CREATING AND FIELD-TESTING A
HIGH SCHOOL CURRICULUM IN
SELF-INSTRUCTION

by

Bruce R. Cooke-Dallin
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APPROVAL

Name: Bruce Richard Cooke-Dallin
Degree: Master of Arts (Education)
Title of Thesis: Creating and Field-Testing a High School Curriculum in Self-Instruction

Examining Committee
Chairperson: M. Manley-Casimir

________________________________________
B. A. Hiebert
Senior Supervisor

________________________________________
R. W. Marx
Professor

________________________________________
M. Elterman
Chief Psychologist
Vancouver Health Department
West Unit
2112 West 42nd Avenue
Vancouver, B. C.
V6M 2B6
External Examiner

Date approved  July 25, 1986
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CREATING AND FIELD-TESTING A HIGH SCHOOL CURRICULUM

IN SELF-INSTRUCTION

Author: ________________________________

(signature)

Bruce Richard Cooke-Dallin

(name)


(date)
Abstract

The inability to plan and maintain effective personal skills for independent living may result from learning deficits in social and emotional areas. This learning has been thought to be necessary for the development of self-management and personal coping.

Self-instruction is thought to be an optimal medium for approaching the development of personal self-management and coping skills. From a cognitive-behavioral perspective, self-instruction involves staged-sequences, specific and generalizable skill training designed to promote self-directed learning. However, three fundamental tasks have been identified as central to many self-instructional foci. These three fundamental tasks are: creating and maintaining motivation, reducing anxiety, and developing systematic procedures for acquiring new skills.

The central contention in this thesis is that school curricula can be developed to teach these three fundamental tasks of self-instruction. Such school curricula should be designed to provide students with a conceptual framework and structured practice in acquiring techniques for increasing motivation, for reducing anxiety, and for acquiring new skills.
Twenty-six secondary students in grades nine and ten were assigned randomly to a self-instructional curriculum group (treatment) and to a control group (no treatment). Pretest and posttest assessments were made using Rotter's Internal vs. External Scale of Control of Reinforcement, Rosenbaum's Self-Control Schedule, a curriculum-based Cognitive Content Test, and a skill transfer Behavioural Tasks Test. The results were inconclusive in that students in the experimental group were not significantly dissimilar in performance on these measures to students in the control group. However, several uncontrolled features influencing the instruction are thought to be primary reasons for these results. Reliability data on the dependent measures and student change data are reported. A student manual and accompanying instructor's guide for ten lessons in the curriculum are presented.

The need for curricula providing self-management and personal coping skills is discussed. The role of the counsellor as a teacher and curriculum developer is considered in relation to the need for broader based approaches to high school learning in a rapidly changing and increasingly complex and demanding world.
To: Miriam
   Neil
   Sophie
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CHAPTER ONE

Introduction

The goal of helping students to acquire adequate skills for independent living in our society is shared both by teachers and by curriculum specialists within our public educational system. To that end, educators have focussed much effort on the production and teaching of a traditional core curriculum featuring such subjects as mathematics, language and literature, the sciences and social studies. Student abilities for critical thinking (i.e., analysis and problem-solving) and independent application of learned skills have been derived from, and prescribed by, experience within the boundaries of that traditional curriculum. There has existed an unsubstantiated assumption that critical thinking and skill application abilities have been transferred easily to other arenas outside the boundaries of the basic subjects. However, traditional school programs have missed a major part of what society appears to expect from education, namely, to provide students not only with curriculum-related abilities, but also with social and emotional skills that will enable them to cope successfully
with modern pressures and demands, to avoid potential emotional disturbance, and to gain satisfaction through living productive lives (Morgan & Jackson, 1980).

One result of the dichotomy between skills desired by society and skills taught in school has been the emerging call for a curriculum that would instruct students directly and systematically in abilities tailored to individual functioning in such areas as anxiety management, problem-solving and interpersonal relationships (Beyer, 1984a, 1984b; Martin, 1983; Martin & Norris, 1982; Sprinthall, 1984b). A major stumbling block in regard to the creation of such school programs has been that teachers have thought that addressing nonacademic behavior is the professional role and function of educational specialists such as counsellors and psychologists (Harris, 1984). However, recently, counsellors, psychologists and teachers have argued that counselling is best perceived as instruction (Carkhuff & Berenson, 1976; Ellis, 1977; Heibert, Martin & Marx, 1981, Katz & Ivey, 1977; Krumboltz & Thoreson, 1976; Mahoney, 1974; Martin & Hiebert, 1985; Stone, 1980). In particular, Martin (1983) has suggested that counsellors in schools have the
potential to develop curricula focusing instruction on social and emotional self-management and problem-solving, and to provide instructional strategies at the classroom level.

Problem

There is a need to develop self-instructional preventive life skills programs at the school level in order to redress the long-standing imbalance that has weighted curricula towards academic learning and away from learning in the areas of self-management and personal coping. For the counsellor developing such a program, a major concern must be how to make course content relevant for each student. Because most concerns that are brought to counsellors occur in the natural environment, and because clients (in this case students) are best situated to observe and change their own environments, thoughts and actions, it is appropriate for clients (students) to take responsibility for altering their own problem circumstances (Stone, 1980).

Martin & Hiebert (1985) have developed a counselling methodology that utilizes models of instruction as the foundation for creating and implementing a variety of counselling interventions.
Martin & Martin (1983) extend the instructional counselling model by proposing a program in which systematic self-change is achieved through the use of skills in self-directed learning. The independent learning and use of the skills and knowledge that pertain to appropriate individual functioning has been described in that program as self-instruction.

It should be noted that self-instruction (SI) in this usage is not to be confused with Meichenbaum's (1977) treatment methodology wherein clients are trained to direct themselves sub-vocally. SI is a concept that has similarity to a number of constructs common in contemporary counselling and psychology literature such as self-control, self-management, self-directed learning, and self-education. Each of the constructs above implies that an individual can exercise control over his or her affect, cognition, and behavior in order to achieve personal goals. SI is concerned with teaching oneself or arranging for oneself learning that can be used independently in order to achieve personal goals. Hence, SI training could have the potential for bridging the gap between skills needed and skills taught that was discussed at the beginning of this chapter.
The concern of this thesis is to investigate the teaching of SI skills to secondary school students. Specifically, the concerns of this thesis are:
(a) to develop an instructional counselling curriculum focussing on the fundamental tasks of self-instruction, (b) to field test that curriculum with a sample of secondary school students, and (c) to discuss the implications of developing and delivering such a curriculum.

Overview

This chapter has provided a rationale for such a study based on personal and education requirements and beyond those on wider social ramifications. The key concepts to be discussed have been introduced. In Chapter Two those concepts will be examined in detail, also recent approaches to theories and educational curricula relevant to this study will be discussed. Treatment procedures and research design will be detailed in Chapter Three. In Chapter Four a summary of descriptive and inferential test statistics will be reported. Chapter Five will contain a discussion of test results including the implications that can be drawn for purposes of instructional theory and practice. The development and presentation of the
curriculum will be examined and implications for future research will be drawn.
CHAPTER TWO

Review of the Literature

Fundamental Tasks of SI

SI is a process through which individuals can learn how to teach themselves patterns of thinking, feeling and acting in order to attain self-control. But before individuals can engage in the step-by-step process of SI, they may be confronted with three obstacles. Firstly, lack of motivation may hamper their abilities to implement a chosen plan. Secondly, they may be handicapped by anxieties that make it hard to plan or execute their SI efforts. Finally, a lack of skills may prevent them from undertaking or maintaining a plan. The pervasiveness of these three problems, that is, low motivation, anxiety and lack of skills, requires special consideration for preventing their influence. Effective SI programs must be equipped to deal with each of these problem areas should any of them arise (Martin & Martin, 1983, p.44). Consequently, techniques designed to increase motivation, to reduce anxiety and to acquire skills constitute the fundamental tasks of SI.

Research investigating programs designed to
address the fundamental tasks of SI have yielded a number of findings relevant to the issue of systematically increasing individual competencies in one or more of the task areas. However, there have been a few attempts towards synthesizing the results of these studies. Also, the bulk of the research has been conducted within only one task area, therefore the findings are reviewed here initially from within the boundaries of individual task areas. Studies in the area of motivation are reviewed first, followed by those in the area of skill acquisition, then by studies about anxiety reduction. Those commentaries that emphasize the need for curricula or programs that offer a combination of task area knowledge and skills are highlighted. Subsequently, it is shown that the fundamental tasks of SI should be offered together within the context of primary prevention.

Motivation

Self-instruction follows very closely the interactive model of self-reinforcement proposed by Bandura (1976, 1977) which accounts for motivation as the interplay between desirability of outcomes and perceived performance capabilities. That
interplay is subject to the effects of ongoing reciprocity between personal, behavioral, and environmental determinants.

For a variety of reasons, lack of confidence in the ability to perform as required can render desired results unattainable. The self-directing individual needs to have motivation-producing strategies available in advance for situations in which outcomes are desired but performance abilities are in question. In order to increase confidence regarding successful action, proven strategies involve (a) setting reasonable goals, (b) monitoring performance and (c) providing meaningful self-evaluation and self-reward. In addition, these three motivational strategies can act to make the outcomes even more desirable while at the same time increasing the desirability of the work and effort required (Martin & Martin, 1983).

**Goal-setting.** Goal-setting is often studied in a classroom or work setting where the goals are established extrinsically (Locke et al, 1981; Sagotsky et al, 1978; Schunk, 1983a, 1983b, 1984). Even where self-prescription of goals is reported (Kimlicka & Haight, 1981; Morgan, 1985), the subject,
content, or behavioral domains might limit students' abilities to express personal goal preferences. For example, one finding common to most studies is that even imposed goal-setting is extremely important in promoting achievement increases (Bandura & Schunk, 1981; Martin, Marx & Martin, 1980; Thomas, 1980).

Goal-setting has been enhanced if the goals are realistic and understandable (Kimlicka & Haight, 1981), if they are proximal (Schunk, 1984), if they feature contingent rewards (Schunk, 1983b, 1984), and if they are attainable (Schunk, 1983a; Thomas, 1980). An obvious difficulty for self-prescription of goals is that goals often occur in a context that involves standards that are arbitrary in relation to personal desires. There are many potential problems posed by the consideration of conducting a controlled study into wholly individualized goal-setting, not the least of which is the lack of potential for a large sized population.

Self-monitoring. Self-monitoring involves observing performances in relation to goals on a continuing basis and recording the observations. Recording for frequency, duration or sub-goal achievement can make progress observable (Martin
& Martin, 1983). In a wide-ranging review of studies pertaining to motivation and achievement, Thomas (1980) points out the value of student-managed motivational behaviors such as self-monitoring. He contends that self-monitoring is a factor that promotes independent learning strategies for individuals. The theme of promoting independence through self-observation and recording is commented upon as well by Nielsen (1983). Self-monitoring has been shown to be enhanced by being associated closely with goals via sub-goals. Self-monitoring that is linked to specific outcome goals is more effective than self-monitoring that is not linked specifically (Morgan, 1981). Furthermore, self-monitoring of sub-goal performance results in better learning than does self-monitoring of time-on-task when both conditions have the same specific target goals. Thus, it would appear that when sub-goals are formulated, the self-monitoring process yields a more effective use of time (Morgan, 1985).

Self-evaluation and Self-reward. Self-evaluation is the comparison of the performance monitored to the performance required in order to accomplish the goal that had been set. Systematic and frequent self-
evaluation provides the link between performance monitoring and outcome objectives. When an objective is reached, the self-evaluation process should yield an appropriate self-reward. The reinforcing qualities of self-reward provide incentives for continued performance and for ongoing self-monitoring (Autry & Langenbach, 1985). Nielsen (1983) offers some quality-enhancing factors relating to self-reward including frequency (e.g., daily for students) and size of reward (it must be meaningful enough to provide incentive).

Rewards tend always to be positive; it has been noted that the motivational properties of self-evaluation are enhanced when positive aspects are emphasized: self-evaluation leading to punishment does not produce a motivating outcome (Kanfer, 1980; Mahoney et al, 1973; Rudestam, 1980).

The potential for inappropriate self-evaluative effects to occur in motivation-enhancing settings for students has been raised (Ames & Ames, 1984). These effects might include unrestricted competitiveness between students, the fostering of individuality at the expense of the group, or conversely, a sense of group failure if some of the group's individuals encounter difficulties. The teaching of self-instruction
must be based on personal, as opposed to interpersonal or group comparisons. If instructors aim at promoting self-directed, self-managed skills and knowledge, they should monitor and assess individual and learning situations to ensure that students' efforts are not misdirected (Ames & Ames, 1984). This note of caution is increasingly important with younger students because of possible developmental limits to broad-based comprehension of long-range outcome results among younger children (Fisher & Pipp, 1984).

Thus the strategies elaborated above all act as measuring devices and provide methods for balancing the requirements of outcome with the requirements of performance. These strategies are motivating because they provide the necessary means to maintain outcome desirability and to stimulate performance capability. It has been pointed out that it is the interplay between the forces of action and result which constitutes motivation. Without the effects of goal-setting, self-monitoring, and self-evaluation/self-reward it is much more difficult to link means to ends in terms of performance and outcome. Without the logical adjustments that the strategies facilitate it becomes difficult to plan effectively because the requirements of performance and outcome
are not readily apparent.

Many studies make assumptions about motivational processes based on findings in respect to some, but not all, of the process component areas. Very few studies incorporate a comprehensive analysis of the effects of goal-setting, self-monitoring and self-evaluation/self-reward studied as a sequenced whole. Yet it is important not only to understand that a comprehensive program can be efficacious, and that it can be presented as a unified, encompassing approach, but also to understand why and how the components of the program contribute to its overall efficacy. Through analyses of the components of motivational processes, researchers have learned that it is important to concentrate on some quality-enhancing factors.

Another problem with many motivation studies concerns the research setting. Often the findings are derived from programs designed to measure increases in student academic achievement, frequently in mathematics classes (e.g., Bandura & Schunk, 1981; Morgan, 1984, 1985; Sagotsky et al, 1978; Schunk, 1983a, 1983b, 1984). These findings should be approached cautiously for several reasons. First, subject matter in such cases
relies on well-structured, as opposed to ill-structured, definitions of problems and competencies (Frederiksen, 1984). Hence, the findings may say more about mathematics achievement than about motivation. Second, questions and criticisms have been posed relating to the transferability of core curriculum based skills. Morgan and Jackson (1980) call for consideration of a broader range of students' learning content and conditions in the planning of school programs. They assert that in the past a concentration on cognitive strengths has resulted in little development of affective strengths and that both are needed for effective functioning. Furthermore, they contend that affective strengths can and must be taught as subject matter. Hence the findings arising from investigations in mathematics classes may not be pertinent to other subject areas.

A large body of opinion exists suggesting that learning and reasoning skills are specific to knowledge domains. Because those skills are attained in situations that are limited to purposes and goals within the domain, the skills become associated with the conditions and restrictions of use in that domain. Therefore, learning and reasoning skills transfer
best from a well-known domain to a domain of related knowledge (Frederiksen, 1984; Glaser, 1984; Steinberg, 1981). The major lack in this field of inquiry then is for the fundamental task of motivation to be delivered and assessed in the context of a knowledge domain pertaining to personal functioning.

Wall (1982) has advocated for a program that would foster both academic and personal effectiveness skills learned on an individualized basis through a three-behavior self-management framework. She describes the three components as (a) individual goal-selection, (b) self-assessing and self-recording performance, and (c) self-rewarding for criterion achievement.

Nielsen (1983) calls for the implementation of secondary school self-management programs based on three similar components: (a) goal-setting, (b) self-observation and recording and (c) self-reinforcement. She contends that there is research available to demonstrate that most adolescents can learn the skills of self-management. The objective of such programs would be for students to self-manage behavior. She implies that results would be derived in academic skills as well as in personal skills.
The question of whether academic and personal effectiveness skills would pertain to similar knowledge domains has not been addressed by Wall (1982) or by Nielsen (1983). Other writers (Beyer, 1984b; Morgan & Jackson, 1980; Sylwester, 1983) would contend that the two skill areas would pertain to different knowledge domains.

Frederiksen (1984) has called for the development of general strategies to deal with ill-structured areas of life problems in contrast to the specific procedural strategies required in mathematics or science-related problem-solving. One aspect of Frederiksen's suggestion that should be investigated is whether general strategies in ill-structured areas are highly amenable to transfer to well-structured areas. The question poses a further one: are there hierarchies within or between knowledge domains such that transfer of learning and reasoning skills can be facilitated from an ill-structured to a well-structured area?

Skill Acquisition

Skill acquisition is a fundamental task of SI because lack of skill can hamper an individual from completing a desired course of action (Martin & Martin, 1983). Skill acquisition occurs in relation
to the existence of the following learning conditions:
meaningful specification of the skills to be learned;
thorough, gradual practice of the skills specified;
and informative feedback regarding practice such
that further skill enhancement results (Martin, 1983b;
Martin & Hiebert, 1985). In addition, skill
acquisition relies on the personal characteristics
that the learner brings to the learning situation
in such areas as experience, ability, cognitive
processing modes and affect. Those personal
characteristics often require individualized learner-
context approaches and activities (Glaser, 1984).

Meaningful Specification. Meaningful specification
refers to the process necessary to understand what
skills are needed in a situation and how to recognize
the components of each skill. I have shown above
that learning and reasoning skills transfer best
from a well-known domain to a domain of related
knowledge (Beyer, 1984b; Frederiksen, 1984).
Consequently, some aspects of meaningful specification
in a learning situation should include an understanding
of the individual's current state of knowledge in domains
related to the new knowledge or tasks. Taking into
account the learner's personal characteristics that
apply to the situation may require presentation that matches the learner's experience and customary interpretation and understanding of language, ideas and events (Glaser, 1984). Bandura (1977) has pointed out the need for careful analysis of what associations can best connect a learner's experience and abilities to the requirements of learning a new skill. When individuals come to a novel situation with inadequate knowledge or experience, they must be provided with a beginning structure through overt organizational schemes (Glaser, 1984). Meaningful specificity in what is to be learned has been shown as a critical requirement for successful learning situations (Thomas, 1980).

**Practice.** The importance of practice as a component of skill acquisition is related to increasing competence in a skill (Frederiksen, 1984) and to the exercise of existent general skills by an individual in a learning situation (Glaser, 1984). As is the case with specifying what is to be learned, it is equally necessary to specify how and why practice will produce a desired outcome and to suit the conditions of practice to the characteristics of the individual (Thomas, 1980) and the context in which the skills will be used once mastered.

When large skill acquisition goals are set,
the common practice is to subdivide the large goal into proximal sub-goals, small steps that combine gradually and sequentially towards skill development (Morgan, 1985; Thomas, 1980). Sub-goals in practice are claimed to provide learners with beliefs that they are able to acquire the skills in question (Bandura & Schunk, 1981). Further, the use of proximal practice goals acts as a cognitive processing heuristic analogous to procedural steps in problem-solving (Frederiksen, 1984). Utilizing practice sub-goals leads to gradual, thorough practice. Other important characteristics of skill practice include the requirement to be focussed in a direct and intensive way (Martin & Martin, 1983); also, the requirement that practice be realistic (Nielsen, 1983). Realistic practice leads to the rise of the developing skill in real life situations.

Feedback. Feedback on practice tends to reinforce skill acquisition. However, certain kinds of feedback tend to promote more learning. For example, contingent rewards can promote skill development (Schunk, 1983b, 1984) perhaps as an aspect of positive feedback performance (Martin, 1983). Information about sub-goal achievement can provide feedback to learners on an
immediate basis (Bandura & Schunk, 1981; Morgan, 1985) by comparing small pieces of activity. Comparative feedback provides specificity that promotes better practice (Schunk, 1983a). On the other hand, noncontingent rewards or vague rewards do not appear to promote further skill development (Schunk, 1983b). Brophy (1981) points out the informational value that may be contained in praise. Hence, praise from a teacher may be reinforcing to a student especially when it is infrequent, specific, contingent upon behavior and credible (p. 27).

Self-evaluation feedback can become part of the process whereby individuals create the cognitively-based sources of self-motivation that provide impetus towards self-directed action. In this regard, Bandura and Schunk (1981) contend that motivational (goal-setting) and learning condition (positive self-evaluation) effects can combine as an incentive for the individual. Such a contention serves to support Thomas's view (1980) that the fundamental tasks of motivation and skill acquisition can be seen to operate in concert to produce independent learning and action capabilities in individuals.

Thomas (1980) forges the necessary conditional link between motivation-related behaviors and learning-
related behaviors, that is: that the development and exercise of proficiency in regard to both types of behaviors might rely on certain instructional conditions. Those conditions should be such that successful cognitive strategies are taught or facilitated in relation to practical task-completion (p. 236). Thomas's (1980) formulation relies on certain characteristics of optimal instructional conditions including clear specificity of tasks to be undertaken, gradual steps of practice and accurate feedback about practice attempts. Those conditions parallel the learning conditions that are expressed in the self-instruction model as the fundamental tasks of skill acquisition. Thus, a clear case is made for both self-managed motivational behavior and skill acquisition conditions to be present in order to promote self-directed learning and action.

Anxiety Reduction

The instructional counselling model offers a definition of anxiety that relates components of cognition, behavior, and physiological arousal reactions to an environmental event that is not threatening enough to warrant such a reaction in an objective assessment. In addition, anxiety is
perceived as related, in a generic sense, to stress reactions, where the latter are chronic and generalized and the former is situation-specific (Martin & Hiebert, 1985). The stance taken by the proponents of SI is that situation specific effects or occurrences can trigger the reactions that prevent or deter an individual from attaining the ends that would otherwise be within reach (Martin & Martin, 1983). For that reason, anxiety-reduction comprises one of the fundamental tasks to be accomplished in order to prevent such inhibitions.

The relationship between anxiety and stress is important here only insofar as it affects the understanding of research findings in which causes, effects and treatments tend to overlap. Methods used to counter anxiety are often used to alleviate the effects of stress-related situations. Definitions of stress and stressor can vary from one report to another, are often hazy and are not infrequently missing altogether (see Hiebert, 1985, for commentary). For this reason, studies that address either stress and/or anxiety will be cited here pertaining to the fundamental task of anxiety-reduction.

Young persons' reactions to anxiety-inducing and stress-inducing situations have been a subject
of well-documented interest recently. The contention has been made that adolescents have a greater need for information regarding the nature of stress, the identification of stress and stressors, and the management of stress because they are subject to more intensely felt stressors than are any other age group (Coleman, 1978; Richardson, Beall & Jessup, 1983). This does not mean that adolescents have lower levels of coping ability (see also Hiebert, 1985). However, it has been pointed out that people in general may be failing to cope effectively with the type and numbers of stressors that confront them regularly, and that inadequate personal resources exacerbate stressor effects (Hiebert & Eby, 1985).

The potential risks posed by the effects of anxiety and stress accrue not only to individuals but also to groups and systems within society. Stress-related problems have been linked to health. Price (1985) claims that, for adolescents, relationships have been shown between stress and depression, suicide, schizophrenia and respiratory tract illness; and between chronic stress and accident frequency. Wolf et al (1981) found definite psychosocial factors prevalent as identifiable risk features in the lives
of young persons who appear to be in danger of future coronary artery disease. These predictive relationships have been identified among younger children as well (Price, 1985; Wolf et al, 1981).

Sylwester (1983) points out that social dangers are inherent in an educational system that produces individuals who respond ineffectively to stressors. Stress factors have been linked to adolescent crime and delinquency, and to drug abuse (Price, 1985), as well as to drop-out rates (Sylwester, 1983). Adolescent susceptibility to stressors has been attributed to the "identity crisis" that occurs during that stage of life (Richardson et al, 1983). Some of the blame for this situation has been directed at the education system for failing to provide students with concrete ideas on how to approach life's problems and expectations systematically, relying instead on the benefits of subject/discipline learning (Sylwester, 1983).

In studies reporting the effects of school-based stress-management and anxiety-reduction procedures, there have been amply recorded benefits (Gerler & Danielson, 1984; Haynes et al, 1983; Hiebert & Eby, 1985; Hiebert & Fox, 1981; Jaremko, 1980; Leal et al, 1981; McBrien, 1978; Omizo, 1981; Richardson et al, 1983;
Rosin & Nelson, 1983; Rossman & Kahnweiler, 1977). These results are not out of keeping with the reported effectiveness of many therapeutic procedures that have been developed to treat the effects of anxiety and stress; only recently has this field of endeavour begun to change focus from remediation towards prevention (Harris, 1984; Hiebert & Eby, 1985; Richardson et al, 1983; Rosin & Nelson, 1983; Sylwester, 1983).

The SI viewpoint advocates learning anxiety-reduction strategies according to the personal characteristics of the learner (Martin & Martin, 1983), but evidence is available to demonstrate that certain cognitive and physiological interventions are easily learned and maintained by people in general, including children as young as first-graders (McBrien, 1978). In a school setting it would be efficient to provide access initially to interventions that have proven widespread general applicability and subsequently to provide individualized attention for students encountering personal lack of success with the general strategies. Hiebert (1983) has provided an overview of stressor management and stress management procedures in a framework for planning interventions. Field test data show that preventive strategies for self-directed coping provide portable skills that can be used in
many or all areas within and beyond a school setting (Harris, 1984; Heibert & Eby, 1985; Richardson et al., 1983).

In addition to acquiring skills for coping directly with personal or environmental sources of stress and anxiety, it is appropriate, as prevention, to acquire and maintain functional skills of conduct in areas of high risk and high demand in relation to stress and anxiety. Hiebert (1986) has pointed out that, for teachers, general high levels of instructional skills provide the basis for meeting job demands. By analogy, general high levels of life skills would provide students with the basis for meeting the demands of modern life.

Curricula

Numerous attempts have been made to develop curricula in specific task areas including problem-populations. These task areas include problem-solving (Arakoff & Stewart, 1975; Conger & Mullen, 1981; Kifer, Lewis, Green & Phillips, 1975; Poitras-Martin & Stone, 1977), and goal-setting (Brown, 1980; Himsl, 1972; Moloff, 1984). (For a review of many goal-setting programs see Glasgow & Rosen, 1978; for reviews of problem-solving programs see
One problem with these curricula is that they have addressed usually only one of these fundamental task areas discussed above. Very few curricula have been developed to address the three fundamental tasks in concert. One notable exception of Making Better Choices (MBC) (Harris, 1984), a curriculum that appears to offer an integrated approach to providing independent self-directed skills in learning and behavior (both social skills and academic behavior). The program is targeted towards exceptional children in Maine, U.S.A. The features of the program's curriculum that are especially worthy of note in the present context are contained in a two-tier model.

The first tier involves teaching students to self-manage certain skills in cognitive planning by proceeding through four stages:

1. **Stop** - think about the relationship between feelings and decisions about behavior, think about what actual behaviors look like, think about the consequences of behaviors, formulate a goal.

2. **Plan** - break the behavioral goal into a series of three to five small successive steps.

3. **Do** - learn that action is harder than
planning by (a) rehearsing sub-steps from Stage two, (b) giving self feedback and soliciting feedback from others.

4. **Check - learn** by evaluating the procedure from Stage one through Stage three, examining process and products. Identify mistakes or concerns for remediation; otherwise, move on to new behavior. Go back (student return) to Stage one.

The second tier involves substituting social behaviors for the academic behaviors that are the focus at the outset of the program (in the first tier).

The program outlined shows a practical way to incorporate the skill acquisition components contained in the self-instruction model. Stage one requires specification of what behavior is to be learned, from the point of view of the learner. Stage two requires that a sub-goal procedure be created. Stage three requires practice and feedback. The motivation task of self-instruction is not specifically addressed in the MBC program although the goal-setting (Stage one), self-monitoring (Stage three sub-goal practice) and self-evaluation (Stage four) components can be identified. There are no
field-test data contained in the Harris (1984) description of the MBC program.

Additionally, what is compelling about MBC from a self-instruction perspective is that an anxiety-reduction strategy is taught to students prior to beginning the four stages outlined. Anxiety reduction becomes the strategic precursor to program activity. In addition, students are trained to self-monitor constantly and to invoke a short cue-controlled relaxation response whenever they become cognitively and/or physiologically aroused while involved in the program. Initially they are instructed in progressive relaxation, tied to verbal cues. Eventually they learn a short response based on breathing, muscle relaxation, imagery and covert self-verbalization.

MBC, as described, demonstrates that the fundamental tasks of SI have been incorporated into a program for school students. The target population for the program is not the general school population. It is not known to what extent the individual tasks are explained or trained, perhaps not extensively given the nature of the intended student population. The program claims
to foster skills that can be transferred from academic to social skills contexts. Further, the program has not been field-tested extensively to determine the extent to which the authors claims are validated by the responses of learners participating in the program.

Summary

From the research material reviewed the following conclusions can be derived:

1. Students need, and are expected, to learn how to live successfully as a result of their experiences in the educational system.

2. The skills needed to lead self-directed lives should be learned within a knowledge domain that may not be closely related to knowledge domains acquired through instruction in the traditional subject areas.

3. A program or curriculum that aims to teach specific skills of personal functioning needs to be personally relevant to each student.

4. Various aspects of the processes involved in motivation, anxiety reduction and skill acquisition have been delivered and tested successfully, but a comprehensive field test approach to those areas is needed.
Given the conclusions it is appropriate to develop a curriculum for delivering the fundamental tasks of self-instruction to a secondary school population. This study was designed to investigate and discuss the process involved in creating the curriculum, delivering the curriculum, and in field testing the effects of the curriculum with a sample of secondary school students.
Hypotheses

The hypotheses investigated were:

1. That students will acquire the knowledge relating to the fundamental tasks of SI through learning the material contained in the curriculum, and measured by the Cognitive Content Test.

2. That the knowledge mentioned in hypothesis 1 will result in perceptions of a more internal locus of control, as measured by Rotter's (1966) Internal vs. External Scale of Control of Reinforcement.

3. That the knowledge mentioned in hypothesis 1 will be accompanied by increased perceptions of self-control, as measured by Rosenbaum's (1980) Self-Control Schedule.

4. That demonstrable skills in the knowledge areas mentioned in hypothesis 1 will be transferred to other problem situations as measured by the Behavioral Tasks Test.
CHAPTER THREE

Methods

Setting

This study was undertaken in a junior secondary school in the Central Fraser Valley area of British Columbia. At that school one teacher who was offering a life skills curriculum to two similar classes of students canvassed the classes to gauge interest in including the curriculum designed for the purpose of this study. A letter describing the project was sent home with each interested student. (See Appendix D). Included in the description was the schedule of events: pretests and posttests surrounding 10 weeks of instruction in the fundamental tasks of SI. Subsequently, each student volunteer and each parent/guardian involved was required to sign a research project informed consent form. (See Appendix D).

The research team involved included a faculty senior researcher, a graduate student project coordinator and the author as field researcher, curriculum developer, instructor, and test administrator.

The author was responsible for all in-class
instruction and for administration of all pretests and posttests. The project coordinator, a certified teacher, acted as classroom assistant, and was present to provide written and verbal feedback according to preestablished criteria for each lesson as planned.

Participants

At the time of the pretest, 26 secondary school students had volunteered to take part in this study. That number comprised two separate classes in Life Skills 09, a nonacademic elective course offered in their junior secondary school. Of the 26 volunteers, 18 were female, eight male; there were 18 grade tens and eight grade nines. Following pretesting, one class was designed as the experimental group; the decision was based on a coin toss (see Table 1).

The experimental group was to receive ten lessons designed to teach the fundamental tasks of SI, teaching was to occur once weekly in a regularly scheduled Life Skills class. At the start of instruction, the experimental group consisted of 13 participants (10 female, three male; nine grade tens, four grade nines); two members of the class (both grade ten males) had opted to withdraw during
Table 1
Composition of Volunteer Subjects in Sample

<table>
<thead>
<tr>
<th>Group</th>
<th>Before</th>
<th>After Pretest</th>
<th>After Pretest</th>
<th>After Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>13</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>11</td>
<td>11</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>( N = 26 )</td>
<td>( N = 24 )</td>
<td>( N = 19 )</td>
<td></td>
</tr>
</tbody>
</table>
the pretest phase. The control group consisting of 11 students (six females, five males; six grade tens, five grade nines) was to continue attending their customary Life Skills 09 classes. During the posttest phase, two participants in the experimental group (both males in grade ten) withdrew from the group and another experimental participant (grade ten female) was absent because she was no longer enrolled in the school. In the control group, two students (one female, one male; both grade tens) did not complete the posttest. The final sample composition consisted of 10 in the experimental group and nine in the control group.

Dependent Measures and Design

There were four instruments utilized in this study to determine what effects could be seen on various dependent variables within subjects from pretesting to posttesting and between subjects in experimental and control groups. Rotter's (1966) Internal vs. External Scale of Control of Reinforcement (I-E Scale) was used to determine locus of control beliefs. Self-control beliefs were gauged using Rosenbaum's (1980) Self-Control Schedule (SCS). A Behavioral Tasks Test was utilized to measure the
extent to which student learning about the fundamental
tasks of SI could be applied to a specific problem.
Finally, a **Cognitive Content Test** established levels
of student knowledge in relation to the content of
the curriculum taught to the experimental group. A
description of the four instruments follows.

**Rotter's (1966) I-E Scale.** This instrument
purports to measure whether or not subjects have
a generalized expectancy that reinforcement has a
contingent relationship with behavior. Those
individuals who see reinforcement as being non-
contingent upon behaviors are judged to have an
external locus of control. They believe that what
happens to themselves is not a result of their own
efforts or their personal factors. On the other
hand, individuals with an internal locus of control
perceive that their efforts or personal characteristics
do influence results in a contingent way. The I-E
Scale depicts subjects as being more toward the
internal end or toward the external end of a range
of self-attribution beliefs.

The underlying assumption in the use of this
instrument is that the tasks of SI curriculum could
affect student self-perceptions by altering measured
locus of control towards increased internal locus of control scores. In this regard, the scoring procedure for the I-E Scale was changed from the original (Rotter, 1966) in which external locus of control scored higher than internal. Because the other three instruments employed in this study indicate intended experimental effects through increased scores, the I-E Scale was scored in reverse so that higher scores indicated an internal rather than an external locus. Thus, scores on the four instruments would vary in a similar direction for purposes of interpretive consistency.

The I-E Scale is administered as a 29 item, forced-choice test that includes six filler items "intended to make somewhat more ambiguous the purpose of the test" (Rotter, p. 10). It has been pointed out (Rotter, 1966) that estimates of internal consistency for this scale represent an attempt to fit some conventional analyses to an unconventional instrument. Biserial item correlations provided are low but consistent (mean r = .25, N = 400); reliability calculations using split-half and Kuder-Richardson techniques are somewhat forced in that the test items are not comparable and are not arranged hierarchically
Test-retest reliabilities in two instances using a 1 month period were $r = .72$ ($N = 60$) and $r = .78$ ($N = 28$). Somewhat lower reliabilities were obtained over a 2 month period: $r = .49$, $N = 63$; $r = .61$, $N = 54$. These lower reliabilities were ascribed to a change in administration conditions; the first test occurred in a group condition whereas the retest was administered individually.

Two studies that both show a highly significant relationship between I-E Scale scores and other non-questionnaire measurements of internal-external control are cited by Rotter (p. 17 - 18) as demonstrating construct validity for the I-E Scale (see below).

The SCS (Rosenbaum, 1980). This is a self-report instrument designed to assess the degree to which subjects indicate that they apply self-management methods in situations representing common behavioral concerns. In completing the SCS, subjects are requested to demonstrate through scoring on a six point Likert scale to what extent an item describes
a behavior characteristic of the subject. Of the 36 items, 12 refer to the use of cognitions for controlling physiological and emotional feelings, there are 11 items referring to problem-solving strategies a subject might employ, four items concern whether the subject has a perceived ability to delay immediate gratification and 9 items relate to general self-efficacy expectation.

Reliability data provided for the SCS by Rossenbaum (1980) include a test-retest \( r = .86 \) (\( p = .01 \)) over a four-week period (\( N = 82 \)). Internal consistency of items was analyzed through five coefficients of \( .81 (N = 145), .80 (N = 117), .84 (N = 179), .78 (N = 111) \) and \( .80 (N = 105) \). The fourth of the preceding scores was computed using an English language version of the SCS, whereas the other scores resulted from the original Hebrew version, with similar subject populations in all five samples. SCS means obtained were similarly consistent between the administrations in Hebrew and the one in English which indicates support for the concept of validity across different populations. However, Rosenbaum cautions against claims for widespread applicability for the SCS without cross validating the instrument.
through additional studies (1980, p. 115).

Validity data for the SCS were derived by comparing scores obtained on that instrument to scores obtained on other scales that are conceptually related to the SCS (Rosenbaum, 1980). Rotter's I-E Scale and the SCS produced scores that correlate with each other, $r = -.40$ ($p = .01, N = 262$). The Irrational Beliefs Test which measures the ten types of irrational beliefs described by Ellis (1962) was shown to produce scores that correlate to SCS scores significantly in 10 out of 11 scores (10 subscores and a total score). Correlation between SCS scores and total scores on the Irrational Beliefs Test was $r = -.48$ ($p = .001, N = 111$).

Rosenbaum (1980) contends that the development of the SCS assumed that one area of self-control behavior that would be measurable using the scale is the ability to tolerate noxious stimuli. In a subsequent experimental study results indicated that subjects who scored high for self-control on the SCS were able to tolerate an aversive cold pressor for significantly longer than were subjects who scored low for self-control. In testing the hypothesis for tolerance of painful stimuli, Rosenbaum (1980)
provided further evidence for the construct validity of the SCS.

It was intended that exposure to the 10 week fundamental tasks of SI curriculum would result in students reporting increased perceptions of self-control as measured by the SCS.

The Behavioral Tasks Test. This instrument, Appendix C, I developed in consultation with the senior researcher and the project coordinator. This instrument presents a problem scenario to the student: to be able to give an oral presentation to the whole school at an assembly. The tasks required were for students to describe what plan they would follow and what specific strategies they would use in order to deal with the fundamental tasks of motivation, anxiety reduction, and skill acquisition. The test was designed to ascertain correct student responses based on 21 discrete characteristics of the fundamental tasks that could be identified (in Appendix C). The 21 characteristics had been derived from core information that was explicit in the experimental curriculum and included in the instructional objectives for the lessons (Appendix B).

The Cognitive Content Test. This instrument,
Appendix C, consists of a 20 item questionnaire with multiple choice options for answers (five choices) Nineteen items are aimed at testing student knowledge about the content of the fundamental tasks curriculum, one item inquires about student perceptions of self-efficacy. The 19 questions related to curriculum content cover various components of the three fundamental task areas, that is: motivation, anxiety reduction and skill acquisition. The Cognitive Content Test I developed as well in consultation with the project coordinator.

In summary, the dependent measures employed in this study indicated the extent to which students could recall curriculum content, could apply that content to a problem task, and the extent to which exposure to the curriculum affected student perceptions of self-control and of general locus of control. It should be noted that the statistical support for Rotter's I-E Scale and Rosenbaum's SCS was derived from studies involving college students. Although no statistical support for the use of these scales with adolescents was found in the literature, it was felt that the characteristics of this sample would be similar enough to those reported earlier
to warrant the use of the scales. Further, it was thought that the data from the current study could potentially provide some statistical support for the use of these scales with adolescents.

**Procedure**

Following pretesting, the experimental group of 13 participants (10 female, three male; nine grade tens, four grade nines) was scheduled to attend 10 one-hour weekly lessons (the experimental curriculum). The control group of 11 participants (six female, five male; six grade tens, five grade nines) was scheduled to attend regular classes.

Posttesting occurred over the course of four sessions - two for each class - during the week following the last lesson in the curriculum. The instructor administered both pretest and posttest according to a preestablished standardized format. This format ensured that all subjects received the test instruments in the same order, in the same rooms, and according to the same directions on both pre and posttesting. Additional material for evaluating lessons and instructional effectiveness was derived from student evaluation feedback forms (Appendix D) produced each session. Also utilized
as process feedback were an instructor's log and lesson evaluations by the classroom assistant, both produced at the end of each session. Some portions of the curriculum had been evaluated by means of a pilot study prior to complete development of the lessons.

The materials and format utilized in delivering the curriculum were prepared prior to the commencement of the experiment. The procedural framework for developing and presenting the material was derived from the instructional counselling approach described by Hiebert, Martin and Marx (1981) and Martin and Heibert (1985). The fundamental tasks of SI concepts were derived from Martin and Martin (1983). Student participation was based on creating a personal goal soon after the outset of the lessons and applying subsequent skill and strategy information towards attaining that goal. Each lesson specified a component of a fundamental task, provided for student practice at the component and provided peer and instructor feedback to the student on developing skills in the component area. Each new lesson was designed to incorporate the information from previous lessons. At the end of each lesson time was provided
for addressing student progress on personal goals through peer and instructor feedback.

Instructional procedures for each of the 10 lessons were based on a standard session format and on teaching objectives for each particular lesson (Appendix B). The standard format followed a sequence: (a) to provide an overview of the content of the session, (b) to present a learning activity and to provide for student practice, (c) to discuss the activity, (d) to spend time in small groups reviewing personal goals with peers and instructor, and (e) to receive instructor feedback on home assignments and to hear about new assignments.

The experimental curriculum was scheduled to be delivered during a school block that was often used for schoolwide activities. Consequently, classes were often cancelled in that block, a fact that was not made known to the research team prior to the commencement of the study. When four of the first eight scheduled sessions were cancelled due to such rescheduling, a decision was made to adjust the curriculum content by combining lessons. As a result, the curriculum was delivered over the course of six sessions rather than 10. Note that Appendix A
contains material designed for the original 10 session curriculum.

After one week following the posttest, all student participants were invited to the university where a portion of the agenda included an end-of-project discussion to hear student impressions and to answer any remaining questions. Control group volunteers were offered copies of the curriculum material.
Included in this chapter are discussions about reliabilities of instruments used, discussions about differences between groups and across time from pretest to posttest, and summaries of reliability data, as well as descriptive and inferential statistics.

Design

The hypotheses presented above (in Chapter 2) were tested using a $2 \times 2$ factorial design for repeated measures. Results for each hypothesis are discussed individually below.

Reliability of Dependent Measures

In order to gauge internal consistency of the experimental instruments used in this study, reliability coefficients (Cronbach alphas) were calculated. The instruments examined were the Cognitive Content Test, the IE Scale and the SCS. Results were calculated using both pretest and postest scores for all students. Findings are shown in Table 2.

In comparing reliability coefficients for this study with those reported for the SCS and
the IE Scale in Chapter 3, it is interesting to note that the coefficients for the scores reported for this study are similar to the results reported by Rotter (1966) and Rosenbaum (1980) for their respective measures. Comparisons would tend to corroborate earlier findings in regard to these instruments.

The Behavioral Tasks Test was scored following calculation of interrater agreement about answer values and total scores. The project coordinator and I developed common criteria for evaluating scores and conducted a reliability trial using five randomly selected student tests. An 86% agreement was obtained between the two raters, this was judged to be adequate. Overall, the tests used in this study were regarded as reliable to a satisfactory degree.

Hypothesis One.

It was hypothesized that students could acquire the knowledge relating to the fundamental tasks of SI through learning the material contained in the curriculum, and that content acquisition could be measured by the Cognitive Content Test.
Table 2

Reliability Coefficients for Dependent Measures at Pretest and Posttest

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>.40</td>
<td>.65</td>
</tr>
<tr>
<td>IE Scale</td>
<td>.48</td>
<td>.57</td>
</tr>
<tr>
<td>SCS</td>
<td>.61</td>
<td>.83</td>
</tr>
</tbody>
</table>

a Content = Cognitive Content Test
Pretest $n = 24$, posttest $n = 19$. 
Results. The two-way ANOVA for repeated measures indicated that there were no statistically reliable group differences ($F (1, 17) = 0.19, p = .67$) nor was there reliable change across time ($F (1, 17) = 1.48, p = .24$) resulting from scores on the Cognitive Content Test. The means and standard deviations are reported in Table 3.

Conclusion. There is no support for hypothesis one.

Hypothesis Two. It was hypothesized that the knowledge relating to the fundamental tasks of SI would result in perceptions of a more internal locus of control, which could be measured by Rotter's (1966) Internal vs. External Scale of Control of Reinforcement.

Results. The two-way ANOVA for repeated measures indicated that there were no statistically reliable group differences ($F (1, 17) = .80, p = .38$) nor was there reliable change across time ($F (1, 17) = 1.13, p = .30$) or a reliable interaction effect ($F (1, 17) = .02, p = .91$) to be seen in scores on Rotter's IE Scale. Means and standard deviations are reported in Table 3.

Conclusion. There is no support for hypothesis
two.

**Hypothesis Three.** It was hypothesized that the knowledge relating to the fundamental tasks of SI would be accompanied by increased perceptions of self-control, as measured by Rosenbaum's (1980) **Self-Control Schedule**.

**Results.** The two-way ANOVA for repeated measures indicated that on the SCS instrument there was a statistically reliable group effect ($F(1, 17) = 4.44, p = .05$) indicating that the scores of the two groups were different. However, there was no reliable change across time ($F(1, 17) = 1.48, p = .24$) nor was there a reliable interaction effect ($F(1, 17) = .12, p = .73$). Means and standard deviations are reported in Table 3.

**Conclusion.** There is no support for hypothesis three.

**Hypothesis Four.** It was hypothesized that demonstrable skills in the knowledge areas relating to the fundamental tasks of SI could be transferred, and that skill transfer could be measured by the **Behavioral Tasks Test**.

**Results.** The two-way ANOVA for repeated measures did not indicate statistically reliable group
differences ($F (1, 17) = .004, p = .95$), similarly change across time was not indicated ($F (1, 17) = 1.65, p = .22$) in scores on the Cognitive Content Test. Means and standard deviations are reported in Table 3.

Conclusion. There is no support for hypothesis four.

There were no significant changes found for the control group from pretest to posttest.

In summary, the scores on the posttests were not significantly different from the scores on the pretests for any of the dependent measures. Consequently, there was not evidence to support any of the experimental hypotheses.
Table 3

Means and Standard Deviations for Dependent Variables at Pretest and Posttest

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Group</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$\bar{X}$</td>
<td>SD</td>
</tr>
<tr>
<td>Content</td>
<td>Experimental</td>
<td>6.67</td>
<td>3.16</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>6.70</td>
<td>2.00</td>
</tr>
<tr>
<td>IE Scale</td>
<td>Experimental</td>
<td>12.00</td>
<td>2.24</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>11.00</td>
<td>2.36</td>
</tr>
<tr>
<td>SCS</td>
<td>Experimental</td>
<td>139.78</td>
<td>14.43</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>127.90</td>
<td>12.30</td>
</tr>
<tr>
<td>Tasks</td>
<td>Experimental</td>
<td>3.67</td>
<td>1.41</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.20</td>
<td>1.03</td>
</tr>
</tbody>
</table>

\(a\) Content = Cognitive Content Test, Tasks = Behavioral Tasks Test.

Pretest \(n = 24\), posttest \(n = 19\).
CHAPTER FIVE

Discussion

The results reported in Chapter 4 did not provide a logical basis for presenting similar self-instructional curricula to students similar to the ones represented in this study. There was no evidence to suggest that students in the experimental group had acquired any curriculum-based learning and skills to distinguish them from the control group. A number of reasons might be cited in order to explain those unsatisfactory results.

The obvious starting point would be to question the effectiveness of the instructor: was the curriculum presented in a manner conducive to student learning? During the first two lessons, observer feedback from within the classroom indicated that the subject material appeared to be presented as planned, and that students appeared to be involved and interested in the classes and in the instructor. However, a number of students commented on the difficulties they encountered when they were exposed to vocabulary in the curriculum that they did not understand.
In addition, a pilot test of Lesson 4 had demonstrated excellent results for student learning. Consequently, it is appropriate to look beyond lack of instructor effectiveness in order to understand why test results were unsatisfactory.

The central reason is probably that the curriculum prepared for this study was not well-suited to the student participants, nor were the students given an optimal presentation of the curriculum. A number of factors are involved here. First, the scheduled blocks for the lessons coincided with blocks used for extracurricular activities school-wide. Cancellations and rescheduling severely affected the delivery of the material, in fact it took 14 weeks to do pretesting, posttesting and delivery of a curriculum shortened to six lessons; the sequence was interrupted by a one-week hiatus five times during that period. Second, students in both control and experimental groups were receiving instruction in a school "Life Skills" program two times weekly. Assuming that there may have been some overlap in topic areas between the host school's "Life Skills" program and the experimental curriculum, students may have been confused rather than illuminated;
or they may have been influenced by a regularly presented school program at the expense of the SI curriculum. Third, and most important, is the composition of the experimental group. Those students were from a non-academic coursework stream, and were exposed to the experimental curriculum during an elective block in which they were not accustomed to an academic focus or receiving homework. In addition, 30% of the final experimental group composition was in Grade nine.

The last factor deserves special attention. When the pilot test of Lesson 4 was conducted with an academically streamed Grade 10 class, the language used appeared to be within the range of comprehension for the class. However, during the initial presentation to the experimental group, it was found quickly that the language used, especially the terms relating to topic areas, were not generally understood. Simplifying the lessons and providing more explanations was undertaken but student interest for new concepts was not generally high. Student feedback indicated that even after alterations the material presented was, at times, considered to be overly abstract and complex.

The processes taught in the study are oriented
towards planning and achievement. However, classroom discussions indicated that only two students in the experimental group were planning to continue with formal education at the post-secondary level. Given some very successful outcome results that arose from a parallel study involving "gifted" Grade 10 students, it becomes critical to consider the academic background and abilities of the participants. The instructor for the parallel study (Norris, 1986) made a strong case for excluding students below the Grade 10 level or for limiting program inclusion to those with a strong academic background and, at minimum, normal intelligence. Thus it may be inappropriate for younger or less academically inclined students to undertake such programs (Norris, p. 146). The consideration that students who do well in school are better prepared for process-oriented education mirrors the contentions expressed by Baldwin (1981) in discussing a study of a Grade 7 program promoting thought processes. The conclusion reached here is that the curriculum prepared for this study was not appropriate for the participant group and that it should better be delivered to an older, more academically sophisticated population. Similarly, it
is concluded that the student volunteers who were exposed to the curriculum would likely have benefitted from material designed specifically for their abilities and ambitions in keeping with the requirements for learner-context approaches and activities outlined above in Chapter 3 (Glaser, 1984).

Finally, it might be the case that the small number of subjects in the analysis did not give the ANOVA enough power to identify the effect as being statistically reliable. Notwithstanding this factor, the previous reasons are probably still worth keeping in mind.

Implications can be drawn from the conclusions for purposes of both instructional theory and practice. Unsatisfactory test results do not condemn the development of SI curricula, they address the preparation of curriculum material without essential knowledge concerning the potential learners. It has been reported above (Chapter 3) that the experience, ability, cognitive processing modes and affect of the learner combine to impact on the ways in which skills are acquired. Keeping in mind the importance of these personal characteristics, the teaching practitioner needs to be aware of the general
attributes of the learning group (e.g., age range, academic achievement levels, community experience) as well as assessing and addressing individual characteristics that come to light over the course of time (e.g., social and family characteristics, developmental level and school experience).

In this context an important characteristic of the experimental group that could not be taken into account in advance was a general lack of prior exposure to the task-processes encountered in the SI lessons. Unfortunately, it seems unlikely that the group's short exposure to the fundamental tasks of SI will constitute anything more than an isolated component in its educational history. This points out the need for ongoing, sequenced process education aiming specific content at specific learning group levels within an ongoing general theme of self-management and personal coping. If such sequenced process education was attempted it would be important to incorporate specific behavioral tasks as indicators of student acquisition of the skills covered in the curriculum. Thus students might be presented with several personally relevant scenarios and asked to utilize a think aloud procedure to indicate the
extent to which they followed the process taught in the curriculum, when they were dealing with real problem situations. This would provide evidence that students had mastered the material that the curriculum purported to teach. Further, if the process skills of personal functioning were taught in relation to ongoing development, the problem of introducing new concepts through a transitory thesis study at such a late stage would not occur. What would be the effects of introducing process-related skills for personal planning and achievement at a much earlier age? Certainly it could be hoped that students in grades nine or ten would not generally consider those topics to be complex or abstract.

In addition, what would be the effects of introducing instruction on social and emotional self-management and problem-solving at the classroom level? One effect would be to normalize the means by which personal functioning is enhanced. Currently, counsellor activity relating to personal issues usually takes place in isolation and apart from the classroom context. Both those conditions tend to reinforce the perspective that counsellors deal with
problems, and that problems are not supposed to be addressed as part of the daily routine. It goes without saying that, in such an atmosphere, concerns are seldom addressed before they reach the "problem" stage and after the possibility of applying preventive solutions has passed.

On the same preventive theme, making self-management into the focus of self-instructed, student-managed factors rather than crisis-related, teacher-managed factors acts to promote the learning of independent skills. Furthermore, a preventive approach that aims at avoiding critical concerns through knowledge and planning creates a much more positive basis for counsellor contact than does a problem-related approach that does not provide solutions until concerns arise. If counsellors undertook classroom teaching to provide preventive skills for personal effectiveness the subject matter would be directed at practical applications rather than at the stigma of needing help to get "fixed". Not every problem or concern can be anticipated and avoided, but with counsellors as practitioners in promoting self-help through learning, they might become approachable outside the classroom with less stigma.
attached to the contact.

Beyond the school setting, counsellor effectiveness through curriculum-oriented endeavors might provide access to personal functioning skills for a wide population of clients. Those who require individualized approaches could continue to find those with counsellors although it should be hoped that more people could get help than do currently if counsellor-based curricula were to become widely available.

Learning in the traditional core subjects has failed to create independent personal functioning skills and knowledge, so the requirement for expanded learning in those areas through additional alternative programs continues to grow. In this era of economic decline and restricted access to education and employment, it becomes increasingly important that young people have as wide as possible an array of personal functioning abilities. Present and future opportunities should not be jeopardized by self-management or coping hazards that can be recognized and controlled in advance.

In addition, an important potential benefit of self-instruction in the fundamental task areas is
that learning about personal functioning issues should generalize to wider social issues. Positive experience in self-instructed personal management surely would provide optimism for the learning and application of skills in group or collective functioning. The process skills identified in this study, and the learning of process skills generally can be related to a wide context of concerns that should best be addressed preventively rather than from a crisis orientation. At the regional or national level a wide context might include demographic factors such as the increasing average age of the working population, growing community responsibility for the effects of poverty, loss of markets for local production, and racial antagonisms. Examples of concerns from a global context might include economic shifts, population concerns such as hunger and disease, implications of future technological changes and international conflict resolution. The link between self-instruction for personal agency and skill acquisition for group agency logically could be enhanced through the instructional objectives of the core curriculum in providing knowledge and abilities
relating to the external world beyond the individual. Therefore, the case is made for ongoing learning in process skills for personal functioning as an essential part of the education that students will need to prepare them for life in a rapidly changing world. Notwithstanding the disappointing test results arising from this study, counselling curricula are required to address this need. A concern basic to the creation of any such curriculum is accurate knowledge about the intended student recipients. Future studies may avoid some problems that were encountered here with that knowledge. In any case, evaluation of curricula through empirical field testing will serve to identify objectives accomplished as well as hazards to avoid. The development and field-testing of such curricula relies on counsellors who are trained for the task. Consequently, counsellor education should provide for the acquisition of curriculum-related abilities. Counsellors can enhance the personal functioning abilities of their clients, in schools and elsewhere, through the development and implementation of curricula keyed to process skills and presented according to the personal and group characteristics of the participants.
Appendix A

Student Handbook

The lessons that follow are presented as narratives that the instructor used to deliver the curriculum. Teaching directions to the instructor are contained within the narratives and are underlined. Home assignments are included at the end of each lesson.
In this first session I will outline what is expected and what concepts you will learn in the course. I will begin by giving each of you a session-by-session outline of the material which will be covered during the next nine weeks. After that, we will discuss the rules for participating in this course, and what the research assistant and the instructors responsibilities are. Next, we will examine what the main topic areas for the course are. Finally, we will conclude this session by forming into three-person groups and each student will receive a log book. We'll discuss homework assignments - what they will be like and why they are assigned. Are there any questions? (Instructor will respond to queries).

I have just given you an overview. An overview is a description of what I intend to do in a lesson. Overviews will be stated at the beginning of each session to give you an advanced idea of what will be presented, and what concepts I consider to be important.
Instructor turns on the overhead which shows the course outline.

During the next nine sessions we will be dealing with various topics which will help you to organize yourself. By organize, I mean knowing what needs to be done, in what order and to what extent.

In session #2, we will learn how to SET GOALS, to come to an understanding of why people set themselves goals, and to discover how each of us can set a goal that can be reached.

Session #3 covers how to MONITOR, RECORD and DISPLAY. Those words may not mean much now, but you'll be well acquainted with them in the next nine weeks. Basically they refer to the ways in which you can watch some aspect of your life on a fairly constant basis, how you can keep a record of what you see, and how you can show these recordings to yourself and others.

Sessions 4 and 5 both deal with overcoming obstacles that interfere with performance. Sometimes we may want to accomplish something but we just can't seem to approach it without getting upset. In session 4 we'll look at one way to RELAX ourselves by relaxing our muscles, in order to overcome worries or anxiety.
In Session #5 we'll discuss ANXIETY-REDUCTION by learning how to think our way through a worrisome situation.

Session #6 examines how we use rewards to motivate behavior and what features of rewards motivate us the most. Motivation means the underlying personal reasons that account for the amount of effort that any person is willing to put out in pursuit of a specific end, that is: mastery or competence in the chosen activity. In this session we'll determine also how to go about setting rewards that complement the goals we create.

In Sessions 7 through 9 we will examine how learning takes place, how each of us can learn to act effectively, and how to judge whether we are progressing satisfactorily towards our chosen goals. The topics for those three sessions will be KNOWLEDGE, PRACTICE, FEEDBACK AND EVALUATION.

Finally, in Session #10 we will review what has been accomplished, and discuss how we can use what has been learned in these 10 sessions.

Solicit Questions - Discuss
Expectations: Now that you have an overview of how this course will progress, I think we should turn our attention to the expectations of this course. You've read and consent forms given to you and your parents. Are there any questions concerning those forms? It should be made clear that although participation is voluntary, it would be impossible to carry on unless each one of you is willing to commit yourselves once you have volunteered. Needless to say, if you feel that continued participation is not good for you, at any point in the course, you are free to withdraw. What we can't have is sporadic attendance - one day in, one day out....that would be counter-productive for any of you since every lesson depends on what we have learned in previous lessons, and we need students to complete all of our requirements so that we can come to well researched conclusions. Are there any questions? If not, I would like to give you this form indicating your willingness to attend regularly and that you are willing to do any homework which is required for the course in the time alloted for each assignment. Your signature on this form
is voluntary, but we would like some assurance that you are prepared to meet our expectations.

Handout Form – Read – collect student’s signatures and promise to give out photocopies next session.

Within this room you can direct all of your attention, questions and responses to me. The research assistant is here to observe, to make recordings, and to be available as a consultant. If we, as a class, need to call on him, we'll do it through me. From here on we can more or less ignore him so that he can attend to his responsibilities while we concentrate on the course material.

Discuss
Course Content

Now I will spend some time explaining three concepts that relate to what we will be doing for the next nine weeks. Those concepts are: motivation, anxiety-reduction and skill acquisition. Each of our future sessions will relate directly to one or more of those concepts, as you may have gathered from the course outline.

Here's a closer look at what the concepts mean and some examples of how they relate to our program. It will be the main contention of this course that any effective program of self-instruction must create an understanding of how to motivate, how to overcome fears and worries that threaten and reduce capabilities, and how to gain the skills needed to move into action. Self-instruction is the way that an individual relies on his or her own thoughts, behavior and feelings to purposefully influence the circumstances of their lives towards more satisfaction and accomplishment. That means knowing how to go about achieving what is possible for you by recognizing the steps that must be followed by being able to plan out how the steps would occur
for you in a personal program of goal-activity.

Motivation is used to describe those mental processes in each person that make an outcome seem or be worth a certain kind of effort. Motivation results when a person judges himself or herself to be capable of producing the kind of effort needed for a desired outcome. In this class, sessions 2, 3, 6, 8 and 9 will present topics that aid in motivating you towards doing something that you want.

An example of motivation: Can you remember the first time that you saved up your money for something that you really wanted?

Instructor questions class, brief discussion of examples from students, concentrating on which experiences were successful and which were not (emphasize why some were unsuccessful, e.g. unrealistic goal, or unrealistic time frame).

Successful attempts to achieve what we want are seldom unusual or surprising because of motivation. We learn from our own experience, success teaches us that a certain amount of effort can lead to a worthwhile outcome. When we've been successful we feel better about
ourselves, and if we recognize an area in which we feel able to complete a task in order to achieve a goal, we'll be more likely to try it if we've had good experiences before. For example, if, instead of a bicycle I attempted to save money for an ocean liner, the outcome expectations would quickly fade. My motivation would be reduced since I wouldn't feel confident about my ability to complete the task. We'll be learning how to increase motivation in weeks 2, 3, 6, 8 and 9, but do you have any questions based on what I have said? Instructor answers questions. Now let's discuss anxiety reduction.

In what situations do you feel nervous or worried? Instructor solicits students comments. Quite often people become anxious about performing in front of an audience, especially if the activity has not been well-rehearsed. Has that ever happened to any of you? Instructor solicits students comments. What were you feeling during (the worst part of) that experience? I can remember having to speak at a wedding on a couple of occasions and learned from the first experience that I had to be calm if I was going to be successful. Because I've learned
how to relax, I can do it pretty much at will. Therefore I use techniques to relax before I do something I am nervous about. In sessions 4 and 5 I will be showing you some popular and easy ways to reduce anxiety by relaxing and by thinking your way through a potentially hazardous situation.

How do you relax? Instructor solicits students comments.

Now that we have discussed motivation and anxiety reduction, I would like to discuss the term skill acquisition. Does anyone here take lessons of any kind when they are not in school? What happens during those lessons? On a larger scale, what happens generally at school is a process of acquiring academic skills by taking courses. The knowledge to be gained is described by the course name. For instance, in Math class you will learn about mathematical concepts. Class-work and homework on math concepts provide you with practice, and marks on math assignments or lessons allow you to judge your progress which gives you clues on how to adjust your methods. Report cards and teacher comments give you further feedback on how you are progressing,
as well as an indication of what else you need to learn or practice. In sessions 7 to 9 we will look in-depth at how specific material, practice, feedback and evaluation combine to help individuals acquire skills that they require in order to experience success. Do you have any questions about the term skill acquisition? Instructor solicits students comments.

Divide into groups and make seating plan.

The small groups I have divided you into will provide an opportunity for you to see what others are doing, and to allow for some co-operative work and feedback. These groups will remain the same for the next 9 weeks, so when I ask you to move into groups, please join up with the same people and go to the same place in the room that I have assigned you today.
Each day we meet I will assign some homework. The homework is separate from what you do with the logs and what you do as goal-related activity. The homework won't take long, and won't be difficult if you follow what's happening in class. Usually homework will consist of a few questions to answer in writing. Homework assignments will provide me with an indication of how much you remember from each session. Furthermore, homework will provide you with some practice in dealing with the concepts encountered in this course.

Questions? Discuss

Today's homework is pretty simple: I want each one of you to keep a record of how often, and for how long, you use the telephone. Therefore, on the paper provided, keep a record of when each phone call occurs and how long it takes. This must be done for all calls between now and our next session. Don't forget that even if you aren't calling someone, you might be on the phone -- maybe you'll be answering calls that are for someone else, but you'll still be on the phone for a few seconds. If any of you work and are on the
phone, you can leave those calls out of your record if they would interfere with your job, otherwise keep a record of every call.

Discuss
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Lesson Two

Overview

Today we will look at how people can make changes in what they do, or how they think, in order to feel that they are benefitting themselves. Our topic is setting goals and we will find out why people set goals related to learning, then we will examine some examples of goals in different aspects of life.

Once we are aware of examples of goals, we will attempt to describe a goal for each one of us – myself included. We will create those statements by splitting into small groups and discussing goals with each other. Then the goal statements will be reviewed by the whole class (this means that the goals will have to be ones we can share – no private ones!).

Next, I will go through the steps involved in defining and working towards my own goal. I will distribute and discuss an assignment which can be completed at home. Then I will distribute log books, I'll explain them and answer any questions about them. Finally I will distribute an evaluation form for you to take with you and return next session. Your co-operation in filling out the form will be a help in refining the lessons.
Why do people want to change? If someone changes where do they think they're going to end up? Solicit student responses. Do any of you have a clear idea of what your lives will look like? Solicit student responses. Instructor allows some discussion, probe for how organized are student respondents.

If we can agree that planned, deliberate changes result from how people interpret their own experience then we can probably agree that most changes will be intended to make us feel or think better about ourselves. This is due to what we'll call learning. The basic point to remember about learning is that it occurs in order to maintain or increase things that seem to be positive and to decrease or eliminate things that seem to be negative. It is the experience of the person that tells them what is negative and what is positive. Sometimes something may seem to be positive, but actually will be negative.

Example: -eating fattening foods
-dropping out of school

On the other hand some things that seem to be
punishment could actually be rewards.

Example: - sport training.

Can anyone give me an example? Discuss

For each person, the ideas of positive or rewarding and negative or punishing behavior are based on two foundations: what we have happen to ourselves, and what we have seen or heard about things happening to others. The ability to understand things through outside happenings increases as people become older. At first, experience comes in pretty simples doses: pleasure and pain, that is, it's painful to be hungry and it's pleasurable to get fed. Similarly it's painful to be in a wet diaper, it's pleasurable to get changed into a dry one.

As children mature, they begin to understand what is happening to others. They discover that others can experience pleasure and pain. For example, if two three year olds bump heads while playing, quite often you'll see one start to cry, then the other one, perhaps less hurt, sees the other child crying, and begins to cry himself or herself. Eventually, the child learns to observe others in order to avoid pain or attain pleasure.
An elementary school student who watches someone step on a frozen puddle and break through is probably not going to risk a cold soaked foot because we learn through watching others. Define vicarious experiences.

Now we come to our main point: setting goals. People set goals for themselves as a means of achieving changes. That is, changes intended to make us feel or think more positive about ourselves. Let us look at a few examples of areas where people set very public goals for change. We'll start with sports, in team sports there are a variety of goal-related situations, here are some examples:

1. Players have the goal of personal and team success, those goals are very public in that spectators show up to urge on their chosen team and the results are obvious to a number of people with either a win or a loss.

2. Coaches, similarly, share the team success goal. Team action is successful if the players execute as instructed and is deemed very successful if the execution results in a win. The goals are public in terms of winning or losing, and again the spectators partake in the public display.
3. The spectators have no personal goals, yet sharing in the public demonstration can make them feel good or bad depending on the outcome. Also, spectators cannot always tell if a team is successful in executing to the best of their ability, but still not winning.

In (1) the players success is in doing something, if successful they feel good about themselves. In (2) the coaches success is in contributing to the players' success, if it occurs, the coaches feel good about themselves. In (3) the spectators contribute by acknowledging the success of the players, and to a lesser degree, the coaches; if the team is successful the spectators feel good about sharing that success.

Another area where recognition plays a big part is the arts. Why is that so? Discuss emotional appeal, cultural appeal, cultural cement.

Few people experience public recognition of their goals, it would seem that not everyone requires an audience in order to attempt to do better. When we see people pass from one grade to the next in school, or advance in a job, we see the results of goals that usually relate to those person's
immediate surroundings: the people they know or associate with and to whom they compare themselves.

It would seem that many changes are made in order to feel better also about relationships -- that what can make me feel better about myself is how I get along with others. Goals that are formed to make relationships better rely on how more than one person can be involved productively in change.

We've seen that our perception of what is happening can make any occurrence into one that we value, or one that we don't value. What do you dislike for entertainment that other people might like? Discuss ballet, t.v. Have you ever felt uncomfortable because you thought someone was criticizing you, only to find that they were just being humorous or sarcastic? Have you found yourself not wanting to see someone, or to get involved in an activity, then later when it happened you enjoyed yourself? Have you ever wanted to make friends with someone but were afraid to approach that person? Discuss.

People set goals for themselves in order to witness a change that will be valued for them or their surroundings. We've looked at some examples
of goals in action or being completed. Now we're going to examine how we might create a personal goal and we'll discuss some methods that will assist us to set appropriate personal goals.

A goal must be attainable, that means it has to be reached without causing too great an expenditure of time or effort. If the goal makes very great demands on a person, they will not be able to value the result highly enough to make the work towards the goal worthwhile, there's more pain than gain. A goal must appeal to the person pursuing it. The goal of learning how to navigate a ship would not be appropriate for someone who gets intensely seasick. Likewise, the goal of playing basketball is not appropriate for someone with arthritic fingers, no matter how appealing that goal might be. Another important point to remember today and in the future: you'll succeed more frequently if you set your own goals. If you choose a goal because it will make someone else happy, your motives may be noble, but you may have difficulty achieving the goal. Why? Solicit student answers, e.g.: no payoff for you, they're not satisfied, etc.
Divide into Small Groups.

First we will discuss the homework assigned last session and see what your impressions were of monitoring phone use. Was it hard to remember to do it? What difficulties did you encounter? Did you enjoy this activity? Did you see any changes in your behavior as a result of monitoring? What was the greatest amount of time spent on the phone? What was the least amount of time spent on the phone? Discuss.

Are any of you surprised at the result? Discuss. It is vital that we become accustomed to the idea of observing our performance, because goal-related progress really suffers if we don't know how well we are doing, that is, where we started from, and how far we've come. We'll spend all of our next session examining the processes and results of self-observation.

You should answer all three questions on this worksheet, and have your answers approved by your other group members. Each group will be responsible for approving that the answers are appropriate to the questions. It might be helpful to remember that this exercise is created in order for you to
make a goal that you can work at over the course of the next two months. If a goal is too heavy, it will require perhaps more effort than we could see in our time frame, and also it may be hard to share the goal or the progress made. On the other hand, if a goal is too trivial, you'll quickly lose interest and spoil a chance to be involved in an ongoing group experience as well as a chance to do something for yourselves. One final hint, when you're looking at someone else's goal, try and put yourself in that person's place long enough to think about whether the answers fit.

Group work - Instructor go from group to group for consultation, clarification, coaching.
- Receive worksheets upon completion.

I'll review the goals now so that we all share in knowing what they are.

Read out each student's goal and encourage that goal by asking questions and voicing support, e.g.: That's an interesting goal, I know you'll enjoy working towards it. Have you wanted to set this as a goal for any length of time? How did you come to settle on that goal?
If a goal seems inappropriate (e.g. to have my parents love me more) ask how it got approved by group members. If it still looks inappropriate, suggest some alternatives on the grounds that the goal may be approached more successfully from another angle. Example: relating to goal above: why not start with some aspect of your normal routine that you would like to change because you'll feel better for changing.

Now I'd like to share my goal with this class. That is to learn each first and last name so that I'll know who you are, and whether or not you're all in your assigned seats. Here's how I would answer the questions on the worksheet.

**Overhead or blackboard**

Because the last session of these ten lessons is a review of the material we have covered, I'll time-limit myself to six weeks for accomplishing my goal. Now each of us has a goal. Questions? Discuss.

Here is another sheet of questions to be answered for next time. **Distribute.**
Name: _____________________________

Question Sheet - Part 1, in class

1. What is one thing about you or about your life that you would like to change?
   Describe: ____________________________________________
   ____________________________________________
   ____________________________________________

2. How feasible is it for you to make that change?
   Describe: ____________________________________________
   ____________________________________________
   ____________________________________________

3. Are there persons, times, places also involved when you make that change?
   ____________________________________________
   ____________________________________________
   ____________________________________________
   If you want to be somewhere, at some time and/or with some person when you change, describe where and/or when, and/or with whom.
   ____________________________________________
   ____________________________________________
   ____________________________________________
Question Sheet - Part 2, home assignment

1. When you think of your goal, what would you be doing or thinking if you were successful in achieving the goal?

2. Are there some steps necessary to achieve your goal? If so, list them, starting with the easiest and ending with the hardest.
   1. 
   2. 
   3. 
   4. 

3. What benefits will result when you accomplish your goal?

4. How willing are you to do the work needed to reach your goal? Circle one.
   1. Not at all willing
   2. Not very willing
   3. Quite willing
   4. Very willing
Question Sheet - Part 2, home assignment cont'd.

5. Thinking of your answers in class to the question sheet (part 1) and combining those thoughts with the results of the questions above, make a statement that will fully describe your goal, what you'll do to accomplish the goal, and what your situation will be if/when you've accomplished your goal.

6. Make a recording of each time that you find yourself in a situation that would be better if you had accomplished your goal already. Use the recording sheet attached.
Overview

Today's session will be concerned with measuring the progress we make towards our goals. The goal statements that you completed at home show what you want to do. Today we will learn how to measure our progress directed at achieving these goals, and how to keep interested in working toward our goal(s). We'll begin with a process of observation called monitoring. We will see that monitoring usually means finding out how much or how often something occurs or does not occur as we get closer to our goals. Then in our groups each one of us will decide how to measure our goal related activity.

When a decision has been reached about how each one of us will monitor, we will go on to discuss some of the benefits of monitoring, and how to make it work for us. We'll examine how often we monitor, why we monitor, and how to keep records of our monitoring. Keeping a record is called recording. I'll be showing you some examples of recording devices and explain how they are supposed to work. Then everyone will decide on a recording device of their own for keeping a record of the goal-related activities that they monitor through
our sessions.

Recording can act as a motivator, that is, it can make it seem more appropriate to carry on towards our goals because we have a record of what we're doing. It has been found that by converting a daily record into a display, the things we do towards reaching goals become more interesting. We'll look at how we can display our recordings, and the advantages of displaying our records.

Finally we will take a look at some material to be completed for our next session.
Description - Long Form

Usually we are aware of the concepts of duration and frequency by comparing things. We know that the daytime in the summer is of a longer duration than it is in the winter. The frequency of wing-beats is higher for a hummingbird than it is for an eagle. We refer to coffee or tea as being weak or strong. All of these concepts serve as ways in which we compare things.

For the purposes of this program: working towards personal goals, it is useful to learn how to compare where we started with where we want to end up. Usually we measure such a comparison in terms of frequency or duration. For instance, Charlie has a goal of not biting his nails, he watches himself and records each time that he is going to bite his nails. Being his own constant watchdog makes Charlie aware of his goal, and the frequency with which he bites his nails goes down as the frequency of catching himself ahead of time goes up. In another example, Brenda wants to improve her physical conditioning so she goes swimming once a week and observes the pool clock to see for how long she swam. At first Brenda can
swim for twenty minutes, but after six months she can swim for ninety minutes. As the duration of time in the pool increases, Brenda's physical fitness increases.

Sometimes it is hard to decide whether a situation calls for a frequency, duration, or intensity observation, so let's examine the goal-statements each of you prepared for today. We're going to change the nature of the goal just by watching our activity towards it; it seems that self-monitoring a behavior tends to alter the behavior. Because no-one can be completely objective, when we are careful to observe what we do, over the course of time, we tend to alter the activity we're observing to make it fit without conception of what suits each one of us as individuals. For instance, we may think that we're assertive and easily speak for ourselves, only to find that a personal observation of our interactions shows otherwise; as we observe that our actions don't match our preconceptions we would probably begin to alter our behavior to make it consistent with our thoughts. Discuss

Move into small groups. We will begin by
reviewing the information from your home assignments.

Within each of your groups I want you to supplement your goal statements by identifying exactly what activity will be required to accomplish your goals, and how that activity can be measured, by increase or decrease in frequency, by intensity, or by duration.

Promote discussion, clarify terms for each small group.

1. What will you do to get closer to your goal?

2. How will you measure what you do?

Now that each of you has a definite statement of goal and a correct means of watching your goal-related activity, it is time to mention a couple of important points. First, monitoring has to happen frequently. If your goal is something that required constant effort then you've got to be watching what's happening all the time. If your goal requires a specific effort at a specific time, then during that time you've got to be continuously aware of what you're doing. In this way the goal can't be dismissed as being trivial or
insignificant. Second, our goals will maintain their importance if we can keep a record of what we're monitoring.

Recording is the transfer of what you're observing into a form that shows your monitoring over the course of time. The things to remember about recording are to do it right away or as soon as you can, and record when you're not distracted by something else. Both Charlie and Brenda knew something about monitoring that affects recording and that is when to best observe your efforts. It seems that the best results for increasing a desired behavior happens when the behavior is noted after it takes place. On the other hand, an undesired behavior is best decreased by noting it before it occurs, or just when the urge happens. Charlie watched for the urge, and decreased his nail-biting. Brenda observed the time at the end of her swim, and as that increased, she of course, got more fit. Sometimes it would be best to record an absence of behavior, for example, number of hours spent not smoking or not daydreaming, as a way to motivate us to perform differently.

Let's look at what devices can be used to
record your goal-related activities. The simplest method of recording is to tally the number of times, or the duration of time spent at an activity. A grid allows you to check off for occurrences or time periods.

Show grid on overhead or blackboard.

How the recording is done relies on how easy the grid is to use. If you want to record your goal-related behavior easily, you'll need something you can carry with you. The object you do your recording on should be small enough to keep in a purse or pocket. Some people doing frequency counts have relied on golf counters, which don't require keeping a pen or pencil constantly with you.

N.B.: Students may need advice.

Now we know how to monitor ourselves, and how to record the results, let's see what we can do to make our daily or weekly results into a meaningful picture.
Performance records are an accumulation of what has been monitored. An example of a performance record is a report card. The teacher takes groups of marks and gives a grade showing performances. It is helpful to learn how to turn out a personal report card on your own goal progress, so that your confidence will build up when you witness any growth or change from your original behavior habits.

Performance records can be very motivating if they are put into a display. The material in the display doesn't have to be open to others, but it must be open to you. The idea is to create some display that pertains to your own progress towards your goal. The display should be in a location where you will see it daily and thus will have some regular impact on you. This use of display is not a new idea, it has been used in many ways. Can you think of any? Promote student responses. Here is an example: Remember Charlie? Poor Charlie found that when he'd managed to control his nail-biting, he somehow got into the habit of food-biting. Charlie began to gain weight. Often it happens that when a problem is apparently controlled, another related problem will surface. Charlie's
problem was a serious one because although he found nail-biting fairly easy to anticipate, he found it more difficult to anticipate the number of opportunities he'd have to nibble or overeat. Finally, when Charlie was worrying about running out of clothes to wear, he decided to go on a food control program. Charlie set himself a goal of limiting his food intake. He consulted a nutritionist at the local hospital and was given a diet. He bought the food he'd need, and he decided to motivate himself by creating a display relating to how he monitored his food intake.

Charlie decided to monitor his food intake; by carrying around a small booklet, he could enter a notation every time he ate. He listed what it was he'd eaten. At the end of each day Charlie charted his intake on a graph that he taped to his refrigerator. Here's Charlie's graph.

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Food not in diet plan
What Charlie wanted to do was keep from entering anything below the double lines. The spaces above the lines are for the meals and snacks allowed by his diet. Below the lines are spaces where Charlie charted anything he'd eaten that was not allowed by the diet. As we can see, Charlie soon discovered that he had a major problem in the evening. He had to concentrate on that, and he set himself a reward to help motivate himself. We'll go on to talk about the reward in a later session, right now, I'm going to show you examples of how other people have created displays.

Show examples on overhead or blackboard:
Histograms, pies, rainbows, body-figures, graphs.

The help that a display can provide for Charlie, as a visible reminder and as a motivator for better performance, can operate for you as well. If a display is made public, for instance, pinned up on the kitchen wall, or in a locker, then friends or family can be enlisted to support your efforts and they can see the progress made. Often goals are shared, but even if they're not, people self-reinforce; that is, they take credit for, and urge themselves on to good performance in order to
maintain a rewarding display.

A display should be located in a spot where you'll see it fairly frequently every day. In addition, it must be relatively easy to enter the data from your daily or weekly recording if the display is going to be used effectively. Otherwise, the display will fall into disuse and your goal program may suffer as a result.

For someone trying to reduce weight, a chart on the refrigerator might be a good spot; or perhaps a weight chart on the bathroom mirror. For someone wanting to increase practice time or study time, a chart where the activity takes place would be good. If you have a general goal such as paying closer attention to your appearance, then a chart at home might not qualify as a good motivator when you're at school. Let's have some suggestions of appropriate and inappropriate places. Discuss.

To finish our session on monitoring, recording and display, I'd like you all to make up a display that you could use to chart your recordings. I'll check those.

Discussion in small groups, then move back to large group.
Adapt one of the examples shown, or use a device of your own choice that will adequately display your ongoing goal activity in a way that will interest you and whomever else you choose to view it. You can help each other on this project. You must be able to enter your daily or weekly data so that it remains understandable.

Homework will consist of recording progress towards your goals. Let's discuss how that will occur. How many of you will be doing frequency counts of some activity?

Select a student, model a tally of frequency on blackboard.

How many will be doing a record of duration?

Select a student, model a record of duration. (e.g. number of minutes per occurrence/day) on blackboard.

I have some simple daily record sheets here for those who would choose to use them for this session's assignment. I myself find it handier to use a pocket-size notebook but if you want to use these, here's a supply and examples of how they can be used.

Show examples on overhead.
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Lesson Four

Overview

Today's session concerns self-reward. We will examine reasons for rewarding ourselves, that is, why it can help us toward our goals. Then we will analyze how to self-reward most effectively. In this analysis we will explore how to select the rewards that are appropriate to a situation and that fit with each goal. Secondly, there will be an explanation of the factors required to deliver the rewards appropriately, that means we will talk about what and when to self-reward and how much or how often rewarding should occur. After that we will move into small groups and do an exercise based on today's information, after we have reviewed the homework and session content from the previous lesson. Finally, we will examine the homework assignment to be given out today.
When we say self-reward what do we mean? (Example: reinforcement - whatever acts to satisfy an organism so that the organism will attempt to recreate the conditions of satisfaction). Promote student responses. In the context of these sessions, we mean how each person can make their goal activity more productive by linking a personal reward to an activity. This means that you decide what would be a good thing to do for yourself, and do it once you've achieved a previously determined level of goal activity. Everyone sets standards of behavior for themselves based on what their past experiences show them they can expect from themselves. Usually people feel a sense of reward if they accomplish what they were aiming for, or a sense of frustration if they fall short or overshoot their goals. A reward increases the likelihood of setting a goal and achieving it, and with practice, any person can learn to set themselves goals that suit their abilities. Question: What does reinforcing mean? It means creating a satisfying state of affairs which a person desires to obtain. (Mention Thorndike's Law of Effect: when a response is
reinforced, it will tend to be repeated in the future). So we self-reward as a means of increasing or strengthening a desired activity - the activity that is related to our goals.

Another important aspect of self-reward is that it fosters independence. If a person does an activity that relies on someone else rewarding it, such as working for someone else's praise, this is called a response to external reward. The activity accomplished will be connected to someone else. Consequently, the judge of whether the activity has been performed adequately will be that other person. In many cases that's an o.k. situation because another person may have knowledge or experience that would make them a good judge, or because another person might be capable of giving the kind of feedback that will promote more and better activity.

On the other hand, there are areas of performance that are best judged by the individual doing the activity or, when the person performing the activity will benefit by reinforcing himself or herself. Such a situation often occurs when the activity doesn't involve anyone else; such as the way a
person thinks or when the activity involves personal habits and characteristics. We'll see some examples of the value of an independent approach later in this session.

We've examined why persons might self-reward, now we'll look at some of the things that go into making a reward appropriate. First, make the reward suitable for the person involved. If you want to find something suitable for yourself, it would not do to choose a reward that doesn't fit with you. For instance, if you want to lose weight, don't reward your achievements with food. One method of choosing a reward is to take an aspect of your life that you enjoy. If you enjoy a weekly television show, tell yourself that viewing this television show will not occur unless you perform some other activity that you want to accomplish (e.g. homework). Distribute handout.

Other important aspects of choosing a reward for yourself are:

1. accessibility - the reward must be readily available (example: no good saying you'll go out to dinner if you haven't got the money.)
2. multiple rewards - the reward can't be used up in one shot (example: a new car.)

3. variety - try to build in more than just one reward (example: promise a reward that repays in private time for a shower, to read a book, to write a letter, to phone a friend - vary the reward.)

4. potency - make sure the reward is reinforcing (example: no use rewarding with something just because it's supposed to be rewarding - don't go on the roller coaster if you don't like heights.)

5. appropriateness to activity - in that a logical connection exists between activity and reward (example: new clothes for weight loss.)

Any questions? Discuss.

Those are some important things to remember when choosing a reward for yourself. Now, let's see how to coordinate rewards to performance.

First, we must ensure that the amount of performance suits the reward. This is called the criterion or standard of performance. For example, dieters often monitor their calorie intake. A dieter could
be doing too much towards weight reduction if a minimal requirement of calories wasn't maintained—results of doing too much might be malnutrition in that case. On the other hand, if a dieter did too little it might mean not reducing calorie intake enough—a very slight reduction in a grossly over-abundant diet would not accomplish much. The result might be that overweight status would be maintained. The task here is to find out how to do the right amount: what effort is right for the reward. What we don't want is to find ourselves continually doing too much, or failing to do enough. So we need to find out what would be the right expectation when doing the activity. How can we find out what is right? Self-monitor: watch yourself and record your level of activity for one week.

Once a person has decided on what can usually be accomplished without making the activity really easy, then the "how much" portion of the reward is set. What remains to be established is when to deliver the reward. Usually self-reward is more effective when it is given for small steps of progress.
Put following points on overhead.

1. Small steps - Self-reward is given only for an overall goal; this long wait will reduce motivation. Consequently it is necessary to include variety where various sub-goals or small steps could be rewarded differently than major goals. It is most important to specify ahead of time exactly what goal will result in what reward -- those decisions can't be made with much effectiveness when an activity is over because the performer would not be conscious of the effects of gradually achieving a certain level of performance. For example, when attempting to lose 40 pounds through dieting, design small rewards for each 5 pound loss.

2. There are some basic rules for when a self-reward should be given: first, the reward must follow the activity and not come before it; secondly, self-reward should be given immediately after performance. (remember what was said about long waits?); third, rewards must follow actual performance,
not the promise to perform. For example, decide whether the loss of 40 pounds is worth a specific reward, then write it down or announce it and stick to it. If you don't have a specific reward, only a vague self-promise, motivation will be vastly reduced.

To summarize, we now know that we should monitor our potential levels of performance in order to establish a criterion or standard. We should decide ahead of time what will be rewarded. And finally, we should remember that rewards should follow activity, not promises, and be delivered as soon as possible.

What do these points mean in relation to your own goals? Let's break into small groups to discuss the rewards you will be putting into your program. First I would like to collect your homework assignment from last week.

Divide students into small groups, check logs, receive homework.

Let's see if any questions arose from last session or from the assignment. Questions, discuss.

We can summarize the last session by saying
that in order to understand to what degree we perform an activity we can focus our attention on that activity and measure how much or how often it occurs. Focussing attention and measuring how much or how often is called monitoring. Keeping the data in a form that can be reviewed easily is called recording - that means writing or filming or audio-taping etc., in order to have a concrete record. Translation of the recording into a chart or some other form of audio and/or visual display gives the recording impact when it is viewed or heard. An appropriate combination of monitoring, recording and display acts to provide the individual undertaking those activities with motivation: the desire and ability to spend more time at a task when the expectation is that the process is within the capabilities of the individual and that the outcome is desireable.

Here are some examples of how self-rewards and external rewards can work, not all of these examples show advantages, some show disadvantages. There are questions at the end of each example that I'd like you to answer - you can discuss the material between yourselves in your small groups.
Distribute handouts.
Brenda began swimming in order to get fit. After a year she found that swimming was so enjoyable that she decided to compete in a swim meet. Because Brenda had been successful in motivating herself to get into the activity a year earlier, she felt that she would be better off training by herself, rather than joining a club. Brenda chose to aid her training by silently repeating to herself "good going Brenda, you're going to be a star" each time she swam more quickly while training. In her first competition Brenda entered as an independent, she was badly outclassed by all the club swimmers. Brenda was humbled by the experience and wondered why her time was so much worse than the other swimmers.

Does Brenda have a criterion?__________________________

__________________________

If so, what?__________________________

__________________________

Is it self-reward or external reward?____________

__________________________

Does it match her goals?__________________________
If you were Brenda, what would you do to make your program more effective?
Mrs. Johnson's husband seemed to be referring constantly to her habit of biting her nails. It seemed to Mrs. Johnson that she couldn't stop herself because often she wasn't aware of what she was doing. However, she was aware of the fact that her fingers were not as attractive as those of her friends and working associates. Mrs. Johnson resolved to do something about it. She talked to a colleague who had recently lost weight and asked him about how he stuck to his diet because she thought that a big part of her problem might be motivation. She was afraid that she would enjoy biting her nails more than she would enjoy stopping. The colleague's advice resulted in Mrs. Johnson following his plan:

1. She kept a notebook in which she put a mark (✓) each time she felt like chewing her nails but managed to refrain, and another mark (✗) each time she chewed her nails.

2. Every day that Mrs. Johnson kept from chewing her nails, she would allow herself to read a favourite book for thirty minutes. If she chewed her nails she could
not read, even though she loved to read.

3. Mrs. Johnson put aside some money that would be used for a manicure once her nails were long enough. She made a deal with her husband that he could use the money for fishing equipment if she hadn't accomplished her goal and used the money for a manicure within six weeks.

Is the reward system appropriate to Mrs. Johnson's personal characteristics? __________________________

______________________________

Why? _________________________________

______________________________

______________________________

______________________________

What criterion or criteria does Mrs. Johnson have?

______________________________

______________________________

______________________________
Martin Harvey wanted to be a Veterinarian like his father. Unfortunately Martin hated his chemistry course which was essential for completing training. One evening while Martin struggled with his chemistry, his father, Harvey Harvey came into his room. Witnessing his son's look of disgust, the senior Harvey announced, "Martin my boy, when I went to Vet. school I also hated chemistry, so to make things easier for you than it was for me, I'm going to reward you for your efforts. If you'll spend thirty minutes a night with me, we'll go over your lessons and homework; in return for the extra thirty minutes, I'll put aside $3.00 a week. If you pass chemistry I'll buy you a first rate stethoscope with the accumulated money." The younger Harvey had mixed feelings, sure he wanted the stethoscope (his ears could feel it already!), but it meant thirty minutes per day more than he was already putting in. In the end he decided that the stethoscope was worth it, so he agreed to spend the time with the elder Harvey.

What does Martin get as a reward?_________________
Is the reward program self-reward or external reward?

Will this program work, if so, why?

If not, why not?
James received $5.00 per week for an allowance. In return, his parents expected him to take out the garbage and keep his room shipshape. James was conscientious and soon established a routine so that he accomplished his parents requirements consistently. Both James and his parents were satisfied with the arrangement. Last summer James stayed with his grandparents in the interior. During his stay his grandparents gave him pocket money, in fact, they gave him more than his regular allowance. At his grandparents' place James didn't have any chores at all, in fact, when he offered help, his grandfather would say, "you take it easy, you're on a holiday." At the end of the summer James found it very difficult to get back into his old routine at home. He felt that his parents were being demanding. His parents felt that James had become a lazy loafer and wondered if it was just a stage that he was going through.

What was James' reward at home?____________________

What was James' reward at his grandparents?____

________________________________________
Why did James have trouble when he returned home?

If you could try to make things better for everyone concerned, what would you do?
Lesson Five

Overview

Today we're going to be involved in examining some of the thoughts and sensations that might reduce your chances of success in reaching your goals. We'll examine how worry and anxiety can affect the way in which our bodies work. Also, we'll discuss emotions that result from fears and worries. Next we will examine why relaxation techniques reduce the symptoms and causes of fear and anxiety. Once we know how to tackle this anxiety bogeyman, we'll practice a technique of relaxing using our muscles.

After we've relaxed we'll continue to look at recording and monitoring. Finally we'll hear some details about our next class.
First off - let's discuss how fears and worries can hold us back.

Most of us have had the experience of not doing something we wanted to try because we got nervous, got cold feet, or suddenly we changed our minds and told ourselves that we didn't really want to do it, or that we'd do it later, or maybe that we really couldn't do it anyway so why try, because we will end up failing. Sometimes a new situation seems to be filled with potential threats. Those of you who remember moving into your first day at Junior High after elementary school might recall how scary it seemed. Perhaps some of you play sports or perform in public appearances and you've experienced jitters or butterflies in the stomach before you start the activity.

All of those thoughts and feelings are common, but they don't have to rule the way that we live. There are ways to overcome the effects of anxiety which we'll examine. First, I'd like to talk about what happens to the human body when it encounters something threatening. You will be questioned about this so pay close attention.
Today we will talk about thoughts and feelings that make us nervous or afraid. These thoughts and feelings can be very threatening to us. A long time ago the human organism was used to reacting to threats in one of two ways: A person could run away, or he or she could stand and fight. In either situation, a rapid change had to take place in order to increase the chances for success. The change that took place involved the body gearing up for intense physical activity. The heart beat or pulse would speed up, breathing would get faster and shallower, adrenalin would be pumped into the blood steam, and the proportion of blood allotted to the large muscles would increase, at the expense of other bodily areas. Other changes would happen too, but basically the result was that the body would be preparing for action. This action was a built-in response to danger. One side-effect of those changes was that the blood flow to the brain was reduced, therefore thinking was reduced in acts of survival.

Unfortunately, our bodies still continue to react to threats in pretty much the way that I've just described. But now it is far more likely
that our threats will not be the kind that require
us to run or fight. But even when they are, we
should attempt to control some of these extreme
body reactions, and to think about possible solutions
for a situation. The bodily reactions that I
described earlier as jitters or butterflies result
from the fight-or-flight response. Such responses
as muscle tension, shakey legs, sweaty hands or
cold sweat on the forehead -- are all symptoms
resulting from an inferred threat.

The instructor should now discuss the scenario
by asking the following questions:

1. What are two possible behaviors early man used
to respond to threat? A) Fight B) Flight
2. What changes in the body take place when we
are preparing for intense physical activity
or action? A) Heart beat or pulse accelerate
B) Breathing becomes faster or shallower
C) Adrenalin pumped into the blood stream
D) Blood flow to large muscles increases.
3. Why is thinking impaired when we are threatened?
A) Blood flow to the brain is reduced.
4. Give some bodily symptoms of what we call jitters
or butterflies. A) Muscle tension
B) Shaky legs  C) Sweaty hands  D) Cold sweat on forehead.

Discuss

There are a number of relaxation methods used to reduce these symptoms, and often various methods will be used together. These methods can be learned in order to reduce the kind of general ongoing worry that might be constant, but also to combat the intense reactions of a particular threatening situation. Today we will try out a series of tensing and relaxing procedures to remove anxious feelings by relaxing the main muscles in the body. This is an exercise that some of you may have done in some form in the past - anyone who has had that experience? Discuss; probe for fears about the exercise.

Instructor reads the deep muscle relaxation script (by permission: Hiebert, B. A. (1980). Self-relaxation: Learn it, use it. Coquitlam: Per Man). The instructor should try to modulate his or her voice in such a fashion as to increase voice levels when muscles are being tensed and decrease/slow down voice when asking the student to relax a certain muscle group. A tape is provided for instructors who would prefer to have this activity orated by an experienced relaxation trainer.
Commence reading the script or turn on the tape.

The purpose of this exercise is to teach you deep muscle relaxation. If you practice, you can learn to relax at will; to put yourself into a very pleasant and comfortable state known as deep relaxation. I'd like you to start by loosening any tight clothing and finding a comfortable position and then closing your eyes. This method works by teaching you to identify tension in various parts of your body and then to identify the opposite of that tension, which is deep relaxation.

I'd like you to clench your right hand into a fist...clench your right hand into a fist and just think about the tension in your right hand.... Feel the knuckles becoming white with tension... and then let it relax. Notice the contrast between the tension and the relaxation...Once again, clench your right hand into a fist and study the tension in your right hand....and then let it relax. Notice the pleasant contrast between tension and relaxation.

Now clench your left hand into a fist and study the tension in your left hand....Then let it relax. Notice the contrast between tension and
relaxation....Once again, clench your left hand into a fist and study the tension in your left hand.... And then let it relax -- just let it go loose and limp and relaxed.

Now bend your right hand at the wrist and point your fingers up to the ceiling. Study the tension in your right wrist and forearm, and then let it relax...and feel the contrast between tension and relaxation. Once again, bend your right hand at the wrist and point your fingers up to the ceiling... Feel the tension in your right wrist and your forearm....and then let it relax, noting the contrast between tension and relaxation....

Now bend your left hand at the wrist; and point the fingers up to the ceiling....and then let it relax....Just go loose and limp and very relaxed.... Once again, bend your left hand at the wrist, pointing the fingers up to the ceiling, study the tension in your left wrist and forearm...and then let it relax. Notice the contrast between tension and relaxation.

Now I'd like you to flex both of your bicep muscles by bringing your hands up to your shoulders. Bring your hands up to your shoulders, flex both of
your bicep muscles....study the tension in your biceps....and then let them relax....It's not necessary to tense your muscles so much that you get a cramp, only just to tense them enough so that you can feel the tension. Once again....flex your bicep muscles....bringing both hands up to the shoulders, and then let them relax....just go loose and limp and relaxed.

Now shrug your shoulders up to your ears. Study the tension in your shoulders and the base of your neck....and then let your shoulders relax. Notice the pleasant contrast between the tension and the relaxation....Once again, shrug your shoulders up to your ears....study the tension in your shoulders and the base of your neck....and then just let them relax....Just sag down...loose and limp and very relaxed.

Now wrinkle up your forehead by raising your eyebrows up to the top of your head....Study the tension in your forehead....and then let it relax....Once again, raising your eyebrows up to the top of your head....study the tension in your forehead....and then let it relax....let your forehead become more and more smooth, more and more relaxed.
Close your eyes very tightly....Study the tension around your eyes, the bridge of your nose....Squint your eyes tightly, study the tension, and then let them relax...Once again, squinting your eyes very tightly...study the tension around your eyes and the bridge of your nose...and then let them relax...

Let them relax and just slightly close.

Now make a big smile, as if to touch both ears. Study the tension in your cheeks and in your mouth...and then let it relax, feeling the contrast between tension and relaxation....Once again, making a big smile as if to touch your ears....study the tension in your mouth and your cheeks...and then let it relax...noticing the pleasant contrast between tension and relaxation.

Now I'd like you to press your tongue up against the roof of your mouth...and study the tension inside your mouth...and then let it relax...

Once again, pressing your tongue up against the roof of your mouth...study the tension inside your mouth, and then let it relax.

Bury your chin in your chest....Study the tension in the front of your neck, and your chin...and then let it relax...Notice the contrast between
the tension and the relaxation....Once again, bury your chin in your chest...and study the tension in your chin and the front of your neck....and then let it relax...feeling the pleasant contrast between tension and relaxation.

Now, I'd like you to press your head back, against the back of a chair or the bed, or whatever. Study the tension in the back of your neck... and then let it relax....Once again, pressing your head back....study the tension in the back of your neck....then let it relax...let those muscles go loose and limp...and relaxed.

Feel that relaxed feeling now...in your forehead...your forehead is becoming more and more smooth, more and more relaxed....That relaxed feeling is spreading down through your face....as your eyes relax...your cheeks relax...your mouth relaxes...your jaw and your chin relax...that relaxation flowing down into your neck...down into your shoulders...down into your biceps, so relaxed... your forearms relaxed...that relaxed feeling spreading down through your wrists...and into your hands...and all the way down to the tips of your fingers...very warm...and very relaxed.
Now, take a deep breath and hold it.... Take a deep breath and study the tension in your chest.... and then let it relax.... Once again, taking a deep breath... and holding it... and study the tension in your chest... and then let it relax.... let your breathing become more and more regular.... more and more relaxed.... More relaxed with every breath.

Now tighten up your tummy muscles.... Study the tension in your abdomen... then let those muscles relax.... Once again, tensing the stomach muscles, study the tension in your stomach... and then let them relax.... Feel that pleasant contrast between tension and relaxation.

Now tighten up your buttocks muscles.... Study the tension in your buttocks and hips... and then let them relax.... Once again, tighten up your buttocks muscles... study the tensions... and let them relax. Let that feeling of deep relaxation... spread down into your buttocks and hips.

Now, tighten up your thighs.... Study the tension in your thighs... and then let them relax.... Once again, tighten up your thighs.... Study the tension in your thighs... and then let them relax... and go loose... and limp... and relaxed.
Now point your toes towards your face....Study the tension in your lower legs...then let them relax.... Once again, pointing your toes towards your face...study those tensions...and then let them relax.

Now point your toes away from your face...
Study the tension in your lower legs and your ankles...then let them relax....Once again, pointing your toes away from your face...study the tension in your ankles and lower leg...and then let them relax.... Feel that pleasant contrast between tension and relaxation.

Now curl up your toes...curl them up inside your shoes or whatever....Study the tension in your feet and your toes...and then let them relax.... Once again, curl up your toes and study the tension in your feet and your toes...and then let them relax...Let that feeling of relaxation...flow down into your feet...and down into your toes.

I think it is really neat that you are relaxing. Your whole body is starting to relax and now to help you relax even further...I am going to review the different muscle groups that we've relaxed, and as I mention each one, they will become even more relaxed than they are now...As I mention each muscle
group...it will relax even further than it already is....Your fingers relaxed....your hands and your wrists relaxed...your forearms relaxed...your biceps relaxed...and that relaxed feeling flowing up into your shoulders...along the back of your neck over the top of your head, all the muscles in your scalp relaxing...and the relaxation spreading down to your forehead...your forehead becoming more and more smooth...and more and more relaxed....The relaxation...spreading down through your face...as your eyes relax...and your cheeks and your mouth relax...and relaxed feeling spreading down into your chest...your breathing becoming more and more regular...more and more relaxed....The relaxation spreading down through your stomach...around the sides and into your back...up and down your spine...all those muscles relaxing...relaxation spreading down into your hips...and buttocks...flowing down into your thighs...your calves relaxed...and your shins and ankles relax.... Deep relaxation flowing down into your feet...all the way down into the tips of your toes....Relaxation coursing through your veins...bathing your whole body....a peaceful, tranquil feeling of relaxation.
Even when we are as relaxed as we think we can be...there is still an extra measure of relaxation. To help your body to become even more relaxed than it is...I'm going to ask you to imagine yourself standing beside a long, black wall, on which the numbers from one to ten are painted... in great big, white numbers. I'm going to ask you to imagine yourself...standing there beside the number one... and starting to stroll along beside the wall... and as you pass each number, your body will become more relaxed...more and more relaxed as you pass by each number...Even more relaxed than it is now.

You can become just as relaxed as you are now whenever you want to...Simply by taking two four-count breaths...a four-count breath in...and a four-count breath out...letting your jaw sag....letting that relaxed feeling spread down through your chin... and up through your face...and down through your neck...and shoulders...and arms...chest and stomach... down through your forearms and wrists...and hands and fingers...letting that relaxed feeling spread down through your hips and buttocks...and down through your legs...your thighs, and your calves... and shins...and ankles...and all the way down to the
tips of your toes.....This is called the 10-second relaxation exercise....You can become just as relaxed as you are now...simply by counting to four as you breathe in...and counting to four as you breathe out....and a second four-count breath in...and then breath out...letting your jaw sag...and letting this wonderful feeling of relaxation spread down through your jaw and chin...and up through your face...and down through your neck....and all the way down through your body....I'd like you to practice that right now....practice this 10-second exercise...making yourself very relaxed...So-o-o relaxed....You can become just as relaxed as you are now...simply by doing this 10-second exercise...placing your whole body in this stage of deep relaxation.

You've been doing a really good job of relaxing..Your whole body is warm and comfortable...and very relaxed...And now to help your body to return to its ordinary state...I'm going to count backwards from five to one....and as I count backwards from five...you'll feel your whole body starting to wake up....When I get to one...you'll feel wide awake..and very, very relaxed...."five"...."four"....
"three"...you're beginning to wake up..."two"...
eyes starting to open...and "one."

Now that the script has been concluded, what are your reactions to what happened? How do you feel now? Discuss

In relation to this discussion, who can identify what types of feelings they have when they get worried? What parts of the body react? Can you anticipate when you are going to become tense? Discuss

So it can be seen that people have their own responses to worry, often those responses feel similar from one person to another. Similarly, the relaxed body has some measurable characteristics that remain the same from one person to another. What are they? Give examples, (e.g. slowed, deeper breathing, low pulse rate, increased finger temp.). What are the others?

Here is a typical recording device for self-monitoring in a relaxation program.

Show relaxation monitoring sheet.

How would you monitor those categories on the sheet? Discuss

So today we have looked at how worries or
anxiety can cause bodily reactions that tend to make an individual act in ways that are not often successful. Those reactions relate to a time when the human condition had needs for survival that no longer apply. We practiced a relaxation technique called deep-muscle relaxation in order to experience the opposite of anxious body reactions. Relaxation is often used to overcome the debilitating effects of fear, worry or anxiety. Next session we will discuss some ways of approaching relaxation or anxiety-reduction through cognitive techniques -- that is "thinking" techniques.

Instructor: The homework will be reviewed by asking for answers to the assignment and comparing those with the real answers. (Show on overhead). If students did not do well, time should be spent explaining why the real answers apply (allow 5 minutes).

Regarding individual programs: Each week the instructor should allow time for small group discussion of progress - encourage peer support and involvement.
In addition the instructor should be going to each student during that time (approximately 10 minutes) to see what personal material is going into the logs and to offer suggestions that might apply to goals. (e.g. how to break activity into smaller sub-steps, how to create a more appropriate reward).

Distribute homework assignment.

Answer questions re: same
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Home Assignment

1. Can you describe what happens to some of the following body areas when an individual feels threatened? Briefly give descriptions for three of the areas listed below:
   1) Brain
   2) Lungs
   3) Heart
   4) Stomach
   5) Hands
   6) Legs
   7) Muscles

2. Describe how relaxation functions in the body by relating your answer to your chosen areas in question 1.
Lesson Six

Overview

Today we will add to what we learned last week about physiological responses to anxiety by learning about cognitive responses to anxiety. Cognitive means what we think, so we will be discussing how to understand and direct our thinking. We will begin by reviewing the home assignment and by getting a bit more practice at relaxing using our muscles. Then we will go on to learn about three concepts: desensitization, thought stopping, and covert verbalization. Afterwards we will have some small group time to discuss progress on goals and to receive homework for next session.
Let's begin by reviewing some of what we did last hour. Your homework was to identify some of the things that happen to the body when a threat is perceived, whether or not there is a real threat. Let's look at a diagram of a threatened body (show overhead) and see what's happening.

What's happening to cause these specific areas to have reactions?

What's happening to the way the blood is distributed?

What's happening to the breathing pattern?

We have identified these reactions and we also practiced a relaxation technique by tensing and relaxing our muscles and controlling our breathing. The desired result of the practice was for people to experience what it feels like to be relaxed, since it is impossible to be relaxed and anxious at the same time. Let's try and be relaxed right now without going through the whole script. Assume a comfortable position.

Coach controlling breathing

Close your eyes.

Breathe in through your nose and out
through your mouth slowly, bringing the air down into your abdomen. Breathe in to a 4 count - 1, 2, 3, 4, and out 1, 2, 3, 4. Repeat 2 times. Now remember how it feels to be relaxed. Feel the relaxation flowing through your body. Breathe in 1, 2, 3, 4, and out (1, 2,) 3, 4. You can feel the relaxation in your arms, in your face, your neck,
your forehead
feels smooth,
your stomach,
your legs
feel the
relaxation
flowing through
your body.
(Pause 10 secs).
Now open your
eyes (Pause
10 secs).

Coach With practice you should be able to do this
for yourself. Are there any questions? Discuss
and answer in the large group.

Some situations or objects can become anxiety-
provoking so that over the course of time a person
will build up a strong, unnatural fear. If that is
the case, it is often too much of a fear to be
controlled easily solely by relaxing the body. A
successful method of overcoming those fears can be
desensitization.

Desensitization is a process of gradually
approaching the situation that is feared by breaking
the situation into small, sequenced steps. Why
do you think this process has the name that it does?
What does de-sensitiz-ation mean? Write the word
SENS/ITIZED on the board. Discusss. Think of
sensitive - heightened senses. A concise Oxford
definition of sensitized is: readily responsive
to or affected by.

Here's an example of how desensitization works
to reduce anxiety:

When employing desensitization as a means of
reducing emotional/physiological anxiety, the
anxious individual first creates a list of a number
of the primary situations and/or objects which are
associated with his or her anxiety response.
Once created, the items on this list should be
sequenced in order of increasing ability to engender
anxiety. If, for example, a person is anxious about
flying in airplanes and this anxiety is interfering
with doing things that a person wishes to do, a
sequenced list like the following may be prepared:
Put on overhead with the following information;
1. Watching an airplane fly over my home.
2. Driving past the airport.
3. Picking someone up at the airport.
5. Buying tickets for a flight.
6. Walking up to a stationary aircraft.
7. Boarding an aircraft and getting off before take-off.
8. Boarding an aircraft for take-off.
9. Taking a short flight around the city on a viewing tour.
10. Travelling 500 kilometers by airplane to see a friend or relative.

Once the list has been prepared, desensitization can begin. The list can be followed using real life situations, or imagined events. When imagination is used, the image must be as vivid as possible. The list is gone through item by item until the person is comfortable with every item. If an item on the list makes the person uncomfortable, the last item where comfort was experienced is returned to, and repeated. Then a new try at the previously uncomfortably experienced item is attempted. If some point on the list causes repeated discomfort, then the person will have to build in more steps between the last one mastered and the one where anxiety was felt.
When desensitization is used "live", the steps must be small. Not too many (e.g. max. 3 or 4) are to be attempted at any one time; usually a day-to-day program.

Often this process is followed with the aid of another person, sometimes the other person may model some of the activities. So, in brief, desensitization is that gradual approach to a provocative situation or object involving the successful mastery (relieving of anxiety) of small sequenced steps. Are there any question? Discuss

Now we'll go on to something else. Namely, how some of the things we say to ourselves can reinforce a viewpoint that isn't sensible, by being irrational, or by being defeatist. We'll look at ways to overcome irrational and defeatist tendencies.

Irrational and defeating tendencies are called, self-defeating thoughts. Three steps that are followed in reducing self-defeating thoughts are:

1. recognition of the faulty thoughts, 2. stopping the thoughts, and 3. replacing the faulty thoughts with more appropriate thoughts. How are faulty thoughts recognized? We'll start by looking at
irrational thoughts.

What does irrational mean? What is logic? Discuss

The three steps that are used to counter the effect of anxiety that results from irrational thought are 1. recognizing irrational thoughts, 2. stopping the thoughts, and 3. replacing irrational thoughts with rational ones.

1. These are some typical symptoms associated with irrational thought:
   "catastrophizing" - It would be terrible if---.
   "blaming" - If I feel badly someone else has caused it by---.
   "idealizing" - I must be able to do everything well.
   - I have to be perfect.

**Discuss WHY, WHERE, and WHEN THESE THOUGHTS HAPPEN.**

2. A process for interrupting irrational thoughts once they have been identified is thought stopping.

The process of thought stopping follows three stages:

   1. **Thought stopping aloud** - Give example, model practice. Ask students to imagine something unsettling - then yell STOP!
and ask if they're still thinking about it.

2. Decreasing vocalization (from loud to low voice) - Give example, model using situation given in thought stopping aloud stage.

3. Sub-vocal common (internal voice) - Discuss imagining the same loud STOP used in the two earlier stages.

3. Give examples of rational alternatives to irrational thoughts, e.g.: It would be terrible if --- didn't ask me to his/her party...because...
I won't like it if I don't get to go, but I can live with the disappointment and find something else that I enjoy doing.

Emphasize that practice is required. After practice has lead to successful mastery of behavioral thought-stopping, then reductions in "anxiety" effects will become apparent. After successfully practicing these 3 stages, self-defeating thoughts will be stopped by successfully embracing thought stopping then replacing self-defeating thoughts with rational alternatives.

Another method of reducing anxiety is covert verbalization using self dialogue. Give Oxford concise dictionary definitions with class
participation: covert verbalization.

If particular situations can be identified as producing anxiety ahead of time then some preventive medicine can be used. Thought-stopping is still important when the command of STOP is sub-vocally practiced. Yet a little self-coaching can also be sub-vocally practiced to lessen a potentially anxious time.

EXAMPLE: The instructor gives an example of learning names of pupils in the class. The instructor should practice putting proper names to faces before class. Once the instructor is in class, the instructor should engage in self-dialogue. For example, "it's O.K., try to ask if the name isn't remembered. No one cares if I'm slow at this, at least I know I'll get it eventually. O.K., look at the class list, find the name and use it, concentrate on the connection, using the name aloud as much as possible. Now, it's working".

By following this example of self-dialogue the instructor is able to adapt to his/her situation. If the situation can be anticipated and self-dialogue can be used systematically, the instructor will know what is to be done, and improve his/her
skills by practicing conscious self-feedback.

Divide into groups, review logs, goals.

Homework for today will involve describing how you could use thought-stopping and covert verbalization to counter anxiety.

Distribute homework.
Choose the **rational** statements from those listed below by putting an "X" before each such statement.

1. Homework makes me bored; it's the teacher's fault that I feel lousy about homework.
2. It would be really awful if someone didn't like me, everyone has to like me.
3. If I really want something badly, I should get it - it's owed to me.
4. If things don't work out the way I want them to, I'm just going to give up.
5. If something goes wrong, it must be someone else's fault.
6. I don't like it when it rains all weekend.

What are the three steps in overcoming irrational and self-defeating thoughts? List them below:

1. 
2. 
3. 

Describe a situation using your experiences that you know in advance will cause you to worry or be nervous. What could you say to yourself
before, during, and after the situation occurs to make the situation less anxiety-provoking?

Situation Description (be brief) ____________

______________________________________________

Self Dialogue before ____________________________

______________________________________________

Self Dialogue during ____________________________

______________________________________________

Self Dialogue after ______________________________

______________________________________________
Overview

We will begin with a review of homework, then we will begin something new.

This session will be the first of three sessions that deal with acquiring new skills. New skills are needed when a person's desired outcome is thwarted because the individual doesn't know how to achieve a goal, or knows what is involved but can't perform the necessary activity. As we will see during the next three sessions, skills are developed by combining three general elements. They are, 1. specific knowledge and understanding of the sub-skills or parts that make up the skill, 2. thorough practice of the skill and, 3. encouraging, objective feedback about our practice.

In concentrating on the first element mentioned: the comprehension of what makes up a skill, we will be dealing with how we can locate, sort out and retain the information that we should practice. Locating information can be difficult, though usually not through lack of material. There are many potential sources which provide information on the specifics of a skill, therefore, we will examine and discuss a few of these. Once we've
decided where our information could be found, we'll need to analyze; what information we should keep, and finally how to organize that information. We'll finish today's session with a quick discussion of last session, and assignment of a task for next session.

Distribute handout of 3 steps. There is room under each step for notes, which you can take as we progress.

Three Steps

1. Acquiring

2. Evaluating

3. Retaining
Description - Long Form

Your assignment from last session was to show how you could use some of the cognitive responses to anxiety, let's review that material now. Discuss via questions and answers.

How can you learn to become knowledgeable or proficient at something that you are not acquainted with very well? Have any of you found yourselves in that position? What did you do? Discuss

Today we will learn how to create a plan for understanding exactly what is required to become knowledgeable or proficient at something we are not acquainted with. Sometimes, the types of goals that you identify for yourselves may not always be within reach. For instance, I am a knowledgeable cook and can coordinate a meal with the right amount of nutrition and variety. I can feel fairly competent about my ability to please a limited number of people with a tasty and eye-pleasing supper. However, I know nothing about how to feed a large number of people, especially if there was a requirement to feed them using recipes I am not familiar with. If I was asked to prepare a traditional feast for 200 Swedish people what would
I do? Discuss

Here are some of the things I might do:

1. Consult an expert about how to do it. Swedish restaurants, cultural groups, consulate, business groups.

2. Go to the library for books or film, tapes, video disc, etc.

3. Enroll in a course, see a demonstration, display etc.

Once we know where to find the information we require, we still have to collect the information that is useful to us. This next step involves two important areas; the first is approaching the source, and the second is judging the value of the information. Both of these areas can cause problems if you don't have much experience. Approaching the source can be difficult because sometimes it can seem embarassing to admit that you don't know something. Also it can be intimidating to approach an expert if we think that an expert is stuck-up, usually that just isn't the case. Generally, the biggest problem in approaching a source of information occurs when we create negative thoughts for ourselves ahead of time. Either we feel ashamed to
make the first inquiry, or we are put off if we can't get what we want right away. What can we do to avoid those situations? Knowing that such pitfalls exist for some people can be preventive medicine. The things to remember are that we must not let our fears/thoughts prevent us from getting to what we need to know, we must be patient in gaining full access to information, and we must be persistent in sticking with our need to get all the information that's pertinent.

You'll remember that anxiety-causing situations can often be overcome through self-talk, in which the individual talks his or her way through the situation. It might sound like this: If I take this one step at a time I'll get through it. Now I have to talk to the librarian, O.K., she wants to help. I'll explain very carefully what it is I need. Fine, I can get some information here, and I'm going to have to request some more through inter-library loans. That's alright.

Patience/persistence are needed because if we don't know how to do something, we often require a number of attempts to get started. Let's imagine me in a situation that's completely novel, looking
for information sources that can help. For example, I want to learn how to use the potter's wheel that I bought in the garage sale last month. Can anyone here give me some clues as to what I need in order to create pottery?

**Instructor gives examples of potential obstacles we experience when we are trying to get sufficient information.**

E.g. Librarian is busy - wait or make an appointment

Courses are filled until September - work from books or expert help

Clay not available - wait or bring some in

No kiln, no glazes, etc. - contact schools, share time.

It should be obvious that some undertakings are going to require a bit of time. In general, the more you are going to achieve by getting specific information, the more time you will be willing to expend towards collecting the information. So far we've been talking about approaching a source, now let's see what is needed to judge what information is useful to us.
There are two main recommendations that apply to any source of information, the first is a recommendation for common knowledge, the second is for expert status. Common knowledge means a lot of people sharing the same outlook, knowing the same piece of information. There are often family, neighbourhood, or cultural attitudes to what is appropriate. For instance, if there are three dance studios in this city, chances are that at least one will be commonly known as having the better graduates. Similarly if there are three Japanese restaurants, probably one or two would be commonly held as better, and yet, if those restaurants or dance studios were located elsewhere, opinions might differ. Perhaps diners in Halifax would like the food from the restaurant judged generally as poorest here. So some of our judgment about what information is best for us will rely on the shared opinion of the community in which we exist.

Can you give me some examples from this community? What do you agree on as the best place to
1. Learn to swim? ———why?
2. Buy local produce? ———why?
3. Get work done on your car engine? --why?

The other recommendation I mentioned for a source of information was expert status. By that, I mean that some people studied very thoroughly or have done something exceptional and thus can relay the best information about their area of interest. Again, it may not be necessary to go to a world champion -- the closest available expert may not be as well known, but may still provide you with a lot of pertinent information. If you want to know what it's like to be in Grade eleven, you can consult someone who's in grade 11. You don't necessarily need to consult someone who is in university, even though they have been in grade eleven. In fact, times have changed enough that a university person may not give you an accurate picture.

The same method of judgment that we've just looked at: expert status, applies also to impersonal sources of information such as books, t.v., show, movies, etc. If a movie is a hit with your friends, you'll probably like it too, for many of the same reasons. If a book or an author are mentioned often by other writers and commentators
who admire something, you can trust their opinions since they are experts in the field. Last thing about experts: some of them are certified. Professional standing is usually an indication of expert qualifications. If you need highly technical advice, you can usually get it through a professional group.

Show examples on blackboard or overhead:

B.C.M.A.
B.C.A.P.E.
B.C. Sports Federation

An important factor remains: what do you do with the knowledge or information that you've encountered? It needs to be organized so that you can refer to it when you want to. After all the work you may have done, you don't want to lose valuable information. You need some way to tell where your information is, therefore your labels need to be meaningful, and you need to have access to your information. Consequently, where and how you store the information is important. Discuss Show examples of following on blackboard or overhead:

DISCUSSION: How to arrange and label - by name,
surname first.

- by category (size, weight, derivation, species).
- by date.

How to store - filing cards (file boxes, cabinets).
- booklets, inserts.
- pieces of paper (in a box, on a wallboard).
- microfilm.
- video or movie.

Whatever method you use, your information should be easily accessed for use, revision or updating.

Move students into small groups.

I'd like to spend five minutes allowing you to discuss your personal goal programs in your groups while I check with you and see how your logs are progressing. Then I'll assign you each a task for next session.

DISTRIBUTE TASKS RANDOMLY
RESPOND TO ANY QUESTIONS
Question tasks

1. What is a Komondor?______________________________
   Where in B.C. can you get one?___________________

2. On how many kinds of musical instruments can you obtain instruction in this community?
   What are they?______________________________

3. If your sweet corn is developing purple leaves, what does that mean?____________________________
   What should you do?__________________________

4. What is the location of the largest single piece of property in this community and how big is it?
5. What connection is there between the Liverpool Daily Press and this community?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

6. List a typical menu for a French meal, with the name of each course as well as the dishes you choose for that course.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

7. How many officials are elected in civic elections here? What are the names of the positions they hold?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

8. Can you learn any martial arts in this community? If so, give the name of an instructor, his or her discipline (e.g. Karate, Tai Chi etc.) and the cost per lesson.

________________________________________________________________________

________________________________________________________________________
9. How many teachers are there in this school?
   How many are there in the School District?
   How many students are there in the school?
   How many in the School District?

10. How many girl babies were born in the MSA hospital in 1980?

11. How did Telegraph Trail get it's name? Where did Telegraph Trail end and why there?

12. What year were the municipal boundaries established? Who was the top-ranked local authority at that time?

13. Where in this community can you buy computer time? What kind of computers are available? What languages would be required?
14. What does getting a propane conversion done on your car mean? Can you get one done nearby? How much would it cost you? ______________

__________________________

__________________________

__________________________
1. Where did you go for information?


2. How many people did you consult? List them by their job or position.


Lesson Eight

Overview

Last session we examined methods of acquiring, evaluating, and retaining specific knowledge about desired skills. In this session we will examine what to do when we have accumulated the specifics. We will learn that practice can be instrumental in acquiring a skill if the practice is conducted properly. The characteristics of good practice are that it be focussed, gradual, realistic, and thorough. We will determine what each of these adjectives means, and we will see examples of what describes good practice in reality. Before we begin to concentrate on practice we will deal with the assignment distributed last session. At the conclusion of our topic for today we will meet in our small groups as usual to review goal progress and to look at the home assignment.
Description - Long Form

First we will see how each of you did when you were searching for specific information on the topics that were assigned. When the assignment was created it was seen as gaining the types of information that would indicate skill as an informed citizen. Each of you in turn will read out your topic and recite the information that collected since last session.

Instructor designate students in turn, promote discussion of results and any additional pertinent information. Reinforce better efforts with verbal praise, review steps taken in gaining material. Solicit problems encountered and promote discussion aimed at solving them.

What occurred as you collected your material was that you got practice in that activity, you became researchers in community knowledge. Your experiences will make it easier in the future to duplicate the task because you'll have learned who to approach for what types of information. Today we'll look at the practice you obtained and
see how your ability to get information could become a more complete skill.

Distribute handout, show topic characteristics on overhead.

The goal programmes that each of you began six sessions ago required each of you to choose an area of concern for which you were prepared to get active right away.

Designate an example from one student.

It was a requirement when we began that you had to possess the skills or knowledge necessary to carry out your goal-related activities. Last session we examined what to do if an individual needed specific information in order to embark on a personal goal programme. Can anyone remember what it is that should be done? Discuss. What we learned was that specific comprehensive knowledge was needed about topics that claim our interest. Today we will learn how to make the most of the information gathered by using focussed, gradual, realistic, and thorough practice based on the information at hand. You can make notes in the areas provided on the handout as we go.

The first characteristic that we'll talk about
is "focussed", what does that word mean? 

Discuss; sample definition: viewed with clarity and directness.

Focussed practice zeroes in on a skill in a direct and intensive way. We learned last session that information collection involves many aspects such as learning to control negative thoughts, patience and persistence when gathering information, how to evaluate what is important, and how to organize and retain the better material. By breaking down the process of information collection we isolated the basic components of the skill. By concentrating on the components during the actual activity, and by repeating practice at the skill in question, the result will be an automatic efficient approach to the task of gaining specific knowledge.

Sometimes it is easy to see how to use focussed practice in acquiring a physical skill. A good example might be swimming. The components to practice would include arm strokes, leg kicks, head movements and breathing. Repeated practice while concentrating on those components will result in automatic, efficient learning in how to swim. Practice can be better when it develops a skill
over time, rather than trying for instant mastery.

A beginning swimmer would be taught best in a gradual manner. It is wise to practice the components of swimming skills first in shallow water before trying deep water in order to ensure that the ability to swim is solidly established before real testing of the skill occurs. An accomplished swimmer will gradually have learned how to get into the water (by diving, jumping), a variety of strokes (backstroke, crawl), and how to turn, stop and tread water, swim underwater etc., over the course of time.

Similarly, if you wanted to become proficient at locating information you would start with a simple problem such as the one you got for your home assignment last week, and gradually learn new approaches with new component skills such as operating a multi-band radio or a computer. In such a situation you might gain the expertise that would allow you to become an investigative reporter or a detective.

Another essential characteristic of effective practice is realism, while it is prudent to begin practice in pretend situations, such as practicing
swim strokes in shallow water, practice must lead to a real setting. Swimming in shallow water must lead to swimming in deeper water and to realistic distances (such as 500 m.) before the skill can be said to exist. Returning to the example of locating information, that skill will need to be improved beyond what is required in a school assignment if it is to be made realistic. That skill needs to become a part of the way that life is conducted outside the requirements of the school setting.

Finally, skill practice must be thorough. It is no help to someone attempting to swim to safety if they had deluded themselves about their abilities to swim any distance. A car driver's practice is incomplete if it does not include the coverage of special skills required for driving under special road conditions such as heavy rain or snow. The requirement of thoroughness can mean an increase in the amount of time and energy needed for achieving some goal, they will be effective. The concepts of gradual and thorough go together naturally in that thoroughness is the result of a gradual accumulation of proficiency in all of the skill components that are relevant to a chosen skill area.
Here's a quick review of the characteristics of effective practice.

1. Focussed means direct, intensive concentration on the components of the skill being practiced.

2. Gradual means developing more and better skills over the course of time.

3. Realistic refers to the transfer of developed skills from the situation in which they were learned to a real-life setting (unless they were learned in a real-life setting).

4. Thorough means all of the components that relate to any particular skill, if a skill is said to be mastered it must be known thoroughly. Discuss

Now move into small groups in order to review goal progress and logs, and to receive the assignment for next session.

Instructor supervise move to small groups, encourage peer support and feedback to individual programmes. Clarify and advise students with particular concerns. Distribute assignment handout, answer questions about assignment.
Home Assignment

Your homework is to learn to say the alphabet backwards. When you come back to this class next session be prepared to recite in front of the class. There will be awards given out based on how well you do. The requirement is really to engage you in some effective practice.

Comment in the space provided below on how the major characteristics of effective practice fit into this assignment. Leave out number 3. We will fill that space during class.
Name: ______________________

Effective practice in reciting the alphabet backwards

1. Focused (what component skills did you concentrate on, and how did you concentrate?)

2. Gradual (did you build your skill through steps? If so, what were they?)

3. Realistic

4. Thorough (can you start at any point in the alphabet and recite the remainder backwards?)
Lesson Nine

Overview

In today's session we will examine the characteristics of effective feedback. The characteristics of effective feedback are: that feedback should be immediate, descriptive, encouraging, and that it leads to further more accurate practice. Here is a list of those characteristics. You should take notes to remind you of what each characteristic means. These notes will be of great assistance when you do your assignment.

Distribute handout.

We will learn the four characteristics in the order they appear on the handout sheet, and give an example of each one. Next we will review the homework assignment by observing each one of us recite the alphabet backwards. Prizes will be awarded based on your performance.

Then we will move into our groups and conduct our weekly update concerning our progress toward our goals, and the log entries you have completed. Homework will be assigned at the end of the session.
We will begin this session by discussing what is meant by the words feedback and evaluation. Let's start with the word feedback. Discuss using blackboard or overhead.

Who can tell me what the word feedback means? Here is a sample definition, feedback is: a description of something that has been observed, including suggestions for improvement on what was observed.

Who can tell me what the word evaluation means? Here is a sample definition: to set a value, to indicate how good or worthwhile something is or is not.

We will distinguish between these words by using feedback to refer to descriptions about skill practice, and evaluation to refer to judgements on whether the practiced skill fits into a goal program.

You can give yourself feedback based on your own actions, or you can receive feedback from another person who has observed what you are doing. The most constructive feedback is usually provided from an observer (other than yourself), who is
knowledgeable about your abilities, and who will give accurate information.

Are there any questions?

How well we acquire a skill is often based on how accurately we are judged when we practice the skill. Without a judgement concerning how we are doing, it is less likely that we will be motivated to improve. Feedback and evaluation can be vital when acquiring a skill because valuable information is provided, which allows for increased motivation. Feedback about a skill we are practicing builds improvement into that practice.

Now we will examine four characteristics of effective feedback, one at a time. You should take notes on the handout I have given you.

The first characteristic is "immediate" feedback. The results of practice should be considered while the practice is occurring, and immediately after each practice session. In much the same way, rewards were seen to be more effective if they were tied closely to an activity, feedback should be timed as soon as possible after practice has occurred. It is not too useful to think about a series of swimming sub-skills and how they combine,
days after you have climbed out of the water.

If your feedback is tied to your attempts as closely as possible then your recollections of all of the aspects of skill practice are fresh and accurate. If you receive feedback from someone else, such as instructors, they too will be able to offer more accurate advice if they have just observed your practice session.

Are there any questions?

The second characteristic of effective feedback is that it should be descriptive. Specific, descriptive feedback provides much more useful information to a skill practicer than does vague, general feedback. It is highly adviseable to keep a permanent descriptive record of what happened in skill practice sessions. Video tapes of practice sessions, recording the observations of the instructor or helper (on audio-tape or in writing), and/or personal notes are useful sources of feedback because they provide specific information which accurately describes skill practice. An example of an effective feedback mechanism is putting powder on one's feet before a dance or gymnastic activity, so that a visual record of foot movement
can be examined following the skill practice session.

The third characteristic of effective feedback is it should be positive and encouraging. We learn a skill more effectively when we note the things we have done well, and by taking satisfaction in our accomplishments, than we do by criticizing ourselves harshly for everything we do poorly. It is important to remember that a lot of human endeavour is fostered by a tendency to move toward pleasure and away from discomfort. In this case, satisfaction derived from a good performance leads to learning, since satisfaction is similar to pleasure, whereas harsh criticism is painful.

Should you become parents in the future, you should remember that appropriate behavior from your child is taught more quickly by rewarding behaviours that you approve of, rather than by punishing those behaviours that you dislike.

Therefore, when you are giving feedback, it is important to take notice of any signs of improvement and progress. This positive attitude increases the likelihood that further practice and effort will result from the person who has received the feedback.
Tied in with this last point is the fourth characteristic of effective feedback, namely, that feedback must lead to further skill practice and skill refinement. Rather than concentrating solely on progress or failure, areas for improvement should be noted carefully, with later practice sessions devoted to the areas where skills can be improved. In this case, it might be more appropriate to rely on an outside source of feedback since an objective viewpoint may be more helpful, and provides more information.

Are there any questions? Discuss

Let's review the four characteristics of effective feedback: Feedback must be 1) immediate, 2) descriptive, 3) encouraging/positive, and 4) initiate refined practice.

This lesson is the final session concerning skill acquisition. To recapitulate, the three components of skill acquisition were; 1) gaining specific information about an area of interest, 2) practicing the skill desired, and 3) judging practice performance by the use of feedback. When these three steps are used systematically, they can be very helpful to a learner who is trying to
acquire new skills, and may be helpful when we are trying to reach our personal goals.

Show steps on the overhead.

We have been using evaluation in this course. In each session we discuss goal programs in our small groups. At this time we evaluate whether the activities we are doing have been appropriate to the goals we have created. Sometimes a person can follow a wrong direction. Even though he/she works very diligently during an activity, the activity might not relate very well to their end goals. For example, in the Middle Ages, alchemists tried to turn inexpensive elements into gold. The alchemists may have used all of the knowledge at their disposal, and may have created some valuable knowledge. However, it took centuries before it became accepted that their efforts were futile. The process of evaluation, by an individual or consultants, can reduce the chances of going in the wrong direction, and can provide useful insights concerning what better directions might exist.

Are there any questions?

Now let's turn our attention to the assignment I gave you in the last session, namely saying the
alphabet backwards, and to comment upon how the characteristics of effective practice (focussed, gradual, realistic and thorough) fit with your learning of the task assigned.

I am going to call upon you, one at a time, to demonstrate what you have learned. I will reward your demonstration by paying you 1¢ for each letter that you say in correct sequence (starting backwards from z). If you recite the whole alphabet backwards (in proper order) you will receive 26¢. I will go first. Model recitation of the alphabet backwards, ask for feedback. Select students one at a time, observe and keep a record, reward according to success.

Once the recitation activity is completed, move students into their preassigned groups.

We will spend five minutes reviewing logs and goal progress, then I will give out the assignment to be completed for next session. Remember that the next session is our last session. Therefore we will review what we have learned, I will collect your logs, and ask you about your personal programs. This will be your last opportunity to answer any questions that you may have about what we have done, or clear
up confusions you may have about any of the material.

Consult, clarify, review goal progress and logs.

Handout homework.

Answer any questions concerning the assignment.
Student Evaluation Assignment

Create some effective feedback (pretend that an outside observer is giving you this feedback) about the progress you are making on attaining your goals. In the spaces provided, write down what the feedback would be in each of the four categories.

1. What goal-related activity is receiving feedback?

2. Immediate feedback

3. Descriptive feedback

4. Positive/encouraging feedback
5. Feedback that encourages refined practice
Lesson Ten

Overview

In this concluding session we will review material from the past 9 weeks. I will begin by giving you a list of key words that we've covered, then we'll review each topic, one at a time, discussing the key words and clearing up any questions that arise.

We'll begin with goal-setting, followed by monitoring/recording/display, and then self-reward with examples provided.

Then we'll review relaxation and take time to practice the same relaxation exercise that we did in session 5. Then we will cover the remaining topics of cognitive anxiety reduction, and the areas of skill acquisition. We'll conclude this session by moving to small groups. I'll collect the home assignments and logs, and we'll clean up anything left that pertains to your goals.
Instructor distributes list of key words from previous 9 sessions.

We're going to review the topics for the previous sessions by identifying some of the key words that applied to the topics covered. We began by looking at goals and how to set personal goals. How do the key words on the handout apply to the topic? Discuss

As an example, we can follow my personal goal of learning your names. The time period for me was nine weeks. Was that an appropriate time period? Discuss

Was the goal attainable?...understandable?...rewarded?...advertized?...Discuss each in turn.

Now let's review the monitoring, recording, display section. The key words in that area should be familiar to all of us. I'm going to ask how those key words applied to some of your goals. Discuss with designated students:

continuous or frequent --
frequency vs. duration --

Our next topic area to review is self-reward.
The key words here are self-explanatory, let's go.
through them.

**Discuss each key word in turn.**

The next area that we covered was relaxation.

We began our experience with relaxation by discussing why relaxation might be needed. Looking at the key words fight or flight, can anyone tell me what happens to the body in a situation where an individual senses some kind of threat? **Discussion**

The effects of relaxation are opposite to the bodily reactions that show response to threat. Especially noteworthy is the fact that the ability to think clearly is greatly reduced by the flow of blood out of the important areas of the brain, and towards the large muscles. Relaxation involves the opposite to that occurrence. Let's review the experience by practicing a deep-muscle relaxation exercise. **Instructor reads script from session 5.**

The other area of anxiety reduction that we covered was the cognitive or thinking one in which the individual changes inefficient thinking by stopping it and sometimes by replacing it with thoughts that help him/her to cope. Do you remember these concepts? **Discuss each key word in turn.**
The last area we will deal with in this review is skill acquisition. The three areas of skill acquisition are 1. gaining specific knowledge about the desired skill, 2. undertaking effective practice, and 3. using the characteristics of effective feedback. Discuss each key word in turn, include review of homework from session 9 relating to feedback.

We will spend the last five minutes in our small groups collecting the home assignments, bringing the logs up to date and finishing any work or questions that might remain relating to your personal goal programs. Supervize move to small groups. Collect home assignments, clarify and review logs and goal programs, answer questions.
KEY WORDS

Setting Goals

time period - goals should be approachable in short periods of time such as one small step per week.
attainable - goals should be within reach.
understandable - know exactly what is meant by your goals.
promise of reward - know the definite reward you will give yourself for success in meeting goals.
advertised - have some way to remind yourself of your goals constantly, such as a poster, or an announcement to friends.

Monitoring, Recording, Display

continuous or very frequent - performance should be observed on an ongoing basis.
frequency or duration - performance involved in reaching goals can be measured by frequency of occurrence or by the time spent doing it.
Self-reward

frequent - maintain initiative by watching what you do constantly and rewarding yourself in small ways as often as improvement is occurring.

take credit - don't be shy about telling yourself that you did well.

sensible - if you're experiencing failures, don't give up, adjust your plans to make success more possible and allow access to rewards.

potency - make your rewards big enough to be valuable to you.

Relaxation, Anxiety reduction

desensitization - gradual, controlled exposure to situations or objects that cause worry or fear (either live or in the imagination).

rational - finding errors in thinking can allow an individual to replace irrational thoughts with more rational thoughts.

thought stopping - learning to halt irrational
thoughts by first yelling STOP, then by learning how to say STOP sub-vocally.

self-talk - replacing thoughts that cause anxiety with a self-dialogue that promotes coping.

breathing - one of the important steps to relaxation is to control breathing.

fight or flight - the inherited tendency to respond to threats with intense physical activity.

Gathering Specific Knowledge

locating - how to find information you need.
recognizing - who can say that the information is good or accurate.
organizing - how to label your information (e.g. category, size, name).
retaining - how to store information for instance by filing it on file cards.

Practice

focussed - direct and intensive practice
keeping in mind the components of the skill practiced.

gradual - build up of skill over time by
adding components.
realistic - practice must lead to real situations if the skill desired is to be mastered.

thorough - all the components of a skill are needed, a partial mastery is not usually adequate.

Feedback

immediate - results of practice should be considered during and right after each practice session.

descriptive - descriptive feedback provides better, more useful information than does vague, general feedback.

encouraging - we learn better by taking satisfaction in accomplishment than through negative criticism.

refinement - feedback is incomplete if it doesn't lead to further practice and better performance.
Appendix B

Instructor Guide

Included in this appendix are teaching objectives, rationales, plans and short descriptions for each lesson in the experimental curriculum.
Lesson One

Objectives

To introduce instructor and Research Assistant, to make contact with students; to define roles.

Students to hear that the Instructor will be responsible for teaching and assignments, the Research Assistant is an observer and recorder.

To outline course content and format and to explain general rules for attendance, course requirements, instructor and student expectations.

To inform that the course will require home assignments as well as in-class work if the students are going to get enough experience with the new (to them) material presented.

To announce that the way in which this session is carried out will be a model for the way in which future sessions will be carried out; that is: to provide an overview, do learning activity, discuss the activity, spend time in small groups reviewing personal plans and supporting peers, and receiving feedback on homework/new assignments. The feedback will be based on current progress and personal comments in logs.
Rationale

To allow each student to experience a process and to introduce the most important content that will be addressed during subsequent sessions. To establish expectations for future activities.

Groups allow students to be involved with classmates' goal programs as well as their own; they provide forum for peer discussion and support, and are convenient for sessional review of ongoing work.

Expectations are established by making it clear that subsequent sessions will adhere to the model and outline presented in this session.

The instructor variable will be reduced by having the students reach some degree of familiarity with the person prior to embarking on goal programs. Consequently, the instructor should take pains to represent self as a model for the course by indicating aspirations, goals, background, etc.
# Lesson Plan - Lesson One

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<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS</th>
<th>MEDIA AND SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Introduction</td>
<td>Attending</td>
<td>Introduce instructor &amp; research assistant-brief personal outline Make seating plan</td>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Overview</td>
<td>Attending</td>
<td>Describe session-sequence of events Explain overview as model for each class-session beginning</td>
<td>Overview</td>
<td>Overhead transparency handout</td>
</tr>
<tr>
<td>session</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Overview</td>
<td>Attending</td>
<td>Give course outline; brief description of content session by session</td>
<td>Overview</td>
<td>Markers of importance</td>
</tr>
<tr>
<td>course</td>
<td>Questions</td>
<td>Give ground rules for participation/withdrawal Explain division of responsibility between instructor and research assistant</td>
<td></td>
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<tr>
<td>(20) Elaboration on course content and requirements</td>
<td>Attending</td>
<td>Outline the content areas and give examples for: -motivation -anxiety reduction -skill acquisition</td>
<td>Statement of objectives Short summary statement of transition</td>
<td>Overhead</td>
</tr>
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<td></td>
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<tr>
<td>(10) Divide into small groups, receive logs numbers</td>
<td>Choose group numbers</td>
<td>Divide into groups; make group seating plan; describe group purpose; Distribute and explain logs Example of entry</td>
<td>Physical arrangement Explanation Statement of objectives</td>
<td>Logs Overhead handout</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>(5) Homework Discussion</td>
<td>Discussion</td>
<td>What form homework will take How homework differs from logs and personal programs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Description

Introduce instructor and research assistant, rationale for curriculum, outline of coursework activity, and questioning procedures.

Overview of session - explain that this session's overview will be a model for each future session, that important points and student requirements will be stated in each session's overview. Then overview this session's activities.

Clearly explain the rules for students participation, parent and student volunteer forms, how to withdraw, students must sign form indicating their willingness to undertake a personalized project and willingness to attend regularly.

Division of responsibilities: Instructor/Research Assistant - use of video, evaluation of course, instructor effectiveness, student learning.

Content areas will be outlines by defining each term, namely, anxiety reduction, motivation and skill acquisition and showing how each task enhances the curriculum. Examples of how each task fits into personal processes will be given. Questions and discussion then will be entertained by the instructor. The instructor will assign groups at
this time in order to avoid having to assign groups for each session. Explain purpose.

Distribute logs. Carefully explain how logs fit into course, and what the expectations are for each student. Accompany explanation with handout of example - sample log entry.

This session is concluded by a discussion of what homework will be assigned. The instructor will emphasize how homework questions differ from other requirements (e.g. logs) and class assignments.
Lesson Two

Objectives

All students will complete a two part assignment in order to arrive at a description of a personal goal. The first part of the assignment will be done in class and will require peer approval of an appropriate goal. The second part of the assignment will require students to complete a question sheet at home. The answers will be used during the next session, they will require instructor approval. Clarification definition of how a peer group should behave:

All three members of small group membership must agree that the goal is appropriate in that everyone in small group considers the skills needed to follow through towards the goal existing in the one setting the goal. Anyone else involved in a participant's goals must have no more outcome responsibility than they would have if this program was not in effect.
Rationale

To establish goal-setting as the requisite for a personal goal-focused program. Consequently, the process of creating a reachable, valued goal must be understood in terms of why and how goal-setting is supposed to enhance performance ergo self-concept.

The developmental level of the students indicates a priority for peer approval in the goal-setting process. Also, the instructor should maintain the students' interest by modelling a goal-setting exercise using classroom dynamics as a frame-of-reference.
### Lesson Plan - Lesson Two

<table>
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<tr>
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<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR)</th>
<th>MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10) Learning: explanation&lt;br&gt;Examples: How others set goals&lt;br&gt;Move to small groups creating own goal&lt;br&gt;(10) Introduce instructor goal&lt;br&gt;(5) Assign homework</td>
<td>Attending&lt;br&gt;Discussion&lt;br&gt;Move to groups own work&lt;br&gt;Small group process&lt;br&gt;Questions&lt;br&gt;Discuss&lt;br&gt;Attend&lt;br&gt;Receive worksheets questions</td>
<td>Outline of objectives for this session. How to make beneficial changes.&lt;br&gt;Give example of learning to distinguish what to value.&lt;br&gt;Homework-questions emphasize goal attainability. Stress group responsibility. Give out worksheets. Coach, clarify. Receive worksheets and review answers. Promote discussion.&lt;br&gt;Introduce goal, use worksheet questions&lt;br&gt;Hand out question sheets</td>
<td>Overview&lt;br&gt;Questions to provoke objectives. Conceptual questions giving examples&lt;br&gt;Transition statements&lt;br&gt;Physical arrangement&lt;br&gt;Peer involvement&lt;br&gt;Clear instructions&lt;br&gt;Markers of importance&lt;br&gt;Redirecting. Open and closed questions&lt;br&gt;Modelling&lt;br&gt;Hand out question sheets</td>
<td>Overview&lt;br&gt;Topic statement&lt;br&gt;Worksheet&lt;br&gt;Worksheet&lt;br&gt;Overhead or blackboard</td>
</tr>
</tbody>
</table>
Description - Short Form

Students will receive an explanation of how deliberate changes enacted by an individual take on meaning because of punishment or reward, or through an individual learning about reinforcement, and by the way an individual perceives the experience. Learning as a factor in development will be presented as a lead-in to discussions about goal-setting. Distinctions will be made between an individual's personal goals, and goals that must involve others.

Students will create personal goals in groups of three, with unanimous small-group approval required for each goal, prior to large-group discussion of each goal.

The progress of goal-setting will be modelled by the instructor. In order to make this exercise meaningful, a class-based goal should be chosen. An example involving learning all of the students' names is provided. The motivational attributes of self-monitoring and recording will be re-emphasized through homework, which is a critical adjunct to a self-counselling endeavour.

A discussion will be promoted to alleviate any fears about embarking on a novel course of events,
and to encourage and promote enthusiasm. Finally, homework will be assigned to practice further analysis and more complete descriptions of student goals.
Lesson Three

Objectives

1. All students will define goals in terms of activity to be done and how monitoring will fit the activity, by answering the questions:
   a. What will you do to get closer to your goal?
   b. How will you measure what you do?

2. All students will design and manufacture a model of their charting devices and indicate how daily recording will be entered; criterion for completion will be instructor approval. Criteria are: that the device will record what it is supposed to record, and that it can be readily understood by class members (not too esoteric).

3. Each student will indicate verbally a recognition of the factors that affect display by designating their location, and indicating why they chose that location, subject to instructor approval.
Rationale

This session will deal with the measurement and data collection required to carry out a goal-focussed self-instructional program. Students will be encouraged to avail themselves of the motivational attributes of monitoring, recording and displaying in terms of reactivity, objectivity, and reinforcement at the environmental and personal levels. It has been adequately established that close-level scrutiny of any activity by an individual tends to alter the activity. This session attempts to have the students practice known methods of scrutiny which should result in increased motivation to perform because performance is being monitored, and increased performance because monitoring creates an ongoing criterion of improvement.
# Lesson Plan - Lesson Three

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR)</th>
<th>MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Overview</td>
<td>Attending</td>
<td>Overview of monitor, record display</td>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>(5) Skills of</td>
<td>Attending</td>
<td>Explain frequency, duration, intensity</td>
<td>Topic statement: learn</td>
<td></td>
</tr>
<tr>
<td>monitoring</td>
<td>Responding</td>
<td>Give human examples</td>
<td>how to compare before</td>
<td></td>
</tr>
<tr>
<td>explained</td>
<td>Questions</td>
<td></td>
<td>and after re: goals</td>
<td></td>
</tr>
<tr>
<td>(10) Small group</td>
<td>Move into groups. Show</td>
<td>Explain questions:</td>
<td>Physical arrangement</td>
<td>Handout</td>
</tr>
<tr>
<td>division - homework</td>
<td>homework</td>
<td>What will you do?</td>
<td>Statement of objective</td>
<td></td>
</tr>
<tr>
<td>tied to monitoring</td>
<td>Answer two questions</td>
<td>How will you measure it?</td>
<td>Promote peer involve-</td>
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<td></td>
<td></td>
<td>Clarify</td>
<td>ment</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Turn on overhead</td>
<td>Clear instructions</td>
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<td></td>
<td></td>
<td>Hand out question sheet</td>
<td></td>
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<tr>
<td>(5) Skills of</td>
<td>Attending</td>
<td>Explain important points (e.g. when to record)</td>
<td>Transition</td>
<td></td>
</tr>
<tr>
<td>recording,</td>
<td>Questions</td>
<td>Give examples emphasizing pre-monitoring to decrease</td>
<td>Topic statement:</td>
<td></td>
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<tr>
<td>introduced</td>
<td></td>
<td>behavior, post-monitoring to increase behavior</td>
<td>recording is transfer</td>
<td></td>
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<tr>
<td>and explained</td>
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<td></td>
<td>Markers of importance</td>
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<td></td>
<td></td>
<td></td>
<td>Clear instructions</td>
<td></td>
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<tr>
<td>(10) Recording</td>
<td>Attending</td>
<td>Demonstrate devices</td>
<td>Overhead trans-</td>
<td></td>
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<tr>
<td>devices</td>
<td>Questions</td>
<td>Use overhead &amp; comment</td>
<td>parancy</td>
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<tr>
<td>demonstrated</td>
<td></td>
<td></td>
<td>1) grid</td>
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<td></td>
<td>Declare</td>
<td>Promote decision re: what device each student wishes</td>
<td>Prompting, cuing</td>
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<tr>
<td></td>
<td>device</td>
<td>to use</td>
<td>2) tally sheet</td>
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<td>3) golf counter</td>
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<tr>
<td>(10) Charting/</td>
<td>Attending</td>
<td>Explain reasons</td>
<td>Topic statement: display</td>
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<tr>
<td>display</td>
<td></td>
<td>give example of how display can be used</td>
<td>can motivate</td>
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<tr>
<td>skills</td>
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<td></td>
<td>Giving examples</td>
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<td></td>
<td></td>
<td>Give example of various displays</td>
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<tr>
<td>(10) Create display</td>
<td>Create</td>
<td>Coaching &amp; modelling how to create a display</td>
<td>Coaching</td>
<td></td>
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<tr>
<td></td>
<td>display</td>
<td>Where to locate? Ease of use. Environmental vs.</td>
<td>Modelling</td>
<td></td>
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<td></td>
<td></td>
<td>self-reinforcement. Discussion promoted by instructor</td>
<td>Markers of importance</td>
<td></td>
</tr>
<tr>
<td>(5) Homework</td>
<td>Move to large group</td>
<td>Monitoring goal performance clarified</td>
<td>Physical arrangement</td>
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<tr>
<td>Explanation</td>
<td>Attending</td>
<td>Offer recording sheet - distribute same</td>
<td>Handout</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questions</td>
<td></td>
<td>recording sheets</td>
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</tbody>
</table>
Description - Short Form

Overview of sessions activities.

Instructor will explain monitoring in terms of frequency, duration, intensity and give examples of monitoring using the hypothetical cases of:

1. increasing physical fitness by swimming, and
2. decreasing nail-biting

The advantages of monitoring these hypothetical cases will be explained. Then each student will tie goal-setting to statement of performance objectives and monitoring objectives.

Recording will be explained, emphasizing the portability and usage convenience needed for recording devices, timing and focus of recording activity. Record as soon as possible and only record what is monitored.

Next, charting and display procedures will highlight how charting presents a comprehensive picture of goal progress, and how displays can elicit self and/or environmental reinforcement. An example of how display fits into goal-directed activity will be set induced to elicit potential display devices from each student.
Homework for this session will be to monitor and to record the first week's goal-related activity. There will be clarification and discussion of recording at the end of the session in order to brief students thoroughly for the monitoring and recording activity.
Lesson Four

Objectives

To have each student answer questions relating to external and self-rewarding examples. The questions will indicate student understanding of establishing and maintaining a performance criterion through monitoring, through variety of rewards, and through matching of rewards to the individual's goals and to the individual's personal characteristics. Students should get no more than six questions wrong out of seventeen in order to demonstrate understanding.
Rationale

Self-reward procedures help to regulate and to strengthen goal-related activities in much the same manner as external rewards, but have the advantage of promoting independent behavior. The independent choice and administration of a reward in order to maintain and/or to increase a target behavior results in the individual controlling the personal components of learning for that activity. Self-reward is an integral factor in any self-management program that strengthens or increases a desired behavior since a self-chosen and administered reward has a greater probability of being reinforcing.
# Lesson Plan - Lesson Four

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR) MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Overview</td>
<td>Attending</td>
<td>Overview content for session Overview</td>
<td>Clear explanation</td>
</tr>
<tr>
<td>(5) Rationale for rewarding self: Explanation</td>
<td>Attending Questions</td>
<td>Explanation of learning: established via reinforcement. Value of self-reward in terms of independence</td>
<td>Markers of importance</td>
</tr>
<tr>
<td>(10) Criteria for selecting appropriate rewards: Explanation</td>
<td>Attending</td>
<td>Identify the integral components of self-reward. Distribute Handout</td>
<td>Topic summary</td>
</tr>
<tr>
<td>(10) How to deliver rewards: explanation of criteria and timing</td>
<td>Questions Discussion</td>
<td>Promote questions. How to monitor for a criterion. Use overhead. Maximize reinforcement via small amounts, different levels of response. Immediate post-response rewards. Promote discussion.</td>
<td>Transition</td>
</tr>
<tr>
<td>Summary of lesson</td>
<td>Attending</td>
<td>Summary statement. Promote peer involvement</td>
<td></td>
</tr>
<tr>
<td>Divide into groups</td>
<td>Move to small groups</td>
<td>Supervise, move to small groups</td>
<td>Physical arrangement</td>
</tr>
<tr>
<td>(25) Homework discussion</td>
<td>Discussion of written work</td>
<td>Receive and review homework, summarize, supervise activity, distribute handout.</td>
<td>Summary of Session 2</td>
</tr>
<tr>
<td>in-class evaluation</td>
<td></td>
<td></td>
<td>Handout</td>
</tr>
</tbody>
</table>
Description - Short Form

An overview of the session will be given at the outset. The overview will be followed by some explanation of why it can be beneficial to self-reward: to strengthen or increase a desired activity and to promote independence.

The logistics of creating a self-reward schedule will begin with an explanation of reward criteria to match individuals characteristics. It will be emphasized that self-rewards should be personal, accessible, multiple, variable, potent and appropriate to the goals sought.

Next reward-delivery will be analyzed in terms of monitoring performance to establish a criterion, and maximizing reinforcement through specificity and timing of rewards.

Finally the group will be divided into smaller sub-groups in order to receive and review homework. Then this sessions handout will be distributed and completed in class.
Lesson Five

Objectives

To have all students state accurately the physiological responses which can result from inferred threat in three out of seven body areas. A minimum of 1/3 of the class will indicate how to monitor pulse and respiration for relaxation training by responding to questions in class, and in actual practice in class. All students will describe how relaxation functions in three of the seven body areas utilized as above.
Rationale

This session is designed to have students understand the causes and effects of bodily responses to inferred threat, and to teach students how relaxation differs from anxiety. Therefore, most discussions are related to show how debilitating fears can be overcome via relaxation techniques. The fact that relaxation techniques can be learned will be made apparent using physiological (deep-muscle) relaxation practice activities, and through discussions concerning relaxation training led by the instructor.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR) MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Attending</td>
<td>Describe sequence of events for today's session and relate these to the course outcome.</td>
<td>Overview - Markers of importance: transition</td>
</tr>
<tr>
<td>(15) Introduce causes of bodily reactions - discussion</td>
<td>Attending Questions</td>
<td>Switch on overhead. Describe body reactions to inferred threat. Develop fight-or-flight scenario, culminate with discussion of how those reactions are inappropriate to most current situations.</td>
<td>Objective statement Cuing Promote discussion Reducing Prompting Overhead transparency of body</td>
</tr>
<tr>
<td>Discussion</td>
<td>Discussion</td>
<td>Discuss the topics: How to overviewing monitor for relaxation. What are your typical anxiety reactions? using questions and answers.</td>
<td>Overhead transparency of Relaxation monitoring sheet</td>
</tr>
<tr>
<td>Summary</td>
<td>Attend questions</td>
<td>Summarize reactions to relaxation training and the response individuals experienced.</td>
<td>Topic summary Overhead transparency as above</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>STUDENT PART</td>
<td>INSTRUCTOR PART</td>
<td>KEY SKILLS (INSTRUCTOR) MEDIA &amp; SUPPLIES</td>
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<td>----------------------------------------</td>
</tr>
<tr>
<td>(10) Move to group work. Home-work from last session</td>
<td>Questions Offer examples Discussion Hand-in</td>
<td>Evaluate monitoring and recording progress. Make suggestions and propose adjustments. Evaluate if goal is appropriately defined.</td>
<td>Physical structure Conceptual Summary and questions Promote peer involvement</td>
</tr>
<tr>
<td>This session's homework</td>
<td>Receive and retain questions</td>
<td>Give instructions</td>
<td>Marks of importance giving directions Handout</td>
</tr>
</tbody>
</table>
Description

After overviewing the sequence of events for this session, the instructor will develop the theme of increasing personal ability by overcoming fears, worries and anxieties using relaxation exercises.

Initially, anxiety will be defined as a natural, innate response to inferred threat. A flight-or-fight scenario will be developed to describe the functional aspects of physiological responses that may evolve from the scenario, and to elaborate on how the various areas of the body are affected. This scenario will conclude with a discussion of contemporary standards of behaviour relating to anxiety.

Following the scenario, a short introduction to the concepts behind relaxation training will lead to a practical-experiential exercise: deep-muscle relaxation. Before the exercise, students prior experience with relaxation training should be solicited. Furthermore, any apprehensions that students may have concerning relaxation training will be addressed.

After the students' questions about the activity have been answered, the relaxation script will be
enacted. Then a discussion will be initiated to allow students to express personal statements about the relaxation activity and about their own anxiety-response. This will lead into a discussion concerning monitoring. Namely how it relates to relaxation and the procedures required to monitor accurately. Deep-muscle relaxation training and anxiety reduction will then be summarized.

The instructor will then assign students to discussion groups to check on personal goal-directed progress. The progress should be analyzed to ascertain whether self-monitoring is accurate, whether the transfer of that material to a recording device is appropriate, and whether subsequent visible displays of recording are maintaining goal-achievement motivation.

Homework from the previous session will then be collected, and homework for this session will be assigned.
Lesson Six

Objectives

All students will demonstrate recognition of rational vs irrational thinking by indicating the rational statement included in a list of irrational self-statements. Students will write down the three steps involved in cognitive disputation. They will describe an anticipated anxiety-provoking situation. Using this example each student will give appropriate examples of, coping self-task before, during, and after the situation.
Rationale

The topic(s) dealt with in this session complement an area introduced in the previous session, namely, the reduction of counter-productive anxiety and worry. The physiological relaxation practiced previously, and behaviorally reviewed in this session, is now augmented by addressing the cognitive components of anxiety which can exist along with, or separate from, physiological components.

Because cognitive responses can only be measured by self-report, a variety of methods are introduced by the instructor to address various common problem areas. The techniques introduced here: desensitization, thought-stopping, and constructive self-dialogue are generally accepted as proven techniques for dealing with cognitively-based anxiety. The order of presentation is from the most mechanistic-desensitization, to the least mechanistic-constructive self-dialogue, in order for students to apprehend the material objectively prior to explaining towards more subjective methods.
## Lesson Plan - Lesson Six

<table>
<thead>
<tr>
<th>Activity</th>
<th>Student Part</th>
<th>Instructor Part</th>
<th>Key Skills (Instructor)</th>
<th>Media &amp; Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Overview with outcomes for session</td>
<td>Attending</td>
<td>Define salient points of what will happen in this session.</td>
<td>Overview</td>
<td>Overhead</td>
</tr>
<tr>
<td>(15) Review previous session on physiological relaxation.</td>
<td>Attending, Questions and responses</td>
<td>Review physiological relaxation by asking for homework, reviewing transparency of body responses to inferred threat - Questions.</td>
<td>Lesson summary</td>
<td>Overhead</td>
</tr>
<tr>
<td></td>
<td>Behavioral response</td>
<td>Short relaxation exercise with coaching summary</td>
<td>Behavioral review</td>
<td>Transparency of body</td>
</tr>
<tr>
<td>(10) Introduce desensitization</td>
<td>Attending</td>
<td>Definition of desensitization - Oxford dictionary When it is used - accustomed reaction Description of desensitization by example emphasizing gradual exposure building success, summarize</td>
<td>Introductory statement</td>
<td>Overhead</td>
</tr>
<tr>
<td>(10) Introduce thought stopping</td>
<td>Attending</td>
<td>Describe the 3 steps: 1 recognition, 2 curtailment 3 replacement. Emphasize consistency and practice examples for each of 3 steps including demonstrations, questions, and summarizing</td>
<td>Lecture</td>
<td>Overhead</td>
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<td></td>
<td></td>
<td></td>
<td>Cue discrimination</td>
<td>Markers of importance</td>
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<td></td>
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<td></td>
<td>Redirecting</td>
<td>Prompting</td>
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<td></td>
<td>Conceptual questions</td>
<td>Redirecting</td>
</tr>
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<td></td>
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<td></td>
<td>Prompting</td>
<td>Modelling</td>
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</tbody>
</table>
Lesson Plan - Lesson Six (continued)

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR) MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8) Divide</td>
<td>Divide into pre-</td>
<td>Check on each student,</td>
<td>Physical arrangement Handout</td>
</tr>
<tr>
<td>into groups</td>
<td>set places and groups</td>
<td>Give out homework sheet.</td>
<td>Explaining, descriptive feedback</td>
</tr>
<tr>
<td>-log review</td>
<td>questions</td>
<td>Summarize</td>
<td>Lesson summary</td>
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<tr>
<td>-homework</td>
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<td>assigned</td>
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<tr>
<td>-summary</td>
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</table>
**Description - Short Form**

This session will be linked to the previous session (physiological relaxation). Then the instructor will introduce the concept of cognitive responses to anxiety-provoking situations and objects. The salient instructional components stated in this session's overview will be:

1. A review of physiological relaxation, intake homework.
2. Descriptions and examples of desensitization.
3. A description and an example of thought-stopping.
4. A description and an example of covert verbalization and self-instruction.
5. Group-time to discuss progress on goals. Their self-verbalization process, and to receive homework for next session.

**Session Content and Process:** The previous session will be reviewed by examining assigned homework sheets which questioned physiological responses to inferred threats. This information, accompanied by an overhead transparency showing the outline of a human body with response areas noted,
will be followed with a (5 minute) behavioural review of deep-muscle relaxation including coaching. After collecting the homework assignments the instructor will make a transition and discuss an approach to situations or objects that may result in a physiological response. The instruction will emphasize that physiological responses have a customary, ideosyncratic cognitive response.

The first coping mechanism for cognitive anxiety presented will be desensitization. The word will be defined and an example of a hierarchical test for a particular problem will follow. The concepts of "live" and imaginal processes will be discussed. Emphasis will be placed on properly graduated steps, pace and success in the desensitization process.

A transition will be made to introduce faulty cognitions and to three fundamental steps which can be used to reduce or eliminate anxiety effects. Namely:

1. recognition,
2. curtailment,
and 3. replacement.

A brief discussion of logic and rationality will
lead into step one (recognition), by identifying "typical" irrational thoughts. The second step (curtailment) will be introduced by demonstrating thought-stopping and explaining how and why it works through motivated distraction. Step three (replacement) will involve the generation of rational alternatives to each irrational thought. Students will be asked to help formulate the alternatives.

The instructor will then introduce the concept of prevention of anxiety via anticipation and pro-action. Students will be asked to identify potentially anxiety-provoking situations and to give personalized approaches to imaginal rehearsal, based on a question such as, what do you say to yourself when?

The instructor will model a realistic class-based situation systematically demonstrating a self-dialogue process (e.g. anxiety experienced by not remembering each student's name). This demonstration is intended as a coping model which students can use to solve this personalized anxiety-provoking situation.

The session will end with students dividing into previously appointed groups to discuss their
progress concerning individual goals, and to receive instructor and peer feedback. Homework sheets will be handed out.
Lesson Seven

Objective

To have each student complete an information-gathering assignment and respond to questions about how the information attained was accessed. The assignment consists of questions relating to the community; students will be requested to list where they found their information, who they talked to, and what positions are held by those consulted.
Rationale

When an individual lacks the skills necessary to complete a desired course of action, an individual must learn how skills are acquired. This lesson deals with the first step in acquiring a skill, that is, the comprehensive understanding and recognition of the components that comprise a skill. Future skill acquisition lessons will focus on skill rehearsal and encouraging, objective feedback. This first element, comprehension, is essential since we need to understand what is involved in the skill before we can begin to behaviorally rehearse and incorporate the skill into our behavioral, cognitive and/or affective repertoire.
### Lesson Plan - Lesson Seven

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR)</th>
<th>MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Review homework</td>
<td>Responding to questions</td>
<td>Promote question and answer discussion</td>
<td>Overviewing</td>
<td>Markers of importance</td>
</tr>
<tr>
<td>(5) Overview</td>
<td>Attending</td>
<td>Explain skill acquisition as filling in a needed component for outcome, therefore this session is the first of 3 sessions namely, 1. comprehending the specifics of a skill 2. thorough/sequential skill practice and 3. meaningful/encouraging feedback related to the skill. Steps for comprehending the specifics of a skill are; a. Examining how to locate information b. Examining how to recognize useful information, and c. Examining how to organize/retain information. Distribute handout of above steps.</td>
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</tr>
<tr>
<td>2. Examining how to locate information (20)</td>
<td>Attending</td>
<td>Use an example which illustrates how to locate information. Include the following sources: a. observation &amp; conversation with experts b. courses in college, school, parks &amp; rec., government, private c. libraries, galleries, museums, media centres d. public forum, workshop, conventions, conferences e. associations, clubs, groups (cultural or business)</td>
<td>Clear instructions</td>
<td>Give examples</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>STUDENT PART</td>
<td>INSTRUCTOR PART</td>
<td>KEY SKILLS (INSTRUCTOR)</td>
<td>MEDIA &amp; SUPPLIES</td>
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<td>f. radio-t.v., video, home computer</td>
<td>transparency &amp; information sources</td>
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<td></td>
<td>g. tours, demonstration, display</td>
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<td></td>
<td>h. systematic self-observation and monitoring</td>
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<td></td>
<td></td>
<td>Take notes: Show above on transparency for student note-taking.</td>
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<td></td>
<td></td>
<td>Explanation that approaching markers of importance sources of information may be difficult due to embarrassment, intimidation, or negative thinking.</td>
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<tr>
<td></td>
<td></td>
<td>What's needed: patience, persistence, judging information by consensus, and the expert status of a source.</td>
<td>Modelling</td>
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<tr>
<td></td>
<td></td>
<td>Instructor questions about consensus in community, list on overhead what people &amp; groups enjoy recognition. Examples of professional groups on overhead or blackboard.</td>
<td>Overhead</td>
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<tr>
<td></td>
<td></td>
<td>Discuss examples of filing: labels, storing, Make notes on overhead.</td>
<td>Overhead</td>
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<tr>
<td></td>
<td></td>
<td>Instruct for students to move to groups &amp; supervise</td>
<td>Physical arrangement</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Touch base with each student, peruse logs, give suggestions, support</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Distribute tasks &amp; questions on 2 handouts</td>
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<td></td>
<td></td>
<td>Answer questions</td>
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Lesson Plan - Lesson Seven (continued)
Description - Short Form

Prior to the lesson the homework from session 6 will be reviewed.

Then the instructor begins with a concise, comprehensive overview of three techniques which will assist students to comprehend the specific skill involved in acquiring a new skill, namely locating, recognizing or evaluating, and organizing and retaining information.

**Step 1** - Instruction concerning location of information will involve giving examples of a variety of potential information sources. Students will be required to take notes.

**Step 2** - Instruction about collecting information includes an examination of potential obstacles, for example: anxiety to approach an activity or, how to overcome anxiety by persistence and patience. Evaluation of the information available will touch on the areas of consensus reasoning and expert status, two high recommendations for any source, with examples of how to recognize those qualities.

Finally, the lesson will focus on filing important
information by giving examples of filing techniques such as: appropriate arrangement, labelling, and storage.

This lesson concludes with a small-group discussion of goal-related activities and a review of the diaries. Homework is assigned at the end of the session.
Lesson Eight

Objectives

To have each student attend to the characteristics of effective practice described as focussed, gradual, realistic and thorough, by learning to say the alphabet backwards. Students will describe the application of effective practice characteristics to their assignment in writing, to be returned to the instructor during the next session. A reward system will be announced in advance in order to increase motivation for the assignment and to comprise a criterion for evaluation. In this case the reward will increase with the ability of each student to complete as much of the task as possible: the reward will be one cent for each correct letter in reverse order, complete success will result in a reward of 26¢, fifteen letters in a row will yield 15¢.
Rationale

Practice, in order to be effective, must facilitate and encourage the acquisition and retention of a skill. The major characteristics of effective practice which are described by the adjectives focussed, gradual, realistic and thorough, have been shown to enhance abilities in the acquisition and retention of skills. This lesson comprises a systematic approach to skill practice that should lead to gains in a participant's motivation for future skill attainment. That motivation would be based on increased self-esteem resulting from successful achievement.
Lesson Plan - Lesson Eight

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS</th>
<th>MEDIA AND SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Overview</td>
<td>Attending</td>
<td>Overview of lesson, sequence the 4 main characteristics of effective practice: focused gradual, realistic, thorough</td>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>(3) Review</td>
<td>Responding</td>
<td>Designate order of student reports Emphasize better assignments Solicit for problems encountered Promote discussion Distribute handout</td>
<td>Redirecting</td>
<td></td>
</tr>
<tr>
<td>home assignment</td>
<td>Discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Examine</td>
<td>Attending</td>
<td>Define characteristic, discuss Use examples of cognitive and physical skills Answer questions</td>
<td>Examples</td>
<td></td>
</tr>
<tr>
<td>&quot;focused&quot;</td>
<td>Responses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Examine</td>
<td>Attending</td>
<td>Continue with same examples Respond to questions</td>
<td>Examples</td>
<td></td>
</tr>
<tr>
<td>&quot;gradual&quot;</td>
<td>Questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Examine</td>
<td>Attending</td>
<td>Continue with same examples Respond to questions</td>
<td>Examples</td>
<td></td>
</tr>
<tr>
<td>&quot;realistic&quot;</td>
<td>Questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Examine</td>
<td>Attending</td>
<td>Continue with same examples Add example of driving a car Summary of characteristics</td>
<td>Examples</td>
<td></td>
</tr>
<tr>
<td>&quot;thorough&quot;</td>
<td>Questions</td>
<td></td>
<td></td>
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<tr>
<td>(7) Move to</td>
<td>Move to</td>
<td>Supervise move</td>
<td></td>
<td>Handout</td>
</tr>
<tr>
<td>small groups</td>
<td>small groups</td>
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<tr>
<td></td>
<td>Peer</td>
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<td></td>
<td>involvement</td>
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</table>
This session will begin with an overview of the lesson, emphasizing the four major characteristics of effective skill practice to be described in this lesson as focused, gradual, realistic and thorough. Students should be encouraged to take notes on the characteristics as the lesson proceeds.

The instructor can use the topic from the previous lesson (gaining specific knowledge) as a cognitive example to demonstrate this lesson's objectives: breaking a skill down into components and mastering them by adhering to the characteristics of effective practice. The cognitive example can be introduced by reviewing the practice aspects of the home assignment from the previous session.

Next the instructor will examine the characteristics one at a time (in the order they are reported above), building towards the concept of practice that includes all four. In addition to the cognitive example, a physical example will be introduced for added clarity, in this case the example of learning a physical skill feature of swimming.

When the four characteristics have been examined, student small groups will review personal goal progress.
and log-book entries with the aid of the instructor where needed. The session will conclude following the distribution of the home assignment due in the next session.
Lesson Nine

Objective

To have each student demonstrate an understanding of the four characteristics of effective feedback, by creating a text of imaginary feedback to match each individual's goal activity. The students will indicate in writing what would constitute; immediate feedback, descriptive feedback, encouraging feedback and feedback that initiates further refined practice.
Rationale

Feedback concerning skill practice provides vital information and motivation to a practicing individual (providing the feedback meets certain requirements). Appropriate feedback leads to improved performance and improved performance leads to success orientation and a subsequent increase in self-concept. Motivation results from the information-improved performance-improved self-concept matrix. Therefore motivation is operationally defined in this instance as an individual's proclivity toward increased time and effort expended on a particular task (in order to master a skill).
### Lesson Plan - Lesson Nine

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR)</th>
<th>MEDIA &amp; SUPPL.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Overview</td>
<td>Attending</td>
<td>Overview of session&lt;br&gt;Distribute handout &amp; suggest Markers of importance&lt;br&gt;Note-taking on 4 major characteristics of feedback:&lt;br&gt;- immediate&lt;br&gt;- descriptive&lt;br&gt;- encouraging&lt;br&gt;- initiates refined practice</td>
<td>Overview&lt;br&gt;Handout</td>
<td>Overhead</td>
</tr>
<tr>
<td></td>
<td>Receive handout</td>
<td></td>
<td></td>
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<tr>
<td>(4) Explanation of what immediate means in relation to feedback</td>
<td>Attending Questions</td>
<td>Define &amp; discuss feedback Clarification &amp; evaluation &lt;br&gt;Answer questions&lt;br&gt;Example of immediate feedback using learning to swim</td>
<td></td>
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<tr>
<td>(4) Explanation of descriptive</td>
<td>Attending Questions</td>
<td>Give examples of descriptive recording (video &amp; audio tape, notes)</td>
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<tr>
<td>(4) Explanation of encouraging</td>
<td>Attending Questions</td>
<td>Tie into how people learn (pain vs. pleasure)</td>
<td></td>
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<tr>
<td>(4) Explanation of initiating refined</td>
<td>Attending Questions</td>
<td>Explanation (short)&lt;br&gt;Answer questions&lt;br&gt;Summarize characteristics&lt;br&gt;Topic summary&lt;br&gt;Summarize briefly the steps in skill acquisition&lt;br&gt;Show steps on overhead</td>
<td></td>
<td>Overhead</td>
</tr>
<tr>
<td>(3) Summary of concept of evaluation</td>
<td>Attending</td>
<td>Summarize &amp; clarify evaluation - example of alchemy (i.e. good work misdirected)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(30) Homework review</td>
<td>Responding Give feedback</td>
<td>Explanation of task to be performed&lt;br&gt;Model same, get feedback, select students one at a time, reward in relation to success</td>
<td>Modelling&lt;br&gt;260 x no. of students</td>
<td></td>
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</tbody>
</table>
Lesson Plan - Lesson Nine (continued)

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR) MEDIA &amp; SUPPLIERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Move to small groups, goal &amp; log review</td>
<td>Move Responses Questions, peer involvement</td>
<td>Supervise move to small groups Clarification &amp; review Answer questions</td>
<td>Physical arrangement Clarify, encourage peer involvement</td>
</tr>
<tr>
<td>(4) Handout assignment</td>
<td>Receive handout Questions</td>
<td>Distribute handout, answer questions</td>
<td>Handout</td>
</tr>
</tbody>
</table>
Description - Short Form

The instructor will overview the lesson, mentioning the sequence of characteristics that constitute effective feedback, namely: immediate feedback, descriptive feedback, encouraging (positive) feedback, and feedback that initiates further refined practice. Students will attend and contribute to definitions of feedback and evaluation.

These four characteristics will be introduced using pertinent examples for each one. After summarizing the information given concerning all four characteristics, a summary of skill acquisition steps (specific knowledge, practice, feedback) will follow. The relationship of evaluation of the student's own goal programs will also be reviewed.

A 30 minute assignment about feedback will give each student an opportunity to practice the knowledge they have been introduced to in this session. The instructor will model the activity in advance and request feedback (from the students) about his/her performance.

Finally, the students will move into pre-assigned groups to practice a weekly goal and log
diary review. Homework will be assigned for the next session.
Lesson Ten

Objective

To enhance student learning by reviewing the important aspects of preceding lessons.
Rationale

Learning in the topic areas covered will be enhanced by reviewing the salient features of all preceding lessons.
# Lesson Plan - Lesson Ten

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>STUDENT PART</th>
<th>INSTRUCTOR PART</th>
<th>KEY SKILLS (INSTRUCTOR)</th>
<th>MEDIA &amp; SUPPLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Overview</td>
<td>Attending</td>
<td>Overview of sequence &amp; purpose of this lesson: to give feedback and to review self-instruction tasks. Handout of key words covered in past 9 sessions.</td>
<td>Overview</td>
<td></td>
</tr>
<tr>
<td>(5) Review of</td>
<td>Discussion</td>
<td>Promote discussion about key words, with examples given by the instructor</td>
<td>Markers of importance</td>
<td>Handout</td>
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<tr>
<td>topic</td>
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<tr>
<td>Goal-setting</td>
<td>Responses</td>
<td>Designate students to give examples, promote discussion</td>
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<tr>
<td>(5) Monitor,</td>
<td>Responses</td>
<td></td>
<td>Promote discussion</td>
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<tr>
<td>record,</td>
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<tr>
<td>display</td>
<td>Questions</td>
<td>Read key word definitions. Answer any questions</td>
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<tr>
<td>(3) Self-reward</td>
<td>Questions</td>
<td></td>
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<tr>
<td>(30) Relaxation</td>
<td>Responses</td>
<td>Question: bodily reaction to threat? Promote discussion. Supervise relaxation</td>
<td>Discussion</td>
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<td></td>
<td>Discussion</td>
<td>exercise</td>
<td>Lecture</td>
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<td>Calling for demonstra-</td>
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<tr>
<td></td>
<td>Attend</td>
<td>Read out definitions. Promote discussion</td>
<td>Discussion</td>
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<tr>
<td>(3) Cognitive</td>
<td>Attend</td>
<td>Read out definitions. Answer questions</td>
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<tr>
<td>reduction</td>
<td>Discuss</td>
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<tr>
<td>(5) Skill</td>
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<tr>
<td>acquisition</td>
<td>Questions</td>
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<tr>
<td>(6) Receive</td>
<td></td>
<td>Supervise move to small groups. Review home assignments. Receive logs. Review</td>
<td>Physical arrangement</td>
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<td>home</td>
<td>Move to small</td>
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<td>assignment</td>
<td>groups</td>
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<td>Logg</td>
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<tr>
<td>Review goals</td>
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Description - Short Form

This lesson will review the major topics covered in preceding lessons. The lessons sequence will follow a list of key words and definitions (distributed immediately following the overview).

Then the instructor will review each topic, tying examples to the key words listed on the handout. The sequence of topics will be:

1. goal-setting
2. monitoring, recording, display
3. self-reward
4. relaxation (physiological)
5. cognitive anxiety reduction
6. specifying skill knowledge
7. practice
8. feedback

Following a discussion about physiological relaxation, the instructor will conduct a relaxation exercise before proceeding to a cognitive anxiety reduction exercise. After all topics have been covered, students will move into small groups to facilitate collection of home assignments, logs, and clarify any difficulties pertaining to their goal programs.
Finally, a question and answer period will be provided to answer any student concerns and the instructor will complete the lesson with concluding remarks.
Appendix C

Dependent Measures

This appendix contains examples of the dependent measures developed for this study, together with scoring key for each test (Cognitive Content Test and Behavioral Tasks Test).
COGNITIVE CONTENT QUESTIONS

DIRECTIONS: Read each question carefully, then circle the answer ON THE ANSWER SHEET, THAT YOU BELIEVE TO BE MOST TRUE.

1. When you are upset because you think you cannot do something, you should:

   A) Accept that life is this way and there is nothing you can do about it.
   B) Try to find out who is making you upset and ask them to be more positive.
   C) Talk it over with friends and take their advice.
   D) Relax and find out what specifically you can do to learn the skills needed to do it.
   E) Ignore the upset and do it anyway since everything will work out in the end.

2. A good method of figuring out whether you have the skills to do something is to:

   A) Examine what you want to do very carefully.
   B) Determine what skills you currently possess.
   C) Decide if the skills you have will allow you to do the thing.
   D) A and B from above.
   E) A and C from above.

3. When you are confronted with a difficult problem, do you believe:
A) Any problem can be solved with effort and hard work, using a carefully designed plan.

B) Problems are created by others and should be solved by others.

C) Nothing is ever as difficult as it seems, so the trick is to simplify the problem.

D) Altering problems is a simple and easy process if you don't get upset by them.

E) If you wait long enough the problem will work itself out.

4. When you are rewarding yourself for doing something, it is best to reward:

A) After a long period of time.

B) After small steps have been accomplished.

C) All of the time.

D) Very rarely.

E) Before the activity occurs.

5. Motivation means how much you want to do something. If you were going to motivate yourself to do a task that you did not want to do, what would be the best way to do it?

A) Set some goals for yourself and try to achieve them.

B) Don't worry about whether you want to do it or not, just do it.
C) Chart your progress with the task, then set up some goals which are evaluated at the end of the activity.

D) Set up some goals, record your progress with these goals in mind, make a chart which displays what you have done, evaluate yourself constantly, and reward what you have done well.

E) Keep telling yourself you want to do this, give yourself some good reasons for wanting to do it, reward yourself when you do well, be critical when you do not do well, and evaluate your performance constantly.

6. In order to learn new skills, the best procedure to follow is to:

A) Practice the new skills as much as possible since practice makes perfect.

B) Understand all you are expected to learn and then practice it as much as possible.

C) Ask intelligent questions of people who are expert in the skills.

D) Take time to make sure you understand the skills, practice them, and get feedback about your practice.

E) Practice and practice, noting everything you do wrong.
7. If you were going to teach a new skill to another person you should use the following approach:

A) Give the information about the skill as clearly as possible, making sure you gave good examples about the skills.

B) Find out what the person knows about the skill, then tell him/her the things he/she does not know about the skill.

C) Describe and demonstrate the skill clearly, encourage the person to practice the skill, and give feedback about the correct performance of the skill.

D) Bring in an expert to demonstrate the skill and point out the most important things that the expert was doing.

E) Arrange a field trip to see the skill in action, then practice the skill in the classroom.

8. Have you ever doubted your ability to do a task even though you know you have the ability to perform appropriately? How can you overcome such self-defeating thoughts?

A) Figure out what thoughts are irrational and forget about them.

B) Accept that is the way you will think.

C) Realize that you are not thinking rationally,
stop your irrational thoughts, and replace them with more rational thoughts.

D) Do not do the task since you are sure that you wouldn't be having these thoughts unless they were justified.

E) Do the task and hope the thoughts don't interfere with your performance.

9. People can teach themselves anything. If this statement were true, what could stand in the way of you doing something? (Select the best answer)

A) Your level of skill, your level of motivation, your level of anxiety.

B) What skills you do have, what skills you do not have, what other people think, and what you think.

C) Other people stopping you, bad luck with the task, not working hard enough.

D) The way you feel, how much time you have to do it.

E) Your beliefs, your friends, your parents.

10. When you are rewarding yourself for something, the things you should keep in mind are:

A) Making the reward something you will enjoy, making it appropriate for the activity you are doing.

B) The reward must be readily available, use a variety of rewards, make sure you want the reward.
C) Make sure the reward is not used up in one shot.
D) A & C
E) A, B & C

11. When you are evaluating something you have done, you should:
   A) Evaluate whether you have achieved what you want to achieve and then decide on future actions.
   B) Give yourself a pat on the back when you have done something well and do not worry about your mistakes.
   C) Continuously monitor your progress and frequently compare your progress to your goals.
   D) Tell others what you are doing so they can help.
   E) Be careful that you are not being too hard on yourself.

12. When you feel nervous about doing something, the best way you can deal with it is:
   A) Realize that there is nothing you can do about being nervous, and that everyone experiences nervousness.
   B) Realize that nervousness is for good reasons, and that you must find out why you are nervous.
   C) Use techniques such as relaxation, or talking positively to yourself that will help you eliminate the nervousness.
D) Use techniques such as going to a movie or talking to a friend.
E) Realize that nervousness will end when the task you are to perform ends.

13. Learning new things:
   A) Is easy if you just take your time.
   B) Requires skills that you can learn and then use to teach yourself new things.
   C) Is seldom as exciting as it is made out to be.
   D) Is better than getting in a rut.
   E) Is impossible without having someone who will teach them to you.

14. When you think you have learned a skill but are not sure whether you can do it in front of others, a good way to overcome this uncertainty is to:
   A) Ignore it and think positively about your abilities, telling yourself not to be so silly.
   B) Build up to it by trying it in front of a friend, then a small group of friends, then in front of your class.
   C) Practice the skill over and over to yourself until you are sure you know it completely.
   D) Avoid doing it in front of others until you no longer feel skeptical of your ability to do it.
E) Do other things which will divert your attention from the people in front of you.

15. When planning to do something on your own you should:
A) Think about it as much as possible and then do it.
B) Select the procedures you are going to use then put these procedures in a logical order to achieve an appropriate end.
C) List all of the actions likely to achieve your goal, then develop a plan to accomplish each of them, one at a time.
D) Wait until you are sure you really want to do it.
E) Figure out how much time you have and do it if time permits.

16. When you are setting goals to achieve, the goals should be:
A) Reachable, understandable, include rewards.
B) Easy to achieve, well planned, indicate your ability level.
C) Specific, motivating, easy to evaluate.
D) Include rewards, easy to achieve, helpful.
E) Include practice, flexible, challenging.

17. If you were going to teach a new skill to another person, you should use the following approach:
A) Find out what you have to do, then do it to the best of your ability.
B) Decide what you are to do, get specific about what goals you want to achieve.

C) Ask an expert how to do something then make a decision about whether you could do it or not.

D) You don't believe people can teach themselves new skills, and would find someone else to teach you/

E) Think positively about what you want to do, and pretty soon you will be able to do it.

18. Let's pretend you had to perform in front of an audience, and although you had practiced and practiced, your nervousness was interfering with your ability to perform. What would be a good method for dealing with your nervousness?

A) Use a method to learn how to relax, relax each time you do the activity, use the method to relax just before you do the performance telling yourself you know the material well and there is nothing to worry about.

B) Get a good sleep the night before the performance, try to forget about the fact that you have to do the performance, practise less and relax more.

C) Take a tranquilizer each time you feel nervous, get a good sleep before you go to the performance and try to practise as much as possible.
D) Ask friends if they feel tense when they have to do things like this, and if they do, reassure yourself that you are not alone.

E) Both answers B and C.

19. When you are doing something that is important to you:

A) Do it to the best of your ability and do not be too hard on yourself.

B) Be aware of your limits and work hard.

C) Reward yourself when you do something correctly, and criticize yourself when you make mistakes.

D) Record your progress, evaluate your progress.

E) Reward yourself when you do something that meets with your expectations.

20. Choose one of the following phrases which describes you the best (filling in the blank). I feel that I have ______________ control and ability to plan and influence what happens to me.

A) A little bit of

B) Quite a lot of

C) Some

D) Absolutely no

E) Complete
**Student's Name**

**Sex (circle one)*** Male Female

**Age**

**Date of birth**

day month year

**Name of School**

(in full please)

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**DIRECTIONS** Circle the answer you believe to be most true. (Use a pencil). Make sure every question is answered, and that there is only one answer for each question.

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<thead>
<tr>
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Stephen's problem: Stephen is a grade ten student who has been asked to give an oral presentation to the whole school at an assembly. Although Stephen has given successful presentations to small groups of class members, he has never talked to a group which is this large. Consequently, Stephen is very nervous about giving the presentation, and is not sure if he can do it. Furthermore, he can't decide if he wants to do the presentation or not.

Question: If you were confronted with Stephen's problem, what actions and methods would you use to: a) make sure you possessed the skills required to give the presentation, b) feel less anxious, c) make yourself want to make the presentation? Be specific about exactly what steps you would take to accomplish these goals.
EVALUATION - BEHAVIOURAL TASKS

Student's Name ______________

Motivation:

1) Did the student set proximal goals?  Yes  No
2) Did the student set attainable goals?  Yes  No
3) Did the student set understandable goals?  Yes  No
4) Did the student's goals include rewards?  Yes  No
5) Did the student include an adequate procedure to monitor performance?  Yes  No
6) Were records suggested for display?  Yes  No
7) Did the student consider self-rewarding techniques?  Yes  No
8) Were self-evaluation techniques explicit?  Yes  No

Anxiety Reduction

1) Did the student suggest any anxiety reduction strategies?  Yes  No
2) Did the student discuss relaxation (or methods of relaxing)?  Yes  No
3) Did the student discuss a method similar to desensitization?  Yes  No
4) Identification of self-defeating/irrational thoughts?  Yes  No
5) Interruption of self-defeating/irrational thoughts?  Yes  No
6) Replacement of self-defeating/irrational thoughts?  Yes  No

Skill Acquisition

1) Did the student consider what skills would be required?  Yes  No
2) Did the student indicate how he/she would determine competence in required skills?  Yes  No
3) Was adequate provision made giving a clear understanding of required skills?  Yes  No
<table>
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<tr>
<th></th>
<th>Question</th>
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<th>No</th>
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<tr>
<td>4)</td>
<td>Was adequate provision made for practising skills?</td>
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<td>5)</td>
<td>Was adequate provision made for receiving feedback to the skill practice?</td>
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</tr>
<tr>
<td>6)</td>
<td>Was skill acquisition graduated?</td>
<td></td>
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</tr>
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<td>7)</td>
<td>Did skill acquisition include planning for skill transfer?</td>
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Appendix D

Project Information

Included in this appendix are the description of the project, letters of informed consent for all volunteers, the letter of consent for experimental group participants, and an example of the evaluation form filled in by students at the end of each lesson.
Personal Agency Skills Curriculum Project

Personal agency is the ability to act in ways that are likely to achieve personal goals. There are a number of skills that can be taught and learned which can help people to acquire personal agency. Some of these skills include the abilities to make decisions, to solve problems, to gather accurate information, to plan activities, to sustain effort and hard work, and to evaluate the effects of one's actions. Other skills that contribute to personal agency include the abilities to motivate one's self, to acquire new skills quickly and efficiently, and to cope with the natural anxieties associated with learning new things.

It often is assumed that secondary school students learn many of the skills described above as byproducts of their regular school curriculum. However, there is considerable reason to believe that many students leave Grade XII without acquiring many of these skills - skills that they will need to make the vital adjustment from student to adult. The purposes of this project are to implement and evaluate a course of studies that attempts to teach Grade 10 students some of the skills of personal agency described above.

Two mini-courses (each consisting of 10 one-hour periods that will run from approximately February 1, 1983 to April 30, 1983) have been developed by a research team in the Faculty of Education at Simon Fraser University. Both courses are designed to teach personal agency skills, and will be taught by members of the Simon Fraser University research team. Any single student may take one mini-course only. In addition to attending these courses, students who volunteer to take the courses (and whose parents approve of their doing so by signing the form attached to this document) also will be required to respond to a number of tests before and after the mini-courses occur. These tests are designed to determine how much the participating students knew about personal agency skills before they took the mini-courses, and how much they know about, and how well they can use, these skills after taking the mini-courses. This testing will help to determine how effective the mini-courses were.

If you agree to allow your child to participate in one of the mini-courses described above, please sign form #1 attached to this document and return it to

____________________________________

____________________________________

____________________________________

Students who volunteer to participate in this project should sign form #2.
Informed Consent For Minors

By Parent/Guardian

NOTE: The University and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are given to you for your own protection and full understanding of the procedures, risks and benefits involved. Your signature on this form will signify that you have received the document described below regarding this project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to allow the child for whom you are responsible to participate in the project.

As (parent/guardian) of (name of child) ______________________________________

I consent to the above-named engaging in the procedures specified in the document titled: Personal Agency Skills Curriculum Project to be carried out in School District #34 during February 1 to April 30, 1983 in a project supervised by: Jack Martin, Ph.D. of the Faculty of Education, Simon Fraser University.

I certify that I understand the nature of this project and have explained it to (name of child) ______________________. I and (name of child) ______________________ know that he/she has the right to withdraw from the project at any time, and that any complaint about the project may be brought to the project supervisor named above or to Dr. George Ivany, Dean of the Faculty of Education, Simon Fraser University.

I may obtain a copy of the results of this study, upon its completion, by contacting Dr. Martin.

Name (Please print): ______________________________________________________

Address: ________________________________________________________________

Signature: ________________________ Witness ________________________

Date: ________________________

When you have read the document stipulated above, please initial the top of the document.
Note: The University and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are given to you for your own protection and full understanding of the procedures, risks and benefits involved. Your signature on this form will signify that you have received the document described below regarding this project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to participate in the project.

Having been asked by Jack Martin, Ph.D. of the Faculty of Education, Simon Fraser University to participate in a research project, I have read the procedures specified in the document entitled: Personal Agency Skills Curriculum Project.

I understand the procedures to be used in this project.

I understand that I may withdraw my participation in this project at any time.

I also understand that I may register any complaint I might have about the experiment with Jack Martin or with Dr. George Ivany, Dean, of the Faculty of Education, Simon Fraser University.

I may obtain a copy of the results of this study, upon its completion, by contacting Jack Martin.

I agree to participate by attending 10 one-hour classes and by completing a number of tests before and after these classes as described in the document stipulated above, during the period February 1, 1983 to April 30, 1983, in School District #34.

Date ___________________________ Name ___________________________

Address _________________________________________________________

Signature _________________________________________________________

Signature of Witness _____________________________________________

When you have read the document stipulated above, please initial the top of the document.
On a scale from 1 - 5, how would you rate this lesson (circle one)?

1 terrible   2 poor   3 fair   4 good   5 excellent

Instructions

Please rate the following questions using the rating scale numbers provided above.

1. How interesting was the lesson? 

2. Evaluate the lesson in terms of you learning new and important information.

3. How effective was the instructor in teaching this material?

4. In total, how would you describe this lesson?

What was the most useful aspect of this lesson for you?

What was the least meaningful aspect of this lesson for you?

What effects did this lesson have on your thoughts, feelings, or behaviors during the past week?
Appendix E

Results of Two-Way ANOVA for Repeated Measures on Each Dependent Variable: Tables 4-7
Table 4

Two-Way ANOVA for Repeated Measures on the Cognitive Content Test

<table>
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<tr>
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### Table 5

**Two-Way ANOVA for Repeated Measures on the Internal vs. External Scale of Control of Reinforcement**

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Table 6

Two-Way ANOVA for Repeated Measures on the Self-Control Schedule

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Table 7

Two-Way ANOVA for Repeated Measures on the Behavioral Tasks Test

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