted by the Ministry of Education and the design of the actual training program was well underway, the program was offered to the community colleges and Provincial Institutes on the basis of voluntary participation. The program is provided at no direct cost (e.g., tuition fees) to any of the participating institutions, but colleges and institutes are required to commit their employees' time and necessary travel funds in order for their instructors to participate. Program operations are based within the Program Development Department, Vancouver Vocational Institute Campus, Vancouver

Community College.

The method (Verner,1964) used in the Instructional Skills Program is the workshop. The workshop is the delivery vehicle at each level of the program. The program is comprised of three distinct workshops - The Instructional Skills Workshop, The Facilitator Training Workshop, and the Training Team Workshop (see Figure 3). Each of these will be introduced briefly in this chapter, then treated in more depth in subsequent chapters.

FIGURE 3

THE INSTRUCTIONAL SKILLS PROGRAM WORKSHOPS

TRAINING TEAM WORKSHOP	1 or 2 PROGRAM DIRECTOR(S) AND 4 or 5 TRAINER TRAINEES
FACILITATOR TRAINING WORKSHOP	1 or 2 PROGRAM DIRECTOR(S) AND 4 TRAINERS and 20 FACILITATOR TRAINEES
INSTRUCTIONAL SKILLS WORKSHOP	1 FACILITATOR AND 5 INSTRUCTOR TRAINEES

THE INSTRUCTIONAL SKILLS WORKSHOP

The Instructional Skills Workshop is conducted at each participating college or institute by experienced instructional staff of that college or institute who have been trained in the Facilitator Training Workshop. Each workshop group is made up of a facilitator and five participants. Facilitators conducting the Instructional Skills Workshop have been trained in a Facilitator Training Workshop.

THE FACILITATOR TRAINING WORKSHOP

The Facilitator Training Workshop is run in two different settings: (a) centrally, at the Langara Campus of Vancouver Community College, once every three to four months; a minimum of twenty participants attend each workshop;the workshop is conducted by a group of four trainers and a program director;and (b) at any community college or Provincial Institute in British Columbia at the request of that institution; when the workshop is held at a participating institution, it is conducted with a trainer - participant ratio of one to five.

Trainers conducting the Facilitator Training Workshop have been trained in a Training Team Workshop by a program director. In general, Facilitator Training Workshop participants are experienced instructional staff from participating institutions selected or recruited by their administrative personnel. The assumption which underlies this selection process is that it is better to have facilitators who have credibility with, and the approval of, their institutional administrators than to try to conduct a centrally controlled screening system, thus at least implicitly calling into question the judgment of institutional administrators.

THE TRAINING TEAM WORKSHOP

The Training Team Workshop is held at the Langara Campus of Vancouver Community College. It is conducted by one or two directors(the usual purpose of co-directing the workshop is to develop a 'graduate' of a previous trainer group as a program director) and is attended by four or five workshop participants. Each participant in the Training Team Workshop is an experienced instructor from within the post-secondary, non-university system who has been a participant in the Facilitator Training Workshop (and, preferably, conducted one or more Instructional Skills Workshops at his home institution). Participants in the Training Team Workshop

preparing to function as trainers in the next Facilitator Training Workshop have themselves been identified during a previous Facilitator Training Workshop by their trainers as having that potential.

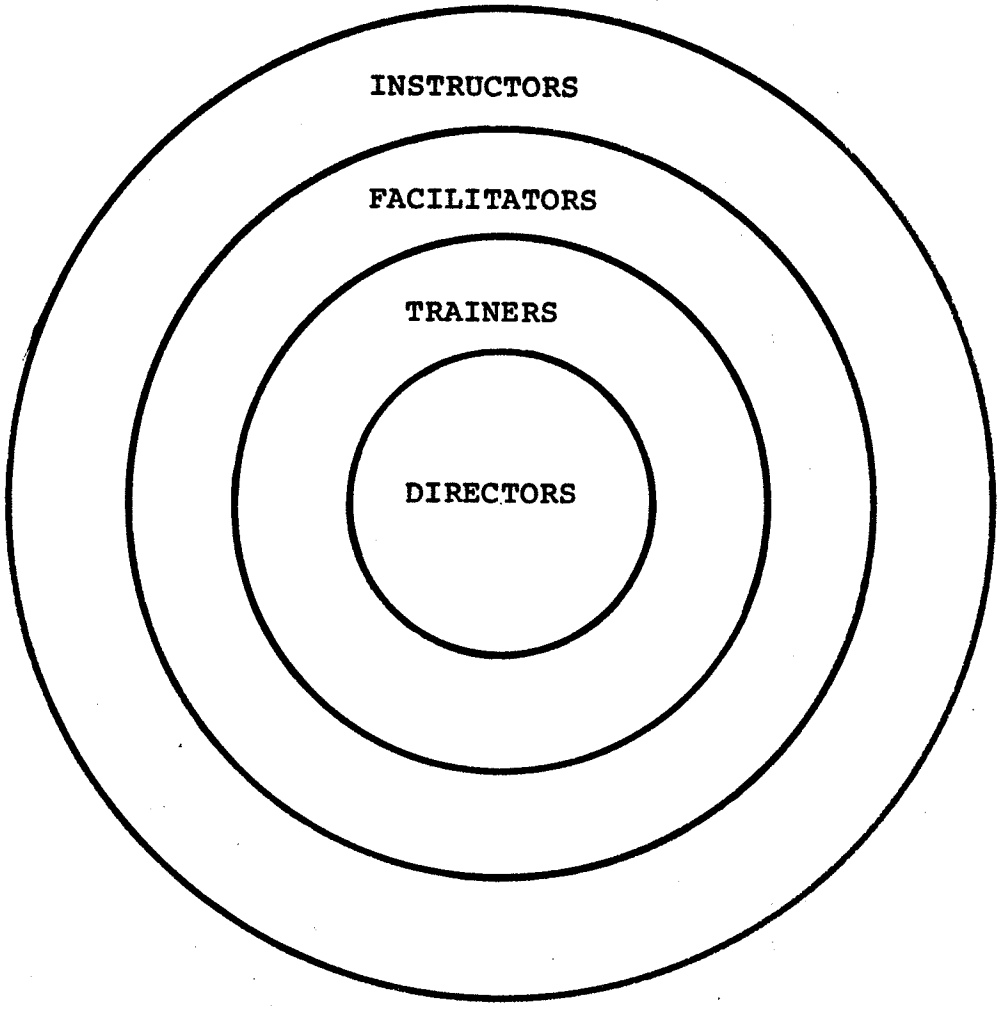
THE DIFFUSION STRATEGY OF THE INSTRUCTIONAL SKILLS PROGRAM

Figure 4 is a graphic portrayal of the diffusion strategy developed for the Instructional Skills Program. The diagram is based on the analogy of the ripples created in a pond by a stone being dropped on the surface of the water. Central to the success and continuance of the program is the role of the program director. In that role during the past two years, the author of this paper has been responsible for the design of each of the workshops, the selection of those who would function in the role of trainer, the conduct of the Training Team Workshop, and the implementation of the Facilitator Training Workshop. The number of program directors is now being expanded, with directors being recruited from the corps of trainers. In turn, the corps of trainers is continually expanding as they are recruited from the ranks of Facilitator Training Workshop participants. Facilitator trainees are now being recruited not only by their college administra-

tions, but also by previously trained facilitators who are 'spreading the word' back at their campuses.

FIGURE 4

"RIPPLES" DIFFUSION STRATEGY



The "Ripples" Diffusion Strategy is founded on a key assumption which distinguishes the Instructional Skills Program from a number of other programs which currently operate in British Columbia and elsewhere on the continent, most of which are institutionally based. That assumption is that the capability to effect dramatic improvement in the quality of instruction resides in the instructors currently functioning within the system. The program itself with its three-tiered workshop methodology is simply the vehicle whereby the development can take place.

The program does not depend for its success upon experts or specialists parachuted into the system for the purpose of conducting the training. Rather, the responsibility for the development of instructional skills within the post-secondary instructional community resides with people from within that group.This basic tenet of the Instructional Skills Program is an outgrowth of the notion that the capability to function as a superior classroom instructor already resides in the life experience of most instructors. The function of the Instructional Skills Program is to draw forth and focus a number of those life experiences on the classroom situation. The focussing and refinement process is best carried out by instructors themselves.

AN EXAMPLE OF A CONTEMPORARY INSTRUCTOR DEVELOPMENT PROGRAM

The Instructional Skills Program has drawn heavily on the experience of a program in the province of Quebec aimed at improving instructional competence in the Collèges d'Enseignement Général et Professionel (CEGEPs). The principal features of the Performa program (Riendeau, 1977) were detailed by the program director, Riendeau, to this writer in an interview in August 1978. A brief description of the program follows.

The new public system of Collèges d'Enseignement Général et Professionel (CEGEPSs) was launched in Quebec in 1967. By 1971, the system had mushroomed in size. A large number of instructors inherited from the venerable *colleges classiques* and an even larger number of younger teachers recruited from industry and from graduate schools comprised the college faculties. The vast majority of CEGEP instructors had little or no training in the technology of instruction.

In response to this situation, the University of Sherbrooke, with funding from the Quebec Ministry of Education, designed Performa - an individualized, flexible professional development program - for the faculties of

five French-speaking and two English-speaking CEGEPs. The formal agreement between the university and each participating college stipulates the responsibilities of each institution.

The university provides overall program administration and learning resources while the college supplies a faculty development officer, administrative support, instructional resources, office space, and, perhaps most importantly, the strong support of the program by the administration. Participation in Performa is voluntary and confidential, and faculty members earn academic credits for taking part in approved developmental activities which are offered or which can be designed especially for them. The earning of thirty credits (recognized as the equivalent of one year of 'scholarity') results in the awarding of a Certificate of College Faculty Development and, usually, a salary increment for the college instructor. A key role is played in the development and maintenance of the program by the full-time, professional faculty development officer who, as an employee of the participating college, maintains a neutral position in relation to the university, the college, and the faculty, while helping instructors to identify their own needs and to design and carry out activities to meet

their identified needs. The premise upon which Performa has been founded is summarized succinctly by Riendeau's statement, "For a college to become a learning community, its teachers must become learners" (1977,p.67).

One further aspect of the Performa program is germane to this discussion of the Instructional Skills Program. Whenever possible, it has been the practice of the Performa director to encourage the development by each participant in the program of self-directed study projects carried out in conjunction with another instructor from the same institution who has been involved in a similar project in the past. Again, the underlying philosophy is one of instructors helping instructors and seeking support for their self-developmental activities from their peers. There are several similarities between the Quebec experience described above and the situation in British Columbia. Some are obvious from the text of this paper and do not require further comment. In the Instructional Skills Program, as with Performa, such aspects of the program as program administration and learning resources are supplied centrally, while the colleges and institutes commit their employees' time and travel time. Colleges and institutes participating in the Instructional Skills Program also must make a strong

commitment to support trained facilitators returning to their campuses. While, as with Performa, participation in the Instructional Skills Program is voluntary, in British Columbia no credit is granted for this involvement.Indeed, Riendeau strongly advised against involvment with problems of credentialing and accreditation of instructors unless it was absolutely necessary to do so. He pointed out that in the province of Quebec, with its unique system of linking salary to years of scholarity, credentialing was essential as a motivator. However, since British Columbia operates on a different system of determining salary placement, Riendeau strongly advised that the Instructional Skills Program function purely as a non-credit, voluntary participation program. The key influence of the Performa program on the Instructional Skills Program, however, is summarized in Riendeau's article: "For a college to become a learning community its teachers must become learners" (1977,p.67). The underlying principle of Performa is one of *instructors helping other instructors and taking responsibility for their own development*.That thinking led ultimately to the particular diffusion strategy adopted by the Director of the Instructional Skills Program in British Columbia.

CHAPTER 4

PEERS TRAINING PEERS

Given the geographical and demographic constraints described in Chapter 1, as well as the prevailing atmosphere of fiscal restraint in the Ministry of Education, it was unrealistic to propose an institutionally-based training program for post-secondary, non-university instructors in British Columbia. Such a program would be costly to operate and would foster dependence on a centrally-located body of 'specialists'. For these reasons the decision was made to design a program based on the principle of *peers training peers*.

PRINCIPLES OF LIFELONG EDUCATION

The *peers training peers* approach is consistent with a number of concept characteristics of lifelong education. Dave (1976) enumerates a number of lifelong education concepts which underly the Instructional Skills Program:

1. "Education . . . is a lifelong process" (p.51). The good instructor is always a learner. The Instructional Skills Program provides an instructor - regardless of his level of experience - with a setting in which to work on the improvement of his instructional skills.

2. "Institutions of education . . . no longer enjoy the monopoly of educating the people" (p.51). This principle of deinstitutionalization, championed by Illich(1970a, 1970b) underlies in part the decision to operate the Instructional Skills Program on a non-credit basis from within the target system.
3. "Lifelong education . . . represents democratization of education" (p.51). The Instructional Skills Program, designed and conducted by the very people it serves, is democratizing post-secondary, non-university instructor training in British Columiia.
4. "The ultimate goal of lifelong education is to maintain and improve the quality of life" (p.52). The ultimate goal of the Instructional Skills Program is to improve the quality of instruction in the British Columbia colleges and institutes.
5. In lifelong education there is an "emphasis on self-directed learning . . ., inter-learning, . . . participatory evaluation of the individual's performance, [and] co-operative evaluation of group work"(p.54).The design of the Instructional Skills Program workshops places the onus of responsibility on the individual participant for his own learning and creates a learning situation

in which the group functions as the primary resource for each participant.

The principles of lifelong education outlined above apply both to the roles of instructor (for which Instructional Skills Workshop participants are trained) and facilitator/trainer (for which participants in the Facilitator Training Workshop and the Training Team Workshop are trained). The notion of active participation in self-help activities is firmly rooted in the community development literature:

> A community basis for thinking of adult education, in contrast to the institutional approach, focuses attention on the needs of individuals and on the needs of the community when programs are planned. . . . The community development idea of adult education is built on this combination, with strong emphasis on community problems and their solution by the active participation of the people concerned through self-help activities. When carried out in proper balance, with specific consideration for the learning which is inevitably involved, this is an excellent manifestation of the modern understanding of learning by doing.
>
> (Hallenbeck,1964,p.11)

Learning by doing - or 'experiential learning' as it is commonly called - is at the heart of the Instructional Skills Program. But learning by doing is likely to achieve desired outcomes only if it is planned, structured, and guided by competent leaders who possess both the technical skills and personal qualities described in Chapter 2. The

required technical skills of the facilitator/trainer (the workshop leader) are treated in depth in Chapters 6 and 7.What follows is a discourse on two of the personal qualities critical to the role of facilitator/trainer.Two major concepts or themes will be explored: the concept of servanthood and that of caring. The high degree of interrelationship between the two concepts will become apparent as the exploration proceeds. The discussion which follows will include an exploration of a number of the tenets of each theme, as well as an exploration of the ways in which these two streams of thought relate to the Instructional Skills Program.

SERVANTHOOD

"If anyone wants to be first, he must make himself last of all and servant of all" (N.E.B.,1970,Mark 9:35). In this single statement Jesus of Nazareth summarizes the basic principle of what constitutes true servanthood. To phrase the same principle in another way: to serve is to lead and to lead is to serve. This principle is developed somewhat more fully by Greenleaf (1973) in his short monograph The Servant as Leader.Greenleaf maintains that:

> The servant-leader *is* servant first.. . . It begins with the natural feeling that one wants to serve, to *serve* first. Then conscious choice brings one to aspire

> to lead. He is sharply different from the person who is *leader* first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. For such, it will be a later choice to serve - after leadership is established. The leader-first and the servant-first are two extreme types. Between them there are shadings and blends that are part of the infinite variety of human nature.
>
> The difference manifests itself in the care taken by the servant-first to make sure that other peoples' highest priority needs are being served. The best test . . . is: do those served grow as persons; do they, *while being served,* become healthier, wiser, freer, more autonomous, more likely themselves to become servants?
>
> (Greenleaf,1973,p.7)

Greenleaf's distinction between the servant-first individual and the leader-first individual is similar to that made by Conyne (1975,p.139) between the toxic individual who extracts nourishment from others and the nourishing person who generates enrichment. A key element in Greenleaf's discussion is his description of the evidence of a servant-first (or nourishing) individual. The interaction of a servant-first individual with others results in the others' growth. Expanding still further on the characteristics of the servant-leader, Greenleaf describes a number of the qualities of the servant-leader.

1. The servant-leader initiates.

> He initiates, provides the ideas and the structure, and takes the risk of failure along with the chance of success. He says, "I will go, follow me!" when he knows that the path is uncertain, even dangerous. And he trusts those who go with him.
>
> (p.8)

2. The servant-leader is a listener first. "A non-servant who wants to be a servant might become a *natural* servant through a long arduous discipline of learning to listen . . . true listening builds strength in other people" (p.10). In order to be able to listen with his whole being, the servant-leader must be comfortable with silence."One must not be afraid of a little silence. Some find silence awkward or oppressive. But a relaxed approach to dialogue will include the welcoming of some silence" (pp.10,11).

3. The servant-leader is skilled in the art of helping other people to make sense of the information inputs which they are receiving.

> Nothing is meaningful until it is related to the hearer's own experience. One may hear the words, one may even remember and repeat them, as a computer does in the retrieval process. But *meaning*, a growth in experience as a result of receiving the communication, requires that the hearer supply the imaginative link from the listener's fund of experience to the abstract language symbols the speaker has used. As a leader . . . one must have facility in tempting the hearer into that leap of imagination that connects the verbal concept to the hearer's own experience.
>
> (p.11)

4. The servant-leader is accepting and empathetic.

> The servant always accepts and empathizes, never rejects. The servant as leader always empathizes, always accepts the person but sometimes refuses to accept some of the person's effort or performance as good enough. . . . *Acceptance* is receiving what is offered with approbation, satisfaction, or acquiescence;

> and *empathy* is the imaginative projection of one's own consciousness into another being. . . . Acceptance of the person . . . requires a tolerance of imperfection.
>
> (pp.12,13)

5. The servant-leader has an unusually high level of

> awareness, opening wide the doors of perception so as to enable one to get more of what is available of sensory experience and other signals from the environment than people usually take in. . . . Awareness is *not* a giver of solace - it is just the opposite. It is a disturber and an awakener.
>
> (pp.19,20)

6. The leader-servant exercises "power of persuasion and example" (p.32). When power is exercised in this manner, it "is used to create opportunity and alternatives so that the individual may choose and build autonomy" (p.32).

7. The servant-leader has a sense of responsibility for problems.

> The servant views any problem in the world as *in here*, inside himself, not *out there*. And if a flaw in the world is to be remedied, to the servant the process of change starts *in here*, in the servant, not *out there*.
>
> (p.34)

The qualities of a servant-leader described by Greenleaf constitute a portrait of the ideal trainer of facilitator in the Instructional Skills Program. But few, if any, of us possess all of these attributes. Those who tend to be good trainers or facilitators, however, manifest a number of these attributes to a marked degree. They tend

as well to be people who are in a continual state of becoming as opposed to people who see themselves as having arrived. That is, they tend generally to be people who are working on their own development or growth in one or more of these areas.

CARING

"To care for another person, in the most significant sense, is to help him grow and actualize himself" (Mayeroff,1971,p.1). This single statement by Mayeroff captures the essence of the underlying purpose of the Training Team Workshop and the Facilitator Training Workshop. Each of these workshops is designed to provide the participants in the workshop with the opportunity to grow and develop in their own skills and in their capability to care for themselves and the other workshop participants. Caring is not something that one can turn off and on like a light switch. It "is a process, a way of relating to someone that involves development, in the same way that friendship can only emerge in time through mutual trust and a deepening and qualitative transformation of the relationship" (Mayeroff,1971,p.1). If, as a trainer or facilitator, I am helping the other to grow by functioning in a caring manner,

> I experience the other as an extension of myself and also as independent and with the need to grow; I experience the other's development as bound up with my own sense of well-being; and I feel needed by it for that growing. I respond affirmatively and with devotion to the other's need, guided by the direction of its growth.
>
> (Mayeroff,1971,pp.9,10)

Mayeroff describes the major ingredients of caring as follows:

1. the patience to "enable the other to grow in its own time and in its own way" (p.17);
2. the honesty involved in "seeing the other as it is and not as I would like it to be or feel it must be" as well as seeing "myself as I am: I must see what I am doing and whether what I am doing helps or hinders the growth of the other" (p.19);
3. "trusting the other to grow in its own time and in its own way . . . only the man who trusts himself to grow, who is not trying to force himself to be something he thinks he is supposed to be, will be able to trust another person to grow" (pp.20,22);
4. humility in being ready and willing to learn more about the other, about oneself and about what caring involves. Humility "includes learning from the one cared for as well" (p.23);

5. hope as "an expression of the plenitude of the present, a present alive with a sense of the possible" (p.26);
6. the courage to trust in the other to grow and in one's own ability to care - "without the courage to go into the unknown such trust would be impossible" (pp.27,28).

Each of these major ingredients of caring is a characteristic of considerable importance to the facilitator/trainer in the Instructional Skills Program. The facilitator/trainer must have the patience to allow the workshop participant to develop and grow in his own time. He must be honest with each workshop participant and with the group as a whole both in clearing his purposes within the context of the workshop and in providing feedback to individuals within the group. He must trust in his own capability to function competently in the group and he must be capable of developing a high level of mutual trust amongst the group members. He must have the humility to see himself not as an expert or as a specialist but as a fellow-learner with the other workshop participants. He must be hopeful in the sense that he is imbued with a faith that growth is possible and that the individuals who are participating in the workshop are capable of developing the skills essential to carrying out the workshop

for which they will be responsible at the next level. When necessary, he must have the courage to self-disclose, to take risks, and to be open to moving with the direction which is unfolding at the moment even when, at the time, this entails relinquishing control of the group process.

The qualities of acceptance, empathy, and awareness described by Greenleaf (1973) are fundamental to the process of caring. Mayeroff (1971) expands upon Greenleaf's thinking in his exposition of two aspects of caring: 'understanding' and 'being with'.

> To care for another person, I must be able to understand him and his world as if I were inside it. I must be able to see, as it were, with his eyes what his world is like to him and how he sees himself. Instead of merely looking at him in a detached way from outside, as if he were a specimen, I must be able to be *with* him in his world, "going" into his world in order to sense from "inside" what life is like for him, what he is striving to be, and what he requires to grow. . . . In caring, my being *with* the other person is bound up with being *for* him as well: I am for him in his striving to grow and be himself. I experience him as existing on the "same level" as I do. I neither condescend to him (look down on him,place him beneath me) nor idolize him (look up at him, place him above me). Rather, we exist on a level of equality. Put more accurately, I am no longer aware of levels; seeing things in terms of different levels has been, so to speak, transcended. We are jointly affirmed; neither one is affirmed at the expense of the other.
>
> (Mayeroff,1973,pp.41,42,43)

When a trainer/facilitator is capable of "being with" each participant in his workshop group, he is adhering

to and operationalizing the fundamental principle on which the Instructional Skills Program is based. To wit, that the capability to develop a high order of instructional quality throughout the post-secondary, non-university system in British Columbia resides within the instructional personnel currently employed within the system. When peer helps peer to develop in this manner, the institutionalized educational system as a whole is humanized, and ultimately the quality of instructor-student interaction in the classroom is enhanced.

CHAPTER 5

THE INSTRUCTIONAL SKILLS WORKSHOP

The Instructional Skills Workshop is conducted at participating community colleges and Provincial Institutes by facilitators trained in the Facilitator Training Workshop. The facilitators are experienced instructors from the participating institution. The workshop which they conduct has been designed so that it can be implemented in a variety of formats. It can be conducted in eight 3-hour sessions, in five or six 4-hour sessions, or in four or five 6-hour sessions. Any of these formats can be carried out on consecutive days, on alternate days, twice a week, or once a week, depending on the situation. The optimum number of participants in an Instructional Skills Workshop is five. The workshop can be conducted with a minimum of four participants. Indeed, the 3-hour session format is ideally suited to this number. On the other hand, a maximum of six participants can be accommodated in the 6-hour session format.

There are two reasons for the number of participants being restricted generally to five. First, the workshop is built on the principle of participants functioning as

a resource for each other. Because of this, if there are less than four participants, the resource group is too limited to function as a source of feedback for each individual instructor. On the other hand, if there are more than five or six participants in any workshop, then it becomes difficult to operate within the time constraints.

SKILLS DEVELOPED IN THE WORKSHOP

The workshop is designed to build specific skills involved in the design, conduct, and evaluation of instructional sessions. These skills are defined in Appendix A: "Instructional Skills Workshop: Performance Objectives." They are outlined below.

1. Design Skills

   By the end of the workshop, participants are expected to be able to write instructional objectives, prepare lesson plans, and design evaluation strategies. Writing lesson plans includes several specific sub-skills, namely:

   a) selecting instructional techniques appropriate to the instructional objective(s) for the lesson;

   b) describing the learning tasks to be engaged in by the learners;

c) selecting instructional aids which complement and support the instructional techniques used during the lesson;

d) estimating within a ten percent margin of error the amount of time required for each learning activity, and

e) sequencing the learning activities in accord with accepted principles of learning.

2. Instructional Skills

The instructional skills which participants are expected to acquire during the workshop include:

a) being able to accurately convey specific learning outcomes to the learners at the outset of an instructional session;

b) testing for learning during the conduct of the lesson;

c) conducting a lesson in such a manner that:

(i) the learners have an opportunity to practise and demonstrate the desired skills;

(ii) the learners have a high degree of participation in the learning process;

(iii) common participational instructional techniques are used;

(iv) common instructional aids are used competently;

(v) questioning is used effectively; and

(vi) the instructor feels and looks at ease.

As well, participants gain practice in the skills involved in giving each other good feedback regarding their instructional performances.

Each of the learning objectives of the Instructional Skills Workshop is derived from one or more of the five learning outcomes in Gagné's typology (see Chapter 2, pp.23,25).

> Learning objectives are related to learning outcomes; in fact, they are derived from them. To define and state an objective for learning is to express one of the categories (or subcategories) of learning outcomes in terms of human performance and to specify the situation in which it is to be observed.
>
> (Gagné,1975,p.72)

The conditions for learning described in subsequent sections of this chapter are congruent with the desired learning outcomes; thus achievement of the learning objectives within the time constraints imposed by the workshop method is maximized.

This workshop emphasizes mastery of *participational* instructional techniques for several reasons:

1. most college/institute instructors rely heavily on didactic, non-participational techniques in their day-to-day instruction (often because their role models did);

2. many instructors are unfamiliar with participational techniques and are not competent in their use;
3. non-participational techniques such as the lecture are often inefficient and ineffective, even for the acquisition of verbal information - classroom time can frequently be used more effectively by having learners *apply* verbal information acquired through reading assignments.

THE PROCESS AND CONTENT OF THE WORKSHOP

The most common format of the Instructional Skills Workshop is that of six 4-hour sessions. Figure 5 depicts in brief the content and process of each of the six sessions. Sessions 1 and 2 are devoted primarily to the development of design skills. A series of newsprint-based exercises are used to provide the participant with practice in the skills involved in writing behavioural instructional objectives, in preparing lesson plans which meet the criteria outlined above, and in designing pre-assessment and post-assessment strategies for measuring learning objectives. These exercises are designed to be conducted in conjunction with the reading and discussion of the hand-out materials which contain relevant pre-requisite information regarding each of these instructional

FIGURE 5

THE SIX 4-HOUR SESSIONS FORMAT OF THE INSTRUCTIONAL SKILLS WORKSHOP

Session #1	Session #2	Session #3	Session #4	Session #5	Session #5
Introduction to the workshop. Pre-assessment of participants' design skills. Written exercises to develop design skills.	Written exercises to develop design skills, especially lesson planning.	First cycle of mini-lessons to develop skills in designing, conducting, & evaluating instruction.	Second cycle of mini-lessons.	Third cycle of mini-lessons.	Optional: A group design project using Kemp's model to consolidate lesson planning skills. Post-assessment of participants' design skills.

design tasks (see Appendix B). The exercises have a dual purpose: a) to develop design skills in each of the participants, and b) to encourage participants to begin to provide each other with specific, objective, behavioural feedback with regard to their performance.

Sessions 3,4, and 5 are the heart of the six-session Instructional Skills Workshop. Each session is primarily based upon the conduct of a series of mini-lessons (the stages of a mini-lesson/feedback session are outlined in the participant handout entitled "Instructional Skills Workshop: Instructional Skills Practice Information Sheet" - see Appendix C).In session 3, each workshop participant conducts a short (maximum 10 minutes in length) mini-lesson which he has designed prior to the workshop session. The participant instructing the mini-lesson is expected to a) convey the instructional objective or objectives of the session, b) pre-assess learner competence, c) conduct the actual learning event, and d) post-assess learner performance. Immediately following the mini-lesson each participant in the workshop group (including the facilitator of the workshop) is given a short period of time (about seven minutes) to complete the "Mini-Lesson Observer Worksheet"(see Appendix D). The purpose of having each person in the group complete the worksheet immediately following the lesson is to enable each participant to commit his observations to paper (thus crystallizing them), and to provide feedback which the person who instructed the lesson can take away and peruse at his leisure.

When participants have finished recording their observations on the "Mini-lesson Observer Worksheets", the facilitator leads a discussion regarding the performance of the instructor, focussing specifically on (a) particular areas of performance which can be positively reinforced and (b) those which might be improved. Other participants in the workshop are encouraged to be as specific and behavioural as possible in their observations and to make concrete suggestions to the individual who conducted the mini-lesson whenever possible. The discussion is interspersed with short segments from the video-tape of the mini-lesson. These segments of video-tape are chosen by the facilitator and are used whenever possible by the facilitator in support of an observation being made by a member of the group. When the discussion regarding the mini-lesson has been concluded, the participant who conducted the mini-lesson is issued an "Instructor Worksheet" (see Appendix E) and encouraged to record his performance objectives for the mini-lesson which he will conduct in the next workshop session. The participant who instructed submits his lesson plan to the facilitator (the workshop facilitator reviews each participant's lesson plan in detail following the workshop session, recording comments, observations and suggestions

for improvement). The lesson plan, when possible, is returned to the workshop participant prior to the next session so the participant has feedback regarding his lesson-planning skills to use as a basis for preparing the lesson plan for the next mini-lesson which he will conduct.

PROCEDURAL MODELS

The mini-lesson/feedback session at the core of the Instructional Skills Workshop is patterned after the interaction analysis procedures created by Amidon and Flanders (1971) and the microteaching process originally developed at Stanford University (Brown,1975). Below is a description of each procedural model and an account of the operational procedures adopted or adapted from each.

The Flanders Interaction Analysis Model

The genesis of the Instructional Skills Workshop can be traced to the author's experience as a participant in a three-day Instructional Techniques Workshop conducted by Patrick Suessmuth of Cantra Training Ltd., Erin, Ontario in January, 1974. During the three days of that workshop, each participant conducted a ten to fifteen minute instructional session each day. Using an

adaption of Amidon & Flanders' categories for interaction analysis (1971,p.14) while the participant conducted his instructional session, Suessmuth coded instructor and learner behaviours on three-second intervals using a numerical code system. The instructional session was video-taped as well. Immediately following the instructional session, Suessmuth led a verbal discussion of the instructional session just completed, interspersed with video-taped highlights. His assistant, meanwhile, entered the numerical codes of the instructor and learner behaviours via a computer terminal into a computer network. The computer returned a set of printouts which contained (a) the raw behavioural codes, (b) a matrix of the behaviour codes which graphically portrayed the interrelationships of the various coded behaviours, and (c) a set of categories of instructor behaviours and learner behaviours broken down into percentages of the total time taken for the instructional session. When these printouts were distributed to the workshop participants, and particularly to the individual who had conducted the short instructional session, they constituted a powerful form of feedback regarding the performance of the instructor and the resultant reactions of the learners. Analysis of

the data provided by the computer in conjunction with segments of the video-tape of the lesson provided immediate, objective feedback to the instructor regarding his instructional performance of a quality seldom available to an individual. Following the analysis of the computer data, Suessmuth encouraged the participant to set new quantitative objectives (in percentage terms) for himself for the next instructional session which he would conduct. This objective-setting process provided a target for the participant to strive toward, as well as a standard against which he could evaluate his own performance following his next attempt at conducting an instructional session.

In developing the procedures employed in the Instructional Skills Workshop, the writer adopted a number of principles from Suessmuth's approach to instructional techniques training. Both Suessmuth's Instructional Techniques Workshop and the Instructional Skills Workshop are highly intensive. A great deal of activity takes place in the workshop within a short time span. Feedback regarding performance is immediate, but whereas Suessmuth employed a set of categories related to verbal behaviours, the Instructional Skills Workshop uses printed

questionnaires which help the group members to structure their feedback and to make it as objective as possible. Verbal feedback in the form of group discussion is provided in both workshop designs, as is visual feedback in the form of highlights from the video-tape recording of the session. In both workshops the participant is encouraged to set new performance targets for himself before moving on to the design of another instructional session. A significant departure from the design of Suessmuth's workshop is the emphasis in the Instructional Skills Workshop on the quality of design skills and evaluation skills, as well as on actual classroom instructional skills.

Amidon & Flanders (1971) confirm the author's first-hand experience (as a workshop participant) of the interaction analysis model as an effective training device for the development and refinement of instructional behaviours. It is, however, of limited usefulness in a short-duration workshop conducted by a college/institute instructor because of its dependence on (a) access to a computer, and (b) the availability of another individual to operate the computer terminal. The amount of time required for each participant to analyse the interaction

analysis data manually would result in a prohibitive cost in terms of time within the context of a short workshop. For these reasons, the author decided not to use the Flanders interaction analysis categories as a basis for providing feedback in the Instructional Skills Program. However, several of the principles underlying the interaction analysis technique have been adopted and integrated into the Instructional Skills Workshop design:

a) immediacy of feedback;

b) objectivity of feedback;

c) multiplicity of levels or types of feedback (visual, verbal, and written);

d) the setting of observable or measurable performance objectives as performance targets for each round of mini-lessons.

The Microteaching Model

Brown (1975) also describes an approach to teacher training based on principles that are similar to those underlying the interaction analysis model of Amidon & Flanders. Brown defines the term 'microteaching' as "a scaled down teaching encounter designed to develop new skills and refine old ones" (p.14). Brown goes on to describe the process: "A trainee (student or teacher)

teaches a small group of pupils for five to ten minutes. The lesson is usually video-recorded and subsequently observed and analysed by the trainee with his supervisor" (1975,p.14).

The original microteaching cycle developed at Stanford in the early 1960's is described by Brown as consisting "of the sequences Plan - Teach - Observe (Critique) - Replan - Reteach - Reobserve" (p.15). The sequence of activities in the Instructional Skills Workshop adheres very closely to the Stanford microteaching cycle model. In the Instructional Skills Workshop the participant designs his mini-lesson, conducts it, receives feedback on it, sets new performance targets for himself, plans another mini-lesson, instructs it, receives feedback on his performance, again sets new performance objectives, prepares another lesson plan, conducts another mini-lesson, and again receives more feedback on his performance. The Stanford model, however, provided for an immediate reteach situation whereas in the Instructional Skills Workshop, at the very best, the replanning, reteaching,and reobserving occurs the next day, if not a week later. However, the loss of the immediate reteach is offset by providing the instructor with written feedback

sheets and by the opportunity in many cases for the instructor to apply feedback received directly in his normal day-to-day classroom situation during the intervening week.

A variation on the original Stanford model which provided the basis for the process developed for the Instructional Skills Workshop is the "Plan - Teach - Observe" model used at the New University of Ulster.

> Emphasis is given to planning and perception as well as performance skills. The programme is carried out in teams of three or four students working with a supervisor. This . . . enables students to plan their lessons together, to teach linked themes if they wish to, to observe each other teaching and to discuss it.
>
> (Brown, 1975,p.15)

The Instructional Skills Workshop also emphasizes the skills involved in instructional design and providing good quality feedback, as well as actual instructional performances. Borrowing a method from the Ulster model, the Instructional Skills Workshop functions in a small group setting as opposed to the one-to-one trainer - learner situation of the Stanford model. The quality and quantity of the learning taking place is compounded by providing a setting in which the participant is given feedback regarding his own performance, but broadens his knowledge and range of techniques from observing other

participants' performance and providing feedback regarding their performance as well as receiving feedback regarding his own.

THE MINI-LESSON/FACILITATION SESSION AS AN EXPERIENTIAL TRAINING TECHNIQUE

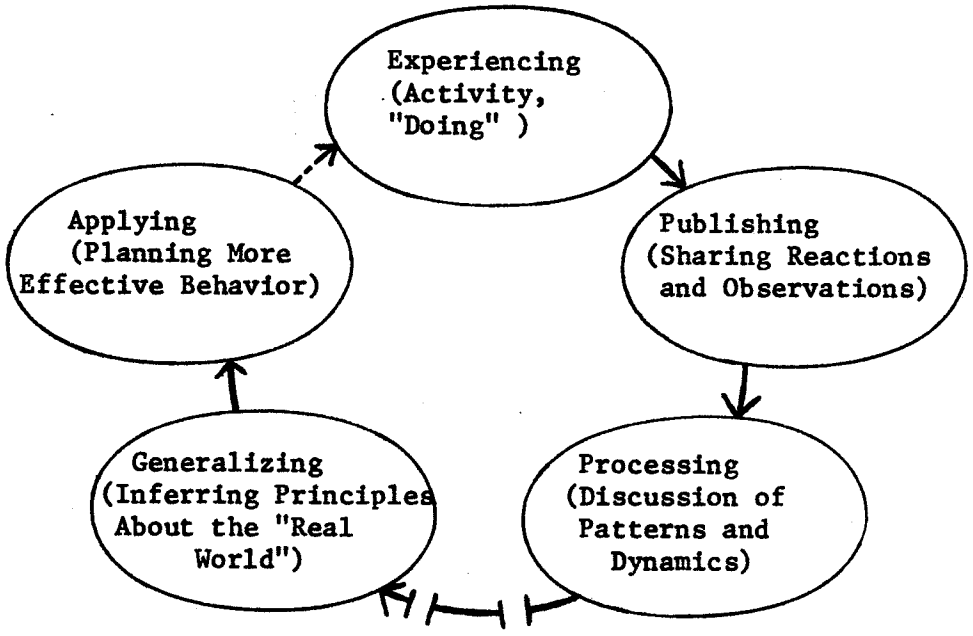
Each step of the mini-lesson/facilitation session is carefully structured and sequenced in order to optimize the conditions for achieving the objectives (see Appendix A) of the instructional event. Given the experiential nature of the technique employed, Gagné's linear, sequential depiction of the phases of an act of learning (Figure 2,p.24) does not portray accurately the way in which the learning occurs. In fact, during a mini-lesson/facilitation session several phases of an act of learning may occur simultaneously. It could even be argued that, at times, a number of different acts of learning occur concurrently (although they may actually be happening in 'rapid-fire' succession) The underlying rationale for the structure of the mini-lesson session might be better understood by examining its similarity to the structured experience technique described by Pfeiffer & Jones (1980). The use of specifically defined performance outcomes and

the mini-lesson/feedback sessions to provide a context in which the learner can take responsibility for his own learning creates a learning process which is highly experiential in nature.

> Experiential learning occurs when a person engages in some activity, looks back at the activity critically, abstracts some useful insight from the analysis and puts the result to work. . . . We call it an *inductive* process: proceding from observation rather than from a priori 'truth' (as in the *deductive* process). . . . A ***structured*** experience provides a framework in which the inductive process can be facilitated. The steps follow those of a theoretical cycle:

FIGURE 6

THE EXPERIENTIAL LEARNING CYCLE



(Pfeiffer & Jones, 1980,p.3)