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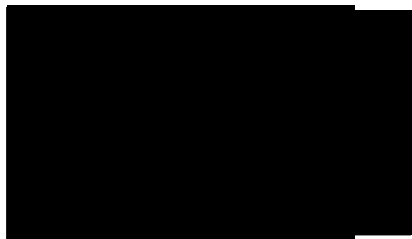
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SELF-EDUCATION: POSTULATES AND PRACTICES  
OF VOLITIONAL LEARNING

by

Kathryn Lynne Huguet

B.A., McMaster University, 1972

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS (EDUCATION)

in the Faculty

of

Education

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APPROVAL

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Self-Education: Postulates of Practices of

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ABSTRACT

The process of self-education is ill-defined. No coherent theory or unified body of research literature on self-education currently exists.

The questions addressed in this thesis are:

1. What sources of information contribute relevant data as to how individuals formulate, guide and implement their own learning?
2. What main ideas and common themes exist in this literature relevant to the practice and teaching of self-education?

To identify documents relevant to the problem, diverse fields of literature were scanned. A cumulative inventory was developed resulting in a collection of three hundred sources from such fields as psychology, sociology, education, medicine and self-help. Each source was read and a tentative definition of self-education was formulated to guide the selection of key statements relevant to the problem. Once a significant number of statements was compiled, the data were sorted into categories. Eight categories emerged: theory of self-education; methods of self-education; characteristics of self-educated people; transformations and transitions; drive and direction; humanistic self-determination; behavioral self-modification; and holistic development. The data from the categories were organized into thirty postulates that describe the nature and importance of self-education in relation to key sociological, educational, psychological and personal conditions.

Postulates were documented in terms of specific statements made by their major adherents. Postulates were confirmed by the frequency of reference in the literature and the consistency of the statements made in support of them.

The literature indicates that complex contemporary environments require individuals to be self-directing throughout their lives. Numerous contradictions are documented in the literature between the need for competent self-educators and the current practices of formal educational institutions. In addition, the literature states that self-education is in tune with basic psychological development and functioning. Self-education is also shown to prepare individuals for personal decision-making and self-directed living.

Conclusions drawn from the review of several hundred books and articles, compiled in the bibliography, suggest that an alternative form of education called self-education clearly exists and is widely practiced. This concept can be defined and has many significant practical applications for formal schooling. Teaching for self-education constitutes a challenging new professional role. Development of individual self-educative competencies prepares individuals to cope effectively with the demands of the modern world. A model has been derived from the literature concerning the selection of appropriate learning approaches based on the individual's level of self-education competence.

DEDICATION

Written in loving memory of

Justina Penner

1922 - 1980



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During the writing of this thesis, my life changed a great deal. I would like to thank the special people whose patience, confidence, encouragement and caring was so important to me.

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## CHAPTER ONE

### Introduction

Learning permeates every facet of human existence. Learning is required to provide for basic physiological needs, to master evolving life tasks, to expand horizons toward the fulfillment of personal potentialities and to maintain communal harmony. In addition, continual learning is necessary to cope effectively with the rapid and continuous changes of contemporary life. While exponential growth in technology has become an accepted fact during this century, it appears that corresponding advances in educational processes designed to prepare individuals to master the contingencies and opportunities of modern life have not occurred.

Learning is usually thought of as something that occurs only in an educational institution under the direction of a teacher and within the structure of a classroom. This is, however, an extremely narrow view of learning and education. The concept of learning is considerably broader than what happens within the four walls of the school. Formal schooling, as it currently exists, does not appear to provide adequate preparation for the type of self-educative expertise the modern world demands. Many critics claim that the conclusion of formal schooling leaves students in a void. Accustomed to directive, externally controlled, and institutionalized learning, individuals experience difficulty initiating and managing the on-going personal learning required by complex, contemporary environments. Modern societies also offer enormous opportunities for enrichment and enjoyment and yet the average human being is often unable to grasp these opportunities and transform them into living realities.

Individuals require specialized personal attributes and skills in order to effectively manage self-directed change. Formal educational institutions are a fact of life in modern societies and should play a crucial role in the development of self-educative attributes and skills. Educational systems need a renewed philosophy upon which their overall organization may be founded. A means of preparing individuals of all ages to become skillfully self-directing in their learning and living is urgently required. This study postulates that self-education constitutes an effective means through which this may be accomplished. The literature suggests that the understanding and mastery of basic learning and developmental principles may allow individuals to break free of a continuing dependence on formal schooling and cultivate personal self-educative capacities. This self-educative expertise would allow individuals to maximize the effective utilization of formal educational resources.

Though efforts have been made through the years to update education to a more personalized, efficient, and effective system, the status quo of teacher-directed education largely remains. In the last decade, however, researchers have begun to investigate the phenomenon of self-direction in learning. What has become apparent is that people do engage in self-education in an interesting diversity of ways. This learning takes place in response to the demands experienced in the normal course of living. The skills and attributes employed in this type of learning, however, do not seem to be directly addressed in present educational systems. The process of self-education is ill-defined. No coherent theory or unified body of research literature on self-education currently exists.

This thesis constitutes an initial exploration of self-education both in its actuality and its potentiality. The thesis attempts to organize and synthesize information from diverse fields into one comprehensive study on the subject of self-education that may be applied to the learning problems of everyday living as well as to the practice of formal education. It was the conscious intent of the author in conducting this study to go beyond the bounds of scholarly literature. The data collection system was designed to achieve as much diversity as possible. A wide cross section of literature formed the data base for the study. Approximately three hundred documents were identified and read to extract key statements relevant to the problem. Included were such varied sources as personal statements, conceptual documents, scholarly sources, social commentaries, polemic documents and popular literature. The intent of the author was not exhaustive coverage of all relevant literature, nor was it to evaluate the quality or veracity of the statements made. The purpose of the study was to cast a wide net in order to collect and synthesize a variety of statements containing key ideas and common themes relating to how individuals formulate, guide and implement personal learning and to present them in an explanatory and illustrative manner.

What has emerged from the interdisciplinary data reviewed in this study are indications of an unique process of learning, an underlying structure of personal attributes and skills shared by self-educators, and a set of thirty postulates that reflect a common theme regarding the urgent need to apply self-education as a major thrust in educational systems and in daily living. In addition, a model has been derived from the literature describing how synergistic learning components may be selected based on the individual's level of self-educative competence.



The scope of self-education is so broad that this thesis could not possibly exhaust the subject. Rather, this study offers a series of postulates which constitute the embryonic precursors to a theory of self-education. These postulates are offered as plausible hypotheses to be critically examined both individually and collectively in the course of further investigation and research in the field of self-education.

### Definition

An integration of various definitions appearing in the current literature describes the self-education process as one in which individuals take the initiative, with or without the help of others, in mastering all the activities usually conducted by the teacher: diagnosing learning needs, formulating learning goals, selecting content and resources, selecting and organizing learning experiences, managing time and effort, and evaluating progress and learning outcomes. Self-education is education taken by the learner, as distinct from education given or externally imposed by others. Gibbons 94(52), Griffin 111(6), Knowles 161(18), Tough 285(1).

### Problem Statement

The basic principles of self-education are largely a mystery because self-education is so inconsequential a part of formal schooling. While many educators appear to agree as to the desirability of self-education, there exists little agreement on how such a concept might be integrated into the existing educational milieu. There are few operating school programs deliberately designed to increase student

initiative and autonomy toward the development of the skills and personal attributes that are required for competent lifelong self-directed inquiry.

Though the idea of self-education has surfaced in the formal education community, the process of self-education is ill-defined. Self-education is not an accepted process and not everyone who uses the term means the same thing. The differences between self-education and traditional education, the characteristics of effective self-educators, and the importance of self-education to the individual and society require further exploration.

There are, however, several bodies of theory and opinion either on the subject of self-education or subjects closely related to it. Each of these bodies of literature raises issues and ideas of importance to self-education, but they have not, as yet, been integrated. Therefore, the questions addressed in this thesis are:

1. What sources of information contribute relevant data as to how individuals formulate, guide and implement their own learning?
2. What main ideas and common themes exist in this literature relevant to the practice and teaching of self-education?

These questions led to the formulation of the following specific objectives:

1. To identify, from many widely diverse fields of literature, sources of information which contribute relevant data as to how individuals formulate, guide and

implement their own learning.

2. To survey and review this literature in order to extract main ideas and common themes and topics which contribute significantly to the understanding, practice and teaching of self-education.
3. To organize and synthesize the interdisciplinary data into an integrative and exploratory study of self-education.
4. To present, in an explanatory and illustrative manner, the central features of the literature for use by educators and others interested in self-education.

### Methodology

A review of educational research revealed a number of references to an educational approach which appeared to be distinctly different from the traditional teacher-directed process found in the majority of existing formal school systems. Descriptors such as self-directed learning, independent study, self-instruction and adult learning projects suggested an alternative form of education in which the learner takes a more central position in educational activity.

An ERIC search was conducted on the topics of self-directed learning, independent study, self-instruction, self-study and autonomous learning. From the

initial sources identified from these descriptors, data were extracted concerning an educational approach in which individuals take the initiative, with or without the help of others, in mastering all the activities usually conducted by the teacher. From this data, the author hypothesized and defined an ideal state of self-guided learning and development in which the individual assumed full responsibility for the formulation, guidance and implementation of personal change throughout his entire life. It was postulated that this ideal state would involve an act of volition; the learner would actively desire and pursue the learning. Decisions concerning his education would grow from the uniqueness of the individual learner's needs, interests, learning patterns, life situation and personal goals. The author assigned the descriptor self-education to this idealized state of self-guided development. This definition of self-education constituted the operative criterion for the selection data during the course of the study.

A further review of educational research was conducted to extract statements that contributed significant data regarding educational trends toward individualized instruction and the personalization of educational activities through non-traditional learning approaches.

Literature on adult education was also reviewed in order to extract data which suggested a pattern of independent and personally guided learning common among a wide range of people.

A third area of enquiry concentrated on sources which criticized contemporary educational systems. The review of educational research suggested that interest in independent study was sparked by specific dissatisfactions with formal schooling.

Statements relating perceived inadequacies in formal schooling, as well as statements emphasizing the demands on individuals to be self-directing and self-responsible in response to the fluid requirements of complex contemporary environments, were extracted.

This preliminary investigation revealed that no unified body of literature concerned with the topic of self-education had been identified. The descriptor 'self-education' did not exist in ERIC, in other educational abstracts and research, or in such comprehensive handbooks as The Encyclopedia of Education Research or The Handbook of Research on Teaching. Existing knowledge concerning the process of how individuals formulate, guide and implement their own learning was scattered throughout widely divergent fields of literature.

The scope of the investigation was extended to reach far beyond the bounds of scholarly literature. A diverse range of authors and titles was scanned to locate sources of information which explored and discussed issues relevant to the various dimensions of self-guided learning and performance. For the purposes of the study, learning was defined as any relatively permanent change in behavior that occurs as a result of experience. Education was defined as the training process through which knowledge and skills as well as personal, interpersonal and performative competence are developed. These definitions were used by the author in consulting experts in the field of education for advice regarding significant and authoritative sources of information relevant to the problem.

Additional sources of data were selected based on general subject knowledge and the problem definition. The data collection system was designed to incorporate as

much diversity as possible. Selected documents included scholarly literature, sources reflecting personal opinions, conceptual and philosophic documents, social commentaries, polemic documents and popular literature. No effort was made by the author to sort documents either in or out of the study. Each source selected was read and key statements were extracted which were considered to reflect central ideas, opinions and themes relevant to the topic of self-education.

This methodology is similar in essence to interviewing a wide cross section of people who have been identified as having an authoritative and/or influential opinion based on personal experience, exploration, experimentation and/or observation of issues related to the process by which individuals formulate, guide and implement their own learning. The author of this study has represented the opinions as they appear in the source documents without critical examination of the quality or veracity of the statements extracted. The methodological process undertaken involved the identification of relevant titles and the selection of strategic items which supported the broad concept of self-education hypothesized by the author.

The author did not seek exhaustive coverage of all relevant literature in any area. The author's intent was to conduct a wide-reaching exploratory search in order to collect and synthesize a variety of statements containing issues, ideas and themes relevant to self-education. The author sought to integrate the interdisciplinary data into one comprehensive body of data and to organize it into an examinable format.

A data collection system was established to record and organize the

interdisciplinary information. This system was comprised of five elements: a bibliographic file of all data sources; a file of quote cards recording all important ideas and research findings; a file of primary articles and a permanent collection of primary books; a file of summary cards on which were recorded complete statements of the key concepts from the quote cards, primary articles and books; and a central file of all summary statements categorically arranged and cross referenced to their original sources to facilitate easy access.

As significant statements were located in the various documents, they were either recorded on quote cards or were underlined in articles and books which were to be kept in the permanent collection. Summary cards were subsequently made up and added to the the growing file. Additional data sources were selected based on the nature of the information already collected and from the bibliographies of original selections. A cumulative inventory was developed resulting in a collection of approximately three hundred sources from such diverse fields as psychology, sociology, education, medicine and self-help.

Once a significant number of statements was compiled, the data were sorted into general categories appropriate to their content. The actual content of the summary card was used to suggest the category. Cards were then gathered according to commonalities of theme and topic; eight definitive categories emerged.

The first category was entitled the theory of self-education. Summary statements which contained existing basic principles, concepts and explanations relating to the process by which individuals successfully direct their own learning were

included. This embryonic literature contained arguments for the personalization of education. Statements relating to the linkage of formal education with life and the preparation of students for evolving life tasks were also placed in this category. The studies of Houle, Tough, Faure, Knowles and Gibbons plus others (Appendix Two) confirmed the widespread existence and extraordinary nature of independent learning as well as provided valuable clues concerning the process of self-education.

The second category was concerned with methods of self-education. Included in this category were basic concepts extracted from popular self-help manuals designed to teach people how to achieve success in their lives. Summary statements documenting personal methodologies of self-development were extracted from research on individuals who had become successful through self-educative means. Books on educational practices designed to teach people how to direct their own learning were also included. The data in this category revealed the importance of developing inner resources in order that active, experiential, and self-directed methods of self-improvement may be pursued.

Information relating to the characteristics of self-educated people was included in the third category. Summary statements documenting the existence of self-tutored experts and self-made men in every age were included here. Useful information regarding attributes, skills, origins, motivation and behavioral patterns of individuals who had successfully directed their own development was collected in this category.

The fourth category was entitled drive and direction. This category was concerned



with the reasons and forces which energized individual's pursuit of self-education. Summary statements emphasizing the importance of internality were placed here. Data on personal will and its role in self-education were included. Information relating to sources of initiative, drive and direction in self-educative activities was collected in this category.

The fifth category was concerned with transformations and transitions. The data in this category were concerned with the chronological stages of maturation which define developmental tasks an individual must accomplish in order to realize full maturity. Life tasks of intellectual, emotional, social, and psychological development were documented and related to the tasks of self-education.

Humanistic self-determination was the title given to the sixth category. Comments relevant to self-education extracted from various documents on phenomenological psychology were recorded in this category. Summary statements included valuable clues as to how people can gain control of their lives through active choice, dissonance resolution and actualization of potentialities. One key concept evident in this category was self-knowledge secured through introspection, psychotherapy and various forms of group process. Awareness of self as well as awareness of others and the outside world was emphasized. Specific generative factors facilitating the development full maturity and productivity were also documented in this category.

The seventh category was called behavioral self-modification. This category included key concepts from the various behavioral psychologies. Basic principles and means of self-control including action plans, feedback and schedules of

reinforcement were recorded. The profound effect of the environment on the nature of man was documented as was the behavioral paradox of reciprocal determinism whereby people also influence and shape their personal environments.

The eighth category was concerned with holistic development. This category included summary statements from the literature of the holistic health movement. Principles and ideas emphasizing the body-mind linkage and how development of powers of concentration and relaxation can aid and enhance learning and healthy life functioning were recorded. Data on Zen, Yoga and other Eastern disciplines as well as information on various techniques such as visualization, self-hypnosis, autogenic training, progressive relaxation, dream programming and meditation were included in this category.

Once the categories had been formulated, major emerging themes and topics were reviewed in order to identify areas requiring further investigation or additional confirmation. Data sources were identified to complete the investigation and ultimately the search was halted when no new emerging themes or ideas were discovered and new data were simply substantiation for what had already been collected.

While the eight broad conceptual categories emerged quickly during the early stages of the study, specific integrative conceptualizations relating to the nature of self-education did not emerge until further analysis of the data had been conducted. Data were eventually organized in the form of answers to following questions:

- a. What is self-education?
- b. What is the role of self-education in the maturation process?
- c. What personal attributes are necessary for self-education?
- d. What skills are necessary for self-education?
- e. What conditions and relationships cultivate and support self-education?
- f. What methods are effective in self-education?
- g. What is the current and future significance of self-education for individuals and society?

Further analysis of the data revealed the existence of several overlapping themes in each of these areas. The data were consequently further organized and synthesized to formulate more specific statements of recurring themes. Eventually, thirty postulates were written. These postulates were documented with reference to specific statements made by their major adherents represented in the data.

Postulates were confirmed by the frequency of reference to the ideas in the literature and the consistency of the arguments made in support of them. The postulates are not demonstrated truths, rather, they reflect the ideas, opinions and conclusions of the relevant adherents. This methodological approach is supported in essence by the procedure inherent in the development of grounded theory. Though no substantive theory was formulated, the thirty postulates constitute plausible hypotheses which require further examination, refinement and research to determine internal consistency as well as to test assumptions and relations with relevant existing theory. The postulates are offered as an elementary conceptual framework which, through further systematic investigation, may form the base from which a theory of self-education could be built. (Glaser and Strauss, 1967)

The data are reported in the form of four chapters which relate to specific sociological, educational, psychological and personal conditions identified in the research. Each chapter contains sub-areas which were suggested by the literature and reflect broad concerns in each of these major groupings of conditions. A

statement of a postulate incorporating essential elements of the condition and explaining the relationship of self-education to this concern follows. Each postulate has been printed starting on a new page to facilitate ease of access and also to allow for reproduction of individual postulates.

Example: Sociological Condition: FUTURITY

Postulate:

THE DEVELOPMENT OF INDIVIDUAL COMPETENCE IN SELF-EDUCATION IS THE KEYSTONE TO MEETING THE FUTURE NEEDS OF SOCIETY AND CIVILIZATION.

A review of the the data arranged in the thirty postulates led to the formulation of specific summary conclusions regarding the existence, nature and importance of self-education.

Personal interpretations of the data subsequently led to the design of a model concerned with the selection of synergistic learning components. The model organizes key findings into a format suitable for practical application.

Sources of data selected for use in this study have been arranged alphabetically in the bibliography (page 223). Reference citations in the text of the thesis appear with the surname of the author first, the number of the citation in the bibliographic listing second, and the specific page number(s) in brackets third.

Example: Maslow 188(22) - Maslow (author's surname), 188 (citation number in the

bibliography), (22) (specific page number)

This method of citation was selected to give the reader useful information in the text as well as to enable the reader to locate the citation easily in the alphabetical bibliographic listing.

### Boundaries of the Study

In any study, the original perspective and methodology affect the direction the investigation will take. The free-sort technique used to create the original eight categories described in the methodology section may reflect the author's particular background and training. It is the author's belief that the essential issues and ideas discovered and compiled are representative of a substantial cross section of, and clearly capture major themes that run through, the literature. The author was sensitive to the possibility of investigator bias and took care to minimize this. Once categories had been created, they were clarified, their properties outlined and then they were put forward for examination and confirmation by an expert in the field. The author encourages the reader to make his own judgement concerning the plausibility of these original categories. In any event, these categories constituted a starting point for the study and were modified based on further analysis of the data.

This study is the synthesis of the creative efforts and contributions of approximately three hundred authors. There are undoubtedly other books which also contain important and relevant data on the subject of self-education. It appears

that in almost every field and from every perspective authors have felt compelled to speak about self-directedness and independence. The aim of this study was not exhaustive coverage of all relevant literature. This thesis constitutes an exploratory search for literature relevant to the topic of self-education. The study organizes and synthesizes ideas, opinions and themes relevant to self-education into an examinable format.

The author did not critically examine the truth, quality or evidential nature of the statements extracted from the literature. The aim of this study was not to prove beyond a shadow of a doubt the accuracy of all the points made in the literature. Rather the attempt was to locate strategic items in literature of many widely divergent fields and to select sources which make major contributions relevant to the subject of self-education in order to discover key ideas and common themes. Further research will be required to test the veracity and consistency of the statements made.

The selection of items contained in the study may not reflect the major thrust of any particular source, indeed, an author could be surprised to find himself supporting certain principles. In addition, no concerted effort was made to locate literature that advocated a contrasting perspective to counterbalance the statements made in the study. It was the intent of the thesis to collect and synthesize a wide range of theory and opinion into one comprehensive study on the subject of self-education.

A distinguishing feature of the study is that the majority of the sources are conceptual documents that have as their base personal experience and a strong

philosophic orientation.

The properties of the postulates and the model offered in the study constitute embryonic precursors to a theory of self-education. The findings require further refinement, research and development before they can provide the relevant predictions, explanations, interpretations and applications expected of a fully developed theory.

Individual postulates may be based on a small number of statements and may contain a narrow representation of the literature available in any particular area. As stated earlier, the aim of this study was not exhaustive coverage of all relevant sources. While this study consolidates theory and opinion from widely divergent fields and defines a body of self-education literature, it offers no specific ways of testing the findings. The postulates put forward in the study are, however, examinable statements individually and collectively. Further research is required to determine the viability of the postulates as well as to search out a representative number of substantiation documents in each area.

### Introduction to the Postulates

The data collected in this study have been organized and synthesized into thirty postulates that relate to the nature and importance of self-education. The postulates were inductively developed; postulates emerged directly from the data in the course of the study. The same evidence from which the postulate emerged was subsequently used to describe and illustrate the postulate. The postulates do not constitute demonstrated truths, they are plausible hypotheses derived from a synthesis of the ideas and opinions of the relevant adherents in each area. As it was not the purpose of this study to establish the quality, truth or evidential nature of the data, the author has not critically examined the statements made. Each postulate represents a compilation and summary of the ideas and opinions contained in the literature and does not necessarily reflect the author's opinions. The thirty postulates form the main body of the thesis and constitute the base from which conclusions were drawn and recommendations for further research made.

The postulates have been arranged in four chapters which relate to specific sociological, educational, psychological and personal conditions identified in the research. The sociological conditions outlined in Chapter Two relate to issues arising from people living together as social groups, including organizational considerations and developmental needs. The literature asserts that a reciprocal relationship exists between the individual and the society of which he is a member. The future of society is dependent upon the quality of the individuals who make it up. The nature of modern society is described as complex and rapidly changing. These conditions are considered to exert pressure on individuals to continually cope and learn. These conditions also present individuals with unprecedented



opportunities. Individuals require an effective mechanism through which they can meet and master the requirements for constant adaptation and development as well as maximize personal opportunities. The data sources reviewed state that society has a responsibility to ensure its future by paying attention to the development of competent individuals who are able to cope with change and make productive social contributions. It is postulated that self-education constitutes an effective means through which these needs may be met.

The educational conditions described in Chapter Three refer specifically to the practices of formal schooling. Educational as well as other existing social institutions are claimed to provide inadequate preparation for the individual self-direction and self-responsibility the modern world demands. There exists a growing popular concern, as well as substantial documentation, that formal school systems are not adequately meeting their explicit and implicit mandates to fully develop individual capacities by cultivating in students a basic sum of knowledge and skills and to ultimately produce effective societal members who are competent to meet the complex challenges of their personal futures. The literature surveyed asserts that individuals are leaving formal schooling ill-prepared to negotiate the fluid demands of contemporary life. Self-education, however, is presented as an effective means through which educational and other social institutions may join forces to effectively accomplish educational mandates. Formal educational institutions are already a reality in society and should play a key role in preparing individuals to become skillfully self-directing in their learning and living. The literature reveals that key concepts of self-education and the characteristics, skills and methods employed by self-educators have important implications for formal educational practice.

Chapter Four discusses specific psychological conditions which are concerned with natural and healthy psychological maturation and functioning. The self-education process appears to parallel and support the natural human developmental continuum of life tasks that must be mastered in the course of personal maturation. Self-education, as a holistic and integrative process of learning, cultivates in individuals the primary attributes and skills required to meet effectively, as well as maximize, developmental tasks and opportunities.

The personal conditions described in Chapter Five are concerned with specific individual concerns associated with successful learning and living in modern environments. Self-education allows individuals to design and execute their personal educational processes in accordance with personal learning needs, interests, learning patterns, aspirations and life stages. The literature asserts that self-educative competencies allow individuals to live more actively and to maximize the effective utilization of varied educational resources available in the community, including formal schools. Through self-educative means, individuals can define personal conceptions of success and ultimately lead healthier, more satisfying and productive lives.

It is imperative that this thesis be read in the correct context. Many sources reviewed use extremely strong language and these statements should not be attributed to the author. The reader should not lose sight of the focus of the study which was to collect, integrate and synthesize ideas, opinions and themes relevant to the topic of self-education and to organize the data into an examinable format.

CHAPTER TWO

## Sociological Conditions CHANGE

## Postulate:

RAPID CONTINUOUS CHANGE IN COMPLEX CONTEMPORARY ENVIRONMENTS  
REQUIRES THAT INDIVIDUALS DEVELOP CAPACITIES TO BE SELF-DIRECTING  
AND SELF-RESPONSIBLE THROUGHOUT THEIR LIVES

In contrast to the relatively stable civilizations of our ancestors, modern environments are rapidly and continuously changing. In the past it was possible to acquire adequate learning in one's youthful years to satisfy the demands of an entire lifetime. Feldenkrais writes:

The basic biological tendency of any organism to grow and develop to its fullest extent has been largely governed by social and economic revolutions that improved living conditions for the majority and enabled greater numbers to reach a minimum of development. Under these conditions basic potential development ceased in early adolescence because the demands of society enabled the members of the young generation to be accepted as useful members at the minimum stage. Feldenkrais 77(16)

The inhabitants of modern societies, however, live in a highly sophisticated, complex world that our grandparents never knew. They are continuously faced with the personal challenge of coping with and adapting to rapid changes in environmental conditions. Knowles 161(16), Winston 303(21). John Dewey writes of profound environmental changes brought about by the Industrial Revolution:

The change that comes first to mind, the one that overshadows and even controls all others, is the industrial one-... Even as to its feebler beginnings, this change is not much more than a century old; in many of its

most important aspects it falls within the short span of those now living. One can hardly believe there has been a revolution in all history so rapid, so extensive, so complete. Through it the face of the earth is making over, even as to its physical forms; political boundaries are wiped out and moved about, as if they were indeed only lines on a paper map; population is hurriedly gathered into cities from the ends of the earth; habits of living are altered with startling abruptness and thoroughness; the search for the truths of nature is infinitely stimulated and facilitated, and their application to life made not only practicable, but commercially necessary. Even our moral and religious ideas and interests, the most conservative because the deepest-lying things in our nature, are profoundly affected. Dewey 58(296)

Tough, McLeish, Rogers and Bennett reinforce Dewey's statements by describing a phenomenon of infinite change that is dominating the social, economic, political, scientific and technological strata of contemporary environments. They emphasize that in the modern world nothing remains fixed, permanent, or unaltered; every aspect of living is permeated by the "ever whirling wheel of change". Bennett 17(14), McLeish 197(4), Rogers 235(27), Tough 285(40). Dewey and Maslow go on to say that this trend toward rapid change will continue and likely accelerate in the foreseeable future. Archambault 7(429); Maslow 187(98). Edgar Faure makes a compelling statement on this point in Learning To Be:

Science and technology have never before demonstrated so strikingly the extent of their power and potential ... change is accelerating boundlessly. Faure 76(87)

These changes, many designed and executed by man himself, are increasing the complexity of individual life experience. Roberto Assagioli elaborates on the circumstances in which man now finds himself as a result of his accomplishments:

Man has had to pay dearly for his material achievements. His life has become richer, broader and more stimulating, but at the same time more complicated and exhausting. Its rapidly increasing tempo, the opportunities it offers for gratifying his desires, and the intricate economic and social machinery in which it has enmeshed him make ever more insistent demands on his energy,

his mental functions, his emotions and his will. Assagioli 10(4)

This new lack of continuity and stability from past to the present to the future seems to make experience almost irrelevant and consequently exerts external pressure on individuals to continually cope, adapt, learn and develop. Gardner 90(35), Houle 134(81), Knowles 161(14), Mahoney & Thoresen 184(206), Tough 285(40). Unfortunately, most people are currently ill-prepared to effectively cope with and adapt to these continuously changing circumstances. Faure 76(142), Mahoney & Thoresen 184(206,207), Maslow 187(98), McLeish 197(4,5). Toffler, in his comprehensive study of the social and psychological implications of change entitled Future Shock, elaborates on the tragic predicament in which the majority of people find themselves:

Change is avalanching upon our heads and most people are grotesquely unprepared to cope with it. Toffler 284(12)

This increasing domination of our society by mobility, machinery and incessant change demands that individuals develop the capacities to be self-directing and self-responsible throughout their lives. The ability to learn independently is a prerequisite to effective life management in the future. Combs & Snygg 48(45), Della Dora 60(v), Faure 76(181), Gardner 90(35), Houle 134(81), Knowles 161(17,18), McLeish 197(4,5), Tough 285(40). Knowles sums up:

... there must be a somewhat different way of thinking about learning ... to be adequate for our strange new world we must come to think of learning as being the same as living ... it is no longer appropriate to equate education with youth ... education - or, even better, learning - must now be defined as a lifelong process. Knowles 161(16-17)

Sociological Condition: FUTURITY

Postulate:

THE DEVELOPMENT OF INDIVIDUAL COMPETENCE IN SELF-EDUCATION IS THE  
KEYSTONE TO MEETING THE FUTURE NEEDS OF SOCIETY AND CIVILIZATION.

There exists an inherent interdependence between the growth and development of the individual and the culture and economy of the society in which he grows.

Since the world is rapidly changing sociologically, culturally and technologically, careful consideration must be afforded to the role of the individual in society's future. Combs & Snygg 48(259), Feldenkrais 77(15,16), Mahoney & Thoresen

184(206). As early as 1859, Samuel Smiles was writing that:

... men cannot be raised in masses, as the mountains were in the early geological states of the world. They must be dealt with as units; for it is only by the elevation of individuals that the elevation of the masses can be effectively secured. Smiles 266(17)

Man is, by nature, essentially both self-preserving and social. Gardner writes:

Man is a complex and contradictory being, egocentric but inescapably involved with his fellowman, selfish but capable of superb selflessness. He is preoccupied with his own needs, yet finds no meaning in life unless he relates himself to something more comprehensive than those needs. It is the tension between his egocentrism and his social and moral learnings that has produced much of the drama in human history. Gardner 90(123)

The writings of Knowles, Houle, Faure, James and Savary, and Combs and Snygg also emphasize that each individual is inescapably part of a larger social system and that the successful future of this social system is largely dependent upon

the full growth of all the individuals who make it up. Combs & Snygg 48(259,260), Faure 76(104), James & Savary 142(124), Jung 149(118), Houle 134(81), Knowles 161(20,60), Smiles 266(35). It is essential, therefore, that the impact of existing formal societal organizations and technological systems on the individual be thoroughly examined and analyzed in order that all systems may be designed in such a way that individual talents are developed to the fullest. Archambault 7(295), Gardner 90(79), Rogers 235(92). Maslow emphasizes that viable political, social and economic systems will have to nurture creative people:

Now they will have to learn about the management of creative personnel, the early selection of creative persons, the education and fostering of creative persons ... we must teach them ... to confront novelty, to improvise. They must not be afraid of change but rather must be able to be comfortable with change and novelty, and if possible (because best of all) even be able to enjoy novelty and change. Maslow 187(97-98)

Implicit is the need to work toward new values and rules for the development of individual responsibility to replace the current emphasis on conformity and institutionally established rules. Social systems must begin to cultivate in the individual the capacity for self-direction and self-responsibility. This development of personal self-educative attributes and skills must be viewed both as an enhancement of the individual and as the enrichment of the collective human race. Archambault 7(437), Bandura 14(211-213), Gardner 90(144,145), Kindervatter 154(37), Mahoney & Thoresen 184(206,207), Maslow 187(97), Smiles 266(55). Gardner writes:

Skills, attitudes, habits of mind and the kinds of knowledge and understanding that will be the instruments of continuous change and growth on the part of the young person must be cultivated to provide for a self-renewing society. Gardner 90(25)

He goes on to say that:

The society capable of continuous renewal not only feels at home with the future, it accepts, even welcomes the idea that the future may bring change. Gardner 90(133)

This cultivation of individual self-educative capacities is clearly not a luxury in our society, but a basic necessity. Bandura 14(210), Combs & Snygg 48(264), Gardner 90(113), Maslow 187(195). Knowles elaborates:

... the 'why' of self-directed learning is survival - your own survival as an individual, and also the survival of the human race. Knowles 161(16).

Development of self-educative capacities prepares individuals to meet the demands of their personal and societal futures; individuals who are self determining act in harmonious, compassionate and responsible ways. Combs & Snygg 48(256), Gilmore 100(12), James & Savary 142(124), Mahoney & Thoresen 184(70,207). Through self-educative means, individuals develop a sense of self adequacy, discover the mysteries of their inner worlds and master the management of their own behavior. They also learn to intelligently influence and act upon the outside world both in their personal interest and in the interest of others. In becoming more fully themselves, they become more realistically socialized. Bandura 14(205,212,213), Combs & Snygg 48(257), Corsini 51(39), Faure 76(154), Houle 134(81), Rogers 235(194). Individual needs become synergic with the needs of society; both entities strive toward mutually valued ends. Feelings of belonging, of being part of a larger social whole, of being socially embedded, including a willingness to contribute and to participate in the communal life emerge. Corsini 51(39), Faure 76(104), James & Savary 142(109), Maslow 189(36,40), Overstreet 214(43), Tough 285(28). Combs and Snygg write:




An adequate self satisfies not only his own needs but also the needs of his society ... The high degree of identification of adequate people with their fellows assures a relationship between self-actualizing people and their societies of mutual enhancement. Combs and Snygg 48(259,260)

This strong sense of social responsibility leads self-educators to make social contributions that enrich the world and hold promise for the future of society. Becker 15(125), Faure 76(154), Gilmore 100(12), James & Savary 142(124). Tough writes:

Learning projects by members of a society are a means to a better future for that society ... The individual as well as the society benefit from his successful attempts to learn. He gains new abilities and competence, new strength and confidence, an enlarged understanding of the people and the environment around him. Tough 285(4)

In The Farther Reaches of Human Nature, Maslow suggests that far beyond collective survival, competent self-educators may facilitate the evolutionary flowering of a new kind of civilization as:

People would be stronger, healthier and would have their own lives into their hands to a greater extent. With increased personal responsibility for one's personal life ... people would begin to actively change the society in which they lived. Maslow 187(195)



Sociological Condition: PRESSURE

Postulate:

INDIVIDUALS REQUIRE THE CAPACITY TO BE SELF-DIRECTING IN ORDER TO COPE EFFECTIVELY WITH EXTERNAL PRESSURES IMPOSED BY THE REMOTE POWERS OF GOVERNMENT, BIG BUSINESS, THE MEDIA AND FORMAL EDUCATION.

The life of modern man is shaped largely by forces in the environment. Combs & Snygg 48(310), Maslow 189(204), Perls 220(25). Individuals have been conditioned to believe that their happiness and well-being are to be secured by means of institutions rather than by their own conduct. Smiles 266(35). In "Toward a Theory of Self-Directed Learning: A Study of Experts without Formal Training", the following statement is made:

... schools, as well as such ever-present entertainments as TV, and a growing number of institutions encourage us to be dependent, passive, conforming and, generally, willing to be directed. Gibbons 94(42)

Formal education, by its very nature, makes a coercive claim on very basic individual human rights. Holt makes a compelling statement on this subject:

Next to the right to life itself, the most fundamental of all human rights is the right to control our own minds and thoughts ... Whoever takes that right away from us, as the educators do, attacks the very centre of our being and does us a most profound and lasting injury. He tells us, in effect, that we cannot be trusted even to think, that for all our lives we must depend on others to tell us the meaning of our world and our lives, and that any meaning that we may make for ourselves, out of our own experience, has no value. Holt 130(4)

Schools generally deprive students of personal responsibility; individuals are cast into an involuntary, mechanical servitude. Students become so indoctrinated with

traditional ideas and become so humble before the imposing prestige and authority of accepted professional opinion that they often lose the power of creative thinking. Feldenkrais 77(4-5), Guinagh 114(xi), Hecht & Traub 120(5), Illich 141(12), Jung 149(14,15).

Once a man or a woman has accepted the need for school, he or she is easy prey for other institutions. Once young people have allowed their imaginations to be formed by curricular instruction, they are conditioned to institutional planning of every sort. 'Instruction' smothers the horizon of their imaginations. They cannot be betrayed, but only short-changed, because they have been taught to substitute expectations for hope. They will no longer be surprised, for good or ill, by other people, because they have been taught what to expect from every other person who has been taught as they were. This is true in the case of another person or in the case of a machine. Illich 141(37)

In Awareness Through Movement, Feldenkrais reinforces Illich's concerns regarding the societal trend toward uniformity. He also comments specifically on education:

The education provided by society operates in two directions at once. It suppresses every nonconformist tendency through penalties of withdrawal of support and simultaneously imbues the individual with values that force him to overcome and discard spontaneous desires. These conditions cause the majority of adults today to live behind a mask, a mask of personality that the individual tries to present to others and to himself. Feldenkrais 77(6)

In Self Help, Smiles goes on to emphasize that when individuals are subjected to over-guidance and over-government, the inevitable outcome is an unfortunate helplessness. It appears that whatever is done for and to individuals takes away the stimulus and necessity of doing for themselves. Smiles 266(35). Coercive social systems encourage individuals to cling to conventional beliefs that provide the security of known passivity and misery but do nothing to nurture an openness to the risk of the unknown and the joys of self-discovery. Illich 141(52,53), Kopp 162(13). The sad and unfortunate product of this condition is documented by Holt:

Some would claim that most people in their daily lives do a great many things - dull, repetitious, and meaningless work, driving a car for hours in traffic, watching television - from which they learn nothing. But of course they learn something. The people doing moronic work learn to hate that work, and themselves for having to do it. The people driving cars in traffic learn to think of all the other people they see, driving or walking, as nuisances, obstructions, even as enemies, preventing them from getting where they want to go. And people watching television learn over and over again that the people they see on the screen, "real" or imaginary, are in every way better than they are - younger, handsomer, sexier, smarter, stronger, faster, braver, richer, happier, more successful and respected. When the time finally comes to come back from Disneyland to reality, and get up wearily and turn off the set, the thought is even more strongly in their minds, "Why couldn't I have been more like them?". Holt 130(12,13)

These quotes reveal with startling clarity that the remote power imposed on individuals by social institutions is often enfeebling in its effects. Individuals must develop the ability to help themselves so that they can recognise and resist the powers of these social institutions. Individuals must consciously choose to minimize tendencies to conform to authority's acculturation process in favour of developing awareness of the reality that is themselves; power that originates from within invariably invigorates and leads to more satisfying and active living. The capacity to be self-directing enables individuals not only to resist these pressures but to actively shape them to suit their personal needs, interests and aspirations. Gross 113(75), Houle 134(51-54), James & Savary 142(195), Rogers 235(331-336), Satir 243(30), Smiles 266(35).

Sociological Condition: FRAGMENTATION

Postulate:

AN INTEGRATIVE EDUCATIONAL APPROACH DESIGNED TO DEVELOP INDIVIDUAL CAPACITIES FOR LIFELONG LEARNING WITHIN THE HOLISTIC CONTEXT OF A LEARNING SOCIETY MUST REPLACE EXISTING FRAGMENTED EDUCATIONAL EFFORTS IN ORDER THAT INDIVIDUALS WILL BE PREPARED TO MEET THE CHALLENGES OF THE MODERN WORLD.

Life has been a harsh struggle since the beginning of mankind and nature is not kind to creatures lacking awareness. The great social difficulties currently created by the existence of many millions of people and rapidly changing environmental conditions cannot be ignored. Unfortunately, even under these conditions of strain, it appears that education has improved only to the extent necessary to bring up a new generation able to replace the old one. The education that each generation has passed on to the succeeding one has been limited largely to a continuation of the habits of thought of the prevailing generation. Feldenkrais 77(16), Gardner 90(134). The rapidly accelerating evolution of science in the modern world, however, makes this traditional educational philosophy less and less acceptable. Archambault 7(296), Faure 76(147,148), Houle 134(51-54), Illich 141(25-33), Knowles 161(20). In Learning To Be, Faure outlines modern educational responsibilities:

Education must recognise itself for what it is ... it is an essential factor in shaping the future, particularly at the present moment, since in the last resort education has to prepare mankind to adapt to change, the predominant characteristic of our time. Faure 76(104)

In his book on adult learners, Tough confirms Faure's comments:

Education must develop the individual to cope with changes in knowledge processes, technology, values and complex forms of social organization. Tough 285(40)

The ever increasing demands imposed on individuals by rapidly changing contemporary environments clearly prohibit the continuation of a static approach to education. Illich 141(77), Maslow 187(98). It is impossible to predict definitively just what society will be twenty years from now and therefore impossible to prepare students for any precise set of circumstances. Archambault 7(429), Illich 141(77), Maslow 187(98). Maslow writes:

Education must change, there is little use in learning facts; they become obsolete too fast. There is little use in learning techniques; they become obsolete almost overnight. Maslow 187(98)

In Learning To Be, Faure asserts that education has developed to the point where it must be considered an integral function of society as a whole:

Education is both a world in itself and a reflection of the world at large. It is subject to society, while contributing to its goals, and in particular it helps society to mobilize its productive energies by ensuring that the required human resources are developed. In a more general way, it necessarily has an influence on the environmental conditions to which it is at the same time subjected, even if only by the knowledge about these which it yields. Thus, education contributes to bringing about the objective conditions of its own transformation and progress. Faure 76(55)

Education clearly constitutes a fundamental method of social progress, reform and renewal. It is crucial, therefore, that schools become an integral part of the community and the community become an integral part of the school. Schools must reflect community life, introducing and training students into effective community membership. Integrative educational services of a new kind are required.

Archambault 7(299,437-439), Faure 76(210), Maslow 187(98). Faure explains further:

The dimensions of living experience must be restored to education ... education must be carried out at all ages of man, according to each individual's needs and convenience. He must therefore be oriented from the outset and from phase to phase, keeping the real purpose of all education in mind: personal learning, self-teaching and self-training. Education must cease being confined within schoolhouse walls. Faure 76(183)

As Faure says, education must be liberated from particular buildings at particular times for schooling to be effectively integrated with the real demands of life. The central aim of education must become the preparation of students to live, learning how to learn effectively so as to absorb knowledge all through their lives. Faure 76(69), Hecht & Traub 184(9). Gardner states:

Education can lay a firm base for a lifetime of learning and growth. Inner resources must be developed to the point where the individual can and will want to learn on his own. Gardner 90(31)

Our society must become a learning society and education must become a project for society as a whole. Archambault 7(300), Gardner 90(134), Illich 141(75,76). The school must become a place of human love and interest, a place of great capability, a place that helps develop the potential of each individual human being as well as that of society. Education must focus on the development of self-directing, free and creative individuals. It must simultaneously cultivate creativity and stability, individuality and social consciousness. Gardner 90(25,79), Morris 207(38). Learners must be stimulated and controlled in their learning endeavours through the very life of their community. Archambault 7(43,83), Faure 76(181,194), Maslow 187(183). In a true learning society, Holt says:

... no one would worry about "education". People would be busy doing interesting things that mattered and they would grow more informed, competent and wise in doing them. They would learn about the world from living in it, working in it, and changing it, and from knowing a wide variety of people who were doing the same. Holt 130(6)

The age of the learning society is here by necessity. Though the future cannot be conclusively predicted, infinite demanding and challenging possibilities exist. It is clear that if these future demands are to be met effectively, individual capacities for lifelong self-education must be developed within the holistic context of a learning society. Archanbault 7(310), Combs & Snygg 48(45), Faure 76(150,181), Houle 134(81), Knowles 161(14-18), Tough 285(40).



CHAPTER THREE

Educational Condition: ISOLATION

Postulate:

THE REALITIES OF THE MODERN WORLD DEMAND THAT EDUCATION CEASE ITS ISOLATIONIST EXISTENCE AND FORM A DYNAMIC AND INTEGRATED SYSTEM WITH SOCIETY WITHIN WHICH INDIVIDUAL CAPACITIES FOR LIFELONG LEARNING ARE DEVELOPED.

Formal education functions largely as a world in itself and for this reason, fails to successfully prepare individuals to deal competently with the ever-changing challenges of contemporary life. Illich writes of this condition in Deschooling

Society:

The very existence of obligatory schools divides any society into two realms: some time spans and processes and treatments and professions are 'academic' or 'pedagogic', and others are not. The power of the school thus to divide social reality has no boundaries: education becomes unworldly and the world becomes uneducational. Illich 141(24)

Unfortunately, it seems that school personnel have little sense of the possible goals of human existence. Schools have built their practices on the basis of coercive authority, statistical truths and abstract knowledge. They consequently offer students a prefabricated and often unrealistic, image of the world. Gibbons & Phillips 96(7), Jung 149(12), Knowles 161(20), Maslow 187(185). Dewey emphasizes that:

The radical reason that the present school system cannot organize itself as a natural social unit is because just this element of common and productive

activity is absent. Upon the playground, in game and sport, social organization takes place spontaneously and inevitably. There is something to do, some activity to be carried on, requiring natural divisions of labour, selection of leaders and followers, mutual cooperation and emulation. In the schoolroom the motive and the cement of social organization are alike wanting. Upon the ethical side, the tragic weakness of the present school is that it endeavours to prepare future members of the social order in a medium in which the conditions of the social spirit are eminently wanting. Archambault 7 (300,301)

Though schools play a crucial role in preparing individuals for effective future living, they fail to integrate key elements from societal existence into the educational curriculum. Archambault 7(303), Faure 76(150,218), Gibbons & Phillips 96(7). Faure comments:

Education suffers basically from the gap between its content and the living experience of its pupils, between the systems of values that it preaches and the goals set up by society, between its ancient curricula and the modernity of science. Faure 76(69)

Effective learning cannot occur in an isolated educational vacuum. Humans are essentially social and the raw material of the self can commence growth only as it meets the world outside and begins to have transactions with it. Man is born into an environment with which he must engage in reciprocal relations if he is to learn successfully. Combs & Snygg 48(43,310), Corsini 51(39), James & Savary 142(195), Maslow 187(190). Education must be conceived as a process of living in the world. Faure 76(5-11), Hecht & Traub 120(9), Gardner 90(11,12). Students must be exposed to varied values, ideas, societies and people in order to become competent to function in the universe in which they will spend their lives. Archambault 7(431), Gibbons 94(53), Gibbons & Phillips 96(7), Knowles 161(14-16). As early as 1859, Smiles was writing of the value of learning in the world:

Daily experience shows that it is energetic individualism which produces the most powerful effects upon the life and action of others, and really constitutes the best practical education. Schools, academies, and colleges, give but the merest beginnings of culture in comparison with it. Far more influential is the life-education daily given in our homes, in the streets, behind counters, in workshops, at the loom and the plough, in counting houses and manufactories, and in the busy haunts of men. This is that finishing instruction as members of society ... consisting in action, conduct, self-culture, self-control ... a kind of education not to be learnt from books, or acquired by any amount of mere literary training ... it is life rather than literature, action rather than study, and character rather than biography which tend perpetually to renovate mankind. Smiles 266(39)

It appears that educators are currently at liberty to set their own goals, establish their own rules and evaluate their own performance in isolation of the realities of the modern world which exist just beyond the schoolroom walls. Though extensive educational resources are spent to purchase the time and motivation of a number of people to take up predetermined educative roles in ritually defined settings, no clear, objective performance criteria appear to exist in order to determine the degree of success achieved in these roles. Schools do not embrace the impersonal evaluation criteria of business and industry which include productivity, efficiency and quality control. Staff apparently have little to worry about once they have secured tenure as they are held to virtually no criteria at all; secure financially and professionally, coming and going pretty much as they please, producing or not as they see fit, they present a life style which may work in the educational realm but would not hold up in the conventional world of business and industry. This instructional model constitutes an extremely poor example for impressionable students preparing for adulthood. Archambault 7(309), Hecht & Traub 120(23), Illich 141(19), Morris 207(26). Illich warns that:

The totally destructive and constantly progressive nature of obligatory instruction will fulfill its ultimate logic unless we begin to liberate ourselves right now from our pedagogical hubris. Illich 141(50)

Education must not be allowed to continue its isolationist existence. An integrated educational-societal system within which continuous innovation, renewal and rebirth can occur in response to the demands of our rapidly changing world is clearly an urgent educational imperative. Faure 76(5-11), Gardner 90(5,6). Dewey offers some important guidelines for the design of this "New Education":

Whenever we have in mind the discussion of a new movement in education, it is especially necessary to take the broader, or social view ... The modification going on in the method and curriculum of education is as much an effort to meet the needs of the new society that is forming, as are the changes in modes of industry and commerce. It is to this then, that I especially ask your attention: the effort to conceive what roughly may be termed the "New Education" in the light of larger changes in society. Can we connect this "New Education" with the general march of events? If we can, it will lose its isolated character; it will cease to be an affair which proceeds only from the over-ingenious minds of pedagogues dealing with particular pupils. It will appear as part and parcel of the whole social evolution, and, in its more general features at least, as inevitable.  
Archambault 7(296)

Educational Condition: BUREAUPATHOLOGY

Postulate:

IN ORDER TO BE EFFECTIVE EDUCATIONAL ENTITIES IN THE FUTURE, THE BUREAUPATHOLOGY OF EXISTING SCHOOL SYSTEMS MUST BE REPLACED WITH A FLEXIBLE AND ADAPTABLE EDUCATIONAL TECHNOLOGY DESIGNED TO DEVELOP INDIVIDUAL SELF-EDUCATIVE CAPACITIES.

Modern western civilization consists of a vast interlocking network of incredibly complex organizations. Each and every individual is affected, directly or indirectly, by the presence of these monoliths:

The municipality is tied to the hospital, the hospitals are tied to one another, and they in turn are tied to the professional organizations and the unions, which are tied to the universities and colleges, which are tied to the lower educational institutions, which are tied to the school board, which is tied to the municipality, which is tied to the technical college, which is tied to the trades licensing board, which is tied to the trade unions, which are tied to the manufacturers, and so on. Lawless 173(166)

Today these complex organizations are taken for granted despite the fact that they were born only at the beginning of this century. Lawless 173(166), Scanlan & Keys 246(176). All large scale, complex organizational entities are bureaucratic:

The management of a large organization is unable to directly supervise and implement its policies and must delegate this work to others with specialized abilities whose roles have been differentiated. In addition, verbal messages are replaced by written messages, which result in standardized formats, routine procedures, and organizational structuring so that individual responsibility and accountability can be precisely pinpointed. Scanlan & Keys 246(176)

Though bureaucracy, in its true form, is an administrative device to be employed to accomplish an effective means-end chain in an organization, it does not seem

to work very well in practice. Often a condition termed 'bureaupathology' develops from an overemphasis on impersonality, status, conformity and routinization. The organization consequently becomes extremely resistant to change and the personal behavior patterns of the organizational members become dysfunctional exaggerations of the desirable characteristics of a bureaucracy. These behaviors include:

... excessive aloofness, ritualistic attachment to routines and procedures, resistance to change, petty insistence on rights of authority and status.  
Lawless 153(172)

The pathology results from the fact that these behavior patterns do not serve to effectively advance the goal of the organization but tend to be essentially self-serving.

Most modern educational systems are large and are, by necessity, bureaucratic. Unfortunately, however, these systems also manifest most of the characteristics of bureaupathology. Modern school systems are largely self-serving. Illich 141(10,16,17).

School programs hunger for progressive intake of instruction, but even if the hunger leads to steady absorption, it never yields the joy of knowing something to one's satisfaction. Each subject comes packaged with the instruction to go on consuming one offering after another, and last year's wrapping is always obsolete for this year's consumer. The textbook racket builds on this demand. Educational reformers promise each new generation the latest and the best, and the public is schooled into demanding what they offer ... No institution could better veil from its participants the deep discrepancy between social principles and social reality in today's world. Secular, scientific and death-denying, it is of a piece with the modern mood ... No one completes school - yet. It never closes its doors on anyone without first offering him one more chance: at remedial, adult, and continuing education. Illich 141(42-44)

In addition, many school systems have failed to keep pace with the rapid and continuous changes of modern contemporary life. Instead of revising and updating educational process in response to the ever-changing needs of modern society, existing school systems apparently try to manipulate facts to suit existing educational structures. The unfortunate outcome of this static systematization is the treatment of human learners as things. Faure 76(157):

School trustees no longer seem committed to protecting the student, but rather to shielding the system from public criticism. As a matter of cold fact, all adults involved in the high-school industry seem committed to protecting their job security ... students - your children and mine - are no longer persons but B/U's (basic economic units). During contract negotiations they become hostages and at budget time, serve as pawns. Morris 207(26)

These institutions have evolved to the point where bureaupathological functioning clouds educational benefits to the individual. Faure 76(188-190). This condition must clearly change if students are to be prepared to effectively meet the challenges of contemporary environments.

We can and we must, given the present state of affairs, inquire into the profound meaning of education for the contemporary world and reassess its responsibilities towards the present generations which it must prepare for tomorrow's world. We must inquire into its powers and its myths, its prospects and its aims. Faure 76(23)

The demands of the modern world require on-going personal development and updating of knowledge and skill; demands for educational services are steadily increasing. In Freedom To Be, the following statement appears:

It seems that what is needed in an age of unprecedented demands for education is not a system but an "un-system". Faure 76(161)

The educational technology is currently available to develop a formal educational "un-system" which supports independent, self-direction in learning instead of bureaucratic systematization, Gardner 90(31), Illich 141(77). It is essential that education begin to effectively prepare students to competently direct their own educations so as to be able to absorb new knowledge all through their lives. Faure 76(69), Gross 113(163).

Clearly, we are not talking here about something that would be nice or desirable; neither are we talking about some new educational fad. We are talking about a basic human competence - the ability to learn on one's own - that has suddenly become a prerequisite for living in this new world. Knowles 161(17,18)

Students must be allowed, encouraged and helped to work with and help each other, to learn from each other and from the world around them; to think, talk, write and read about the things that excite, interest and are of crucial importance to them. Holt 130(11). Faure asserts that it is essential that:

Educational structures must be remodelled, to extend widely the field of choice and enable people to follow lifelong educational patterns ... the bureaucratic aspects of educational activity must be broken down and its administration decentralized. Faure 76(79,80)



Educational Condition: SUBJECT EMPHASIS

Postulate:

IN ORDER TO RESPOND EFFICIENTLY, EFFECTIVELY AND HUMANELY TO THE CHANGING DEMANDS OF THE MODERN WORLD, EDUCATIONAL TECHNOLOGY MUST PLACE LESS EMPHASIS ON SUBJECT MATTER AND FOCUS INSTEAD ON THE DEVELOPMENT OF INDIVIDUAL SELF-ENQUIRY SKILLS.

It appears that curriculum has become the overriding principle upon which contemporary school systems are built. Gibbons & Phillips 96(5), Jenks & Murphy 143(21), Knowles 161(20). Curriculum has become big business, a business that is unfortunately self-serving rather than serving the real learning needs of students.

Illich offers the following overview:

School sells curriculum - a bundle of goods made according to the same process and having the same structure as other merchandise. Curriculum production for most schools begins with allegedly scientific research, on whose basis educational engineers predict future demand and tools for the assembly line, within limits set by budgets and taboos. The distributor-teacher delivers the finished product to the consumer-pupil, whose reactions are carefully studied and charted to provide research data for the preparation of the next model, which may be 'upgraded', 'student-designed', 'team-taught', 'visually-aided' or 'issue-centred'. Illich 141(41)

Highly specialized modern curricula effectively separate the intellectual, physical, aesthetic, moral and social components of the human learner. Many schools have become akin to factories complete with automated assembly lines where students must fill a pre-cut groove on a moving belt of subject matter. Faure 76(5-11).

Morris comments:

... 70 minute periods - blocks of time, and programs. The teacher is trying to get through the course before the end of the year, which is the same as

saying 'We're trying hard to get the rubber on this wheel before the next wheel comes along. Morris 207(36)

The essential weakness of this curricular model is not just that it emphasizes the necessity for provision of definite subject matter. The real weakness lies in the realm of the imaginations of contemporary educators who cannot conceive of an educational world beyond the provision of a fixed and rigid environment of subject matter; an environment all together too remote from the experiences of the learner. Archambault 7(8,9), Buckman 32(121), Collins & Moore 46(63), Faure 76(69), Hecht & Traub 120(4), Knowles 161(20). This educational approach offers students little opportunity to directly examine reality or to experience and explore their unique individuality. Maslow writes:

Education makes little effort to teach the individual to examine reality directly and freshly. Rather it gives him a complete set of prefabricated spectacles with which to look at the world in every aspect, e.g. what to believe, what to like, what to approve of, what to feel guilty about. Rarely is each person's individuality made much of, rarely is he encouraged to be bold enough to see reality in his own style, or to be iconoclastic or different. Proof for the contention of stereotyping in higher education can be obtained in practically any college catalog, in which all of shifting, ineffable and mysterious reality is neatly divided into three credit slices, which by some miraculous coincidence, are exactly three weeks long and which fall apart neatly, as a tangerine does, into completely independent and mutually exclusive departments. If ever there was a perfect example of a set of rubrics imposed upon reality rather than by reality, this is it. Maslow 188(223)

It is interesting to note that the curricular orientation of modern educational technology is largely a product of past generations where the accepted mission of schools was the transmission of a sum of knowledge.

Our school's methods, and to a very large extent our curriculum, are inherited from a period where learning and command of certain symbols, affording as they did the only access to learning, were all important. The ideals of this

period are still largely in control, even where the outward methods and studies have been changed ... Present education is highly specialized, one-sided and narrow. It is an education dominated almost entirely by the medieval conception of learning. Archambault 7(308)

It would seem that this subject emphasis would be more legitimate in the past when environments were relatively stationary and enduring and individuals were able to acquire sufficient information in their youthful years to guide them through an entire lifetime. During this century, however, educational and environmental conditions have changed substantially and are continuing to change at an increasing pace. It is strange, therefore, that this curricular orientation has survived, thrived and flourished in modern school systems. Archambault 7(307), Faure 76(18), Knowles 161(16,20). It is obviously no longer realistic or adequate to define the purpose of education as transmitting solely what is known; educational process must be linked to the changing realities of contemporary living. Faure 76(69), Knowles 161(16,17). The rigid, subject-centred curricular model employed in most school systems clearly prohibits adequate preparation of students for adult autonomy which will require them to deal effectively with the changing conditions and vicissitudes of the modern world. Faure 76(142), Houle 134(51-54). Faure describes the changes necessary in curricular action:

Basic education must be many sided, designed not only for children and adolescents but also for adults who, at any age, may have need of it. While dispensing fundamental knowledge, such education aims at learning how to perceive and comprehend the world. It must endeavour to instill, especially in children, a taste for self-learning that will last a lifetime; to arouse their desire to know, to ask questions and to question themselves. Faure 76(184)

In Self-Directed Learning Knowles states that:

... the main purpose of education must now be to develop the skills of

inquiry. When a person leaves schooling he or she must not only have a foundation of knowledge acquired in the course of learning to inquire but, more importantly, also have the ability to go on acquiring new knowledge easily and skillfully the rest of his or her life. Knowles 161(16,17)

Continued emphasis on teaching only subjects is an inadequate and ineffective educational strategy in view of the ever-changing demands of contemporary environments. Morris 207(28), Illich 141(19). Rogers emphasizes that:

No approach which relies upon knowledge, upon training, upon the acceptance of something that is taught is of any use. Rogers 235(32)

In order to be effective in the face of changing environmental demands, school systems must embark upon an evolutionary developmental process designed to effect a more active, expressive and self-directing educational approach. Knowles 161(60), Maslow 187(179). Though goals of educational systems are often stated in terms of 'freedom', 'wisdom' or the 'full development of the individual' and school systems frequently assert that they advocate intellectual freedom at the earliest possible age, it is obvious that a tremendous gap exists between this proclaimed philosophy and actual educational action. The emphasis of educational action must clearly shift away from the concept of learning limited in time, confined in space, and centred on a subject-matter curriculum; education must be viewed as an existential continuum as long as life. Individuals must be prepared through basic education to chart and pilot their own course of learning according to their personal needs and desires. Archambault 7(430), Erikson 71(81), Faure 76(18,233), Gross 113(163), Hecht & Traub 120(23), Houle 134(81), Knowles 161(16,17), Tough 285(40). As Gardner says in Self Renewal:

Education goes far beyond the school buildings; the world is an incomparable

classroom and one's own life is a memorable teacher. Gardner 90(11,12)

Instead of focussing exclusively on teaching subject matter, schools should also emphasize respect for individuality and increased freedom. True self-education can only occur when people are not compelled to learn and others are not obligated to teach them - especially not to teach them a particular subject matter curriculum. Gibbons & Phillips 96(4), Illich 141(75,76). In The Farther Reaches of Human Nature, Maslow contrasts, from his own experience, the idea of intrinsic education and subject-centred education:

I am now very busily occupied in trying to catch up with all the epiphenomena of this notion of intrinsic education. Certainly one thing I can tell you. Our conventional education looks mighty sick. Once you start thinking in this framework, that is, in terms of becoming a good human being, and if then you ask the question about the courses that you took in high school, "How did my trigonometry course help me to become a better human being?" an echo answers, "By gosh, it didn't!" In a certain sense, trigonometry was for me a waste of time. My early music education was also not very successful, because it taught a child who had a very profound feeling for music and a great love for the piano not to learn it. I had a piano teacher who taught me in effect that music is something to stay away from. And I had to relearn music as an adult, all by myself. Maslow 187(170)

Formal educational process should build naturally on the actual life experiences of the students that attend them. Archambault 7(170,171), Faure 76(79), Morris 207(25). Formal educational systems should play a central role in the development of key personal attributes and skills required for lifelong self-direction in learning and living. A personalized educational approach that is not restricted solely to the acquisition of subject matter would allow students to learn what they actually need to learn. Students would learn actively, of their own volition, and would be responsible for their personal educational successes and failures. Holt 130(16,17), Maslow 187(182). Education must come to be viewed as a process in

each human being instead of a bank of subjects. This new educational process must be designed to develop individual skills of self-directed enquiry required for successful negotiation of the fluid demands of contemporary life. Faure 76(142,143), Knowles 161(16,17).

Educational Condition: COERCION

Postulate:

INDIVIDUALS WOULD LIVE BETTER, LEARN MORE, AND GROW MORE ABLE TO COPE WITH THE WORLD IF EDUCATION ABANDONED COERCIVE MEANS OF SHAPING HUMAN BEHAVIOR AND INSTEAD HELPED INDIVIDUALS LEARN TO SHAPE THEMSELVES.

The principles of general systems theory state that systems can be either open or closed. The characteristics of a closed system are described in Satir's

Peoplemaking: 7

A closed system depends on edict and law and order and operates through force, both physically and psychologically ... Closed systems evolve from certain sets of beliefs which are few, but powerful:

Man is basically evil and has to be controlled to be good.

Relationships have to be regulated by force.

There is one right way and the one with the most power has it.

There is always someone who knows what is best for you. Satir  
243(113,114)

Formal educational systems are largely closed systems which rely heavily on coercive authority to shape and control student behavior. This approach to education, Dewey says, originates from a psychological base which considers the child to be a passive receptor of external data. The student's will constitutes a force to be controlled and checked as student desires are, by nature, mischievous and immature. Dewey states that a common educational assumption is:

... that the mind of the individual is naturally adverse to learning, and has to be either browbeaten or coaxed into action. Archambault 7(5)

Satir asserts that human beings cannot flourish in these closed systems; at best

they can only exist. Satir 243(114). For many individuals, this means that their basic right to learn is often curtailed by the obligation to attend formal schools which restrict the pursuit of personal interests and creativity during increasing portions of their lives. Illich 141(12). Educational institutions generally insist that students conform to the external regulations of the educational order rather than tuning into personal creative potential; many teachers fail to recognise that learning initiative comes essentially from the personal needs and powers of the pupil. Archambault 7(5,6), Combs & Snygg 48(254), Corsini 51(200), Feldenkrais 77(4), Goertzel & Goertzel 105(277), Hecht & Traub 120(5), Holt 130(3,4), Morris 207(36), Satir 243(113), Schutz 252(440). Education has essentially become something that authoritarian teachers do to passive students. Young students learn quickly to yield to the conventional teacher's coercive rule and to associate all learning with being taught:

Institutional wisdom tells us that children need school. Institutional wisdom tells us that children learn in school. But this institutional wisdom is itself the product of schools because sound common sense tells us that only children can be taught in school. Only by segregating human beings in the category of childhood could we ever get them to submit to the authority of a schoolteacher. Illich 141(28)

In Learning To Be, Faure states that existing student-teacher relationships require fundamental reassessment, especially when they constitute:

... a dominator-to-dominated relationship ... entrenched on one side by the advantages of age, knowledge and unchallenged authority, on the other side by a position of inferiority and submissiveness. Faure 76(77)

In early childhood, students learn that to be successful in school they must sit at their desks and passively accept facts presented by their instructional 'masters';



they must not be active, question or participate. Billed as the specialist and sole resource in the classroom, teachers make all decisions relating to goals, content and instructional activities; they present, assign and evaluate by virtue of their authority. The teacher is viewed simultaneously as custodian, preacher and therapist. Illich 141(25-33). Holt describes the obvious inequity of this situation:

Students have seemingly unlimited obligations to teachers who have no obligations to them at all. The student owes the school and the teacher everything and can be penalized if he does not deliver; the school and the teacher owe the student nothing. As someone else put it, 'there are severe penalties for being a bad student but no penalties at all for being a bad teacher'. Holt 130(107)

It is no surprise then, that students, steeped in attitudes of extrinsic learning, develop conditioned responses to teachers. Maslow writes:

Classroom learning often has as its unspoken goal the reward of pleasing the teacher. Children in the usual classroom learn very quickly that creativity is punished, while repeating a memorized response is rewarded, and concentrate on what the teacher wants them to say, rather than understanding the problem. Since classroom teaching focuses on behavior rather than on thought, the child learns exactly how to behave while keeping his thoughts his own. Maslow 187(181).

Traditional schooling is rigidly other-designed and other-directed; students are constantly instructed as to what they should do, when to do it, how to do it and for how long. Education is considered an extremely serious business; teachers are often actually frightened by the sight of students enjoying themselves. Goertzel & Goertzel 105(277), Holt 130(3), Maslow 187(188). The strictures of this educational approach often deprive the student of enjoyable learning experiences, of opportunities to develop a sense of self worth and of the decisions as to how he should conduct his own education when he leaves the formal school system. Friere

87(58,59), Holt 130(3), Jung 149(14,15). Hecht and Traub comment:

What is the typical high school senior choosing when he chooses college? ... he's choosing a period of nonproductivity, of sitting on the sidelines just when he may be aching to get into the thick of things. He is choosing to learn second-hand through words and formal lectures, rather than directly through experience. He is choosing an incredible sedentary way of life ... at a time when he is already restless. Hecht and Traub 120(4)

Administrators of formal schooling appear to generally consider students mere depositories for knowledge; children who can learn only from a teacher. Friere 87(58,59). The unfortunate outcome of this situation is that upon completion of a prescribed term of confinement in schools, students move out into the world to fend for themselves and the educators want no more responsibility for them. Gibbons & Phillips 96(6), Morris 207(36). There exists an urgent need for a new educational approach; educational aims, the role of the teacher and the pupil, subject matter and instructional methodology must be redefined. Educators must accept that schools cannot be absolute and that coercion is not the only means of bringing about student effort toward learning goals. Morris 207(37). If students experience learning situations as humiliating, threatening, and painful, they will not learn what the teacher is trying to teach them, or if they do, they will forget it in a day or two. There can never be the reality of productive encounter, truthfulness or honesty when one person holds coercive power and authority over another. Holt 130(12,13,25). Education may begin with dependence but it must end in freedom. Holt 130(107), Klausner 155(5).

School attendance and participation should constitute an educational ladder upon which teachers effectively hoist the climber from the child's passive role to the adult's active one. Faure 76(69), Gross 113(163). Faure describes the

teacher-student relationship as the 'cornerstone of the edifice of traditional education' and offers ideas as to how this relationship should change to develop in students the capacity to be effectively self-directing and responsible:

The teacher's duty is less and less to inculcate knowledge and more and more to encourage thinking; his formal functions apart, he will have to become more and more adviser, a partner to talk to; someone who helps seek out conflicting arguments rather than handing out ready-made truths. He will have to devote more time and energy to productive and creative activities: interaction, discussion, stimulation, understanding, encouragement. Faure 76(77).

In Instead of Education, Ways To Help People Do Things Better, Holt concludes that people:

... will live better, learn more, and grow more able to cope with the world if they are not constantly bribed, wheedled, bullied, threatened, humiliated, and hurt; if they are not set endlessly against each other in a race that all but a few must lose; if they are not constantly made to feel incompetent, stupid, untrustworthy, guilty, fearful, and ashamed; if their interests, concerns, and enthusiasms are not ignored or scorned. Holt 130(11)

The spell of coercive education must clearly be broken and replaced with an educational approach that develops the inner resources of individuals in preparation for a lifetime of self directed learning and growth. It is time for schools to abandon coercive means of shaping human behavior and time instead help individuals learn to shape themselves. Archambault 7(xxiv), Bandura 14(212), Gardner 90(31), Holt 130(4), Illich 141(51).

## Educational Condition: INDOCTRINATION

## Postulate:

EFFECTIVE SELF-EDUCATIVE CAPACITIES LIBERATE INDIVIDUALS FROM THE OBLIGATION TO SHAPE PERSONAL EDUCATIONAL EXPECTATIONS ACCORDING TO THE SERVICES OFFERED BY FORMAL EDUCATIONAL INSTITUTIONS.

Society currently offers an educational system that very effectively 'schools up' its members so that learning is generally equated with what is taught in formal educational institutions. Collins & Moore 46(49), Gibbons 94(41), Gibbons & Phillips 96(6), Gross 113(51), Illich 141(12,47), Knowles 161(19,20), Maslow 187(168). Gross writes that generally students are conditioned to believe that:

... the "right" way to learn is in a classroom, from a teacher and from texts, through listening to 'expert authorities' and doing assigned reading, by taking tests and getting grades. Gross 113(16,17)

By assigning grades and packaging instruction with certification, schools effectively cultivate student dependence for learning upon teachers and institutions. They instill in learners the belief that there is a secret to everything in life and that only teachers can properly reveal these secrets. The unfortunate result of this indoctrination process is that most individuals know only how to be taught, they have not learned how to learn. Gibbons & Phillips 96(8), Illich 141(75,76), Knowles 161(14,20). Individuals have come to identify their personal and cognitive growth solely with educational planning and manipulation and as a result, many individuals have difficulty accepting the concept of self-directed learning. They find it inconceivable that independent, unconstrained learning is "real" education. Gross 113(16,17), Illich 141(39). A kind of universal myopia has

been created by formal education's fixation on credits and credentials earned through the successful completion of examinations. Gibbons 94(42), Gross 113(51), Holt 130(3), Illich 141(12,13). Illich comments on the emphasis of schools on quantifying achievements:

The institutionalized values schools instill are quantified ones. School initiates young people into a world where everything can be measured, including their imaginations, and, indeed, man himself ... Once people have the idea schooled into them that values can be produced and measured, they tend to accept all kinds of rankings. There is a scale for the development of nations, another for the intelligence of babies, and even progress toward peace can be calculated according to body count. In a schooled world the road to happiness is paved with a consumer index. Illich 141(40)

Evaluation by examination has become an obsession; all student successes are relative and quantified. Goertzel & Goertzel 105(247), Holt 130(80). Gibbons and Phillips write:

In schooling, evaluation is ... always based upon a written test - even when the topic is how to do something ... students compete on the same test against an abstract norm, and from the results, are sorted into levels of success and failure. Gibbons & Phillips 96(9)

The educational indoctrination process is so effective that skills not learned and evaluated through formal schooling are often discriminated against. Collins & Moore 46(61-63), Gibbons 94(41,42), Goertzel & Goertzel 105(241), Hecht & Traub 120(vi), Illich 141(25). Gross writes:

'Degrees are used as fly swatters' ... 'to kill unpapered people' Gross 113(51):

Learners must no longer be forced to submit to discrimination based on whether they possess a certificate or diploma. Competence must finally be detached from

curriculum. Gibbons 94(53), Illich 141(12,39). Individuals must develop the awareness that learning is the human activity which least needs manipulation by others and educators must realize that intellectual accomplishment is not the exclusive domain of traditional academic scholarship. Gibbons 94(42,43), Gross 116(40), Illich 141(12). The role of education must shift away from the arbitrary and manipulative toward the support of self direction in learning. Archambault 7(310), Gibbons & Phillips 96(9,10), Illich 141(52,53). Gibbons writes that:

A way of helping students of all ages to become skillfully self-directed must be found and made a part not just of schooling, but of all forms of education. Gibbons 94(42)

A new educational technology must be conceived which supports personal growth rather than educational addiction. Self-education constitutes such a technology, an effective means of liberating individuals from the obligation to shape their personal educational expectations according to the services offered by established educational institutions. Gibbons & Phillips 96(9,10), Holt 130(5), Illich 141(50,103), Knowles 161(14-16), Tough 285(19). It is time for educational systems to shift gears and to give individuals responsibility for their own educations. Faure explains:

Democratizing education will only be possible if we succeed in shaking off the dogmas of conventional pedagogy, if free and permanent dialogue is set up within the educational process, if this enhances individual awareness of life, if learners are guided towards self-education and, in short, change from objects into subjects. Education is all the more democratic when it takes the form of a free search, a conquest, a creative act; instead of being, as it so often is, something given or inculcated, a present or a constraint. Faure 76(75)

Educational Condition: INVOLVEMENT

Postulate:

LEARNING IS ESSENTIALLY ACTIVE; SCHOOL SYSTEMS MUST START TO INVOLVE LEARNERS IN THEIR PERSONAL EDUCATIVE PROCESSES SO THAT STUDENTS WILL COME TO DEPEND LESS ON THE CLASSROOM TEACHER AND MORE ON THE TEACHER INSIDE THEMSELVES.

Before the advent of formal school systems, individuals were largely educated by life experiences in and around their family household. Educational activities were born of the necessity to survive and every member of the household had his own share of the work. Children, as they gained in strength and capacity, were gradually initiated into the mysteries of several processes. The work was a matter of immediate and personal concern and everyone participated. When formal educational institutions were established, however, the active learning focus of household education was apparently left behind. Archambault 7(298), Holt 130(3). Formal school systems were formulated in such a way that students have largely been regarded as passive "internalizers" of information provided and controlled by external agents. Gibbons and Phillips comment:

In schools teachers do most of the initiating; they are the major actors to their largely passive student audiences ... This general practice of managing student effort does not develop the initiative they will need to manage their own education. Gibbons & Phillips 96(6)

Formal education, in general, has failed to recognize that learning is an intensely personal, active, and creative process as well as that learning initiative must come from the actual needs of each individual learner. Schools have tended to hold on to a "passive internalization" concept of learning instead of building new

educational practices around the abundant evidence indicating that individuals learn best from active personal involvement in activities relating to the real concerns they are experiencing in their lives. Carnegie 40(58), Combs & Snygg 48(193), Gibbons 94(42), Gibbons & Phillips 96(6), Holt 130(12), Klausner 155(5), Knowles 161(20). Kidd explains that:

... learning is the active, not the passive, part of the process: the learner opens up himself, he stretches himself, he reaches out, he incorporates new experience, he relates it to his previous experience, he recognises this experience, he expresses or unfolds what is latent within him. Kidd 153(15)

This active reaching out of the individual, each purposeful expenditure of effort to procure the materials that his potentialities demand in order that they may come into action and find satisfaction, even if blind at first, constitute the essential first step in an interaction that will lead to effective learning and personal growth. Each and every life experience in which the individual engages, including attendance in school, constitutes a potent learning opportunity that may serve to facilitate this learning and growth. Archambault 7(5), Gibbons 94(47), Holt 130(12), Smiles 266(57). Life is a struggle and each individual must grapple with life problems in a personal search for identity, relatedness and meaning. Allport 5(24-26), Combs & Snygg 48(353), Frankl 85(8,9), Gardner 90(124), Illich 141(97), Kopp 162(4), Maslow 189(10), Schiffman 248(9). Jung explains that experience has clearly shown that the environment cannot give man as a gift:

... that which he can win for himself only with effort and suffering ... We must go through a process of self nourishment. Jung 149(58)

Though most schools seem to separate 'learning' and 'doing' in the course of everyday educational practice, they are not different kinds of acts. Carnegie



40(58), Rogers 235(276). Holt emphasizes that education is clearly:

... something a person gets for himself, not that which someone else gives him. Holt 130(3)

Nothing that is of real value can be achieved without the full investment of one's 'self' and courageous working toward the achievement of a personally meaningful goal. Assagioli 10(90), Faure 76(142,143), Smiles 266(230). Rogers elaborates:

Anything that can be taught to another is relatively inconsequential, and has little or no significant influence on behavior ... the only learning which significantly influences behavior is self-discovered and self-appropriated. Rogers 235(276).

It is clear that individuals must be intimately involved in their personal educational processes. Gross states clearly that:

This idea of self-development is the link between your life and your learning. A free learner seizes the exhilarating responsibility for the growth of his or her own mind. This starts when you realize that you must decide what you want to make of yourself. However much your learning and growth involve other people and feed on their insights and skills, in the final analysis it is you who must choose and conduct your own process of life change. Gross 113(22)

Gardner explains that in traditional educational process, we attempt to:

... teach young people by giving them cut flowers when we should be teaching them to grow their own plants. We stuff their heads with the products of earlier innovations rather than teaching them to innovate. We think of the mind as a storehouse to be filled when we should be thinking of it as an instrument to be used. Gardner 90(25,26)

Directive teaching does contribute to certain kinds of learning under certain circumstances. Generally, however, educational practices could be much more

effective if they incorporated more active student involvement. Holt 130(66), Morris 207(28). Illich states that:

Our options are clear enough. Either we continue to believe that institutionalized learning is a product which justifies unlimited investment or we rediscover that legislation and planning and investment, if they have any place in formal education, should be used mostly to tear down the barriers that now impede opportunities for learning, which can only be a personal activity. Illich 141(49)

In order to improve educational process, we must shake off the dogmas of conventional pedagogy. Free and permanent dialogue must be set up within educational systems to allow for learning to take on the form of a free search, a conquest, a creative and self-directed act. Archambault 7(171,306), Faure 76(74,75), Illich 141(49,64). Each student must learn to be both the learner and the teacher at the same time; each individual's learning capabilities will be equal to his ability to 'put the teacher inside himself'. Gross 113(63), Holt 130(66), Rogers 235(276).

Holt says each student must:

... more and more, grade his own tasks, get his own feedback, make his own corrections, and develop his own criteria, standards, for doing these things. Only as he is able to depend less and less on the teacher outside, and use more and more the teacher inside, will he be able to do well what he wants to do ... And so it must always be the first and central task of any teacher to help the student become independent of him, to learn to be his own teacher. The true teacher must always be trying to work himself out of a job. Holt 130(66)

The student must become the centre of his own learning; learning action must belong to him and be an integral part of him instead of being ordered and controlled by an external instructional agent. Gross 113(17,18), Holt 130(5), Illich 141(12,13), Smiles 266(302). Knowles sums up:

... there is convincing evidence that people who take initiative in learning (proactive learners) learn more things, and learn better, than do people who sit at the feet of teachers passively waiting to be taught (reactive learners) ... They enter into learning more purposefully and with greater motivation. They also tend to retain and make use of what they learn better and longer than do reactive learners. Knowles 161(14)

Educational Condition: PEDAGOGICAL DOGMA

Postulate:

SELF-DIRECTED LEARNING TRANSCENDS THE RIGID DIDACTIC ROLE OF TRADITIONAL TEACHER-DIRECTED EDUCATION TO CHANGE STUDENTS FROM OBJECTS INTO SUBJECTS OF A SELF-MANAGED, CREATIVE EDUCATIONAL PROCESS.

Self-education is vastly different from the teacher-directed education generally associated with formal school systems. Gibbons & Phillips 96(9), Knowles 161(20). In schools, the teacher exercises control in goal setting, content selection, unit organization, and choice of learning style. Gibbons and Phillips comment:

In schools the teacher does most of the work, setting up each lesson, securing and utilizing the necessary materials, supervising the efforts the students put in and the progress they are making, telling them when to begin and when they are finished. Gibbons & Phillips 96(7)

In self-education, however, the locus of control lies within the student. Gibbons 94(53), Knowles 161(60). Knowles explains:

Self-education assumes that the human being grows in capacity (and need) to be self-directing as an essential component of maturing, and that this capacity should be nurtured to develop as rapidly as possible. Knowles 161(20)

Self-education supports and encourages this natural maturational process by allowing the student to exercise increasing control over personal learning. The individual initiates learning endeavours, sets goals, arranges supplies, makes contacts, and supervises his own activities in accordance with his unique level of learning maturity. Gibbons & Phillips 96(5). The learner becomes the central

performer in his personal educational process by accepting responsibility for the selection and management of learning content and methodology. Gibbons & Phillips 96(5).

In schools, the teacher also controls the evaluation of learning performance. Individual students are evaluated in competition with other students and in relation to abstract norms. Test results are then sorted into levels of success and failure. Gibbons & Phillips 96(5,9), Illich 141(16). Holt explains:

S-schools give tests ... not to find out what you know but what you don't know, and not so that they may help you find out what you don't know, but only so that they may say you are better or worse than other students. Holt 130(80)

Self-education, unlike traditional education, requires individuals to evaluate themselves in comparison with their own earlier performance in ways appropriate to them and their own special activities. Gibbons & Phillips 96(5), Holt 130(80), Knowles 161(61). This evaluation data is then used to measure personal progress and to decide what to learn next. Gibbons & Phillips 96(9).

A second difference between self-directed learning and teacher-directed learning involves the role of the learner's experience. Teacher-directed education generally treats the learner's experience as far less valuable a learning resource than that of the teacher, textbook writers and materials producers. Teachers generally view the learner's experience as something to be built on rather than used. Knowles 161(60). Students are conditioned to:

... think of resources for learning as residing outside themselves - in

teachers, experts, books and the media, Knowles 161(71).

The main purpose of traditional schooling reflected in most curricula is the absorption by learners of disciplines of knowledge from designated experts and authorities. The teacher has the responsibility to see to it that the resources of these experts are transmitted to the learner. Gibbons & Phillips 96(5), Knowles 161(20), Jenks & Murphy 143(21). Students most often do this learning from books, sitting at desks in classrooms. Gibbons & Phillips 96(5), Jenks and Murphy 143(21), Knowles 161(20,71). Schools, maintained by obligatory attendance, effectively separate schooling from the personal lives of the students. Faure 76(69), Gibbons & Phillips 96(7).

Self-directed learning, however, views the learner's experience as a valuable and rich resource for learning which should be explored along with the resources of experts. The teacher's role in self-education is one of facilitator and resource person in a learning process planned and managed by the learner. Self-directed learning activities stimulate new interests as the learner searches for knowledge that is constantly preceded by a question arising from his personal experience. In self-education, students learn more often by 'doing' and their learning is linked closely with the demands of their everyday living. Gibbons & Phillips 96(7), Jenks & Murphy 143(21), Knowles 161(18,20).

Teacher-directed learning differs from self-directed learning in that it assumes that students become ready to learn different things at different maturational levels. According to this assumption, any given set of learners will be ready to learn the same things at specified levels of maturity. Goertzel and Goertzel write

that in traditional schooling:

... children of the same chronological age but with widely varying abilities and interests are required to perform essentially identical tasks. Goertzel & Goertzel 105(370)

Traditional schooling offers a variety of subjects in a fixed pattern and set time-frame in an attempt to make everyone minimally competent in the same or similar curriculum of knowledge and skills. Gibbons & Phillips 96(5), Maslow 187(168), Knowles 161(20). Self-education, however, assumes that individuals become ready to learn what is required to perform their evolving life tasks or to cope more adequately with their life problems, and that each individual therefore has a somewhat different pattern of readiness from other individuals. Faure 76(148), Gibbons & Phillips 96(8), Goertzel & Goertzel 105(246), Knowles 161(20), Maslow 187(191). The learning orientation of self-education, therefore, is task- or problem-centred. Self-directed learning activities are organized as task accomplishing or problem solving learning projects. Knowles 161(20,21). Gibbons writes:

Self-education is usually applied education - learning for immediate application to a task, and from the practical experience involved in executing it. Gibbons 94(53)

Activity-oriented and experiential, self-education encourages students to make direct contact with concrete objects and to engage in interactions with practitioners. Archambault 7(10,11), Gibbons & Phillips 96(5). Self-education involves a concentration of effort in a single activity or field pursued within a flexible time frame. Gibbons & Phillips 96(5), Goertzel & Goertzel 105(246), Jenks & Murphy 143(21).

Motivational conditions are another area of striking differences between teacher-directed and student-directed education. Teacher-directed learning assumes that students are motivated to learn in response to external rewards and punishments, such as grades, diplomas, awards, degrees and fear of failure. Jenks & Murphy 143(21), Knowles 161(21). The teacher attempts to maintain student effort through a program of external motivation and discipline. Gibbons & Phillips 96(5). Griffin comments:

... too often educators fall into the trap of believing that students are dumb, apathetic and not motivated to learn - simply because they don't happen to think it is important that they learn the particular things we think they should learn right now. Griffin 111(6)

In contrast, self-education assumes that learners are motivated primarily by internal incentives, such as need for esteem, desire to achieve, the urge to grow, the satisfaction of accomplishment, the need to know something specific, and curiosity. Gibbons & Phillips 96(10), Jenks & Murphy 143(21), Knowles 161(21). Unlike traditional education, individual effort is maintained through self-motivation and self-discipline. Gibbons 94(53), Gibbons & Phillips 96(5).

The learning climate of teacher-directed education is drastically different from that of self-directed education. In teacher-directed education, the climate is largely one of teacher authority and inter-student competition. Knowles comments:

Students typically enter into any activity labeled "educational" with the notion that the appropriate relationship for them to establish with fellow students is that of competitor. Knowles 161(71).



In self-education, however, the learning climate is generally informal, mutually respectful, consensual, and supportive. Other learners are regarded as collaborators rather than as competitors. Peers also constitute valuable learning resources. While self-education involves independent decision-making, it also requires interdependence with others for effective learning. With each act of self-education, the person asserts, practices and cultivates his capacity for co-operative action as well as his capacity for independent action. Collins & Moore 46(229,230), Gibbons & Phillips 96(5,8), Goertzel & Goertzel 105(246,278), Guinagh 114(viii), Knowles 161(71,72).

Traditional teacher-directed education as it is presently designed is generally inadequate preparation for the lifelong self-education complex contemporary environments demand. Gibbons & Phillips 96(9), Knowles 161(14-16). Students leave formal schooling knowing only how to be taught, they have not learned how to learn. Gardner 90(25,26), Knowles 161(14). As a consequence:

School graduates experience a sudden and dramatic shift from obeying the external controls of the schools to establishing an internal locus of control over their own education, and an equally dramatic shift to responsibility for the success or failure of their efforts. Schools do not employ strategies designed to manage this shift, nor do they give students supervised practice in responsible control of their own learning. The skillful exercise of control is essential to teaching oneself effectively. Gibbons & Phillips 96(6)

Graduates of traditional education do not think of themselves as natural, lifelong learners. It is urgent that creative forms and means of developing self-directing learners be examined. Traditional education must begin to concentrate on the initiation and support of self-educative enterprises. Faure 76(209), Gardner 90(5,6), Tough 285(19). Students must be transformed from the objects of education into

subjects of their own personal educational processes. Della-Dora and Blanchard explain:

... students need to have opportunities to learn how to choose what is to be learned, how it is to be learned, when it is to be learned, and how to evaluate their own progress. Students need to learn all this in settings which provide for the active assistance and cooperation of teachers and other adults, and of their peers. Della-Dora & Blanchard 60(1)

Formal educational technology largely determines the extent and direction of individual self-educative practices. Feldenkrais 77(3), Knowles 161(19). Self-directed learning offers ways and means of transcending the rigid didactic role of traditional schooling and of restructuring educational technology to effectively prepare individuals to meet the demands of their personal futures. Faure sums up:

Self-learning ... has irreplaceable value in any educational system. Faure 76(209)

## Educational Condition: TEACHER RESOURCES

### Postulate:

TEACHING FOR SELF-EDUCATION CONSTITUTES A CHALLENGING NEW PROFESSIONAL ROLE WHICH MAXIMIZES THE UTILIZATION OF TEACHER RESOURCES THROUGH THE TRANSFERENCE OF OWNERSHIP AND RESPONSIBILITY FOR LEARNING TO THE STUDENT.

Almost all educators agree that teachers should develop in students the skills required to become competent lifelong, self-directed learners. This ideal is often evident in the goal and philosophy statements of educational institutions. Faure 76(185). Even as early as 1859, Smiles was writing that the best teachers:

... recognise the importance of self-culture, and of stimulating the student to acquire knowledge by the active exercise of his own faculties. They have relied more upon training than upon telling, and sought to make their pupils themselves active parties to the work in which they were engaged; thus making teaching something far higher than the mere passive reception of the scraps and details of knowledge. Smiles 266(302)

While most educators support the desirability of active self-direction in learning, there does not seem to be agreement as to how the task can be accomplished. Most school systems place little emphasis on the development of self-direction in current educational practice; self-education is generally placed far below the traditional teacher-directed learning approaches in the annual list of priorities. Rogers 235(293). The traditional model of teacher as content transmitter and judge of students' absorption of subject-matter is still prevalent in the majority of school systems. Knowles 161(31), Rogers 235(293). Maslow comments on the performance of this traditional role:

... the overwhelming majority of teachers ... are devoted to passing on the knowledge that children need in order to live in our industrialized society. They are not especially imaginative or creative, not do they often question why they are teaching the things they teach. Their chief concern is with efficiency, that is, with implanting the greatest number of facts into the greatest possible number of children, with a minimum of time, expense and effort. Maslow 187(180)

The main teacher function in traditional schooling appears to remain the preparation and execution of a content plan; the teacher decides what content is to be covered, how to organize material into manageable units, how to sequence units, what means to utilize in the transmission of material, and how to evaluate student reception and absorption. Knowles 161(31,32). This emphasis on content coverage essentially ignores individual differences among students and because students are generally scheduled for one fifty to sixty minute period for each course, prohibits effective individualization of instructional process as well as out-of-school learning activities. Jenks & Murphy 143(27). Additional unfortunate outcomes of this popular content model of instruction include the indoctrination of students with traditional ideas, the eradication of individual creativity and the cultivation of a continuing dependence on educational institutions. Gibbons & Phillips 96(8), Goertzel & Goertzel 105(247), Guinagh 114(xi,xii). The increasing complexity of contemporary living, however, is forcing individuals of all ages to seek out ways of developing the self-directed enquiry skills required for effective adjustment to changes in knowledge processes, technology and social organization. Faure 76(69,161), Gardner 90(27,35), Hecht & Traub 120(9), Houle 134(81), Knowles 161(14), Mahoney & Thoresen 184(206), Robbins 231(11), Tough 285(40). This situation has caused demands for educational services to increase dramatically. Governments and educational officials are consequently faced with a serious dilemma:

On one hand, it is or will eventually become impossible or at least irrational to mobilize financial resources in direct proportion to the total demand for schooling. On the other hand, the demand for education is already or soon will be of greater dimensions than traditional educational systems have the capacity to handle, even when operating at optimum levels. Under these circumstances, governments can hardly fail to question whether trying to satisfy this demand uniquely through existing institutions and budgets is reasonable, and whether it would not be more appropriate to use other forms and other means. Faure 76(49).

One means of meeting this rapidly increasing demand for educational services is to adopt as the fundamental aim of education the preparation of individuals to take full ownership and responsibility for their personal learning and living. Gardner 90(13), Knowles 161(7), Mahoney & Thoresen 184(206). Implicit in such an approach is the need to work toward new values and educational structures designed to promote individual self-direction to replace current emphasis on conformity and teacher-established rules. Mahoney & Thoresen 184(207). The challenge for teachers is to permit and promote student responsibility in all phases of learning; planning what is to be learned, engaging actively in the process, and assessing personal progress. Jenks & Murphy 143(25). Faure suggests that:

From the standpoint of lifelong education and in the present state of human knowledge, calling teachers 'masters' (whichever of its meanings we give the word), is more and more an abuse of terms. The teacher's duty is less and less to inculcate knowledge and more and more to encourage thinking ... Subject-matter must be individualized ... authoritarian forms of teaching must give way to relationships marked by independence, mutual responsibility and dialogue. Faure 76(77-80).

In self-education, the teacher performs the role of procedural guide and co-learner within the framework of a process structure rather than that of unchallenged content expert in a content structure. Archambault 7(xxviii), Knowles 161(33-38). Facilitators of self-education select procedures that are likely to be

effective with a particular group of learners; these include both those required to create an appropriate learning climate as well as those which assist students in the planning of personal learning projects, the diagnosis of learning needs, the setting of realistic goals, the design of learning plans and the evaluation of learning outcomes. The focus of the learning environment becomes the student rather than the teacher. Archambault 7(359), Combs & Snygg 48(388), Faure 76(136), Holt 133(62), Jenks & Murphy 143(17,18,22), Knowles 161(33), Rogers 235(292,293). Holt comments:

... the true teacher, the master ... does not want to make the student into a slave or a puppet, but into a new master. He is not a behavior modifier. He does not move the student by imperceptible steps toward an end which only he, the master, can see. He seeks instead to give the student greater control of his own behavior, so that he may move himself toward his own ends. Holt 130(58)

Self-education transforms learning into a process of becoming. Rogers states that when the teacher creates a relationship characterized by mutual respect, genuineness, openness, warm acceptance and sensitivity with a student:

... the student will become a self-initiated learner, more original, more self-disciplined, less anxious and other-directed. Rogers 235(37,38).

There exists a reciprocal relationship between teacher and student; they plan together and learn from each other. The teacher is not an authority in dispensing ideas to be absorbed but rather a guide, a stimulus, and catalyst in getting the student to direct his own learning. Archambault 7(xxiv), Friere 87(66-73), Griffin 111(6), Illich 141(97), Jenks & Murphy 143(17,18), Morris 207(28), Rogers 235(40). Students work at their own pace and in the areas of their special interests; the teacher's behavior is tailored to the students' unique instructional needs. Students

feel needed and assume responsibility for what happens to them in the course of their learning. Faure 76(220), Goertzel & Goertzel 105(267), Jenks & Murphy 143(25).

It is important to note that the transition from teacher-directed to student-directed learning often constitutes a serious crisis for both teacher and student. Knowles 161(17,33). The challenge to set one's own goals and pursue them with full personal responsibility, so that any failures are clearly one's own, is nearly always a crisis for students making the changeover. Knowles writes that:

Many students enter into a new learning situation feeling the deep need for the security of a clear structural plan - an outline, a course syllabus, time schedule and the like. They want teachers who know what they are doing, who are in charge. When they first hear me describe my perception of the role of a facilitator and resource to self-directed learners it seems so structureless to them that they become anxious. Knowles 161(37)

This transition period, though difficult, is a necessary part of productive self-direction. It must be accepted and understood as a predictable, important phenomena. Changing from a teacher-directed to a student-directed program involves both student and teacher in a dramatic shift in the rules of the learning-teaching process:

... students may have to fail at self-reliance and responsible self-management before they can make the changes necessary to become successfully self-directed. It is a crucial learning period all participants must endure. Gibbons & Phillips 96(28)

The change in focus from teacher-directed to student-directed learning is also difficult for the teacher. No longer the sole authority in the classroom, the teacher is often unsure of exactly how and when to act. Knowles describes his

personal experience in shifting from teacher to facilitator of learning:

It required that I divest myself of the protective shield of an authority figure and expose myself as me - an authentic human being, with feelings, hopes, aspirations, insecurities, worries, strengths, and weaknesses. It required that I be clear about precisely what resources I did and did not have that might be useful to the learners, and that I make the resources I did have accessible to them on their terms. It required that I extricate myself from the compulsion to pose as an expert who had mastered any given body of content and, instead, join my students honestly as a continuing co-learner. Knowles 161(33,34)

Involvement in student-directed learning is challenging for both teacher and student. An effective teacher of self-education must assist students in the accomplishment of three major transitions:

The transitions from teacher-directed to student-directed learning, the transition from student-directed learning to guided-self-education, and the transition from guided self-education to the independent pursuit of excellence. Gibbons & Phillips 96(11)

The first of these involves teaching students who are accustomed to teacher-prescribed content and method, how to decide for themselves what and how they will learn, The second involves learning to relate day-to-day studies to the larger issues of life, society, and culture while still under the guidance of the school. The third transition is from school to adult life and the commencement of true self-education. Gibbons & Phillips 96(12). The unique teacher-student relationship that grows through the effective accomplishment of these transitions can be advantageous for teacher, student and educational system. Self-education maximizes the effective utilization of teacher resources because students develop the capacity to successfully manage their own learning activities. Gibbons and Phillips elaborate on benefits to the teacher:



... teachers of self-education help themselves by simplifying their role and by sharing the responsibility for learning with students and their parents rather than taking full responsibility for it. Self-education is not another task added on to all the tasks of teachers. Teaching for self-education is a new role, but it consolidates all teaching activity into a single task: to challenge students to plan and execute their own pursuit of excellence. The teacher makes fewer presentations, and spends less time on managerial trivia, motivation and discipline. More time is devoted to the process of learning. Teachers deal with fundamental problems students face in becoming self-directed. Gibbons & Phillips 96(26).

Teaching for self-education clearly constitutes both a necessary and challenging new professional role. Gibbons & Phillips 96(26). Conditions in which teachers are trained must be changed so that, contrary to traditional ideas and practice, teachers will learn to adapt teaching process to the unique needs of each learner. Faure 76(217). If teachers make the switch from directing students' activities to helping them learn how to direct their own, they will make a profound contribution to the students' lives. By conveying to students the power to direct their personal learning endeavours, teachers can help students achieve excellence as well as prepare students for the personal decision-making and self-directed learning that will be demanded of them all through their lives. Gibbons & Phillips 96(26), Maslow 187(181).

Educational Condition: NON-TRADITIONAL LEARNING APPROACHES

Postulate:

TO MAXIMIZE THE LEARNING POTENTIAL OF NON-TRADITIONAL LEARNING APPROACHES, INDIVIDUALS MUST DEVELOP SPECIALIZED SELF-DIRECTED ENQUIRY SKILLS.

Numerous non-traditional learning approaches have emerged during recent years as educators have searched for alternatives to existing educational practice. Faure 76(180), Griffin 111(6). A sampling of current educational literature reveals an array of non-traditional learning approaches emphasizing individualization of educational enterprise. These learning approaches are labelled variously as; self-planned learning, self-instruction, self-inquiry, autonomous learning, self-teaching, individual learning, independent study, self-directed learning, individually prescribed instruction, and self-study. Faure 76(134), Griffin 111(6), Knowles 161(18), Tough 285(92).

The widespread existence of these non-traditional learning approaches constitutes an embryonic technology for the practice of self-education as they allow students to be engaged in real and important decisions about their learning. Faure 76(134), Griffin 111(8), Knowles 161(18), Tough 285(92). Hecht and Traub quote Samuel Gould, chancellor of the State University of New York, on the thrust of non-traditional study:

Non-traditional study is more an attitude than a system ... This attitude puts the student first and the institution second, concentrates more on the former's need than the latter's convenience, encourages diversity of individual opportunity rather than the uniform prescription, and deemphasizes

time, space, and even course requirements in favor of competence and, where applicable, performance. It has concern for the learner of any age and circumstance, for the degree aspirant as well as the person who finds sufficient reward in enriching life through constant, periodic, or occasional study. This attitude is not new; it is simply more prevalent than it used to be. It can stimulate exciting and high-quality educational progress. Hecht & Traub 120(215)

Non-traditional learning approaches present a wealth of resources and opportunities to learners. Gross writes:

These programs eliminate rigid prerequisites and requirements for taking courses, so that you can design your own education around your major concerns, enthusiasms, and work or leisure activities. In such programs sitting in classrooms, taking tests, and piling up credits have been replaced by projects in which you master the skills and acquire the knowledge that you need in the ways that best suit your life style. Gross 113(21)

Hecht and Traub confirm Gross's comments concerning the flexibility and diversity of opportunity offered through non-traditional instruction:

Instruction can take place almost anywhere; in religious institutions, government agencies, museums and galleries, YMCA's and the like, performing arts studios, or theaters - plus, of course, conventional academic institutions. It may be offered through employers, industry, self-study, tutors, recreational and sports groups, or proprietary and correspondence schools. The forms of instruction may include lectures and classes; on-the-job training; short term conferences, institutes and workshops; individual lessons from a private teacher; discussion groups; independent informal study; travel-study programs; community projects; television or video cassettes; radio, records, or audio cassettes; computer-assisted instruction; even talk-back telephone instruction! Hecht & Traub 120 (215,216)

It appears that non-traditional education can, and does, take a hundred different forms. Though the current educational emphasis has remained on learning that parallels courses or subjects that institutions already offer; individual learning developments have resulted in more flexible formal educational practices. The large dimensions of this innovative wave of non-traditional learning approaches can be

discovered by listing some of the new forms of individualized teaching; polyvalent classes, non-graded schools, transition courses, comprehensive schools, multivalent schools, unstreamed classes, drop-in high schools, worker's universities, "invisible" universities, free studies, heuristic life experience learning, credit by examination, "do-it-yourself" colleges, "universities without walls", and individually prescribed instruction. Faure 76(134), Griffin 111(7), Gross 113(21,87), Hecht & Traub 120(221), Knowles 161(16). All these forms of non-traditional learning recognise and legitimize the self-directedness of learners. They stress personal diagnosis and self-management of learning activities. Faure 76(134), Griffin 111(7). Though it is too early to assess the relevant merits of these educative approaches, their common focus and its implications are very significant. Knowles writes:

... many of the new developments in education ... put a heavy responsibility on the learners to take a good deal of initiative in their own learning. Students entering into these programs without having learned the skills of self-directed enquiry will experience anxiety, frustration, and often failure, and so will their teachers. Knowles 161(15)

To maximize the learning potential of these educational approaches, individuals must first develop specialized self-directed enquiry skills currently not provided for in either formal education or these non-traditional learning techniques. Formal education must begin to provide individuals with the means, tools and incentives for self-education. Faure 76(134), Knowles 161(17). All aspects of educational action must concentrate on the cultivation of these specialized skills in order to prepare individuals to be successfully self-directing in their educational endeavours and throughout their entire lives. Faure 76(5-11,181,209), Gardner 90(25), Gross 113(163), Knowles 161(16), Maslow 187(183).

Educational Condition: SELF-CULTURE

Postulate:

SELF-EDUCATION IS WIDELY PRACTICED BY INDIVIDUALS IN THE COURSE OF THEIR EVERYDAY LIVING AS WELL AS AT THE HIGHEST LEVELS OF PROFESSIONAL ACTIVITY.

Self-education in one form or another is already a reality. The idea of lifelong education has gathered great strength over the past ten years, although it is an illusion to think of it exclusively as a discovery of our time. Throughout history and throughout the world, self-education has been common and important. Faure 76(142), Gibbons & Phillips 96(1), Houle 134(11), Tough 285(92). Every era has produced self-directed learners. Houle explains:

As the examples of Browning and Descartes suggest, the continuing learner has existed in every age. To anyone with a classical education, examples from antiquity come readily to mind. Plato's dialogues and the contemporary descriptions of the Lyceum and other schools testify to the passion for lifelong learning among at least a few of the Greeks. The works of Plutarch, Cicero, and the other Roman writers are rich with illustrations; among them are Cato learning Greek at eighty, Alexander carrying the works of Homer with him everywhere, and Caesar trying to plan each day so that it would include administration, sleep, writing and study. Houle 134(10)

There is nothing new in the idea of the continuity of the educational process. Whether they do so consciously or not, individuals keep on learning and training themselves throughout their entire lives. Faure 76(142), Feldenkrais 77(4). Gibbons and Phillips comment:

Infants teach themselves to walk, to talk, to play and even to read (Kendall, 1980). School children learn new social roles, hobbies and jobs; they may even master such difficult fields as electronics through their own

learning efforts after school hours. Adults learn in their own ways and by their own means to manage their lives, to be marriage partners and parents, to find pleasure through avocations, to deal with personal problems - such as aging and divorce - and to become proficient in their jobs. Gibbons & Phillips 96(1,2)

Learning, therefore, occurs informally as well as formally. Gibbons 94(42), Gibbons & Phillips 96(1), Illich 141(12,13), Tough 285(1). Research conducted by Tough identified that a great number of adults are engaged in 'learning projects' throughout much of their lives. These learning projects are highly deliberate efforts to gain certain knowledge and skill or to change in some other way. Many of these individuals are unaware that they are involved in a 'learning project', they simply undertake this learning because they have a problem and require a solution. Gibbons & Phillips 96(1,2), Knowles 161(20), Tough 285(1,4,28). Tough reveals that ninety percent of adults of all ages, all occupational backgrounds and educational levels as well as in several countries, conduct at least one deliberate learning project every year. A typical learning effort requires one hundred hours and the average is five such projects annually for a total investment of five hundred hours per person. Over seventy percent of these learning endeavours are totally self-initiated and self-directed, no more than twenty percent involve formal educational institutions. Tough 285(1,13), 288(1).

Research conducted by Gibbons on experts without formal training also confirms the extraordinary extent of self-directed learning endeavours. By studying the biographies of twenty acknowledged experts without formal training, it was found that the accomplishments of these individuals are derived from their extra-curricular life experiences rather than through formal educational means. Gibbons 94(47). Expertise was developed, in each case, through:

... active experiential, self-directed, situational, often challenging means rather than the passive, abstract-theoretical, teacher-directed means which often occur in classroom situations. Gibbons 94(47)

The knowledge, skills and personal attributes required to manage personal learning can be developed. Individuals who involve themselves in self-education projects perform for themselves several major tasks of the professional educator. They establish objectives, select educational activities, obtain resources, and evaluate personal learning outcomes. Gibbons 94(51), Gibbons & Phillips 96(6-9), Knowles 161(18), Tough 285(116). Though most self-educational activities currently occur on a modest scale, there exist many important implications for the enhancement of formal educational technology. Faure 76(210), Gibbons & Phillips 96(2). Formal education must begin to cultivate in learners the competencies required to initiate and direct personal learning. In view of changing contemporary environments and corresponding increasing demands for educational services, it is mandatory that governments, educational and other institutions actively initiate and support self-education. Tough asserts that:

One finding is clear: adults want additional help and competence with planning and guiding their learning. Hopefully adult educators will respond by adopting a fresh, broader purpose: to foster the entire range of major learning efforts, not just group instruction and pre-programmed courses. Tough 288(19)

Formal educational process must be re-defined to include both institutionalized and out-of-school education. The concept of education limited to certain ages and confined to school buildings must be superceded. Formal education must lay, in each individual, the broad base for a lifetime of self-directed learning and growth. Faure 76(233), Gardner 90(13), Gibbons 94(53). A restructuring of

educational systems is required. Formal education must focus on the following:

Learning to live, learning to learn, so as to be able to absorb new knowledge all through life; learning to think freely and critically; learning to love the world and make it more human; learning to develop in and through creative work. Faure 76(69)

Self-education is the essential building block of future developments in both formal and informal learning. Learning must be recognised and accepted as a process that involves a total lifetime, in the sense of both time span and diversity, and all society, including its social and economic as well as its educational resources. Faure 76(69), Gardner 90(31), Gibbons & Phillips 96(2).



Educational Condition: RESEARCH FINDINGS - CHARACTERISTICS

Postulate:

STUDIES OF PEOPLE WHO HAVE BECOME SUCCESSFUL THROUGH SELF-EDUCATION REVEAL A NUMBER OF SHARED CHARACTERISTICS WHICH PROVIDE VALUABLE CLUES FOR EDUCATORS REGARDING THE SKILLS AND PERSONAL ATTRIBUTES REQUIRED FOR SUCCESSFUL SELF-DIRECTION IN LEARNING.

To understand self-education, one must first understand the characteristics, beliefs and actions of those who have taken part in the process. Research in the fields of education, psychology, creativity, and leadership provide extensive data concerning the personality characteristics of individuals who have become successful through self-educative means. These characteristics provide valuable clues for educators regarding the skills and personal attributes required for successful self-direction in learning and living. Gibbons 94(42,43), Gilmore 100(226), Houle 134(10).

The process of self-education is not easy; the self-educator gives up a simpler life for a more responsible, demanding and difficult life. He devotes himself to a life task of seeking learning that is precious to him. A life theme of gathering purpose and drive pervades his existence. Gibbons 94(42), Houle 134(3). He is both traditional and radical. His mission in life is to learn, to improve, and to find meaning. The self-educator is unique, both in himself and in the contribution he makes to society. However, the characteristics of the self-educator are not unique, nor are they limited to a privileged few. Individuals are self-educating in an infinite number of ways and to many different degrees. The characteristics and

skills required for self-education reside as potentialities in every individual and can be developed. Carnegie 40(58), Frankl 85(44), Gardner 90(124), Gibbons 94(42), Kopp 162(26), Maslow 187(43,44), Peale 218(46), Tough 285(175). Faure writes in *Learning To Be*:

A human being is born into the world with a batch of potentialities, the individual's life is a process of giving birth to himself through the development of these capacities. Faure 76(158)

The self-educator avidly pursues his potentialities; he desires self-realization.

Frankl 85(46), Gilmore 100(7), Gardner 90(13), Maslow 187(281), McLeish 197(44).

These potentialities are not just indifferent possibilities, they are always linked to relatedness, meaning and value. Allport 5(24-26), Combs & Snygg 48(355), Frankl 85(46), Kopp 162(4).

The characteristics of Tough's "high" learners, Gibbons' "experts without formal training", Gross' "free learners", and Gilmore's "productive personality" are strikingly similar to the characteristics of Maslow's "self-actualized individual", Rogers' "fully-functioning person", Jung's "individuated person", Fromm's "autonomous person", and Satir's "fully-integrated" individual. Gardner creates a profound image of the self-educator as an individual capable of self-renewal, for whom:

... the development of his own potentialities and the process of self-discovery never end. Exploration of the full range of his own potentialities is not something that self-renewing man leaves to the chances of life. It is something he pursues systematically, or at least avidly, to the end of his days. He looks forward to an endless and unpredictable dialogue between his potentialities and the claims of life - not only the claims he encounters but the claims he invents. Gardner 90(11,12)

Self-education, free learning, creativity, psychological health and self-actualization all share common characteristics and competencies: the supremely healthy individual is also a competent self-educator. Gross 113(52), Maslow 187(57,73)

The self-educator is governed by a quest for meaning. He has, within this unique psychological dynamic, the capacity to seek the kinds of experiences which will enrich and open his personal world. Carnegie 40(58), Gardner 90(124), Gross 113(intro), Peale 218(46), Robbins 231(91). He lives fully in the world; mastering it, leading it and using it for his purposes. James & Savary 142(115), Maslow 187(281). He experiences vividly, selflessly, with full concentration and total absorption. Through these experiences the self-educator becomes more truly himself and more fully human. James & Savary 142(115), Maslow 187(45), 189(97).

Self-education is a creative process and the self-educator has a creative attitude. Gilmore 100(226), Maslow 187(290). This creativity grows out of the uniqueness of the individual on the one hand, and the materials, events, people, and circumstances of his life on the other. Anderson 6(71). He experiences himself as the true centre of his world, and the true originator of his acts. Klausner 155(5), McLeish 197(36). He is able to shift strategies and change directions. He can give up his initial perception of a problem and redefine it. Combs & Snygg 48(253), Gardner 90(46), Meichenbaum 198(275). The self-educator is an innovator, a discoverer of the new. Gilmore 100(8), Maslow 187(290). He is imaginative and innovative in his approach to living and in the accomplishment of his own goals. Gilmore 100(6), Maslow 187(62).

The creativity of the self-educator constitutes a special way of looking at life; it is creativity that is not limited by acculturation. The self-educator is able to maintain detachment from conventional categories, his own past attitudes and habits of mind. Gardner 90(46,47), McLeish 197(47). He often becomes a trailbreaker for others. His creativeness touches everything he meets, works with and experiences with a special kind of magic. Anderson 6(44), Combs & Snygg 48(252), Getzels & Jackson 91(42), Goertzel & Goertzel 105(279), Guinagh 114(8), Maslow 188(170). May writes:

Creativity is the encounter of the intensely conscious human being with his world. Anderson 6(68)

The creative person faces novelty with confidence. Maslow 189(16). He introduces his original ideas, products or performances into the environment around him or into the environment of the inner self so that a degree of transformation, large or small, may take place in these environments. James & Savary 142(9), McLeish 197(56).

The self-educator possesses several characteristics related to his creativity: talent, natural ability in his chosen field, and ingenuity. These characteristics lead to intelligent and innovative achievements. Becker 15(125), Combs & Snygg 48(207), Gibbons 94(47), Gilmore 100(226), Goertzel & Goertzel 105(x), Maslow 187(291), Tough 285(175). The self-educator wants to have an impact on his world. Gibbons elaborates:

Whether they are cartoons, buildings, novels, paintings ... or the formulation

of satisfying philosophical statements, simply doing the activity seems rewarding. Working toward an ambitious goal gives the subjects' efforts order, direction and purpose. The promise of such recognition and reward makes the goal even more important. Gibbons 94(48).

The self-educator wants to make a tangible and significant contribution in his chosen field. He invests with intensity and authenticity in his human environment.

Gibbons 94(47), Gilmore 100(6,7), Hampden-Turner 116(43), Tough 285(175).

Relationships with others are important to him. Gibbons 94(48), Maslow 188 (165,166). A social support system is desired as a means of maintenance and development. Gibbons 94(48). The learner gleens hope and encouragement from previous experiences of recognition and reward for his efforts by the persons on whom he is dependent for support. Gilmore 100(229).

The self-education process is intensely interpersonal. The self-educator recognises his need for affiliation and communication with others. He wants to live and relate to others in a meaningful way. Assagioli 10(85), Combs & Snygg 48(239), Gardner 90(113), James & Savary 142(5), Knowles 161(61), Peale 218(191), Perls 220(25), Rogers 235(16-20). As he becomes more fully himself, he becomes more realistically socialized. McLeish writes:

The supreme need for each individual adult is surely to achieve identification and fulfillment of self. Selfhood grows from interaction with other beings, from love of oneself and love for others - a creative union of immense potentiality. McLeish 197(68).

Social responsibility is another characteristic of the self-educator. This sense of social conscience assures a mutually enhancing relationship between himself and his society. Gilmore 100(228), James & Savary 142(124), Mahoney & Thoresen 184(311,312), McLeish 197(264), Rogers 235(194). Gilmore writes that:

... one hallmark of productive persons as a group is a mature social awareness and concern in the broad sense of the term. Their contributions are motivated, directly or indirectly, by an empathic, altruistic and sympathetic feeling not only for specific individuals, but for humanity in general. Gilmore 100(228)

The self-educator is responsible and responsive in his relationship with others. Assagioli 10(90), Gilmore 100(6). He shows a remarked ease in social relationships; his empathy, judgement, sense of fairness, responsibility and skill in communication arouse the respect and trust of others. Gibbons 94(47), Gilmore 100(226), James & Savary 142(195), Maslow 187(155), Rogers 235(331,336), Satir 243(30,31), Stevens 272(88,89), Tough 285(28). The self-educator is capable of intimacy; candid, game-free relationships with mutual free giving and receiving without exploitation. Berne 22(25), Combs & Snygg 48(38), Gardner 90(17,18), Maslow 188(155), Stevens 272(274,275).

Caring and conviction are two additional attributes. The learner firmly establishes the things in which he believes, cares deeply about them and has a profound conviction in their attainment. Gardner 90(19,20), Gilmore 100(228), May 192(286), Peale 218(45).

The self-educator has a highly developed internal value system which commits him to a fundamental integrity in his own behaviors and an inherent respect and esteem for others. Gibbons 94(47), Gilmore 100(228), Maslow 187(291), 188(177). These personal principles are guidelines for action, conduct, method and arrangement; they are dynamic and extremely influential in the lives of self-educators. Collins & Moore 46(41), Combs & Snygg 48(105), Hampden-Turner

116(34), Maslow 189(206), Peale 218(42,97), Satir 243(96). Maslow writes:

Self-actualizing people ... do what they do for the sake of ultimate, final values, which is for the sake of principles which seem intrinsically worthwhile ... These values are not abstract ... they are as much a part of them as their bones and arteries. Maslow 187(192)

The self-educator's source or locus of direction is internal, his style self-validating. Hampden-Turner 116(33), Hill 125(43-45), Maslow 187(299), 189(34,35). Tough explains that self-educators:

... choose their own career and activities and are not pushed by external forces. Tough 285(28).

The value of the learning is, for the self-educator, established not by the praise or criticism of others, but by himself. Anderson 6(76). This does not mean that the person is oblivious to, or unwilling to be aware of the judgements of others. It simply means that the basis of evaluation lies within himself. Gilmore 100(229), Rogers 235(23). Self-education is characterized by independence of thought. The self-educator feels confident in himself and his environment and feels free to choose his preferred style of life. Collins & Moore 46(229), Gibbons 94(46), Gilmore 100(155), Guinagh 114(6), Hampden-Turner 116(36), James & Savary 142(5), Maslow 187(47), 188(160-162), Schiffman 248(97), Tough 285(175).

The self-educator also has a clear sense of identity. Gibbons 94(46), Gross 113(67), Tough 285(175). Gilmore explains:

The productive person knows who he is and where he is going; he is confident in his unique role and feels comfortable with himself and what he is doing ... It embodies not only his self-esteem and self-respect, but also

his clear and realistic perception of himself and his capabilities. He is confident of, happy with, and effective in his uniqueness as an individual. Gilmore 100(227).

The self-educator understands, uses, expresses and exercises the full range of his capacities. Combs & Snygg 48(17,21), Hecht & Traub 120(47-62), James & Savary 142(201), Jung 149(108-113), Knowles 161(86), Maslow 187(48,49), Peale 218(13). By knowing himself, the self-educator is able to open himself up to growth and development. Campbell 34(385), Corsini 51(39), Kopp 162(20), McLeish 197(64,67), Perls 220(120), Rogers 234(288), Tough 285(281). Self-knowledge and a favourable attitude toward himself and his capabilities give root to self-confidence, self-respect and self-control which in turn supply the power and strength to propel and direct the self-educator's efforts toward mastery and success. Collins & Moore 46(15), Gardner 90(14,15), Gilmore 100(13,227), Hampden-Turner 116(44), McLeish 197(66,67), Peale 218(94-97), Smiles 266(314).

The self-educator is life-positive. He believes that all things are possible and recognises that the power to solve all problems is inherent within himself. Maslow 187(281), Peale 218(121,138). He is resourceful in a wide variety of circumstances, many of them even tragically adverse. Collins & Moore 46(84), Gibbons 94(47), McLeish 197(13). He has the capacity to imagine himself already successful, and consequently acts dynamically and with confidence. Gibbons 94(43), Peale 218(56). The self-educator brings to any situation a fundamental attitude of hope which is based on an inner assurance that, whatever the nature of the task, he will be rewarded with a sense of accomplishment. Gilmore 100(229):

Hope enables an individual to extend himself into the future, to establish remote, not easily attainable, but ultimately highly rewarding goals. Gilmore



100(229)

Hope, single-mindedness and perseverance enable the self-educator to pursue a task to its conclusion; he grapples with the problems of life rather than retreating from them. Gilmore 100(228,229), Smiles 266(25). He can cope with any life situation effectively. Gilmore 100(229), Tough 285(66).

This struggle to learn, grow, recover from defeat, surmount obstacles, live life with vitality and resilience requires physical energy. Gardner 90(18), Peale 218(46), Tough 285(175). Smiles wrote that:

Energy enables a man to force his way through irksome drudgery and dry details and carries him onward and upward in every station of life. It accomplishes more than genius, with not one-half the disappointment and peril. Smiles 266(228,229).

Personal will is the source of initiative, drive and persistence necessary to energize and sustain self-directed activity. Will is the force of purpose that enables the self-educator to do or be whatever he sets his mind on being or doing. Assagioli 10(189), Faure 76(142,3), Feldenkrais 77(172), Smiles 266(230). The self educator has a highly developed ability to mobilize his personal will. Assagioli 10(6), Combs & Snygg 48(17), Gibbons 94(43), James & Savary 142(5), McLeish 197(174). His will influences, moulds, forms and creates through intention, choice, and decision as well as determination and resolution to act. Allport 5(89), Assagioli 10(11), Bennett 18(38), Farber 74(9), May 192(9,192) . Assagioli writes:

The will occupies a central position in man's personality and is intimately connected with the core of his being - his very self. The will also plays a function in deciding what is to be done, in applying all the necessary means for its realization and in persisting in the task in the face of all obstacles

and difficulties. Assagioli 10(6).

The self-educator is also mature. This maturity combined with personal will ensure a positive direction of growth and development. Archambault 7(5), Argyris 9(72), Faure 76(81), Gilmore 100(6), Hecht & Traub 120(19), Tough 285(175). Overstreet elaborates:

A mature person is not one who has come to a certain level of achievement and stopped there. He is rather a maturing person - one whose linkages with life are constantly becoming stronger and richer because his attitudes are such as to encourage their growth rather than their stoppage ... he grows in knowledge and the wise use of it ... he is a person who has learned to operate well in a human environment so that he continues both to add new people to those whom he cares about and to discover new bases of fellowship with those already familiar. Overstreet 214(43)

The self-educator also enjoys excellent physical and psychological health. Faure 76(156), Gibbons 94(47,48), Goertzel & Goertzel 105(28), Holt 130(5), Maslow 187(192), 188(149), Peale 218(146). This vitality of body and mind enables the independent learner to live successfully in the natural world and also in the psychic world. Bennett 17(98), Combs & Snygg 48(77), Maslow 187(183), 188(201,202), Peale 218(157), Schiffman 248(54).

In self-directed education, the learner has the major responsibility for the purposes and methods of learning as well as the achievement of the learning involved. Gibbons 94(52), Knowles 161(60). The self-educator seizes with excitement the exhilarating responsibility for the growth and development of his own mind. Gross 113(22). This responsibility is a challenge; he must choose from his existing pool of potentialities. He must decide which will be condemned to non-being and which will be actualized and thus rescued for eternity. Frankl 85(46), Gross

113(72,73), Perls 220(x).

The self-educator is willing to take risks in the pursuit of excellence. Gardner 90(17), Gibbons 94(47), James & Savary 142(6), Maslow 189(37), Schiffman 248(101), Smiles 266(18). He has the courage to fail which is a necessary prerequisite to self-directed living. A choice is always a gamble and the courage to change jobs, explore latent talents, try a new way of life rather than stay in a boring rut, to wake from lethargy and inertia - all require the courage to fail. Collins & Moore 46(63), Combs & Snygg 48(253), Hampden-Turner 116(47,53), Maslow 189(46), Schiffman 248(104) . Holt explains:

The most valuable and indeed essential asset the student brings to any learning is a willingness to adventure, to take risks. Without that, he can't learn anything. Holt 130(71)

The self-educator has a strong urge to experience new things. He releases energies to explore both his inner and outer worlds. Campbell 34(58,59), Gardner 90(43,44), Gross 113(15,58), Houle 134(3), James & Savary 142(5), McLeish 197(196), Rogers 235(22). This openness to experience makes him feel vital and alive, courageous and motivated, able to solve problems and enjoy himself. Anderson 6(75), James & Savary 142(177), Maslow 189(29), McLeish 197(45). Combs and Snygg write that:

Openness to experience makes possible a capacity for wonder and a sensitivity to events that makes a thrilling experience of much that may appear humdrum and ordinary to others. Combs & Snygg 48(253)

This quality of openness also allows the self-educator to acknowledge and accept conflict. He is able to perceive a confronting stimulus or problem clearly,

accurately and realistically. Far from being disconcerted by a difficult situation, he welcomes the challenge of ambiguity, uncertainty and complexity. Frankl 85(47), Gardner 90(46,47), Gilmore 100(229), Hampden-Turner 116(56), Maslow 189(47), McLeish 197(36), Schiffman 248(12,13). The self-educator realizes that:

Where there is ambiguity there is an opportunity for creativity because ambiguity admits of more than one way of looking at a situation. DiCyan 63(188)

The self-educator has the ability to reconcile dichotomies and bring various segments of his living into synergistic combination. Hampden-Turner 116(56), Maslow 189(140).

All these characteristics add up to a physically and psychologically healthy, energetic, feeling, creative, productive human being. The self-educator is a master of survival; he has the tools to be close to others, to make sense and order out of the world of people and the things outside them, to take risks, to change when the situation demands it, to continue to develop, and to be fully human. He accepts responsibility for himself and has a sense of ownership about his destiny. He feels competent in engineering himself and his life in the directions that interest him. Gibbens 94(47,48), James & Savary 142(109), Maslow 188 (153-174), Satir 243(2,3), Rogers 235(183,184), Tough 285(175).

The modern world requires that individuals develop self-educative competencies. To meet the challenges of complex contemporary environments where facts, knowledge, techniques, inventions and advancements in technology are accelerating at ever-increasing rates, a change in the attitudes of educators must take place. We

must redefine the skillful or educated person. Knowles 161(14-16), Maslow 187(58).

Much of that we have called learning has become useless. Any kind of learning which is the simple application of the past to the present, or the use of past techniques in the present situation has become obsolete in many areas of life. Education can no longer be considered essentially or only a learning process; it is now also a character training, a person-training process. Maslow 187(99)

The new task of education is to develop in each individual student the self-educative competencies required to live successfully in the real world. Archambault 7(229), Faure 76(217), Maslow 187(99). On the basis of his study on experts without formal training, Gibbons has formulated a series of principles which address the need for practical educational strategies to facilitate student development of self-educational competencies. Gibbons writes:

Self-education involves the development of attributes traditionally associated with people of character: integrity, self-discipline, perseverance, industriousness, altruism, sensitivity to others and strong guiding principles. Teaching for self-education should promote the development of personal integrity rather than the opportunistic pursuit of offered rewards, of self-discipline rather than obedience, of inner drive rather than the avoidance of punishment or the pursuit of artificial rewards, of caring rather than sustained competition and of strong internalized principles rather than externally imposed rules.

Self-education involves the development of attributes usually associated with self-directed and unique, even radical people: drive, independence of thought, nonconformity, originality and talent. Teaching for self-education involves promoting drive rather than passivity, independence rather than dependence, originality rather than conformity, and the talents that make individuals unique rather than the tasks that make them all the same ... Self-educated people seem to like others and to be liked or admired by them; they seem to be healthy in attitude, body and mind. Teaching for self education involves promoting a holistic approach to learning so that students not only master some knowledge or skill but, they also develop a healthy attitude toward themselves, others, the world and their activities. Gibbons 94(54)

Education must now be viewed as a process of learning and growth which develops

each individual's capacity to direct and control his own destiny. Education for self-education is nothing short of education for living. Anderson 6(54), Archambault 7(5), Faure 76(81), Holt 130(72), Maslow 187(184), Stevens 272(247).

## Educational Condition: RESEARCH FINDINGS - METHODS

Postulate:

STUDIES OF PEOPLE WHO HAVE BECOME SUCCESSFUL THROUGH SELF-EDUCATION DOCUMENT A VARIETY OF UNIQUE LEARNING METHODS EMPLOYED BY THESE INDIVIDUALS WHICH HAVE SIGNIFICANT PRACTICAL RELEVANCE TO FORMAL EDUCATIONAL PRACTICE.

Several diverse but related studies describe unique personal learning methodologies of individuals who have been successful through self-educative means. Gross documents several examples of these self-directed learners:

Just a few who have succeeded without the "advantage" of a college education are crusading journalist I. F. Stone; inventors Edward Land (the Polaroid camera) and Bill Lear (Lear Jet); anthropologist Richard Leakey; Cosmopolitan editor Helen Gurley Brown; social critic Eric Hoffer; and sports promoter Don King. Perhaps the most renowned such case in our time was Winston Churchill, who said "I have no technical and no university education, and I have just had to pick up a few things as I went along" ... Stewart Brand, creator of the best-selling Whole Earth Catalog describes his occupation as "just goin' to school in the world". Gross 113(19,20)

These self-educated people tend to develop unique patterns of learning methods which best suit their personal educational needs. Gibbons 94(53). Though some of these individuals may attend lectures or private lessons, most self-educators appear to believe that their self-conducted study has provided them with a superior education to that available from formal educational institutions. Gibbons 94(47), Gross 113(20), Houle 134(3), Tough 285(3). Gross quotes Buckminster Fuller as saying:

True higher learning is self-administered unlearning of most of what we have been taught in school. Gross 113(20)

Generally, self-educators direct their personal growth and development through:

... active, experiential, self-directed, situational, often challenging means rather than the passive, abstract-theoretical, teacher-directed means which often occur in classroom situations where the challenge is predictable and controlled. Gibbons 94(47)

A review of the various methods employed by self-educators provides extensive data that has significant practical relevance to formal educational practice. The main method employed is simply self-disciplined and self-directed study. Gibbons 94(48). Self-educators accomplish their learning by independent exploration of fields in which they have an interest through their own investigations and experiments. Gibbons 94(48), Gross 113(17).

Another major educational method described in studies of experts without formal training is learning through experience. Buckman 32(121), Gibbons 94(47,53), Gross 113(19), Maslow 187(174). Life experiences are regarded as rich learning resources; they yield accomplishment, mould behavior, develop life conceptions and decide the content of individual knowledge. Bandura 14(16,101), Dill 64(124), Guinagh 114(viii), Holt 129(8), Knowles 161(20), Tough 285(174). Gibbons explains that:

Some primary experience ... focuses their attention and interest on a particular field of expertise. This is followed by a single-minded pursuit of excellence in the field largely through self-disciplined study and activity ... the activity becomes a way of life. Their previous experience seems to open them to unusual opportunities ... Development continues through a pattern of incidents which cast new light on the field and by challenges which lead to new insights. Gibbons 94(49)



Accidents or coincidence also seem to play an important part in the lives of self-educators. Chance occurrences can lead to new insights and enable the learner to solve problems and make breakthroughs in understanding. Gibbons 94(48), Stevens 272(274). Campbell elaborates:

A blunder - apparently the merest chance - reveals an unsuspected world, and the individual is drawn into a relationship with forces that are not rightly understood. As Freud has shown, blunders are not the merest chance. They are the result of suppressed desires and conflicts. They are ripples on the surface of life, produced by unsuspected springs. And these may be very deep - as deep as the soul itself. The blunder may amount to the opening of a destiny. Campbell 34(51)

It seems that flowing with these chance experiences toward goals that are but but dimly defined, eventually lead self-educators to make great accomplishments. Rogers 235(277), Stevens 272(274).

Another learning method employed by self-educators is the creative accomplishment of maturational tasks. As each familiar life horizon has been outgrown, the old concepts, ideals, and emotional patterns are left behind for new-challenges. Self-educators welcome the opportunity to pass through each successive threshold and readily adapt to the requirements of each maturational life stage. Bischof 23(578-80), Campbell 34(51).

Behavioral self-control also represents a dynamic means through which self-educators can alter external environmental contingencies as well as personal internal environments to promote meaningful change. Mahoney & Thoresen 184(129). Behavioral psychology offers many personalized techniques to facilitate individual growth and development. Bandura 14(208), Klausner 155(131), Krasner 165(800),

Mahoney & Thoresen 184(316). Applications of these self-control practices enable self-educators to direct their own courses of action toward valued goals by creating personal cognitive aids and self-reinforcing consequences. Bandura 14(212), Martin 186(5), Watson & Tharp 291(51).

Another learning method frequently employed by self-educators is the seeking of subject matter and advice from friends, relatives, neighbours, and fellow workers. If information is required in a specific field, they will consult with experts such as doctors, lawyers, salespersons, librarians, or financial experts. Buckman 32(16,17), Illich 141(76), Knowles 161(82), Smiles 266(57), Tough 285(3). These individuals are regarded as valuable learning resources able to help them think through problems and reach a personal decision. Knowles 161(71,75).

Self-educators will also observe experts working in their field of interest as a means of learning. Gibbons 94(48), Illich 141(88), Mahoney & Thoresen 184(315), Polanyi 225(62), Smiles 266(360). Bandura comments on the importance of observational learning methods:

Psychological theories have traditionally assumed that learning can occur only by performing responses and experiencing their effects. In actuality, virtually all learning phenomena resulting from direct experience occur on a vicarious basis by observing other people's behavior and its consequences for them. Bandura 14(12)

Self-educators may also create or join groups in order to share their studies. Gibbons 94(53), Houle 134(3), Knowles 161(82), Tough 285(3). Small groups provide a means of self-development. Gross quotes Eric Fromm on the topic of small groups satisfying:

... "the need of the individual to work actively together with others, to talk, to plan, and act together, to do something which is meaningful beyond the money-making activities of everyday life ... to be open and vulnerable, to be imaginative, to rely on one's judgement and decision." Gross 113(112).

Groups are a means to develop self-awareness and interpersonal competence; each member has the opportunity to discover how he relates to others, how he can create purpose, how others will then react to him and how he can use this knowledge for further learning and development. Hampden-Turner 116(157), Maslow 187(183).

Grief and pain are sometimes the source of growth and development. Campbell 34(395), Maslow 189(8). Klausner writes that pleasure and pain draw on the same reservoir of underlying excitement, and that this pain can lead to valuable insights and learnings. Klausner 156(136,7).

Self-educators also use myth and ritual in the course of their learning. It has always been the prime function of mythology and rite to supply the symbols that carry the human spirit forward. Campbell 34(11). Kopp comments:

Each man's identity is an emergent of the myths, rituals and corporate legends of his culture, compounded with the epic of his own personal history. Kopp 162(20)

Campbell adds:

Throughout the inhabited world, in all times and under every circumstance, the myths of man have flourished; and they have been the living inspiration of whatever else may have appeared out of the activities of the human body and mind. It would not be too much to say that myth is the secret opening

through which the inexhaustable energies of the cosmos pour into human cultural manifestation. Campbell 34(3)

The so-called rites of passage, which occupy such a prominent place in the life of a primitive society, are sometimes used by self-educators as developmental means. Characterized by formal exercises of severence followed by an interval of retirement rich with myth and ritual, the learner grows and changes until the time has ripened for his return to the normal world, where he will employ his newly acquired expertise. Campbell 34(10).

In studying the lives of experts without formal training, Gibbons found that self-educators also employ problem-solving as a learning vehicle. Gibbons 94(47). The active and energetic solving of one problem aids in the resolution of the next issue as knowledge is carried into faculty and applied to future situations. Knowles 161(82), Rogers 235(39), Smiles 266(302).

Self-educators are willing to take chances. They believe that learning is a risky business and that in order to learn, one must risk failure. Combs & Snygg 48(253), Gardner 90(17), Hampden-Turner 116(47), Maslow 189(46), Schiffman 248(104). Learning results from trial and error; errors are forgotten and successful responses are maintained. Maltz 185(28,29). Smiles adds his view on the value of failure:

Failure is the best discipline of the true worker, by stimulating him to renewed efforts, evoking his best powers, and carrying him forward in self-esteem, self-control and growth in knowledge and wisdom. Failure, conquered by perseverance, is always full of interest and instruction, and this is illustrated by many examples. Smiles 266(18)

All learning involves some difficulty and fumbling and self-educators are able to use their errors as learning opportunities. They develop self-awareness through the experience of stumbling and picking themselves up. They learn from their failure, discouragement and despair. Gardner 90(17), James & Savary 142(6), Schiffman 248(101).

Self-educators use "time-out" periods, when the normal activities of life are suspended, as another learning method. McLeish suggests that one may learn from:

... upsetting the neat, tired order of one's thoughts and throwing them in temporary disarray in the room of the intellect, so that new shapes and images may appear from creative confusion. McLeish 197(282)

During these periods of critical reflection, the individual has time for self-analysis, examination of the environment and for formulation of new lines of action. Archambault 7(212), Bennett 17(106,107), Collins & Moore 46(112), Friere 87(95), Goertzel & Goertzel 105(267).

Visualization and fantasy also constitute learning methods. Peale advises that one should build a personal feeling of power by formulating and stamping indelibly on the mind a mental picture of success. Peale 218(24,25). He writes:

The basic factor in physics is force. The basic factor in psychology is the realizable wish. The man who assumes success tends already to have success ... when either failure or success is picturized it strongly tends to actualize in terms equivalent to the mental image pictured. Peale 218(56)

Fantasy is one expression of imagination that assists learning. Imagination is the home of intentionality and fantasy is one of its languages. Fantasy, therefore, is

a valuable means to explore the total self; communicating, exploring, trying on for size. Fantasy assimilates reality and then pushes reality to a new depth. May 192(278).

Self-taught experts also learn by reading everything they can find relating to the problems and issues that concern them. Dill 64(124), Gibbons 94(48). They read books, magazines, and newspapers. Gross 113(19), Holt 130(39), Houle 134(3), Smiles 266(57), Tough 285(3). Gross explains that John Houseman, the distinguished stage and film director, got his "auto-didactical" education from endless reading during his lonely travels in the grain business before the Great depression. Gross 113(20).  
McLeish suggests self-educators do their:

Reading, viewing and reacting with an active learning "set", to break the grey smog of passivity which otherwise stifles new opportunities for learning.  
McLeish 197(282)

Self-educators listen to the radio and view television and movies with discrimination. Houle 134(3), Tough 285(3). These learners make television work for them. Gross 113(113).

Learning contracts are another way of facilitating self-directed learning. Gibbons & Phillips 96(27), Knowles 161(62). Knowles created the concept of 'learning contracts' to accommodate differences in learning readiness and style; they include objectives, resources, strategies, evidence of accomplishment, and a means of validating accomplishment. Learning contracts assist self-directed learners in the organization and structuring of personal learning endeavours. Knowles 161(62).

Another method used to explore and actualize unique personal potential is the learning journal. McLeish 197(260). Self-educators record ideas, thoughts, feelings and dreams as a means of probing their unconscious to secure valuable insights and make daily experiences more meaningful. This process heightens awareness of personal learning process, enhances and expands creative powers, and helps connect facts, perceptions and ideas. Gross 113(67,68). McLeish suggests that learning may be enhanced by:

Keeping at hand ... the notebook and the pencil with which to record striking reactions, questions, later brief reflections ... the ideas that arise unbidden from the unconscious mind, and which once lost, may not reappear; and concepts and plans hammered out by the restless mind in periods of sleeplessness. McLeish 197(282).

Self-educators also use 'learning projects' to direct their learning. Coolican 50(17), Tough 285(7). Tough offers the following definition of a 'learning project':

A learning project is a series of related episodes adding up to at least seven hours. An episode is a well defined period of time that is held together by the similarity in intent, activity or place of the thoughts and actions that occur during it. The episode has a definite beginning and ending, and is not interrupted for more than 2 or 3 minutes. Many episodes are between 30 and 60 minutes in length, but some are shorter or longer. In each episode, the person's desire to gain and retain certain definite knowledge and skill is dominant. Tough 285(7)

These learning projects are generally problem-oriented rather than subject-oriented; the self-educator seeks the learning for practical utilitarian purposes. Tough 285(28-39). Tough's definition of learning projects has been constructed to include a wide range of major learning endeavours. Any method may be included; reading, listening, observing, attending classes, reflecting, practicing, getting answers to questions. The only criteria for inclusion is that the

individual's primary intention during the episode is to gain and retain certain definite knowledge and skill. This term 'knowledge and skill' also includes changed awareness, competence, habits, attitudes, sensitivity, confidence, etc. Self-planned learning, classroom learning, and learning guided by programmed instruction are all included. Non-credit learning is included along with learning for a credit or degree or a certificate. Learning for highly practical reasons, to make a good decision, build something, raise a child, perform some task, is included as are learning efforts motivated by curiosity, interest, puzzlement, and enjoyment. Major learning efforts, though tied together by a strict definition, exhibit a fascinating diversity and energy. Tough 288(2).

These learning methods contrast sharply with traditional teacher-directed learning methods used in formal school systems. Gibbons 94(47), Hecht & Traub 120(4). In schools, a lot of time is non-productive, students learn second-hand through words and formal lectures; Faure states:

Education suffers basically from the gap between its content and the living experience of its pupils, between the systems of values that it preaches and the goals set up by society, between its ancient curricula and the modernity of science. Faure 76(69).

The existing alienation of education from living institutions can be overcome only when students recover a sense of ownership and responsibility for their learning. Buckman 32(13), Knowles 161(18). The methods employed by self-educators can provide a means to accomplish this task. Self-educative methodology has irreplaceable value in any educational system; educational structures must be remodelled to enable people to follow lifelong educational patterns. Buckman 32(5,26), Collins & Moore 46(63), Faure 76(209), Gibbons & Phillips 97(27).



Educational Condition: EDUCATION DESIGN

Postulate:

STUDIES CONCERNED WITH THE NATURE OF SELF-EDUCATORS AND THE LEARNING METHODS THEY EMPLOY PRESENT SIGNIFICANT GUIDELINES FOR EDUCATION DESIGNED TO PREPARE INDIVIDUALS FOR LIFELONG SELF-EDUCATION.

The design of traditional teacher-directed education is generally inadequate to prepare students for the demands of their personal futures. It is no longer acceptable to think of education as simply the running of classes and workshops designed to transfer a sum of knowledge. Faure 76(18), Gibbons 94(54), Illich 141(103), Knowles 161(16,17), Tough 288(1). Traditional education must be fundamentally re-defined:

The concept of education limited in time (to school age) and confined in space (to school buildings) must be superseded ... School education must be regarded not as the end but as the fundamental component of total educational activity, which includes both institutionalized and out-of-school education. A proportion of educational activity should be de-formalized and replaced by flexible, diversified models ... Briefly, education must be conceived of as an existential continuum as long as life. Faure 76(233)

Educational reforms must not be undertaken in piecemeal fashion. Faure 76(148), Gibbons & Phillips 96(9), Knowles 161(15-17). A holistic concept of the goals and modes of educational process in relation to the demands of the modern world must be formulated. Faure 76(176)

Studies concerned with the nature of self-educators reveal that these individuals are unique in their devotion to learning. These studies also show that the process

of self-education is not limited to some special few. Carnegie 40(58), Gardner 90(124), Frankl 85(44), Gibbons 94(42), Houle 134(3), Kopp 162(26), Maslow 187(43), Peale 218(46), Tough 285(1,175). Ample evidence exists of the widespread practice of self-education by individuals trying to cope with the realities of everyday living. Though these individuals may not consciously be aware of the application of self-education principles, they are engaged in real self-initiated and self-managed educative endeavours. The capacity to exercise a high degree of imagination, ingenuity and creativity in the solution of life problems and evolving life tasks is therefore widely, not narrowly, distributed in the human population. For this reason, an understanding of the personal attributes of individuals who have become successful through self-education, and of the methods through which they develop themselves, has important implications for the enhancement of formal educational technology, especially in the teaching of young people who will at some point in the future assume their places as contributing adult members of their society. Faure 76(69), Gibbons & Phillips 96(1-3), Gilmore 100(221), Houle 134(82), Scanlan & Keys 246(212,213), Tough 285(1,4).

Education must become recognised as a process of maturation through which each individual develops the capacity to direct and control his learning and living. Archambault 7(5,174), Combs & Snygg 48(313), Faure 76(81), Gibbons 94(42), Gibbons & Phillips 96(2,3). Studies reveal that, under the proper conditions, individuals can learn not only to accept responsibility but also to seek responsibility. External control is not the only means of bringing about student effort in learning. If in possession of the required skills and attributes, students will exercise self-control and self-direction in the service of objectives to which they are committed. Gibbons & Phillips 96(6-9), Illich 141(103), Knowles 161(20,21),

Scanlan & Keys 246(212,213). Teaching for self-education involves permitting students to move freely within a flexible educational structure. This permission to be free carries an inherent component of responsibility. Students must have the creative latitude to experience all feelings and consequences associated with learning acts. It is this type of freedom/responsibility to be oneself which fosters the development of an internal locus of control. Teaching for self-education, therefore, involves helping students internalize control over their personal learning. Anderson 6(81), Archambault 7(11,12), Gibbons 94(53), Knowles 161(20).

Teaching for self-education involves educating the complete personality of the student. Individuals who have become successful through self-education have developed specific personal attributes crucial to their success. These include such qualities as integrity, self-discipline, perseverance, industriousness, altruism, interpersonal competence, independence of thought and creativity. Teaching for self-education involves the cultivation and support of these characteristics through learning activities and educational structures. Faure 76(217), Gibbons 94(54), Gibbons & Phillips 96(6), Holt 130(71), Tough 285(175), Maslow 187(99), Smiles 266(v). Gibbons writes:

Teaching for self-education should promote, model and reward the development of personal integrity rather than the opportunistic pursuit of offered rewards, of self-discipline rather than obedience, of inner drive rather than avoidance of punishment or the pursuit of artificial rewards, of caring rather than sustained competition and of strong internalized principles rather than externally imposed rules ... teaching for self-education involves promoting drive rather than passivity, independence rather than dependence, originality rather than conformity, and the talents that make individuals unique rather than the tasks that make them all act the same. Gibbons 94(53,54)

Development of these attributes also requires a warm, supportive, coherent

environment in which satisfying relationships with other people may be formed. Self-educators need to be with other people and are generally liked and admired by others. Self-educators relate to peers collaboratively and see them as valuable resources in their learning efforts. They are also able to relate effectively to teachers as facilitators, helpers and consultants. Teaching for self-education, therefore, involves accepting each student as having worth in his own right. It means creating an active learning environment in which self-directed learning activities are warmly supported and there are ample opportunities to form satisfying relationships with others. Anderson 6(79), Gibbons 94(54), Illich 141(19), Knowles 161(61).

Self-educators have strong personal principles based on a deep empathy and concern for others and a respect for the intrinsic worth of their fellow man. Gibbons 94(47), Gilmore 100(89). Teaching for self-education involves helping students develop a personal sense of social responsibility and a healthy concept of 'self' as an independent but also interdependent entity within the larger social organization in which he exists. Gibbons & Phillips 96(8), Gilmore 100(89,900), McLeish 197(4,5).

Through self-educative acts, self-educators make recognizable contributions to the world around them. They are usually guided by a vision of accomplishment and seek the recognition or rewards inherent in their pursuit of excellence. Teaching for self education involves helping students to see themselves experiencing desirable attainments. It also involves assisting students in the formulation of learning plans designed to make their visions realities. Gibbons 94(53), Gilmore 100(89).

In the natural course of their learning, self-educators discover unique patterns of formal, informal and casual learning methods which best suit their personal learning styles. Teaching for self-education involves remodelling educational structures to extend widely the field of choice available to students in order to personalize learning processes. It also involves helping students to develop and define a personal learning style. Faure 76(79,233), Gibbons 94(53), Gibbons & Phillips 96(7).

Self-education is usually applied education with a problem-orientation rather than a subject-orientation. Self-educators generally seek learning for practical utilitarian purposes. Teaching for self-education, therefore, should integrate theoretical concepts with practical application through varied experiential methodologies. Teaching for self-education should prepare students to cope in the 'real world'. Faure 76(217), Gibbons 94(53), Gibbons & Phillips 96(7), Keeton 150(2,3), Knowles 161(20), Maslow 187(99), Tough 285(28-39), 288(8).

Studies reveal that self-educators rely on reading and other process skills to advance their learning endeavours. Teaching for self-education should include the development of student competencies in reading and remembering through active and experiential means in order that they may secure the information and guidance they will require in the course of their projects. Archambault 7(229,230), Gibbons 94(54), Houle 134(72).

Studies of experts without formal training reveal that self-education usually involves a concentrated effort in one field of study rather than a general study

of many diverse fields. Self-educators expend their energies in a field that effectively combines personal interests, talents, and past experiences with the promise of future success. Teaching for self-education, therefore, should facilitate student identification and exploration of fields of interest and subsequent development of expertise in the activities that may become central in their lives. Gibbons 94(47,53), Gibbons & Phillips 96(8).

Generally, self-educators are healthy in attitude, body and mind. They develop vitality and clarify their identities through self-educative acts which, in turn, release energy and permit them continue to grow and develop. Teaching for self-education involves promoting a holistic approach to learning so that students not only acquire knowledge, but also develop a healthy attitude toward themselves, others, and the world around them. Gibbons 94(54), Maslow 187(57,99), Stevens 272(247).

Fundamental alternatives to the concepts, structures and methodologies of existing formal education must be innovated and envisaged. Faure 76(181), Gibbons & Phillips 96(1). Existing educational institutions must embark on an evolutionary developmental process targetted toward teaching people how to teach themselves:

Self-education occurs outside of formal educational institutions, not inside them. The skills can be taught and practiced in schools, teachers can gradually transfer the authority and responsibility for self-direction to students, and self-educational acts can be simulated, but self-education can only truly occur when people are not compelled to learn and others are not obliged to teach them ... While schools can prepare students for a life of self-education, true self-education can only occur when a person chooses to learn what he can also decide not not learn. Gibbons & Phillips 96(4)

Formal education cannot force the development of self-educative competencies;

schools must instead concentrate their efforts on creating warm and supportive educational environments in which the necessary attributes and skills may emerge through a process of student-directed maturation and development. Rogers comments:

The farmer cannot make the germ develop and sprout from the seed; he can only supply the nurturing conditions which will permit the seed to develop its own potentialities. Anderson 6(78)

New educational technologies can and must be developed in order to establish the external conditions and supportive interpersonal relationships required to foster and nourish the latent, internal self-educating potentialities of students. Anderson 6(78), Gilmore 100(221). Faure warns:

Education has the the dual power to cultivate and to stifle creativity. Recognition of its complex tasks in this domain is one of the most fruitful intellectual achievements of modern psychopedagogical research. These tasks may be described as preserving each individual's originality and creative ingenuity without giving up the need to place him in real life; transmitting culture without overwhelming him with ready-made models; encouraging him to make use of his gifts, aptitudes and personal forms of expression without cultivating his egotism; paying keen attention to each person's specific traits without overlooking the fact that creation is also a collective activity. Faure 76(149,150)

Schools must play a central role in helping students understand that life is precious and that learning is the quest of life, a habit you take on, not simply a diploma or degree. Archambault 7(295,296), Faure 76(104), Houle 134(71), Maslow 187(187,188), Morris 207(38). Morris explains:

The school must become the place of human love and interest, the place of great capability, the place that helps develop the human being's natural potential. Morris 207(38)

Self-directed, lifelong education must become the overarching principle on which all aspects of education are designed. Faure 76(181,182). Education must be individualized and personalized to the utmost and constitute a preparation for life-long self-learning. Faure 76(74,75), Gibbons & Phillips 96(4), Knowles 161(17,20), Maslow 187(58). Gibbons and Phillips sum up:

In the future, when we have responded to the self-education imperative, the job will be made easier by parents who model self-education and encourage initiative in their children. These parents will be assisted by a community designed to encourage self-education and to provide the resources people need to pursue it. In all lines of work people will be given opportunities and incentives for continuous on-the-job learning. In such circumstances a distinctive and complete form of teaching for self-education may emerge. Gibbons & Phillips 96(11)

In the meantime, the main task of education will be help students understand the differences between teacher-directed and self-directed education and to create educational structures which enable students to develop the skills and attributes to be non-dependent and self-directed people. Faure 76(133), Gibbons 94(54), Gibbons & Phillips 96(11), Knowles 161(61).



## Educational Condition: EDUCATIONAL VISION

## Postulate:

TEACHER-DIRECTED EDUCATION AND SELF-EDUCATION ARE NOT MUTUALLY EXCLUSIVE CONCEPTS; THESE FORMS OF EDUCATION BELONG ON THE SAME CONTINUUM, PLACED ACCORDING TO THE DEGREE OF STRUCTURE PRESCRIBED IN THE LEARNING SITUATION.

Over the past decade, educators have been involved in a search for the one 'best' approach to learning. This quest seems to have revolved primarily around the concept of student-direction versus teacher-direction in learning. Faure 76(142). A multitude of writers have assigned various labels to educational approaches which incorporate elements of student direction in learning activities. Though opinions as to the ideal degree of student direction vary significantly from author to author, the main thrust of all these approaches involves the transfer of responsibility for learning from the teacher to the student. Della Dora & Blanchard 60(1), Faure 76(134), Griffin 111(6), Knowles 161(18), Tough 285(92). While the widespread emergence of non-traditional learning approaches seems to indicate a strong desire for an effective alternative to traditional teacher-directed education, evidence from research clearly indicates that there is, in fact, no single all-purpose learning approach. Eiseman 67(145-148), Gibbons & Phillips 96(10), Jenks & Murphy 143(25-27), Knowles 161(21).

Educational research reveals that though traditional teacher-directed education and self-directed education are very different, they are not mutually exclusive concepts. Eiseman 67(145-148), Gibbons & Phillips 96(12,13), Jenks & Murphy 143(25-27), Knowles 161(21). All education, including institutionalized schooling, is

to some degree self-education. Gibbons writes:

All education is self-education in the same way that all jumping is high-jumping. Just as sure as you can distinguish a high jump from an ordinary jump, you can distinguish self-directed education from teacher-directed education, even though the individual ends up doing the learning - or the jumping - in both instances. Gibbons 94(51).

All teacher-directed learning is not necessarily bad and all self-directed education is not necessarily good. Gibbons and Phillips 96(9), Knowles 161(21). Research from the fields of education, psychology and leadership provide valuable data that indicates that both approaches, as well as an infinite number of combinations of the two can be effective. Educational effectiveness is primarily a function of matching the appropriate learning approach with the appropriate situation. Eiseman 67(148), Gibbons & Phillips 96(12), Scanlan & Keys 246(399). Traditional teacher-directed education and self-directed education, therefore, really belong at opposite ends of one learning continuum. The key variable is the extent of prescribed structure. Eiseman 67(145), Gibbons & Phillips 96(9,10). Identification of the most effective approach depends upon the unique variables of any given situation. Jenks & Murphy 143(25-27), Scanlan & Keys 246(399,400).

The broad goals of formal educational process are usually expressed in terms of developing student maturity and competence. Schools are assigned the responsibility of ensuring that every student reaches a specified level of competence in certain disciplines of knowledge as well as ensuring that the student is progressing toward personal maturity. Faure 76(220), Gibbons & Phillips 96(7,8). Faure states that:

The physical, intellectual, emotional and ethical integration of the individual into a complete man is a broad definition of the fundamental aim for education. Faure 76(156)

Inherent in this goal statement is the provision of leadership. Leadership involves the ability to influence an individual and/or group toward the achievement of goals. Robbins 231(240). In formal education, teachers exercise influence with students in their pursuit of educational and personal goals. Gibbons 94(53,54), Gibbons & Phillips 96(6-9), Knowles 161(31-38).

Research in the field of leadership reveals some valuable clues as to how teachers may provide educational leadership more effectively. The recognition of task and relationship as two important dimensions of a leader's behavior has been a central part of management research over the last several decades. Research conducted at Ohio State University revealed that most leadership activities could be divided into two distinct categories; 'initiating structure'(task-oriented behavior) and 'consideration' (relationship-oriented behavior). The Ohio State staff found that initiating structure involves:

... leader's behavior in delineating the relationship between himself and members of the work group and in endeavoring to establish well defined patterns of organization, channels of communication and methods of procedure. Hersey & Blanchard 124(94).

They found that the second dimension of leader behavior, consideration, involves:

... behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and members of his staff. Hersey and Blanchard 124(b)(94).

For some time it had been believed that task and relationship behaviors were

mutually exclusive. Research conducted at Ohio State University and later at the University of Michigan have proved this assumption wrong. Hersey & Blanchard 124(94,95), Robbins 231(242,245). The researchers subsequently sought to discover the most effective combination of task-oriented and relationship-oriented behaviors but had little success in identifying consistent patterns of leadership behavior and group performance. Definitive conclusions could not be drawn because results varied over different ranges of circumstances. Hersey & Blanchard 124(161), Robbins 231(244,245).

Further research revealed that the predicting of leadership success was far more complex than solely considering the behavior of the leader. The failure to obtain consistent results led to an examination of situational influences and ultimately gave birth to contingency leadership theory. Robbins 231(245,246). Numerous contingency theories of leadership have been developed. One outgrowth of this movement is situational leadership. Situational leadership is based upon an interplay among the amount of direction (task-oriented behavior) a leader gives, the amount of socio-emotional support (relationship-oriented behavior) a leader provides and the 'maturity' level that followers exhibit in attempting to accomplish a particular task, function or objective. Hersey & Blanchard 124(161), Scanlan & Keys 246(399-403).

Follower maturity is defined as the capacity to set high but attainable goals, willingness and ability to accept responsibility, and education and/or experience of an individual or group. These variables of maturity are considered only in relation to the specific task to be performed. Followers are not mature or immature in any total sense, but rather tend to have varying degrees of maturity depending on the

specific task, function or objective that a leader is attempting to accomplish through their efforts. Maturity ranges from low to high on a continuum and leadership behavior should vary in accordance with the specific task-relevant maturity of the follower. Hersey & Blanchard 124(161,162).

Parallels to these findings are evident in recent educational research which asserts that teachers must adapt their instructional behavior to the needs of different learners. Dependent upon the maturity of the learner, the teachers role may appropriately be active or passive, critical or supportive, direct or indirect, frequent or occasional, proactive or reactive. Jenks & Murphy 143(25,26). Maturity of the student is dependent upon such characteristics as the level of student self-sufficiency, i.e. the perceived ability of the student to effectively manage his learning, solve his problems and overcome conflicts of values, needs or interests; the extent of the students participation in experiential activities; and the number of requirements for graduation or certification outstanding. Jenks & Murphy 143(18).

Combining the principles of research in these two fields, it is clear that there are situations in which high teacher direction is appropriate. Eiseman 67(148), Gibbons & Phillips 96(12), Jenks & Murphy 143(25,26), Knowles 161(21). Knowles explains:

No doubt there are learning situations in which we are indeed dependent (as when approaching an entirely new and strange area of inquiry), in which our experience is in fact of little worth (as when we have had no previous experience within the area of inquiry, in which our readiness to learn is really determined by our level of maturation regarding the area of inquiry, in which we are rightly focussing on accumulating subject matter, and in which we are actually motivated by external pressures. Knowles 161(21)

The teacher must learn to respond effectively to the specific needs of the situation. Jenks and Murphy elaborate:

A teacher may be directive or nondirective, may lead students or follow them, may coax, wheedle or demand, may be solicitous or formal, make assignments or await the development of interests. Jenks & Murphy 143(18)

Each of these behaviors can be either facilitative or inhibitive depending on the maturity level of the student. Eiseman 67(144), Jenks & Murphy 143(19). Research suggests that as students' learning maturity increases, prescribed structure first becomes less important and then somewhat irrelevant, then a small hindrance and finally, for very mature students, a significant hindrance. Research also confirms that when students' maturity is extremely low, students learn more effectively under teacher-directed education because they need externally-imposed structure. Eiseman 67(146,147), Gibbons & Phillips 96(12), Jenks & Murphy 143(19).

These research findings are extremely useful when examining the implications of potential educational policy decisions. Eiseman writes:

... the decision to adopt progressive education on an overall basis is risky since even though the anticipated benefits for mature students are greater, so also is the magnitude of the disaster expected with immature students. One can conclude that a skillfully crafted policy which provides different amounts of prescribed structure for students at different levels of maturity - and which also takes into account the other orthogonal dimensions involved - would yield optimum results for each student. Eiseman 67(144)

Educational policy should be formulated based on the assumption that every learner should be headed toward maturity and self-direction. Gibbons & Phillips 96(10), Jenks & Murphy 143(19). Though students may not be mature in a total sense in any given situation, they are capable of exercising self-direction in

relation to specific tasks. Della Dora & Blanchard 60(5), Gibbons & Phillips 96(5-13), Jenks & Murphy 143(21). Della Dora and Blanchard write:

... young people are capable of beginning to learn to participate in significant ways in educational decision making in elementary school. By the time they are entering early adolescence, most young people are capable of participating in major ways in determining educational goals, subject matter for learning, methods for learning/teaching, and ways of assessing educational achievement. Della Dora & Blanchard 60(1)

Gibbons and Phillips write that an effective program for teaching self-educative competencies must gradually facilitate the student's transition from teacher-directed education to self-education. Gibbons & Phillips 96(12). They suggest that this facilitation may be accomplished by:

... establishing a system in which the teacher-directed portion of the program gradually diminishes as instruction, experience and maturity enable students to become self-directed in more and more of their learning activities, to become more self-educating in the breadth of conception within which their learning activities are designed, and finally, to make the major transition from school to adulthood. Gibbons & Phillips 96(12)

In order for any constructive change to take place in formal education, educators must first free themselves from the shackles of traditional pedagogical dogma and adopt a modern view of the processes of educational growth and renewal which must place great emphasis on both continuity and change. The only educational stability that will stand the test of time in this rapidly changing world is educational innovation in motion; a continual evolution of educational concepts, structures and methodologies designed to keep pace with the educational demands of modern learners. Faure 76(181,233,234), Gardner 90(8,9), Gibbons & Phillips 96(1-3), Hersey & Blanchard 124(206-214), Knowles 161(14-16).

The realities of the modern world require individuals to keep growing and developing throughout their lives. Formal educational process has a crucial role to play in assisting individuals to meet the challenges of their personal futures.

Faure writes:

The demand for education, characteristic of our time, is of unprecedented dimensions and strength. This evolution is taking place ... in all regions of the world ... It is uncontestably a universal historical phenomenon. All indications are that this trend will gather momentum. It seems to us to be irreversible. Future educational policies must be formulated on this basic fact. Faure 76(34,35)

As a consequence of these steadily increasing demands for education, governments and educators are faced with a serious dilemma:

... it is or will eventually become impossible to mobilize financial resources in direct proportion to the total demand for schooling. On the other hand, the demand for schooling is already or soon will be of far greater dimensions than traditional educational systems have the capacity to handle, even when operating at optimum levels. Under these circumstances, governments can hardly fail to question whether trying to satisfy this demand uniquely through existing institutions and budgets is reasonable, and whether it would not be more appropriate to use other forms and other means. Faure 76(49)

As long as teacher-directed education remains the central focus of formal schooling, students will remain largely unprepared for the future. Gibbons & Phillips 96(9). Educators must halt their search for the one 'best' learning approach and realize that both teacher-directed and self-directed learning have a legitimate place in formal education. Educational activity must instead become centered on the learner. Faure 76(220), Gardner 90(5,6), Jenks & Murphy 143(19), Maslow 187(168). Educators must effectively combine teacher-directed and self-directed educational approaches in order to cultivate and support student



responsibility in all phases of learning:

When a person leaves schooling he or she must not only have a foundation of knowledge acquired in the course of learning to inquire but, more importantly, also have the ability to go on acquiring new knowledge easily and skillfully the rest of his or her life. Knowles 161(15,16)

The age of the learning society is here and educators have a fundamental responsibility to prepare students to competently assume their roles as fully-functioning members of their society by developing their capacities to be self-directing and self-responsible lifelong learners. Della Dora & Blanchard 60(1), Faure 76(181,182), Gibbons & Phillips 96(11,12), Keeton 150(1), Knowles 161(14-17).

CHAPTER FOUR

Psychological Condition: DEVELOPMENTAL CONTINUUM

Postulate:

THE PRIMARY PROGRAM OF EACH INDIVIDUAL'S SELF-EDUCATION IS THE SUCCESSFUL RESOLUTION OF THE PERSONAL, RELATIONAL AND PERFORMATIVE TASKS WHICH MUST BE ADDRESSED IN THE LIFELONG DEVELOPMENTAL PROCESS OF UNFOLDING MASTERY; THE SECONDARY PROGRAM IS THE CREATION OF A PERSONAL PATTERN OF EVOLUTIONARY TRANSFORMATIONS THROUGH WHICH THE INDIVIDUAL TRANSCENDS HIS ENVIRONMENT TO FULFILL HIS VISIONS, POTENTIALITIES AND ENTERPRISES

The process of self-education is in tune with the natural process of psychosocial development. Knowles writes:

An essential aspect of maturing is developing the ability to take increasing responsibility for our own lives - to become increasingly self-directing.  
Knowles 161(15)

Inherent in this development, as with all living things, is a ground plan which unfolds in a sequence of stages. This plan is governed by inner laws of human development and is also profoundly influenced by prevailing environmental conditions. The development of personality involves inner changes which create predictable crises in the growth of the individual. Each crisis constitutes:

...a turning point, a crucial period of increased vulnerability and heightened potential ... psychosocial development proceeds by critical steps - 'critical' being a characteristic of moments of decision between progress and regression. At such points either achievements are won or failures occur, leaving the future to some degree better or worse but in any case, restructured. Sheehy 256(19)

These crises ultimately become personal tasks which the individual must resolve in order to successfully progress from one stage of psychosocial maturation to the next. The degree of success attained will be determined in decisive encounters between the individual and his environment, particularly his interaction with significant other people in his life who may either cultivate or inhibit his successful resolution of the crises. Erikson 70(52), Levinson 178(41), Sheehy 256(19,20). Land elaborates:

Growth cannot occur independently - it requires interaction and interrelation between the growing thing and its environment. Land 172(11)

Whether conceived as stages of ego development or as periods in the evolution of individual life structure, the resolution of self-educative crises unfolding on a steadily expanding environmental stage, falls to the individual and composes his primary program of self-education. The individual must accomplish these tasks of development himself. While others may encourage or guide the individual, they cannot direct or carry him through a growth transition. Jung explains that experience has clearly shown that the environment cannot give man as a gift:

... that which he can win for himself only with effort and suffering ... we must go through a process of self-nourishment. Jung 149(58)

Over a lifetime, individual life structure evolves through a sequence that seems to follow a universal pattern. Each stage is characterized by a crisis or task. Erikson, for example, describes the following sequence of accomplishments necessary for the development of a healthy personality:

1. Basic trust in oneself and others.
2. Autonomy: confidence in oneself to act independently.
3. Initiative in doing and making things.
4. Industry in becoming skillful at producing.
5. Identity as a competent, worthy individual with inner continuity.
6. Intimacy with a few others influenced by an emerging ethical sense.
7. Generativity or the capacity to be productive and to contribute.
8. Ego-identity or the integration, acceptance of life, spirituality and renewal. Erikson 70(55-100)

Sheehy and Levinson also discovered the existence of distinct developmental patterns as a result of their studies of personal histories. Levinson states that:

... the life structure evolves through a relatively orderly sequence during the adult years ... It consists of a series of alternating stable (structure-building) periods and transitional (structure-changing) periods. These periods shape the course of adult psycho-social development. Levinson 178(49)

The primary task of each stable period is to build a life structure. Key choices must be made and a structure formulated based on personal goals and values. Levinson 178(49). During the transitional period, the individual must dismantle old structures and create new ones to meet the demands of inner changes and new circumstances. Levinson goes on to describe the challenge of self-education presented in this situation:

A transitional period ... terminates the existing life structure and creates the possibility for a new one. The primary tasks of every transitional period are to question and reappraise the existing structure, to explore the possibilities for change in self and world, and to move toward commitment to the crucial choices that form the basis for a new life structure in the ensuing stable period. Each transitional period has other distinctive tasks reflecting its place in the life cycle. Levinson 178(40)

These stages and their inherent life crises play an extremely vital role in human development. While they have a predictable time of emergence, they may also be

present long before they are expected and also may recur. Implicit in the concept is the idea that tasks or crises may be met and carried out either well or poorly. While evaluation of developmental tasks is difficult, generally a life structure is considered satisfactory to the extent that it is viable in society and suitable for the self. Levinson 178(53). In order to be successful in the formulation of their life structure, individuals require self-identity, self-esteem, hope and competence. Becker 15(19).

Beyond coping with the basic stages of development, there exists a secondary self-educative program in which the individual transcends the stages or crises imposed by internal and external conditions and designs his own unique growth pattern and means of growth achievement. Maslow explains that authentic, self-actualizing, and productive people:

... are not primarily adapted to external reality or shaped by it or equipped to cope with it. Maslow 189(183)

These individuals are characterized by detachment, independence, self-government and introspection; their centering-point is intrapsychic. Maslow 189(182-183).

Hampden-Turner explains the relationship of this secondary program to the primary program of self-development by stating that man:

... chooses how to perceive and whom to perceive. He defines himself and his competence, and invests this competence with a chosen degree of risk and purpose. From the synergy of his existence with that of others he chooses what to recall and how to symbolize and synthesize it. He is free within the process of his development which is the necessary condition of his freedom. Hampden-Turner 116(38)

The effective self-educator struggles, risks and reaches out again and again even in the face of discouragement and sustained incomprehension.

The nature of man is clearly not a static phenomenon. Individuals are continually developing. Land elaborates:

The only permanence of human nature is the direction and the continuity of this transformational change ... We can safely assume that in our evolution there is no finite or visualizable end to growth. Land 172(194)

Man is the only creature capable of choosing to evolve and of transforming both his culture and environment by the behaviors he selects and those he excludes.

The goal of the secondary program of self-transformation varies. For some individuals it involves the achievement of productive and healthful self-actualization, for others it involves escape from the limitations of personal ego in order to attain union with a universal consciousness and for yet others it is the achievement of mystical powers and experience. The final stages of such a program are necessarily undefined, but the early stages involve the creation of a personal pattern of evolutionary transformations through which the individual transcends his immediate environment in order to fulfill his personal visions, potentialities and enterprises. Allport 5(27,28), De Ropp 61(65), Maslow 187(281-282), 189(38), Perls 220(125), Tough 285(28), Watts 292(133).

The aim, process and activities of the primary program of self-education provide opportunities through which psychosocial developmental tasks may be met and mastered. The secondary program of self-education involves transcendence of the

immediate environment. Maslow explains:

Transcendence refers to the very highest and most inclusive or holistic levels of human consciousness, behaving and relating, as ends rather than as means, to oneself, to significant others, to human beings in general, to other species, to nature, and to the cosmos. Maslow 187(279)

Psychological Condition: READINESS FOR SELF-DIRECTION

Postulate:

SELF-THERAPY IS A SELF-EDUCATION PROCESS EMPLOYED IN A WIDE RANGE OF PSYCHOLOGICAL TREATMENTS DESIGNED TO HELP INDIVIDUALS DEVELOP MASTERY OF INNER FORCES NECESSARY FOR SELF-MANAGEMENT, PSYCHOLOGICAL HEALTH AND THE CAPACITY TO FUNCTION EFFECTIVELY IN THE WORLD.

Many, if not all, psychologies and psychotherapies include theories and practices of self-treatment that facilitate personal preparation for active self-education. Effective self-educators develop a state of psychological readiness before embarking on personal learning endeavours. The tasks of self-education necessitate the successful resolution of issues pertaining to personal resistance to growth, emotional problems and dysfunctional social behaviors so that attention, thoughtfulness, energy and determination can be focussed on active endeavours. The individual must have a realistic perspective regarding his life in order to be able to effectively formulate personal goals and operating plans. The self-educator must also be capable of implementing his plans and managing personal time and effort as well as negotiating and overcoming obstacles that may be encountered. Gibbons & Phillips 96(6), Knowles 161(15-17). Effective counsellors and therapists in various psychological disciplines regard the ability to deal with personal problems as a basic life competency. Goodwin explains:

Counsellors have a variety of methods available to help facilitate clients' growth. Ultimately, however, clients must learn how to help themselves. One of the primary means for helping clients develop their own self-development systems is educational interventions ... to teach specific skills in coping better with problems of living. Goodwin 106(13)



Self-therapy provides one means through which the self-educator may achieve personal psychological readiness. This therapeutic model, based on the development of individual self-directedness, may also constitute a valuable frame from which instructors of self-education may develop self-educative competencies in students.

A wide variety of approaches to self-therapy currently exist. In Transactional Analysis, the individual learns to analyze his transactions with others to determine which of his three primary ego states, the Parent, Adult or Child, is active in key situations and social interactions. From these analyses, life scripts or patterns of such prevailing forms of interaction are defined. The long-range goal is to eliminate scripts that inhibit volition, self-direction and growth. This objective is achieved through a series of sessions in which the individual assesses various aspects of his life and his behavior as well as through the writing of carefully planned personal contracts that prescribe living in ways contradictory to undesirable scripts. Berne 20(21-48), James & Savary 142(3-21), Jongeward & Seyer 144(10-57).

Another popular approach is behavioral self-modification. Behavioral methods of self-change, or self-control prescribe methods through which the individual can control his own behavior in predictable ways by systematically managing his environment. These include controlling the stimuli received, self-reinforcement of desirable behavior, self-punishment for the elimination of undesirable behavior, self-monitoring for accurate feedback and evaluation of progress and techniques for interrupting cycles of behavior or increasing them. Planning behavior, organizing responses, scheduling rewards and publicly recording progress are all

key practices. Bandura 14(2-13), Mahoney & Thoreson 184(201-216,308-316), Martin 186(2-3).

Gestalt methods of self-development often involve dramatic or psychodramatic activities designed to deal with intrapsychic conflicts. Activities may include exploring a known fantasy one has already discovered through observation, playing all the parts involved in a recurrent dream or playing out an imaginary encounter with a person who has aroused an inappropriate reaction. Perls 221(5-55), Perls, Hefferline & Goodman 223(227-251), Schiffman 248(18-33), Stevens 273(1-9). In Gestalt Self-Therapy, Schiffman describes the following technique:

1. Recognize an inappropriate reaction.
2. Feel the apparent emotion.
3. Find out what else you feel.
4. Ask, "What does this remind me of?"
5. Look for the pattern in what happened. Schiffman 248(195 -199)

Gestalt psychotherapy is the most affective of the therapies, emphasizing the experiencing of emotions more than cognitive, rational or verbal examination.

The Freudian, psychoanalytical approach described in Horney's Self-Analysis, offers a paradigm similar to Schiffman's, but one which depends more on rational examination. Horney 132(9-34). Horney offers the following as an example of the process but cautions that this constitutes an oversimplification of a more complex process:

1. Observe an unusual or troubling behavior or reaction in which the emotion evoked is out of proportion to the situation.
2. Try to find whether similar difficulties operate in other areas of your life.

3. Examine how it affects your life.
  4. Try to determine the factors responsible for the difficulty.
- Horney 132(82-88)

There are also other approaches and techniques of self-change. The human potential movement incorporates a number of activities that may advance self-development and self-knowledge including yoga, meditation, massage, T-groups, fantasy techniques, dance, relaxation and autogenic training. Rudestam, in Methods of Self-Change, draws together many techniques under the headings of affective, behavioral and cognitive methods and urges an eclectic approach utilizing the full range of possibilities available. He encourages each individual to build an appropriate comprehensive program that suits personal needs. Feldenkrais 77(3-9), Pelletier 219(191-291), Rudestam 238(1-17).

One concern that is often expressed regarding self-therapy is the potential danger to the individual in examining inner forces on his own. Ample evidence exists, however, that individuals are well able to protect themselves from insights that they are not ready to receive. Self-therapy requires motivation, either a desire or need, for personal change. Self-therapy constitutes a means of self-education through which individuals may resolve dysfunctional feelings and behaviors as well as develop personal psychological readiness that will allow them to function effectively in their surroundings and maximize the opportunities in their lives. Horney 132(30-33,243), James & Savary 142(5), Jongeward & Seyer 144(8-9).

Psychological Condition: IDENTITY

Postulate:

SELF-EDUCATION PROVIDES OPPORTUNITIES FOR DEVELOPMENT, EXPLORATION, EXPRESSION AND EXERCISE OF PERSONAL CHARACTERISTICS AND CAPABILITIES TOWARD THE FORMULATION OF A STRONG AND POSITIVE SELF-CONCEPT.

Every individual acts in accordance with his self-concept. This self-concept, which in turn governs our every act, is formed by three factors; heredity, education and self-education. Allport 5(27), Feldenkrais 77(3), Robbins 231(63,64). Feldenkrais writes:

The part that is inherited is the most immutable. The biological endowment of the individual - the form and capacity of his nervous system, his bone structure, muscle tissue, glands, skin, senses - are all determined by his physical heritage long before he has any established identity. Feldenkrais 77(3)

There are no genes to carry the feeling of self-worth. Though often individuals regard self-concept as an entity arbitrarily bestowed by nature, self-concept is primarily the result of education and self-education. Education determines language and establishes a pattern of concepts and reactions common to an entire society. These concepts and reactions will vary according to the environment into which a person is born. The manner in which this external education is acquired, as well as the selection of the material to be learned and the rejection of that which cannot be assimilated is determined by self-education. Feldenkrais 77(3).

Education and self-education occur intermittently. In the first weeks of life, the

individual's education is chiefly comprised of absorbing the environment, and self-education consists of refusal of, or resistance to, things that are organically alien and unacceptable to the individual's inherited characteristics. Capacities for self-education develop as the individual grows and matures. Through self-exploration and interactions with the people and the world around him, the individual discovers not only what he is but what he is not, and attaches values to those discriminations. Combs & Snygg 48(134), Feldenkrais 77(134), Gibbons & Phillips 96(1), James & Savary 142(22), Satir 243(24). Eventually, personal characteristics emerge and the individual begins to choose among people, objects, and actions in accordance with his unique nature. He no longer accepts everything that training tries to impose on him. Allport 5(28-30), Bennet 17(115), Feldenkrais 77(3). Allport explains:

If he is normally endowed the human infant will in time develop a conscience, a sense of self, and a hierarchical organization of traits. He will become some sort of structural system, self-regulating and self-maintaining ... he will exert himself to become something more than a stencil copy of the species to which he belongs ... personality is governed ... by a disposition to realize its possibilities ... one of the capacities most urgent is individuation, the formation of an individual style of life that is self-aware, self-critical and self-enhancing. Allport 5(27,28)

Of the three factors active in the establishment of self-concept, self-education alone builds on this natural psychological dynamic. Physical inheritance comes unsolicited and external education is largely imposed upon the individual. Self-education, however, is a unique volitional learning process through which an individual develops a strong and positive identity which, in turn, enables him to fulfill individual potentialities. Allport 5(45), Bennet 17(171), Feldenkrais 77(8), Maslow 189(38), Perls 220(125), Tough 285(28).

Through self-education, the individual develops a concept of himself as a non-dependent and self-directing person. Collins & Moore 46(15), Knowles 161(64), Lindeman 180(13-14), Rogers 235(22-23), Schiffman 248(97), Tough 285(28). The confidence built through self-educative successes allows the individual to create the laws of his own inner nature. He becomes self-contained and self-sufficient to the extent that his determinants are primarily inner ones, rather than social or environmental. Combs & Snygg 48(251), Goertzel & Goertzel 105(57), Maslow 189(35,45), Rogers 235(23), Schiffman 248(54). The individual develops a high degree of self-esteem which forms the base from which he assumes full ownership of his potentialities and begins to engineer himself according to his personal desires and aspirations. Combs, Avila & Purkey 49(144), Gilmore 100(11,14,43), Peale 218(13,24), Satir 243(27,28).

Through this process of becoming more fully himself, the individual also discovers his specieshood, his humanness. The farther he goes into himself in search of the particular and unique, the more he finds and identifies with the whole human species. Maslow 187(187), Rogers 235(193). Self-education experiences provide the individual with opportunities to feel liked, wanted, acceptable and able to cope. Combs & Snygg 48(262). He discovers intelligence, power, self-expression, freedom, creativity, appreciation, enjoyment and fellowship through his learning endeavours. He makes contributions that are meaningful, experiences beauty and joy, and shares these realizations of his personality in communities of fellowship. Lindeman 180(13-14), McLeish 197(57), Smiles 266(314).

A unique relationship of mutual influence exists between self-education and a positive self-concept. Just as self-education shapes self-concept, self-perceptions

determine individual capacity for self-education. Combs & Snygg 48(122), Feldenkrais 77(31,32), Gardner 90(9), Houle 133(18-35), Maslow 187(170), May 192(221), Rogers 235(108,288). Gross explains:

Your learning, like your life, will take its shape and draw its energy from your values and priorities. I have spoken of learning as a "lever for life-change". The fulcrum of that lever is this sense of yourself - who you are, what you need and want, what you seek to become. It is this self concept that gives meaning to everything you learn. Gross 113(67)

In order to maximize personal self-educative potential, the individual must know himself and accept himself fully as a person. Allport 5(28), Campbell 34(40), Corsini 51(39-40), Feldenkrais 77(10,11), Gardner 90(14), Gross 113(63), Hampden-Turner 116(39), Maslow 189(201), Peale 218(23), Schiffman 248(9,14). Gardner elaborates:

The maxim "Know Thyself" is so ancient, so deceptively simple, so difficult to follow, it has gained richness of meaning as we learn more about man's nature ... The individual who has become a stranger to himself has lost the capacity for genuine self-renewal. Gardner 90(14-15)

The individual requires a positive view of himself in order to initiate and direct self-change. Combs & Snygg 48(145,308), Feldenkrais 77(11), Gilmore 100(13), Gross 113(72), Hecht & Traub 120(46-55), Mahoney & Thoresen 184(202), Maslow 189(201), McLeish 197(66,192), Perls 220(120), Rogers 235(108). Combs, Avila and Purkey write:

The self is the centre of a person's existence, his frame of reference for dealing with life. Persons who approach their problems with an air of "can do" are already far ahead of those who begin with a "can't do" attitude, expecting defeat. With a positive view of self one can dare to be open to experience, and confront the world with open arms and quiet certainty. Combs, Avila & Purkey 49(144).

A positive self-concept is clearly required for the autonomous achievement and inner-direction which enable an individual to manage his personal learning endeavours and to deal effectively with any life situation. Combs & Snygg 48(250), Gilmore 100(14), James & Savary 142(xv).

The unique "motor" of self-directed learning and living is a strong and positive sense of self. McLeish 197(64-65). At the same time, the self is a process that exists largely as potential that can only be realized through an active life of creative development and self-expression. Bennet 17(52), Jung 149(7), Maslow 187(85,186), Satir 243(27). Each individual possesses, in his awareness of his evolving identity, the responsibility and power to mobilize his inherent ability to direct his own destiny. Campbell 34(385,386), Combs & Snygg 48(43), Lindeman 180(13-14), Mahoney & Thoresen 184(201,202), Schiffman 248(42).

Self-education is not an easy process to master, nor is it one that is ever complete. It is a continuing way of life. Maslow 187(186), Rogers 235(181). Rogers explains how self-direction liberates the individual from being ruled by the expectations of others:

The characteristic movement ... is ... to permit himself freely to be the changing, fluid process which he is ... learning to listen sensitively to himself ... as he moves toward acceptance of the "isness" of himself ... He trusts and values the complex inner processes of himself, as they emerge toward expression. He is creatively realistic and realistically creative. He finds that to be this process in himself is to maximize the rate of change and growth in himself. Rogers 235(181)

Self-education permits the individual to be largely his own project; it provides the means and ways for an individual to direct the growth and development of a



positive self-concept toward the realization of his full human potential. Combs, Avila & Purkey 49(144), Feldenkrais 77(8), Maslow 187(186).

Psychological Condition: SEEKING OF MEANING

Postulate:

SELF-EDUCATION SUPPORTS, ENHANCES AND ENCOURAGES THE HUMAN PSYCHOLOGICAL DYNAMIC OF NATURAL AND SPONTANEOUS SEEKING OF MEANING.

Man demonstrates in his nature a pressure toward fuller and fuller being. Allport 5(24-26), Archambault 7(5), Faure 77(142), Kopp 162(19), Maslow 189(10,160), Rogers 235(35). Rogers writes:

All humans have an urge to expand, extend, become autonomous, develop, mature ... the motivation for learning and change springs from the self-actualizing tendency of life itself, the tendency for the organism to flow into all the differentiated channels of potential development. Rogers 235(285)

While self-actualization is extremely important to man, it is not his only concern. Life involves more than solely trying to live out personal potentialities. In addition to self-fulfillment, man seeks relatedness and meaning. Man finds identity only to the extent to which he commits himself to something beyond himself, to a cause greater than himself. Every man has a mission; the world holds special opportunities and obligations reserved for him alone. He spends his life in search of the realization of values and the fulfillment of meaning potentialities which are to be found in the world outside him rather than strictly within his own psyche. Frankl 85(10,44-51,68), Gardner 90(115). Gardner elaborates:

The meanings in any life are multiple and varied. Some are grasped very early, some late; some have a heavy emotional component, some are strictly intellectual; some merit the label religious, some are better described as

social. But each kind of meaning implies a relationship between the person and some larger system of ideas or values, a relationship involving obligations as well as rewards. Gardner 90(125-127)

Man is, by nature, a seeker of meanings and self-education supports, enhances and encourages this natural human psychological dynamic. Meaning is derived directly from the data of actual life experiences. In self-education the individual selects, organizes, and interprets learning experiences in ways that are personally meaningful. This meaning connects the individual with the world around him and constitutes a major determinant of future self-directed action. Combs & Snygg 48(353,362), Frankl 85(14), Gardner 90(124), James & Savary 142(4), Kopp 162(4), Maltz 185(xiv,xv), Maslow 189(8), May 192(208), Peale 218(46), Schiffman 248(9).

Each individual's meanings are unique and specific; no one can prescribe a meaning for another person. Combs & Snygg 48(17,37), Frankl 85(14), James & Savary 142(8), Maslow 189(22). Frankl explains that:

Each man is unique and each man's life is singular; no one is replaceable nor is his life repeatable. This twofold uniqueness adds to man's responsibility ... life is a chain of questions which man has to answer by answering for life, to which he has to respond by being responsible, by making decisions, by deciding which answers to give to the individual questions. Frankl 85(17)

Responsibility is at the very essence of human existence. Through self-educative acts the individual interprets, on his own terms, his personal responsibilities and the definition of his personal meaning. Frankl 85(13). He actively decides how he will spend his life; he designs his own future. He uses his personal will to discover meaning in his world. Self-education sharpens awareness, heightens alertness and generally aids the individual in his search for meaning. Gross 113(58). The

self-educator sets personal goals, selects stimuli, makes choices and formulates action plans designed to fulfill the specific meaning of his life and also to meet his personal responsibilities to society, humanity and mankind. Frankl 85(12,51), Gardner 90(115), Gibbons & Phillips 96(8), Kopp 162(8).

It is important to note that no climax exists in man's search for meaning; it constitutes a lifelong quest that is never really complete. Maslow 189(33), Rogers 235(181). Gardner elaborates:

... the self-renewing man never feels that he has "arrived". He knows that the really important tasks are never finished - interrupted, perhaps, but never finished - and all the significant goals recede before one. The man who thinks that he has "arrived" has simply lost sight of those goals (or perhaps never saw them in the first place). Gardner 90(122).

Since meaning is never permanently 'attained', the self-educator must continually risk the security present in his current understanding in order to discover the unfolding meaning of his new experience. Assagioli 10(31), Frankl 85(14). Faure writes:

By nature, man ... has a taste for risk and accepts it; all forms of risk - the risk of being wrong or led astray as much as the risk involved in discovering, in being discovered and in facing life's great experiences. Faure 77(148).

The self-educator is open to exploration and discovery. Impulses are desired and welcomed. If these impulses constitute tensions, the self-educator trusts his own experience and spontaneously, freely and willfully chooses his desired course of action. He is not rigid, he is able to deal with his own internal conflict and relates successfully to the world outside himself. The striving and struggling for

something worth longing and groping for ultimately yield health and contentment. Frankl 85(68), James & Savary 142(109), Maslow 189(29), Rogers 235(22,193) . Even in difficult or seemingly unpleasant situations, the self-educator discovers meaning. Frankl 85(15), Mahoney & Thoresen 184(318). Frankl explains:

Life can be made meaningful in a threefold way: first, through what we give to life (in terms of our creative works); second, by what we take from the world (in terms of our experiencing values); and third, through the stand we take toward a fate we no longer can change (an incurable disease, an inoperable cancer, or the like) ... man is not spared facing his human condition ... the tragic triad of human existence ... pain, death, and guilt. By pain, I mean suffering; by the two other constituents of the tragic triad, I mean the twofold pact of man's mortality and fallibility. Frankl 85(15)

For the self-educator, life never ceases to hold and retain a meaning up to its very last moment. Frankl 85(15), McLeish 197(155). The self-educator builds into his personal world his own structured fields of meaning. Hampden-Turner 116(28-33). Self-educative acts release energies to grow, to break through archaic ways of thinking and behaving in order to discover new meaning. Each and every day presents valuable opportunities to the self-educator to make decisions which facilitate his personal growth and his discovery of meaning. Allport 5(89), Berne 21(31), Corsini 51(397), Frankl 85(6), James & Savary 142(4,5), Rogers 235(170,171), Schiffman 248(51).

CHAPTER FIVE

## Personal Condition: INDIVIDUAL NEEDS

## Postulate:

SELF-EDUCATION PROVIDES FOR DIVERSITY OF INDIVIDUAL EDUCATIONAL OPPORTUNITIES TO MATCH UNIQUE PERSONAL LEARNING PATTERNS, STYLES AND NEEDS.

The individual's unique personal psychosocial structure furnishes the basic material and constitutes the real starting point for all learning. Allport 5(48), Archambault 7(428). This structure includes the individual's unique perceptions of himself and the world in which he lives as well as the meanings these things have for him. Combs & Snygg 48(17), Faure 77(157), James & Savary 142(7,8), Kidd 153(52), Maslow 189(22). As a consequence of this personal structure, each individual possesses unique learning patterns born of highly individualized and complex interactions of personal and societal factors. Combs & Snygg 48(17,37), Gibbons & Phillips 96(7), Griffin 111(8), Houle 134(80), Maslow 189(22). The process of self-education acknowledges these individual differences in its assumptions that:

... individuals become ready to learn what is required to perform their evolving life tasks or to cope more adequately with their life problems, and that each individual therefore has a somewhat different pattern of readiness from other individuals. Knowles 161(20)

The pertinence and applicability of learning is therefore a function of the perceived relationship of the learning to the needs experienced by the individual in his life. Allport 5(47,48), Combs & Snygg 48(24,196), Holt 130(12), Houle 134(3),

Kidd 153(50). Gross writes that:

The prime time to learn is when your own need, curiosity, taste or hunger impels you in a particular direction. The rule holds for adults in their developing interests and capacities as it does for children's miraculous learning to walk and talk. It's as true for metaphysics or Chaucer as it is for typing or bridge or bookbinding. Gross 113(17)

In self education, learning grows out of real concerns and real needs; learning is effectively integrated with what is important and interesting in the personal life of the learner. Gibbons & Phillips 96(7), Holt 130(12), James & Savary 142(5). Basic individual needs for food, shelter, clothing and safety are generally substantially satisfied in North American society, consequently higher order needs are emerging as the primary motivating influences behind human behavior. The needs to be dignified, to be respected, and to be free for self development are becoming very important. Carnegie 40(31), Hersey & Blanchard 124(33), Maslow 187(11), Rogers 235(285). Tough elaborates:

... as their lower order needs such as food are satisfied ... they are setting a new goal for themselves: self-actualization, the realization of their enormous potential. They are seeking the higher joys of gaining new knowledge and skills, of achieving better self-understanding, of learning to interact more sensitively and honestly with others. Tough 285(4)

Self-education is in tune with this emergence of higher order needs:

... self-directed learning assumes that learners are motivated by internal incentives, such as the need for esteem (especially self-esteem), the desire to achieve, the urge to grow, the satisfaction of accomplishment, the need to know something specific, and curiosity. Knowles 161(21)

Self-education, as a 'self' centered process of free and independent learning, allows learners to design, direct and control personal learning activities in order

to bring to fulfillment their collective and well as their personal potentialities. Bennet 17(171), Lindeman 180(13,14), Maslow 187(186), Schiffman 248(42). Gross advises that:

No one can learn for you, any more than a surrogate can love for you or eat for you. "To learn" is an active verb, and you as a learner are unique. Your education is something you must tailor to yourself, not something you can get ready made. Gross 113(17,18)

Individuals know what they need and want to know. They must be able to explore and learn about the the world ways that suit their personal learning styles. Holt 130(11-13). While no one particular way of learning is inherently superior to another, self-education offers learning options sufficiently diverse to accommodate the unique learning patterns and styles of each individual throughout their entire lives. Archambault 7(6), Faure 77(157), Gibbons & Phillips 96(7), Griffin 111(8), Gross 113(17,18), Knowles 161(20). Self-education provides an effective and holistic means through which individuals may design, direct and control their own learning and living in accordance with personal temperament, circumstances, life stage, interests, needs and aspirations. Faure 77(183), Gross 113(17,18), Holt 130(12,13).



Personal Condition: MASTERY

Postulate:

SELF-EDUCATION PERMITS INDIVIDUAL PURSUIT OF UNDERSTANDING,  
ACHIEVEMENT AND EXCELLENCE IN A BROAD RANGE OF FIELDS.

Unlike traditional schooling which attempts to make every student minimally competent in the same bodies of knowledge and skill, self-education permits an individual to explore a range of fields as broad as the fields of activity pursued throughout the community. Gibbons 94(53), Gibbons & Phillips 96(8). When the self-educator embarks upon his personal quest for knowledge and skill, he selects a field which effectively combines his interests, past experiences, talents and temperament with promising opportunities. Gibbons 94(53). The self-educator then concentrates his efforts on one activity, working at it until he completes it. Gibbons 94(47), Gibbons & Phillips 96(8), Maslow 187(61). The uniqueness of the individual and the materials, events, people and circumstances of his life comprise the elements from which the project originates. Gibbons 94(53), Rogers 235(350). Once active in a field of his choice, the self-educator seldom seeks minimal competence. Gibbons and Phillips explain that self-educators:

... usually attempt to become as proficient as they can, and excellent if possible, because it is their field of choice and is closely identified with them. Gibbons & Phillips 96(8)

Students in school also seek excellence, but it is possible only for a few to achieve it. Self-education, however, offers learning options in fields sufficiently diverse to allow an individual to formulate personal, self-directed learning

activities that build naturally on personal strengths, interests and needs. Every student is consequently afforded opportunities to pursue excellence in fields of his choice and can experience productivity, success and, ultimately, mastery. Gibbons & Phillips 96(8,18), Gross 113(17,18).

Self-educating potentialities are a heritage of every human being. Through self-educative means, every individual can activate, develop and manage personal learning in a wide variety of fields throughout their entire lives. Maslow 189(83), McLeish 197(69). Kecskemeti states that:

All real learning is learning of a mastery. It begins with dependence and ends in freedom. Klausner 155(5)

Though the self-educator may be dependent initially, this dependent position is only the beginning of what he is ultimately capable of attaining. The self-educator learns primarily by doing. When he first attempts an activity, he may not do it well. Experiences of failure, if owned and analyzed, contribute valuable learnings as the solution of one problem helps in the mastery of another. As a result of continued effort combined with good models to follow and advice, if and when required, the self-educator learns and eventually achieves mastery in the field of his choice. Carnegie 40(58), Gibbons & Phillips 96(10,16), Holt 130(15,16), Rogers 235(276), Smiles 266(302). Mastery is the result of the self-educator's intense involvement and willful action. Assagioli 10(24), Gibbons & Phillips 96(6), James & Savary 142(9). Born of a personal struggle and the outcome of self-control, self-discipline and training, the achievement of mastery yields:

... maximum effectiveness and the most intense and enduring sense of

assurance, satisfaction, and joy. Assagioli 10(24)

These positive feelings generate the method, confidence and hope the self-educator requires for the task of broadening the range of his studies. The development of expertise in one field encourages the natural extension of efforts into richer, more complex fields which have a feedback effect on the individual of capability, self-trust and self-esteem. Gibbons & Phillips 96(8), Maslow 189(57,58). Gilmore elaborates:

The productive person brings to any situation certain basic attributes which are the result of his previous experiences both with himself and with his environment. One of these is a fundamental attitude of hope - the assumption that he is competent to succeed and that his success will be rewarded by those who are important to him ... he has the expectation of success, and he therefore proceeds in a manner that will enable him to fulfill his own prophecy. As a result, he increases both his competence and his self-esteem, and therefore his chances of still further success and mastery. Gilmore 100(13)

Self-education encourages and supports the exploration of a wide range of fields of activity. This exploration and experimentation eventually lead to personal mastery of the forces that control the individual's life. The self-educator develops an internal locus of evaluation; he knows when and at what level of proficiency he will move to his next field of interest. Gibbons & Phillips 96(9), Hill 125(44,45). Through a series of self-educative acts, the individual learns how to pursue understanding and achievement, to become expert, and ultimately to develop the breadth and perspective associated with an 'educated' person. Gibbons & Phillips 96(19), Gilmore 100(13). Gross asserts that individuals who:

... take command of their own learning ... master more things, and master them better, than those who rely on being taught. They tend to have greater zest, retain more of what they have learned, and make better use of

it in their living. Gross 113(17,18)

Personal Condition: SELF HEALTH

Postulate:

SELF-EDUCATION IS HOLISTIC EDUCATION CONCERNED WITH THE DEVELOPMENT OF HEALTHY, FULLY FUNCTIONING INDIVIDUALS IN WHOM THE PHYSICAL, INTELLECTUAL, EMOTIONAL AND ETHICAL ASPECTS OF THEIR LIVES ARE SUCCESSFULLY INTEGRATED.

Self-education involves volitional action through which the individual may realize his personal potentialities in the areas of physical health, emotional serenity, zest for living and mental peace. Faure writes that the aim of development is:

... the complete fulfillment of man, in all the richness of his personality, the complexity of his forms of expression and his various commitments - as individual, member of a family and of a community, citizen and producer, inventor of techniques and creative dreamer. Faure 77(vi)

The process of self-education constitutes an effective means through which the individual may achieve complete fulfillment in all these areas. A central consideration in this developmental process is "wellness", a concept that incorporates the elements of self-responsibility, nutritional awareness, physical fitness, stress management and environmental sensitivity. Ardell 8(58-63), Feldenkrais 77(3-9), Ryan & Travis 240(1). The self-educator, through his volitional search, creates an individualized, integrated lifestyle in accordance with his unique background, needs, preferences and values. The self-educator is life-positive; his purposes are clear and he values physical and psychological vitality. Ardell 8(8-9), Faure 77(156), Gibbons 94(47,48), Goertzel & Goertzel 105(28), Maslow 187(281), Peale 218(121,138,146).

Self-education is integrative. The self-educator is aware that the mind and the body are interactive. He realizes the profound impact of his mental state on his body. He acknowledges the influence of volition in his personal process of wellness. Pelletier elaborates:

All states of health and all disorders are considered to be psychosomatic .... Through considering the psychosomatic process in man, it becomes possible to consider the extent to which an individual can exert volition in the course of health and disease. Pelletier 219(318)

The effective application of volitional development is demonstrated dramatically in Cousin's Anatomy of an Illness, a carefully documented history of a personal healing program which was successful despite the terminal diagnosis rendered by the professional medical community. Cousins 52(4-6). A central concept that relates to volitional action in self-health is responsibility. Ryan and Travis write:

Looking within, and assuming responsibility for what you find there is a necessary condition for wellness. Ryan and Travis 240(12)

The process of self-education involves a never-ending series of free choice situations. The self-educator actively chooses what he will become and then accepts full responsibility for himself and his actions. Corsini 51(40), Della Dora & Blanchard 60(v), Maslow 187(45). He actively makes things happen in his life rather than waiting for life to act on him. Maslow 187(47), Schiffman 248(52). The self-educator views himself as a living process of wellness. He recognizes that in order to be healthy he must continue to grow and change in relationship to the changing circumstances of his life. Gardner 90(11,12), Lindeman 180(13,14), Overstreet 214(43), Rogers 235(181), Ryan & Travis 240(1). The self-educator learns to tune into unique personal patterns and discover his real needs and desires. The

self-educator revels in his uniqueness and strives to integrate every facet of his being toward the achievement of his full potential. Rogers describes the characteristics of the fully-functioning person:

He is able to experience all of his feelings, and is afraid of none of his feelings; he is his own sifter of evidence, but is open to evidence from all sources; he is completely engaged in the process of being and becoming himself, and thus discovers that he is soundly and realistically social ... He is a fully functioning organism, and because of the awareness of himself which flows freely in and through his experiences, he is a fully functioning person. Rogers 235(288)

The self-educator is healthy, active, and self-responsible. He feels intimately connected with the world around him. Ryan and Travis 240(3-4). His vitality of body and mind enable him to live happily and freely both in the external objective world around him and in the subjective world of his psyche. Bennet 17(98), Combs & Snygg 48(77), Maslow 187(183), 189(201-202), Peale 218(157), Schiffman 248(54).

Personal Condition: TIME

Postulate:

IN ORDER TO MAXIMIZE THE LEARNING POTENTIAL OF THE DAYS, MONTHS AND YEARS SPENT OUTSIDE FORMAL EDUCATIONAL INSTITUTIONS, INDIVIDUALS MUST BECOME SKILLFULLY SELF-DIRECTING.

Most individuals equate the phrase 'learning experience' only with what transpires in formal educational institutions. Gibbons 94(41), Gibbons & Phillips 96(1), Gross 113(16,17), Illich 141(12,47), Knowles 161(19,20). This conception of learning is extremely narrow as, in actuality, people spend much more time out of school than in it, even on a school day. Gibbons explains that:

... when school days end, even the best educated have forty or fifty years of life and learning still ahead of them ... Continued growth during these out-of-school hours and years requires continued learning - learning to master new jobs, to become better lovers, to meet life crises, to find new interests, to handle changes in society, to master new roles, to open new dimensions in ourselves and our relationships, and to make contributions worthy of our capacities. Gibbons 94(42).

There exists valuable learning potential in the activities which take place outside school as individuals struggle to perform their evolving life tasks and cope with life problems. Gardner 90(11,12), Gibbons 94(42), Illich 141(12), Knowles 161(20).

Faure writes that:

Whether they do so consciously or not, human beings keep on learning and training themselves throughout their lives, above all through the influence of the surrounding environment and through the experiences which mould their behaviour, their conceptions of life and the content of their knowledge. Faure 76(142)



Life experienced through relationships with the physical world and other people provide all individuals with an effective format for lifelong learning. Faure 76(142), Kidd 153(9), Knowles 161(20), McLeish 197(277). Knowles asserts that:

... there must be a somewhat different way of thinking about learning ... we must come to think of learning as being the same as living. We must learn from everything we do; we must exploit every experience as a "learning experience." Every institution in our community - government agency, store, recreation organization, church - becomes a resource for learning, as does every person we have access to - parent, child, friend, service, provider, doctor, teacher, fellow worker, supervisor, minister, store clerk and so on and on. Learning means making use of every resource - in or out of educational institutions - for our personal growth and development. Knowles 161(16)

In order to maximize the learning possible through these life experiences, specialized self-directed enquiry skills are required. Individuals must know how to effectively acquire new knowledge easily and skillfully throughout their entire lives. Gibbons elaborates:

Such growth, or informal learning, is very different from formal education. The self-educator must be independent, energetic, creative and strongly self-directed ... A way of helping students of all ages to become skillfully self-directed must be found and made part not just of schooling, but of all forms of education, including the education parents give their children and the education that all of us give ourselves throughout our lives. Gibbons 94(42).

The need for continued learning permeates all human existence; individuals need to improve their abilities to be self-directing and self-responsible to meet effectively the challenges of their personal futures. All life experiences should be treated as incomparably rich learning resources. Archambault 7(298), Combs & Snygg 48(261), Della Dora & Blanchard 60(v), Knowles 161(20), Rogers 235(277). Holt states that:

There are no experiences from which we learn nothing. We learn from everything we do, and everything that happens to us or is done to us. What we learn may make us more informed or more ignorant, wiser or stupider, stronger or weaker, but we always learn something ... It is the quality of our experiences, the satisfaction, excitement, or joy that we get or fail to get from them, that will determine how those experiences change us - in short, what we learn. Holt 130(12)

Down through the ages, man has carefully recorded the passage of time. Invisible and irretrievable, it is acclaimed as the most precious of possessions. It is unfortunate, then, that most individuals do not maximize the time available to them for learning. Gibbons and Phillips elaborate that after formal schooling:

People stop thinking of themselves as natural learners ... Many assume that to learn a particular thing they must return to the classroom. Gibbons & Phillips 96(7,8)

Each individual wakes up every day to a promise of twenty-four hours of meaningful experience. Bennett 18(18), MacKenzie 194(5). Each individual must live on this twenty-four hours of daily time as there is no more time available. Bennett states that:

Out of it we have to spin health, pleasure, money, content, respect and the evolution of our immortal soul. Its right use, its most effective use, is a matter of the highest urgency and of the most thrilling actuality. Bennett 18(18)

In order to fully utilize the learning potential of the days, months and years spent outside formal educational institutions, individuals must cease thinking of learning as something that only takes place in educational institutions under the direction of a teacher. They must accept responsibility for the direction of their living and through the development of self-educative capacities capitalize on the learning potential of all life experiences. Gibbons 94(41), Gross 113(16,17).

Personal Condition: INTERPERSONAL COMPETENCE

Postulate:

SELF-EDUCATION IS CHARACTERIZED BY INTERDEPENDENCE AND CULTIVATES INDIVIDUAL COMPETENCE IN INTERPERSONAL LIVING.

The self-educator is himself a small system within the larger systems of the family, society, country, continent and world in which he lives. Combs & Snygg 48(38,140), Corsini 51(39), James & Savary 142(145), Rogers 235(34), Satir 243(290). There exists a significant and inescapable interdependence between these systems.

Gibbons and Phillips explain:

By each act of self-education, the person asserts, practices and cultivates his capacity for independent action. This does not mean that the individual necessarily acts in isolation. His success will depend to a considerable extent upon the confidence and self-esteem he has generated through sustained relationships with others, and upon the support network he has established. To be self-educated one must be independent rather than dependent, but independence is only possible through interdependence, and this often involves learning and acting in cooperation with others. Gibbons & Phillips 96(8)

Self-educators establish learning networks of informants, guides, masters, colleagues and collaborators who act as informal teachers, consultants and partners in learning endeavours. Gibbons & Phillips 96(15,18), Gross 113(54), Knowles 161(61), Tough 285(176). Other people interpret and advise as well as provide emotional acceptance and support that nurture his self-educative enterprise. Assagioli 10(159), Gibbons 94(54), Gibbons & Phillips 96(18), Houle 134(68), Knowles 161(75), Kopp 162(5,26), Mahoney & Thoresen 184(69). The self-educator learns to relate to other people as rich learning resources and often

engages in mutual learning through cooperative efforts. Carnegie 40(39), Gross 113(54), Knowles 161(71).

Self-education clearly cannot take place in an interpersonal vacuum. The fundamental base of self-education is social; the self-educator experiences deep needs for affiliation and communication with others. Gardner 90(73,74), Hampden-Turner 116(31), McLeish 197(65), Perls 220(25), Rogers 235(194). Perls explains that:

On the psychological level, man needs contact with other human beings as much as, on the physiological level, he needs food and drink. Perls 220(25)

The internal strength that enables the self-educator to function independently is derived from a sure knowledge of himself which ultimately can only be developed through interactions with his fellow man. He learns and grows in relationship to significant others with whom he forms synergistic relationships. Combs & Snygg 48(43), Hampden-Turner 116(33), Maslow 189(190). Hampden-Turner states that man exists:

... in relation to others who receive his communications and witness the investment of his personality in the human environment. Hence the development of existential capacities in one man is interdependent with the development of such capacities in other men and the total relationship may be regarded as a continuous process. Hampden-Turner 116(31)

By living in a network of people, the self-educator discovers self-knowledge, purpose and meaning. Allport 5(78), Assagioli 10(85), Combs & Snygg 48(43), Corsini 51(39), Frankl 85(66), Gardner 90(73-74,113), Gibbons & Phillips 96(8), Holt 130(4), James & Savary 142(195), Kopp 162(9), Maslow 189(190), Peale 218(191),

Perls 220(27), Rogers 235(91,92), Skinner 262(169). Satisfying social interactions in self-educative acts give birth to love of self and love for others which merge and form a creative union which, in turn, encourages further personal growth and development. Berne 22(25), Gardner 90(17,18), Gibbons & Phillips 96(15), James & Savary 142(195,305), Maslow 187(155), McLeish 197(68), Rogers 235(331,332), Satir 243(30).

Complete individual autonomy is unthinkable; isolated man does not exist. The fact that man will ever stand in need of man is borne out by modern psychology and anthropology. Assagioli 10(85), Gardner 90(113), Perls 220(27). Though the self-educator is a non-dependent and self-directed individual, he also views himself as an integral and effective member of society. He wants to live and relate to others in a meaningful way. Assagioli 10(187), Combs & Snygg 48(259,260), James & Savary 142(124), Maslow 189(190), Perls 220(26), Rogers 235(194). Self-education, therefore, emphasizes interdependence; a healthy and creative union of independent and interdependent action. Combs & Snyggs 48(43,140), James & Savary 142(145), Mahoney & Thoresen 184(311,312), Perls 220(26), Rogers 235(34), Satir 243(290). In Self Help, written in 1859, Smiles summarizes the unique relationship between the individual and his fellow men:

Although much may be accomplished by means of individual industry and energy ... it must be at the same time acknowledged that the help which we derive from others in the journey of life is of very great importance ... these two things, contradictory though they seem, must go together - manly dependence and manly independence, manly reliance and manly self-reliance. From infancy to old age, all are more or less indebted to others for nurture and culture; and the best and strongest are usually found the readiest to acknowledge such help. Smiles 266(55)

Personal Condition: CHOICE

Postulate:

SELF-EDUCATION CULTIVATES IN INDIVIDUALS THE DECISION-MAKING SKILLS REQUIRED TO SUCCESSFULLY DIRECT PERSONAL GROWTH AND DEVELOPMENT.

The process of healthy growth is a never-ending series of free choice situations confronting the individual at every point throughout his life. No one can be spared the responsibility of making decisions in his life. Each person needs to learn to make wise, active choices and thereby assume full responsibility for his personal living. Corsini 51(40), Della Dora & Blanchard 60(v), Frankl 85(13), Maslow 187(45).

Self-education cultivates in individuals the decision-making skills required to successfully direct personal growth and development. Assagioli 10(168), Gibbons & Phillips 97(26), Maslow 187(192). There are usually a number of goals which the self-educator feels an urge to pursue. The first decision the self-educator must make is to choose a specific goal from among the many possibilities available, considering both the short-term and long-term consequences of the choice. Assagioli 10(151,167-168), Bandura 14(213). From this inner-directed beginning, the self-educator embarks upon a sequence of self-directed acts. He decides what activities and ways of learning have meaning for him. He establishes a natural sequence for the various steps and identifies the human and material resources appropriate to his goal. Finally, he establishes effective timing for the various steps, ensuring steady progress toward the eventual actualization of his personal goal. The responsible self-educator actively chooses all elements of his personal

learning process. He consequently identifies closely with his project and readily learns from the consequences of his acts. Skills acquired become a source of self-esteem. As projects succeed, the individual becomes increasingly interested in engaging himself in a personal struggle to develop his personality, realize his full potential, and find meaning in his world. Assagioli 10(155), Corsini 51(40), Rogers 235(170,171), Skinner 262(4,5).

The choices involved in self-education require consistent use of personal will. Through willful acts and exercise of his decision-making skills, the self-educator expresses his desires, clarifies direction and develops determination and commitment to the accomplishment of self-set goals. It is important to note that a person cannot be effectively self-educating if he does not believe in the possibility of it. A fundamental fact of which the self-educator is very aware, is that to decide means to choose and that not making a decision is also choosing. Assagioli 10(152), Gardner 90(131), May 192(221). Jongeward and Seyer advise:

Sometimes, usually without realizing it, we choose failure over success. Unaware, we fulfill narrow, distorted self-imagery and restrict our possibilities. Jongeward & Seyer 144(3)

The self-educator learns to believe in himself, choose actively and expect success. In so doing, he brings everything into the range of personal possibility. Peale 218(96). Maslow elaborates:

... life is a process of choices, one after the other. At each point there is a progression choice and a regression choice. There may be a movement toward defense, toward safety, toward being afraid; but over on the other side, there is a growth choice. To make the growth choice instead of the fear choice a dozen times a day is to move a dozen times a day toward self-actualization. Maslow-187(45)

Self-education cultivates in individuals the ability to make growth choices. The self-educator actively makes things happen in his life rather than waiting for life to act on him. He has a strong desire to develop and is able to channel his energies effectively. Assagioli 10(166), Collins & Moore 46(209), Gross 113(15), Maslow 187(47), Rogers 235(193), Satir 243(27). Through his personal choices, the self-educator expresses himself, clarifies his thinking, and assumes responsibility for the success or failure of his actions. Maslow 187(47), 189(47), Schiffman 248(52). Assagioli advises that:

We are in a period of drastic change and rapid renewal; many old forms do not work anymore. The old ways of life prove increasingly inadequate to meet present demands ... renewal can and should be regulated by appropriate choices, wise decisions, and a firm will ... we must have the courage and the will to throw ourselves boldly and joyfully into the adventure which the future holds. Assagioli 10(169)

Through self-educative means, an individual may acquire the confidence required to meet his personal future and the freedom needed to carry out his own designs. The successful self-educator largely designs his own life. Berne 22(31), Corsini 51(397). He is able to make important decisions and take decisive action because he fully accepts himself and his life. He makes an effective, active choice within the realities of any given situation. He does not mourn the past fruitlessly or waste time pondering what is not, rather he greets each new day with joy and enthusiasm. McLeish 197(275), Rogers 235(193), Smiles 266(366). He is open to his experience and welcomes every adventure. The self-educator recognizes that he possesses a precious area of free will and that he has the personal strength and skill required to make effective choices. He maximizes the learning potential of each opportunity by making active decisions which facilitate personal growth.



Assagioli 10(156), Combs & Snygg 48(240), Schiffman 248(51). Gross sums up:

This idea of self-development is the link between your life and your learning. A free learner seizes the exhilarating responsibility for the growth of his or her own mind. This starts when you realize that you must decide what you will make of yourself. However much your learning and growth involve other people and feed on their insights and skills, in the final analysis it is you who must choose and conduct your own process of life change. Gross 113(22)

Personal Condition: VOLITION

Postulate:

SELF-EDUCATION DEVELOPS IN INDIVIDUALS THE VOLITIONAL CAPACITY TO REACH BEYOND THE KNOWN AND FAMILIAR IN PERSONAL PURSUIT OF NEW KNOWLEDGE, SKILLS, RELATIONSHIPS AND ACCOMPLISHMENTS.

Will involves the capacity to organize oneself and make choices so that movement in a desired direction or toward a certain goal may take place. Assagioli 10(6), Farber 74(2), May 192(215). Will is the energy of intention; energy to make choices and decisions that eventually transform intention into action. Farber 74(4), McLeish 197(274). Through volitional acts, the individual explores, formulates intentions and makes choices that lead to achievements and the discovery of meaning. Farber 74(29), Frankl 85(6). Assagioli writes:

Fundamental to inner power is the tremendous unrealized potency of man's own will. Its training and use constitute the foundation of all endeavours. Assagioli 10(6)

Every individual possesses inherent characteristics of "intentionality". Allport explains:

... the most comprehensive units in personality are broad intentional dispositions, future-pointed. These characteristics are unique for each person, and tend to attract, guide, inhibit, the more elementary units to accord with the major intentions themselves. Allport 5(92)

Intentionality is essentially a personal interpretation of reality. May 192(223). It is a structure which gives meaning to the dimensions of an individual's experience. It involves the capacity to have intentions. May 192(221,222). A set of

characteristics including initiative, intensity, daring, determination, discipline and integration are required to energize and guide the will. Self-education constitutes an effective means through which individuals can develop these characteristics and then learn to use them. It is important to note that these two sets of factors are interactive: certain personal characteristics are necessary for the achievement of acts of will, and acts of will are necessary for the development of the characteristics. Allport 5(89,92,93), Assagioli 10(10-13), Farber 74(4), May 192(215,221,241-242).

The first act of intentionality involves a separation from the commonplace, from the routine, from the expectations of others about how one should behave. Rogers 235(181). Each human actually has two sets of forces acting within him. One clings to safety and defensiveness out of fear. Fear arises at the prospect of taking risks, jeopardising what he already has, fear of independence, freedom and separateness. The second set of forces compels him to seek the uniqueness of self. Rogers 235(285). These two sides of the individual must be experienced, the chasm recognised and reckoned with in order that will may be exercised. James & Savary 142(6), Maslow 189(46), Schiffman 248(12,13). Rogers explains:

... the individual has within himself the capacity and the tendency, latent if not evident, to move forward toward maturity ... This tendency may become deeply buried under layer after layer of encrusted psychological defenses; it may be hidden behind elaborate facades which deny its existence; but it is my belief that it exists in every individual, and only awaits the proper conditions to be released and expressed. Rogers 235(35)

Intentional characteristics must be mobilized in order to translate dysfunctional defenses and the internal status quo into a dynamic process of personal, self-directed growth and development. Combs & Snygg 48(253), James & Savary

142(86), Maslow 189(33,138), May 192(192). The individual engages in a series of volitional actions directed toward the fulfillment of personal potentialities. Allport 5(76), Combs & Snygg 48(102), James & Savary 142(4), Maslow 189(10).

Self-education assists the individual in viewing his quest for knowledge as an opportunity to make a growth choice rather than a fear choice. Self-education is a volitional act in that it is education taken rather than education given. The self-educator, in finding his way, is also discovering how to find his own way. Since the plan is entirely the person's own, his self-image is at stake as he moves into a new mode of thinking, feeling and acting. From identification with his own purposes, he draws the will to persevere until the act is successfully completed. By completing the act, the individual derives a sense of power over his life. Effective mobilization of personal will becomes the central force in his quest for learning. Assagioli 10(10-12), Bennett 18(25,38), Kopp 162(3), Maslow 189(45-49).

Healthy will is action following vision; the individual formulates a wish, a concept of what he would like to have happen. Wish establishes a future-orientation; it is the capacity to reach deep down into oneself and to acknowledge a longing to change the future. May 192(209). Wish involves imaginative playing with the possibility of a desired act or state occurring. Bennett 18(25,38), May 192(209-215). The individual must determine from among the many possible goals, which he prefers. This is a function of deliberation, in which the various goals, the possibilities for realizing them, and the desirability and consequences of doing so are examined. Deliberation must then be followed by a choice and a consequent decision. This means the choice of a given aim and the setting aside or discarding of others. The choice must then be affirmed by a decision. This

activates and fosters the dynamic and creative energies needed to ensure the achievement of the goal. Wish, therefore, ultimately leads to the formulation of a purpose to be achieved; a clear vision the goal to be reached. This, however, is not sufficient as it is not yet will in action. The aim must be valuated and assessed in an active and dynamic process. Motives must be aroused which generate the urge and the intention to achieve the desired goal. Assagioli 10(138), May 192(221). Assagioli writes:

... a purpose is the will to reach a goal ... but a goal is not such if it is not regarded as valuable ... a motive is not a motive if it does not "move", if it does not impel toward a goal. And the direction of the motive is given by intention. Assagioli 10(140)

Intention becomes action through personal will. The will involves power: power in the sense of capacity and in the sense of energy. Assagioli 10(171). Will is the matured form of wish; will gives the element of self-direction to wish. May 192(215). The individual formulates a plan and program based on careful consideration of time, circumstances, conditions and existing possibilities and then executes the plan. Assagioli 10(178,179). Execution takes place when personal will puts into operation the necessary and appropriate means for reaching the proposed objective. It does so by taking command of and directing the various psycho-physical functions (thinking and imagination, perceptions and intuition, feelings and impulses, active organs). The will calls up the various functions needed for its purposes and gives them definite commands, directions and instructions while supervising the implementation. Effort and energy are applied toward the achievement of the personal objective. Archambault 7(282), May 192(215). This also involves constant adaptation and modification to changes in conditions and circumstances. Assagioli 10(138-139). The will considers

contingencies in the outer world; it coordinates and organizes volitional acts in a synergistic fashion. Assagioli 10(33,138-139,149-150), Faure 76(142,143).

There currently exists a serious crisis of personal will. The technology of the twentieth century has shaken man's faith in his own ability to influence what happens to him in his life. It is ironic and tragic that it is exactly in this portentous age when power has grown so tremendously and decisions are so necessary and so fateful that individuals find themselves feeling impotent in the use of personal will. May 192(180-182)

Just as the individual is feeling powerless and plagued with self doubts about his own decisions, he is, at the same time, assured that he, modern man, can do anything. May 192(183). Despite these promises of great power and freedom, individuals have been conditioned to believe that their happiness and well-being are to be secured by means of institutions rather than by their own conduct. This conditioning is evident in the world of commerce as well as in matters of education and health. Things are done to and for individuals by the new inventions. Their role, however subtly put, is to passively submit, accept the blessing, and be thankful. Gibbons 94(42), Holt 130(12,13), Illich 141(52,53), Kopp 162(13), May 192(183), Smiles 266(35).

The tragic predicament of modern man is that the very processes which make him so powerful are also the processes which render him powerless. May 192(184). This crisis of the will does not originate from either the presence or absence of power in the individual's world. It comes from the contradiction between the two - the result of which is a paralysis of will. May 192(187). Gardner writes:

The claims of society and the claims of the individual will always be in potential conflict. Individual freedom cannot stand against the powerful pressures that are brought against it unless it is supported by deep-rooted habits of thinking and acting. Gardner 90(144)

Self-education cultivates and strengthens the individual's ability to mobilize personal will. Through self-educative acts, the individual discovers that 'self' and 'will' are intimately connected. This realization transforms the individual's self-awareness and his attitude toward others and the world around him. He begins to perceive himself as a living 'subject' endowed with self-directed powers to choose, to relate, to bring about changes in his own personality, in others and in circumstances. This enhanced awareness and vision of unlimited potentialities for inner expansion and outer action, give birth to feelings of confidence, security, joy and a sense of 'wholeness'. Assagioli 10(10). May writes:

It is in intentionality and will that the human being experiences his identity ... What happens in human experience is "I conceive - I can - I will - I am." The "I can" and "I will" are the essential experiences of identity. May 192(241,242)

By applying the personal power generated through this discovery of identity and intentionality the individual is able to to recognise and resist the powers of social institutions and to actively shape his life in ways that suit his personal needs, interests and aspirations. Assagioli 10(90), Bandura 14(208-210), Gardner 90(18,45), Gross 113(15,59,75), Hampden-Turner 116(192,193), Hill 125(43), Houle 134(51-54), James & Savary 142(195), Rogers 235(331-336), Satir 243(30), Smiles 266(35).

In summary, effective use of personal will involves the ability to formulate distinct

intentions, act upon them until successful and apply them synergistically to the betterment of oneself and society. The use of the will is at the basis of every activity. A well-developed will improves personal effectiveness. Assagioli 10(11). Will is developed through the determined action and struggle of self-directed acts. Assagioli writes:

When we make a physical or mental effort, when we are actively wrestling with some obstacle or coping with opposing forces, we feel a specific power rising up within us; this inner energy gives us the experience of "willing". Assagioli 10(9)

Self-education involves an inner-directed force of "willing" that urges us to a specific course of action. Assagioli 10(9). Self-education energizes will to apply to learning, growth, and the discovery of meaning. Gardner 90(18), Peale 218(46), Smiles 266(25). Self-education is a developmental, cumulative process which, through every successive self-directed act, develops the learner's confidence and capacity to achieve more complex objectives. May 192(215,221). Through self-educative acts, the individual learns to use his will effectively and consequently lives more freely and more in harmony with life and his true purposes. Assagioli 10(17). Self-education instills in the learner a strong desire to continue to grow, to make life a continuous series of explorations. Bennett 18(25,38), McLeish 197(179). The act of will applied in self-education, allows the individual to essentially mold, form and create himself. Assagioli 10(24), Hill 125(44), May 192(9). Smiles states:

Nothing that is of real worth can be achieved without courageous working. Man owes his growth chiefly to that active striving of the will, that encounter with difficulty, which we call effort; and it is astonishing to find how often results apparently impracticable are thus made possible ... It is will - force of purpose - that enables a man to do or be whatever he sets



his mind on being or doing. Smiles 266(230)

Personal Condition: FREEDOM

Postulate:

THE VOLITIONAL NATURE OF SELF-EDUCATION ESTABLISHES EACH INDIVIDUAL AS PERSONAL CREATOR AND MASTER OF HIMSELF AND OF HIS IMMEDIATE ENVIRONMENT.

Freedom is an important concept in self-education. Psychological analysis of freedom inevitably leads to issues relating to the metaphysics of determinism. Freedom is often considered the antithesis of determinism. Allport 5(83-88), Bandura 14(203), Mahoney & Thoresen 184(316), Rogers 235(192). In self-education, however, accepting the concepts of freedom and will does not deny the existence of deterministic parameters in human life. Self-education integrates the concepts of determinism, will and freedom by concentrating on the individual's relationship to unalterable conditions and circumstances:

"Freedom" wrote Spinoza "is the recognition of necessity." Man is distinguished by his capacity to know that he is determined and to choose his relationship to what determines him. He can and he must ... choose how he will relate to necessity, such as death, old age, limitations of intelligence, and the conditioning inescapable in his own background. Will he accept this necessity, deny it, fight it affirm it, consent to it? All these words have an element of volition in them. May 192(268)

Freedom, therefore, lies not in the individual conquering objective nature, or in the little space that is left to him in his subjective nature, but in the fact that he experiences both. The individual will never be able to extricate himself completely from the ties which bind him to various realms of unalterable conditions. Nevertheless, he always has a certain degree of freedom because in his intentionality the two realms are brought together, and in experiencing both, he

changes both. His volitional actions make it possible for him to choose his relationship to necessity. Within the real parameters of necessity, however restrictive they may be, he moves freely. Bandura 14(207), Frankl 85(60), Hampden-Turner 116(28), May 192(200,268). Rogers writes:

The fully functioning person ... not only experiences, but utilizes, the most absolute freedom when he spontaneously, freely and voluntarily chooses that which is also absolutely determined. Rogers 235(193)

The self-educator works within a frame of choice, not of destiny. Allport 5(84). As he moves through life, he is confronted with alternatives. He feels free to choose from among them and this freedom introduces the concepts of value and meaning. Corsini 51(40), Hampden-Turner 116(28), Perls 220(24). Smiles elaborates:

There is no absolute constraint upon our volitions, and we feel and know that we are not bound, as by a spell, with reference to our actions. It would paralyze all desire of excellence were we to think otherwise. The entire business and conduct of life, with its domestic rules, its social arrangements, and its public institutions, proceed upon the practical conviction that the will is free. Without this where would be responsibility? Smiles 266(231)

When freedom is defined in terms of options, rights and responsibilities there is no incompatibility between freedom and determinism. Bandura 14(203), Frankl 85(60), Rogers 235(359). Freedom emerges as a continuum marked according to the individual's self-developed ability to manage the many environments, including the inside one, that influence control. Mahoney & Thoresen 184(319). Freedom may be conceptualized as increasing the number of individual options through the application of specific self-education principles. Bandura 14(208), Mahoney & Thoresen 184(318), Skinner 262(251). Bandura defines freedom in terms of:

... the skills at one's command and the exercise of self-influence which choice of action requires. Given the same environmental constraints, individuals who have many behavioral options and are adept at regulating their own behavior will experience greater freedom than will individuals whose personal resources are limited. Bandura 14(203)

Relative freedom, therefore, depends on the individual's possession of multiple possibilities for behavior. The more behavioral alternatives and prerogatives he has the greater his freedom of action. Allport 5(85), Bandura 14(201). Self-education develops personal maturity which ultimately increases the size of the individual's behavioral repertoire. Allport 5(85), Argyris 9(50), Bandura 14(201), Combs & Snygg 48(252), Gross 113(59), Maslow 189(140). The successful self-educator has developed the volitional attributes of independence, initiative, responsibility and co-operation, and has learned the technical and human skills that enable him to take an active role in his own growth and development. Allport 5(85), Bandura 14(203), Mahoney & Thoresen 184(71,72). He is in intimate contact with himself and his environment. He is an integrator, able to bring separates and even opposites together. He is capable of seeing the world in broad terms and consequently has a wider choice of action. Combs & Snygg 48(115,252), Maslow 189(140). Faure explains:

Yesterday, ignorance and incapacity condemned man to respond to outside influences - whether from nature, other people or society in general - with resignation or neurotic reactions. Today's new man apprehends, knows and understands the world (inner and outer); he also has the necessary techniques for acting on the world, intelligently and in his own interest. All these elements means man is the master of his fate. Faure 76(154).

The self-educator realizes that he is not only responsible for what he does but also for what he is. Instead of being fully conditioned by any set of circumstances he actively constructs himself. Facts and factors are nothing but the raw material for his self-directed acts, and his life is a continuous chain of

such acts. Frankl 85(61). Self-education establishes each individual as the personal creator and master of himself and of his immediate environment. Allport 5(12), Combs & Snygg 48(252), Frankl 85(60,61), Guinagh 114(xii), Maslow 189(38). The self-educator trusts himself completely; he assumes full responsibility for himself and for his actions. Rogers 235(115-119), Schiffman 248(42). He feels an ever-growing sense of freedom in being sensitive, realistic and inner-directed. Faure 76(18,209), Krasner 165(800), Mahoney & Thoresen 184(73), Maslow 187(185), Rogers 235(180,181), Stevens 272(3).

Active self-educative acts create a strong base from which freedom can grow. Gardner 90(144,145). Rather than only reacting to external events, the self-educator becomes energetically proactive in his learning and living. The establishment of an internal locus of control increases available options and consequently increases personal freedom. The competent self-educator guides and directs his own responses. He does not see himself as the passive receptor of destiny, nor does he see himself in total control. His view is pragmatic and realistic. Assagioli 10(6), Collins & Moore 46(61). As each life situation unfolds, the self-educator makes an active choice within the realities of the circumstances. Kidd 153(52), Maslow 187(178), Rogers 235(193). He wills or chooses the action he wishes to take, in relationship to all the external and internal stimuli, because it is that behavior that will ultimately provide the greatest satisfaction. Maslow 187(47), Rogers 235(193).

The self-educator realizes that he must actively choose freedom. Kopp 162(26). He avoids the common trap that Kopp describes in If You Meet The Buddha On The Road, Kill Him:

... we are defeated not only by the narrowness of our perspective, and our fear of the darkness, but by our excuses as well. How often we make circumstances our prison, and other people our jailers ... I sometimes forgo recognising the extent of my freedom, timidly avoid some situations that frighten me, and make excuses for my constraint. At my best, I take full responsibility for what I do. I see that there is no prison except that which I construct to protect myself from feeling my pain, from risking my losses. Kopp 162(193)

Self-education enhances the individual's ability to exercise his freedom of choice by providing the vehicle through which he may explore the world around him, evaluate his own and others' experiences, and discover meaning in his life. Holt 130(4). The self-educator values his independence and freedom. Collins & Moore 46(48), Combs & Snygg 48(260), Goertzel & Goertzel 105(x). He learns how to act out of choice rather than necessity. He creates his own structures within his own personal world and exists as a free, self-defined individual living harmoniously and interdependently with others in his community. Bandura 14(212), Collins & Moore 46(89,90), Combs & Snygg 48(17,264), Gardner 90(6,45), James & Savary 142(109), Jung 149(70), Mahoney & Thoresen 184(311,312), Maslow 187(183), 189(29), Rogers 235(65,66). The self-educator is truly self-determining, free and responsible. Frankl 85(63).

CHAPTER SIXSummary Conclusions

The following conclusions have been drawn from a review of the data arranged in the form of the thirty postulates documented in the main body of the thesis. These conclusions are not intended to repeat the many individual findings related to specific postulates but rather to summarize in a comprehensive manner the broad findings of the study.

The questions addressed in this thesis were:

1. What sources of information contribute relevant data as to how individuals formulate, guide and implement their own learning?
2. What main ideas and common themes exist in this literature relevant to the practice and teaching of self-education?

In reference to the first question, this study has identified, from many diverse fields of literature, approximately three hundred sources of information which contribute data relevant to how individuals formulate, guide and implement personal learning. As stated in Chapter One, the author made no attempt to evaluate the quality of this literature. Some of the documents selected would likely not be considered credible from a scholarly viewpoint, but because they have been influential in forming public opinion, they were considered worthy of inclusion in this study. As this thesis is exploratory in nature, all potential sources of data, inside and outside the bounds of scholarly literature, were included. The

methodology was designed to facilitate the selection, organization and synthesis of relevant statements from this interdisciplinary data into a comprehensive set of postulates suitable for further examination. As a result, a unified body of literature concerned with the subject of self-education has been created.

In reference to the second question addressed in this thesis, the most overwhelming finding of the study is that a form of education called self-education clearly exists. While many people have written about issues relevant to the subject of self-direction in learning, they have most often made it a sub-set of formal schooling. But self-education is not merely a non-traditional learning approach born out of a reaction to formal schooling. This study reveals that self-education is clearly a field of its own, with its own distinctive nature, principles and processes. Formal schooling is one of the many ways in which the lifelong process of self-education may be guided or influenced.

Another significant finding of this study is a concept of self-education that is broader than existing definitions. The definition formulated in the course of this study is that self-education is the lifelong, volitional process by which individuals design and execute their personal and performative development in relationship to the changing circumstances and unalterable conditions of their lives. It is a holistic process in which individuals engage in a search for meaning, relatedness and identity.

An exploration of the various dimensions of this definition revealed self-education to be a dynamic, lifelong learning process. The individual engages in an on-going struggle; he continuously accepts the challenge of exploring himself and his



environment again and again. Self-education seems to flow from each individual's quest to become all that he is capable of becoming. It involves an acceptance of oneself as an open system with great potential for development rather than as a closed system whose future is totally pre-determined by personal limitations and fixed circumstances. Self-education does, however, take place within the context of the changing circumstances and unalterable conditions of an individual's life. The effects of heredity, environment, and early conditioning cannot be denied and the self-educator works creatively with this raw material from which he forms himself.

The literature indicates that self-education is the process by which individuals develop themselves as they learn to express their choices in accomplished acts through the effective application of personal will. Self-education is a volitional act; the effective mobilization of personal will becomes the central force in the quest for a better life and creative fulfillment. Development of an individual's volitional maturity appears to be inseparable from his development as a person. Through acts of will, individuals express, experience and develop unique identity.

Self-education appears to be a competency-based form of education built on concrete attributes and skills of self-directed inquiry required for successful learning and living. Primary attributes include vitality, positivity, internality, self-awareness, responsibility, initiative, determination, independence and co-operation. Primary skills include planning, organizing, decision-making, problem-solving, evaluation and integration. The development of attributes and proficiency in skills may be viewed on a continuum; at one end is the individual's present level of development and at the other exists all the possibilities of what

he might choose to become within the unalterable conditions and circumstances of his life. This thesis postulates that these attributes and skills are interactive with the process of self-education; a threshold level of these attributes and skills is necessary for successful self-education and, in turn, the success of self-educative acts contributes to the further development of these attributes and skills.

Self-education also involves a personal dedication to mastery. The data describe a growth-oriented, cumulative process in which every successive act constitutes a developmental opportunity for the learner. Each project undertaken and accomplished facilitates the individual's development of primary self-educative attributes and skills. Successful self-educative enterprise contributes to the enhancement of the individual's sense of personal power in being competent to control and direct his own life.

The literature indicates that self-education involves self-understanding as well as making sense of one's experience. The meaning gained from experience appears to be equal to the individual's subjective investment made in the outside world. Through successful self-educative acts, the individual not only extends his knowledge of the external world, but also develops a deeper knowledge of himself. This discovery is not an isolated process but necessitates a relatedness with other people. Self-education involves a personal search for excellence accompanied by a maturing social consciousness.

Self-education is an evolutionary process that involves the effective meeting of personal life objectives, the demands of contemporary environments, maturational crises and evolving life tasks. The process of self-education is consistent with the

major processes of development - personality, social responsibility, personal will and productive learning - and contributes to their cultivation. There is ample evidence that the majority of people engage in self-educative endeavours in many different ways and to varying degrees in the course of their everyday living. The latent potentialities to be effectively self-educating exist in everyone. The successful development of the primary attributes and skills of self-education allows for more purposeful and successful learning practices. It is no longer realistic to equate learning with youth; learning must be considered a lifelong process. Self-education focuses on the development of basic human competence; the ability to learn independently which is a prerequisite for living in this rapidly changing world.

The data indicate that the development of self-educative competencies opens the door to a wide range of benefits for the individual. Through self-education, individuals can best prepare themselves to cope effectively with the rapid and continuous changes which occur in complex, contemporary environments and have become an intensive demand of living in our time. Self-education changes the individual's approach to learning and living from one of passivity to one of activity. Self-education allows the individual to manage the demanding and challenging possibilities that exist in the modern world. There is a corresponding increase in individual options and consequently an enhancement of individual freedom.

Self-education prepares the individual to direct his own learning efforts all through life without sustained dependence on formal educational institutions. By designing his own curriculum, the individual can tap the extraordinary array of

resources at home, at work, and in the community. He may want to utilize the resources of conventional educational institutions from time to time, but will not be obligated to shape his education solely according to the offerings of these institutions. The competent self-educator possesses the ability to recognize times when it is appropriate to use teacher-directed education as a means of securing the learning he desires. He does not abandon his self-directedness in these situations, rather he enters them with a searching and probing perspective. When achieving personal goals is the primary objective and not the credit or mark, the expertise to be gained from the teacher and the situation is more likely to be fully exploited. Self-education allows for individual pursuit of excellence in a broad range of fields. It allows the individual to live fully, maximizing the learning potential in all life experiences.

In summary, self-education is a holistic process; it deals with all elements and parts of individual experience in an integrative way. Skillful self-education appears to constitute an effective means through which individuals may help themselves toward the successful negotiation of the complete life journey. It seems to be an innovative yet realistic approach to the design of personal destiny and the acceptance of the personal and social responsibilities which accompany this special freedom.

This study also concludes that formal educational institutions play a prominent role in modern societies. From the perspective of self-education, the central mandate of formal education should become the development of attributes and skills that permit people to effectively face the demands of living and create opportunities to more fully experience life. The primary learning in youthful years must be the

development of skills of enquiry and the enhancement of necessary attributes.

Appropriate development of self-educative competencies in elementary school would have significant practical implications for the methodologies employed throughout the remaining years of formal schooling. Formal educational systems require renewed philosophies and practices in order to prepare students effectively for adult autonomy which will require them to deal effectively with the changing conditions and vicissitudes of the modern world.

Teaching for self-education constitutes an enhancement and an enlargement of the teacher's professional role. The present emphasis on the transmission of content and teacher initiation and control must evolve into a multi-dimensional role that facilitates learning how to learn so as to prepare students to direct their own learning all through their lives.

The educational goals which are often stated in terms of freedom, full development of the individual, wisdom, and intellectual freedom at the earliest possible age can be made a reality through the process of self-education.

The development of self-educative competencies promises a better future for society. There exists an inherent interdependence between the growth and development of the individual and the society in which he lives. Through self-education learning becomes an integral function of the community. As individuals develop the attributes and skills of self-education they become more competent in coping with the demands and maximizing the potential of their lives. The future of society and civilization depends on building such competent individuals.

The Volitional Learner: A Model for the Identification of Synergistic Learning Components

As a result of conducting this study, the author felt it necessary to offer some personal interpretations of the findings in a practical format. These interpretations have been consolidated in the form of a model, The Volitional Learner (Illustration 1). This model has been constructed to assist learners, educators and others interested in self-education to identify synergistic learning components. It constitutes a germ of an idea that is simple and graphic. It should be viewed as a developmental model that may require refinement arising from actual use. Examination of the essential elements from various sources revealed no one, all-purpose, 'best' learning approach that suits all situations. This model is, therefore, a contingency learning model that outlines shifting educationist roles and learning approaches in accordance with the specific learning situation.

The key components of the model are the learner, the educationist and the learning approach. The key consideration in all learning situations is the learner and his level of task-relevant volitional maturity. The most effective educationist role and learning approach must correspond with the assessed level of the learner's volitional maturity. This contrasts with traditional education where teacher and content have generally been regarded as the center of activities even when this likely has not been totally appropriate to the demands of the learning situation. This model advocates that learning begins from the perspective of the learner.

Factors to be considered in applying this model include the level of the learner's

volitional maturity, the major source of direction and the major source of assessment.

Volitional maturity involves the capacity for self-directed activity in relationship to a specific learning task. Elements of volitional maturity include:

a. Task-relevant education and experience

b. Primary and secondary attributes

- primary attributes are those attributes of self-educators that extend to any learning endeavour including: vitality, positivity, internality, self-awareness, responsibility, initiative, determination, independence and cooperation
- secondary attributes refer to those particular attributes that maximize success in a specific task and will vary from task to task.

c. Primary and secondary skills

- primary skills are those skills of self-educators that extend to any learning endeavour including: planning, organizing, decision making, problem solving, evaluation and integration
- secondary skills refer to those skills required for the particular task and will vary from task to task

On the model, volitional maturity is indicated on the diagonal axis. Volitional maturity can range from low to high dependent upon the degree to which the learner possesses the aforementioned characteristics. It is important to point out that individuals are not volitionally mature in any total sense, but rather their level of volitional maturity will vary in relationship to the specific learning task undertaken. Highly developed primary attributes and skills usually influence the level of volitional maturity despite the lack of particular or task-relevant

education and experience. With a minimal amount of structure, this individual would be capable of assuming a very active role in the learning situation. The reverse is also true; the individual with minimal development of primary attributes and skills will require more externally imposed structure until these capacities are developed. Also, this individual often has difficulty transferring his learning outside of the task-specific area.

The second factor, the major source of direction of the learning, is located on the vertical axis. Direction involves the activities associated with the management of learning such as the selection of goals, content and methodologies; design, organization and sequencing of learning activities; and management of time and effort. The continuum of direction ranges from other-direction to self-direction.

The third factor, the major source of assessment of the learning, is located on the horizontal axis. Assessment involves the activities associated with the evaluation of learning progress and outcomes. This could be based on personally set goals or institutionally set criteria for accreditation. The continuum of assessment ranges from other-assessment to self-assessment.

In order to increase the learner's capacity for self-direction and self-assessment, an increase in volitional maturity is required.

The following is a description of the specific steps involved in applying this model:

1. Identify the specific learning task to be undertaken.



2. Assess the task-relevant volitional maturity level to determine appropriate balance in source of direction and assessment.
3. Identify appropriate learner role from:
  - a. Student - low volitional maturity level: needs high degree of both direction and assessment by others;
  - b. Designer - moderate volitional maturity level: interactive involvement with an educationist; primarily self-directing but requires other-assessment for accreditation;
  - c. Assessor - moderate volitional maturity level: interactive involvement with an educationist; needs direction from other but can self-assess learning value and outcomes; and
  - d. Director - high volitional ability level: can initiate, direct and assess own learning.

General guidelines to be considered in the application of the model are that low levels of volitional maturity generally need high externally imposed structure. The structure should be gradually reduced as abilities develop, depending on the specific learning task. At high levels of volitional maturity, high direction from others constitutes a significant hindrance to effective learning as the learner is capable of setting his own direction and then either self-assessing or bringing the finished product to an educationist for assessment. It is important to note that volitional maturity is always task-relevant, therefore, even learners assessed as having a low level of volitional maturity can exercise some self-direction and assessment in relationship to some specific tasks.

4. Once the appropriate learner role has been identified, the corresponding

educationist role and learning approach can be selected. Effective learning requires internal consistency between the role of the learner, the role of the educationist and the learning approach.

a. Student - Teacher - Traditional Education

In this situation, the volitional maturity level of the learner is low. This may be due to a minimal level of development in the primary self-educative attributes and skills or it may be the result of no previous education and experience relevant to the specific learning task. In this case, a high degree of external structure is required and the most appropriate educationist role is that of a teacher. This traditional learning approach involves the teacher outlining what, when, where and how the learning task is to be accomplished. While this is the most common approach in educational institutions, it is generally only appropriate when the learner has a low level of volitional maturity. It seems that it is all too easy to diagnose most learning situations as requiring this high level of teacher-direction without affording due consideration to learner's resources in the assessment of volitional maturity.

b. Designer - Assessor - Non-Traditional Institutional Arrangements

In this situation, the learner is at a moderate level of volitional maturity. The learner is primarily self-directing in the selection of learning goals, content and methodologies; design, organization and sequencing of learning activities; and management of time and effort. In this case, therefore, the learner is capable of co-operative interaction with the educationist. The primary educationist role is that of assessor of learning progress and outcomes. The corresponding learning approach is one of non-traditional institutional arrangements whereby the learner assumes primary responsibility

for the initiation and management of the learning task, but learning is other-assessed for accreditation purposes.

c. Assessor - Facilitator - Non-Graded, Non-Credit Learning

In this situation the learner is once again at a moderate level of volitional maturity. In this case, however, the learner is primarily self-assessing, that is, he is able to evaluate learning progress and outcomes without external assistance. The learner engages in co-operative interaction with the educationist, seeking guidance concerning the selection of learning goals, content and methodologies; design, organization and sequencing of learning activities; and the management of time and effort. The educationist acts as a facilitator, guiding and co-ordinating the learning task as required. The learning approach is one in which accreditation is not involved.

d. Director - Consultant - Self-Education (Independent)

In this situation the volitional maturity level of the learner is high. The learner likely has had some education and experience relevant to the learning task and has a high level of self-educative attributes and skills. In this case, the learner is independent and assumes major responsibility for the direction and assessment of the learning task. He may seek out an educationist for consultative assistance but is capable of providing his own learning structure and support. The most appropriate learning approach under these circumstances is independent self-education.

There are a number of implications of this model in relationship to formal schooling. Formal educational institutions are a fact of life in our society and have an important role to play in the development of primary self-educative

attributes and skills. People should acquire basic self-educative attributes and skills from core curriculum in the course of their formal schooling and thereby prepare themselves for lifelong self-directed learning and living. Even students in elementary schools are capable of this development.

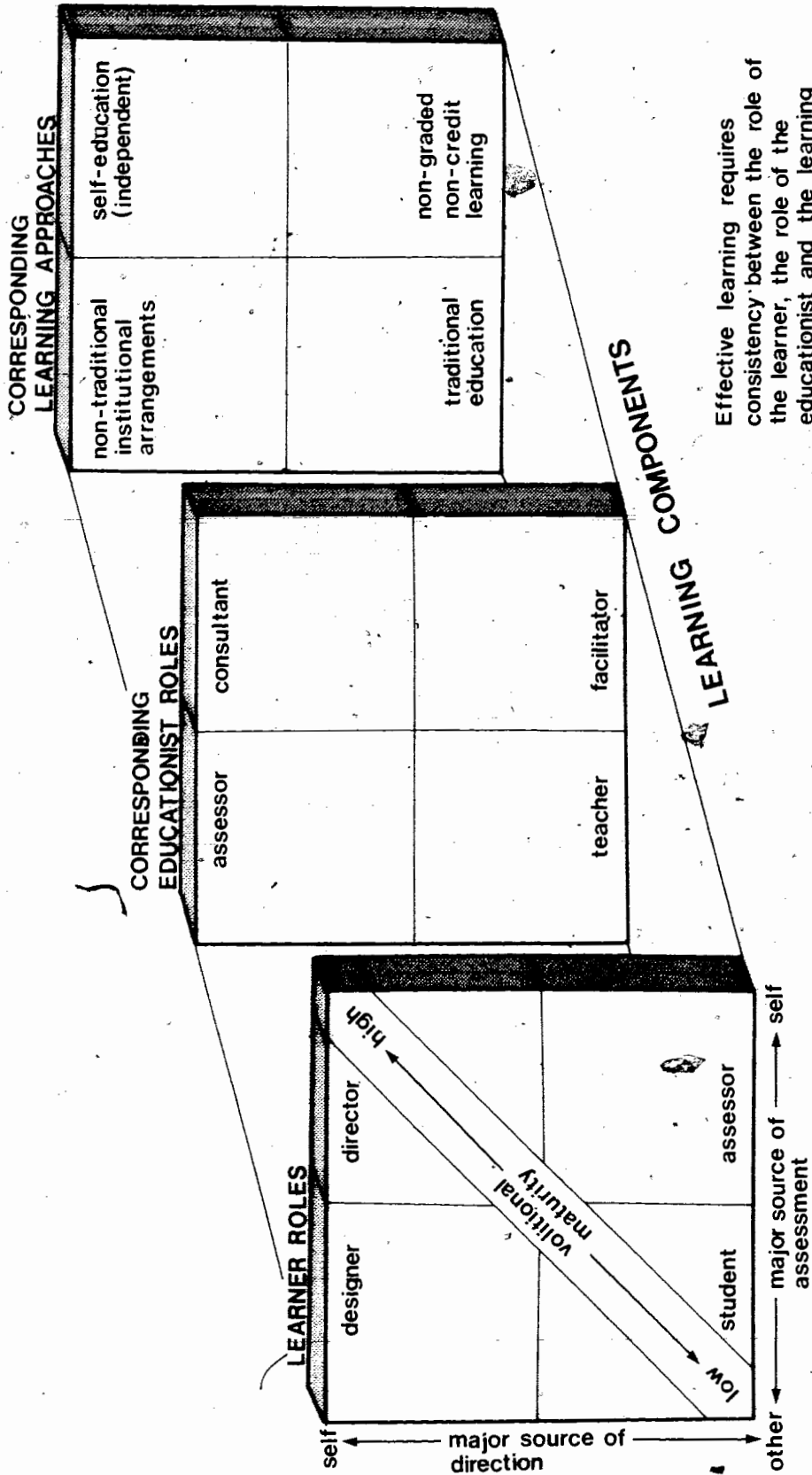
This model also has implications concerning the required range of educational competencies in teachers. Teachers would require specific skills to develop volitional maturity in others. They would also require skills in the assessment of volitional maturity of learners in order to be able to effectively adapt their role. If the existing teacher-centered educational approach was used to develop the primary self-educative attributes and skills to facilitate learner self-directedness in relation to any kind of learning, individuals would come to approach a wide variety of learning situations with at least a moderate level of volitional maturity. This would ultimately make the teacher's role more challenging and maximize their use as an extremely valuable learning resource.

In addition, the development of volitional maturity would allow individual learners to engage in personal learning endeavours without a high degree of involvement from others. This ability would hold obvious benefits for the individual in that he would not be constrained by the availability of an educationist or course. If an individual desired particular accreditation or assessed himself at a low level of volitional maturity in relationship to specific learning tasks he wished to pursue, he could still access the facilities available through formal educational channels. For example, educationist direction would likely be required in situations where the individual was engaged in a completely new learning endeavour in which he had no previous knowledge or experience. A high degree of self-direction in

learning would also reduce the tremendous burden on educational institutions and society as individuals would take more responsibility for personal learning and would rely less on formal educational institutions.

FIGURE 1

**THE VOLITIONAL LEARNER: a model for the identification of synergistic learning components**



Effective learning requires consistency between the role of the learner, the role of the educationist and the learning approach.

### Recommendations for Further Research

While the reader is encouraged to formulate his own ideas regarding which aspect or aspects of this study warrant further research, the following recommendations for additional research are offered as the author's opinion of logical areas in which further study could advance and test the postulates and assumptions formulated in this study.

This study has formulated a set of thirty postulates which relate to the nature and importance of self-education in relation to key sociological, educational, psychological and personal conditions. These thirty postulates constitute plausible hypotheses which will require further examination, refinement and research to determine internal consistency as well as to test assumptions and relations with relevant existing theory.

The study has identified a series of primary self-educative attributes and skills. Instruments could be developed to test the presence and level of development of these attributes and skills in any given population. In order to be meaningful, their presence should be correlated with relevant criteria for "success". Some suggestions include achievement in formal education, career advancement, health, happiness and entrepreneurial activity. Such a study could form the base for a more complex experimental design by establishing baseline data.

A longitudinal study is recommended as a means of examining the cyclical effect of primary attributes and skills on the process of self-education. This thesis has postulated that an interactive relationship exists between the process of

self-education and relevant attributes and skills. An empirical study using a control group and test group could be designed. A control group identified as having low levels of primary self-educative attributes and skills might be compared to a test group identified as having moderate to high levels of self-educative attributes and skills.

Another approach to researching the primary self-educative attributes and skills would be through an experimental curriculum based on the principles formulated in the study. Development of criteria for effective evaluation would be required. This experimental design should employ both test and control groups to ensure reliable results.

Further research is also needed concerning the development of a competency-based approach for teachers in the facilitation of primary self-educative attribute and skill development. Basic competencies in terms of skills and attributes required for various educationist roles in the model need to be researched and defined. Methods by which educationists could develop these competencies also require research.

In order to provide assistance to learners, instruments could be designed to allow individuals to rate their own volitional maturity and learning readiness as well as to help assess the most effective learning approach and type of educationist assistance required. Definition of results-oriented effectiveness criteria for the various educationist roles would enable students to evaluate whether or not they are getting appropriate assistance.



Another concern reflected in the study relates to the growing expense of formal schooling accompanied by increasing demands for educational services. In light of these conditions, an economic cost-benefit study of self-education in terms of its potential contribution to society as compared to traditional education would be worthwhile. This should be combined with consideration of current educational philosophy, goals and actual educational outcomes.

Summary Remarks

What has emerged as a result of this study is a concept of self-education as the lifelong, volitional process by which individuals design and execute their personal and performative development in relationship to the changing circumstances and unalterable conditions of their lives. It is a holistic process in which individuals engage in a search for meaning, relatedness and identity.

Self-education is a unique phenomenon. The scope of self-education is so broad that this thesis could not possibly exhaust the subject. Rather, this study has attempted to open the door to further investigation by integrating information from widely divergent fields into one unified body of research literature and by presenting central themes and topics which contribute to the understanding, practice and teaching of self-education.

Self-education emphasizes self-responsibility and self-direction toward the fulfillment of the individual and toward the enhancement of collective survival. Self-education constitutes a means through which each individual may design personal educational action in accordance with the emerging needs, demands and possibilities of his life. Self-education is future-oriented, a style of learning and living that holds great promise for tomorrow.

APPENDIX ONEList of Thirty PostulatesSociological Conditions

## 1. CHANGE

Rapid, continuous change in complex contemporary environments requires that individuals develop capacities to be self-directing and self-responsible throughout their lives. (page 22)

## 2. FUTURITY

The development of individual competence in self-education is the keystone to meeting the future needs of society and civilization. (page 25)

## 3. PRESSURE

Individuals require the capacity to be self-directing in order to cope effectively with external pressures imposed by the remote powers of government, big business, the media, and formal education. (page 29)

## 4. FRAGMENTATION

An integrative educational approach designed to develop individual capacities for lifelong learning within the holistic context of a learning society must replace existing fragmented educational efforts in order that individuals will be prepared to meet the challenges of the modern world. (page 32)

## Educational Conditions

### 5. ISOLATION

The realities of the modern world demand that education cease its isolationist existence and form a dynamic and integrated system with society within which individual capacities for life long learning are developed. (page 36)

### 6. BUREAUPATHOLOGY

In order to be effective educational entities in the future, the bureaupathology of existing school systems must be replaced with a flexible and adaptive educational technology designed to develop individual self-educative capacities. (page 40)

### 7. SUBJECT EMPHASIS

In order to respond effectively, efficiently and humanely to the changing demands of the modern world, educational technology must place less emphasis on subject matter and focus instead on the development of individual self-enquiry skills. (page 44)

### 8. COERCION

Individuals would live better, learn more and grow more able to cope with the world if education abandoned coercive means of shaping human behavior and instead helped individuals learn to shape themselves. (page 50)

### 9. INDOCTRINATION

Effective self-educative capacities liberate individuals from the obligation to shape personal educational expectations according to the services offered by formal educational institutions. (page 55)

#### 10. INVOLVEMENT

Learning is essentially active; school systems must start to involve learners in their personal educative processes so that students will come to depend less on the classroom teacher and more on the teacher inside themselves. (page 58)

#### 11. PEDAGOGICAL DOGMA

Self-directed learning transcends the rigid didactic role of traditional teacher-directed education to change students from objects into subjects of a self-managed, creative educational process. (page 63)

#### 12. TEACHER RESOURCES

Teaching for self-education constitutes a challenging new professional role which maximizes the utilization of teacher resources through the transference of ownership and responsibility for learning to the student. (page 70)

#### 13. NON-TRADITIONAL LEARNING APPROACHES

To maximize the learning potential of non-traditional learning approaches, individuals must develop specialized self-directed enquiry skills. (page 77)

#### 14. SELF-CULTURE

Self-education is widely practiced by individuals in the course of their everyday living as well as at the highest levels of professional activity. (page 80)

## 15. RESEARCH FINDINGS - CHARACTERISTICS

Studies of people who have become successful through self-education reveal a number of shared characteristics which provide valuable clues for educators regarding the skills and personal attributes required for successful self-direction in learning. (page 84)

## 16. RESEARCH FINDINGS - METHODS

Studies of people who have become successful through self-education document a variety of unique learning methods employed by these individuals which have significant practical relevance to formal educational practice. (page 98)

## 17. EDUCATION DESIGN

Studies concerned with the nature of self-educators and the learning methods they employ present significant guidelines for education designed to prepare individuals for lifelong self education. (page 108)

## 18. EDUCATIONAL VISION

Teacher-directed and student-directed education are not mutually exclusive concepts; these forms of education belong on the same continuum, placed according to the degree of structure prescribed in the learning situation. (page 116)

## Psychological Conditions

### 19. DEVELOPMENTAL CONTINUUM

The primary program of each individual's self-education is the successful resolution of the personal, relational and performative tasks which must be addressed in the lifelong developmental process of unfolding mastery; the secondary program is the creation of a personal pattern of evolutionary transformations through which the individual transcends his environment to fulfill his visions, potentialities and enterprises. (page 125)

### 20. READINESS FOR SELF-DIRECTION

Self-therapy is a self-educational process employed in a wide range of psychological treatments designed to help individuals develop the mastery of inner forces necessary for self-management, psychological health and the capacity to function effectively in the world. (page 131)

### 21. IDENTITY

Self-education provides opportunities for development, exploration, expression and exercise of personal characteristics and capabilities toward the formulation of a strong and positive self concept. (page 135)

### 22. SEEKING OF MEANING

Self-education supports, enhances and encourages the human psychological dynamic of natural and spontaneous seeking of meaning. (page 141)

Personal Conditions

## 23. INDIVIDUAL NEEDS

Self-education provides for diversity of individual educational opportunities to match unique personal learning patterns, styles and needs. (page 145)

## 24. MASTERY

Self-education permits individual pursuit of understanding, achievement and excellence in a broad range of fields. (page 148)

## 25. SELF-HEALTH

Self-education is holistic education concerned with the development of healthy, fully functioning individuals in whom the physical, intellectual, emotional and ethical aspects of their lives are successfully integrated. (page 152)

## 26. TIME

In order to maximize the learning potential of the days, months and years spent outside formal schooling, individuals must become skillfully self-directing. (page 155)

## 27. INTERPERSONAL COMPETENCE

Self-education is characterized by interdependence and cultivates individual competence in interpersonal living. (page 156)



## 28. CHOICE

Self-education cultivates in individuals the decision-making skills required to successfully direct personal growth and achievement. (page 161)

## 29. VOLITION

Self-education develops in individuals the volitional capacity to reach beyond the known and familiar in personal pursuit of new knowledge, skills, relationships and accomplishments. (page 165)

## 30. FREEDOM

The volitional nature of self-education establishes each individual as personal creator and master of himself and of his immediate environment. (page 173)

APPENDIX TWOSummary of Research Findings

Several in-depth studies have contributed data relating to the existence of self-education; it appears that throughout history and throughout the world, self education has been common and important. Faure 76(142), Gibbons 94(41), Houle 134(10-12), Tough 285(92).

Research conducted by Houle, Faure, Tough, Knowles and Gibbons documents substantial and significant data regarding the nature, value and necessity of self education. Several of these studies identify key characteristics of self educators and offer creative educational methodologies designed to facilitate the development of self-educating capacities. In addition, several of these studies compare and contrast traditional teacher-directed education and self-directed learning. Recommendations are included as to how existing education must be modified to encourage the development of self educative competencies in response to the demands of a rapidly changing modern world.

The studies are presented chronologically; the data appears as follows:

1. Houle, "The Inquiring Mind"
2. Faure, "Learning to Be"
3. Tough, "The Adult's Learning Projects"
4. Knowles, "Self-directed Learning"
5. Gibbons, "Experts Without Formal Training"

Houle: The Inquiring Mind

In 1960, Cyril Houle devoted a small but significant study to the examination of self-compelled adult learners who pursued self-learning activities throughout their whole lives. He writes that:

The desire to learn, like every other human characteristic, is not shared equally by everyone ... in a world which sometimes seems to stress the pleasures of ignorance, some men and women seek the rewards of knowledge - and do so to a marked degree. They read. They create or join groups in order to share their studies. They take courses. They belong to organizations whose aims are wholly or partly educational. They visit museums and exhibits, they listen to radio and watch television with discrimination, and they travel to enlarge their horizons. The desire to learn seems, in fact, to pervade their existence. They approach life with an air of openness and an inquiring mind. Houle 134(3)

Houle asserts that, in fact, every era has produced men and women with these keenly inquiring minds:

As the examples of Browning and Descartes suggest, the continuing learner has existed in every age. To anyone with a classical education, examples from antiquity come readily to mind. Plato's dialogues and the contemporary descriptions of the Lyceum and other schools testify to the passion for lifelong learning among at least a few of the Greeks. The works of Plutarch, Cicero, and the other Roman writers are rich with illustrations; among them are Cato learning Greek at eighty, Alexander carrying the works of Homer with him everywhere, and Caesar trying to plan each day so that it would include administration, sleep, writing and study. Houle 134(10)

Houle states further that whole cultures have been based on the conception of lifelong learning and that late in the eighteenth and nineteenth centuries, when the desire for education was far outrunning the possibilities of the existing schools, the concept of 'self-education' became very important. Houle 134(11,12). Houle believed that to understand the total phenomenon of self education, one must first understand the nature, beliefs and the actions of those who have taken

part in the process. Houle 134(10). Toward this end, Houle studied twenty-two continuing learners. As a whole, this group of people, despite diverse backgrounds in other ways, turned out to be basically similar. Houle documents the characteristics shared by these individuals:

1. They were perceived by others as being deeply engaged in learning.
  2. They regarded continuing education as a important part of their lives,
  3. They were highly involved in educational activities,
  4. They had the same basic ways of thinking about the learning process in which they were engaged,
  5. They all had goals which they wished to achieve,
  6. They all found the process of learning enjoyable or significant, and,
  7. They all felt that learning was worthwhile for its own sake.
- Houle 134(15)

While these continuing learners appeared to be basically similar, they did vary in terms of the major conception they held about the purposes and values of continuing education. After careful analysis, Houle found that these self learners could be divided into three learning categories; goal-oriented, activity-oriented and learning-oriented:

The first, or as they will be called, the goal-oriented, are those who use education as a means to accomplishing fairly clear-cut objectives. The second, the activity-oriented, are those who take part because they find in the circumstances of the learning a meaning which has no necessary connection, and often no connection at all, with the content or the announced purposes of the activity. The third, the learning-oriented, seek knowledge for its own sake. Houle 134(16)

Houle found that these were not pure types; the best way, he said, to represent them pictorially would be by three circles which overlap at their edges. He stressed, however, that the central emphasis of each group was distinct and clearly

discernable. Houle 134(16). In addition to an in-depth examination of the specific characteristics of each group, Houle offers a few observations about several of the influences which are most commonly suggested as leading to lifelong learning. They are, Houle says, family background, teachers and schools, public libraries, occupation and example of friends. Houle 134(68-80).

Above all, Houle emphasizes the individuality of every learner. He writes:

Each person is unique and his actions spring from a highly individualized and complex interaction of personal and social factors. Houle 134(80)

In addition, he documents the value and necessity of widespread lifelong learning in view of:

... competition of the market, the rapid advancement of knowledge in every field, the need to cope successfully with larger and more complex forms of organization both of men and knowledge, and the steadily raising of acceptable levels of performance. Houle 134(81)

Society's hopes for the future, Houle asserts:

... must rest in large measure on our capacity to increase the amount and the ability of those who continue all their lives to share in the benefits and the pleasures of intellectual inquiry. Houle 134(82).

In summary, Houle's study offers valuable insights into what he aptly called 'The Inquiring Mind'.

Faure: Learning To Be

Undertaken in 1971 and published in 1972, Learning To Be is the report of a broadly representative UNESCO Committee, chaired by Edgar Faure. The Committee set out to identify overall solutions to the major problems involved in the development of education in a constantly changing universe. Early in the report, the Committee emphasizes that demands for educational services are increasing and that this fact must be considered in the formulation of educational strategies:

The demand for education, characteristic of our time, is of unprecedented dimensions and strength. This evolution is taking place for various yet concordant reasons - in all regions of the world ... It is incontestably a universal historical phenomenon. All indications are that this trend will gather momentum. It seems to us to be irreversible. Future educational policies must be formulated on this basic fact. Faure 76(34,35)

The report indicates that the realities of the modern world require individuals to keep growing and developing throughout their lives. Formal educational process has a crucial role to play in assisting individuals to meet the challenges of their personal futures. Government and educational officials are currently faced with a serious dilemma. Faure writes:

On one hand, it is or will eventually become impossible or at least irrational to mobilize financial resources in direct proportion to the total demand for schooling. On the other hand, the demand for education is already or soon will be of far greater dimensions than traditional educational systems have the capacity to handle, even when operating at optimum levels. Under these circumstances, governments can hardly fail to question whether trying to satisfy this demand uniquely through existing institutions and budgets is reasonable, and whether it would not be more appropriate to use other forms and other means. Faure 76(49)

The Committee goes on to state that in this 'age of change', education has a

responsibility to prepare individuals to cope with the dynamic nature of contemporary environments:

Education must recognise itself for what it is: it may be the product of history and society, but it is not their passive plaything. It is an essential factor in shaping the future, particularly at the present moment, since in the last resort education has to prepare mankind to adapt to change, the predominant characteristic of our time. Faure 76(104)

If educational systems are to do their duty effectively, current educational practice bears careful examination:

... the very substance of education, its essential relationship to man and his development, its interaction with the environment as both a product and factor of society must all be deeply scrutinized and extensively reconsidered. Faure 76(69)

The Committee documents certain shortcomings of traditional education in the report:

Education suffers basically from the gap between its content and the living experience of its pupils, between the systems of values that it preaches and the goals set up by society, between its ancient curricula and the modernity of science. Faure 76(69)

Freedom To Be emphasizes that for far too long education has focussed on the task of preparing individuals for stereo-typed functions, stable conditions or a particular job; it attempts to instill knowledge in neat subject packages. This educational concept of acquiring, at an early age, a sum of knowledge valid for a lifetime is sadly out of date. Traditional instructional methodology is becoming less and less acceptable. Faure 76(148). It is no longer desirable to undertake educational reforms in piecemeal fashion, without a holistic concept of the goals

and modes of the educational process:

To find out how to reshape its component parts, one must have a vision of the whole ... the effects of education are ranging further and further ... we must think clearly in exploring new paths for the future. Faure 76(176)

In present circumstances, the Committee asserts, partial reforms are not adequate. Fundamental alternatives to the very concepts and structures of education must innovated and envisaged. Faure 76(181). It is urgent that creative forms and means of educating the world population be examined:

Educational structures must be remodelled, to extend widely the field of choice and enable people to follow lifelong educational patterns. Subject-matter must be individualized; pupils and students must be aware of their status, their rights and their own wishes; authoritarian forms of teaching must give way to relationships marked by independence, mutual responsibility and dialogue; pedagogical training must be geared to knowing and respecting the multiple aspects of human personality; guidance must replace selection; those making use of educational institutions must participate in their management and policy-making; the bureaucratic aspects of educational activity must be broken down and its administration decentralized. Faure 76(79,80)

The Committee asserts that we must not simply 'overhaul' traditional educational systems, we must rework and redesign educational enterprise:

Link education to life, associate it with concrete goals, establish a close relationship between society and the economy, invent or rediscover an educational system that fits its surroundings - surely this is where the solution must be sought. Faure 76(69)

Toward this end, the Committee stresses two fundamental ideas: lifelong education and the learning society. Faure 76(xxxiii). Learning is presented as a process that involves a total lifetime, in the sense of both time span and diversity, and all of society, including its social and economic as well as its educational resources. The



Committee proposes that:

Learning to live, learning to learn, so as to be able to absorb new knowledge all through life; learning to think freely and critically; learning to love the world and make it more human; learning to develop in and through creative work. Faure 76(69)

These should be the new essential building blocks of educational processes.

Education must transcend its rigid didactic role, it must, instead, concentrate on the full flowering of human faculties. Faure 76(18). The following statement appears in the report:

The new educational ethos makes the individual the master and creator of his own cultural progress. Self-learning, especially assisted self-learning, has irreplaceable value in any educational system. Faure 76(209)

Twenty-one principles and twenty-one corresponding recommendations regarding essential elements of educational reform and change have been formulated by the Committee. A summary of the major elements follows:

The concept of education limited in time (to 'school age') and confined in space (to school buildings) must be superceded. School education must be regarded not as the end but as the fundamental component of total educational activity, which includes both institutionalized and out-of-school education. A proportion of educational activity should be de-formalized and replaced by flexible, diversified models. Excessive prolongation of compulsory schooling, which is beyond certain countries' capacities, must be avoided ... Briefly, education must be conceived of as an existential continuum as long as life.

'Closed' educational systems should be made 'open'. We must gradually eliminate rigid distinctions between primary, secondary and post-secondary education. Short-cuts and branch-articulations should be introduced into educational channels ...

All available means, conventional and unconventional, should be applied to developing basic education ...

Education and work should be closely associated. Technology should be ever-present in the educational process, both as content and as guiding method ...

There should be more diversified higher-education institutions. Universities should be turned into multi-purpose establishments open to adults and young people, and designed as much for continual training and periodic upgrading as for specialization and scientific research.

Education should be individualized and personalized to the utmost and constitute a preparation for self-learning ...

Educational management should be democratized, and the general public should play a large part in all decisions affecting education.  
Faure 76(233,234)

The Committee asserts that students must be transformed from the objects of education into subjects of their own personal educational processes. Students must be encouraged and supported in the free dialogue and free search of self-learning leading to self-awareness and fulfillment. Education must be diverse enough to accommodate the unique learning needs and styles of each and every student throughout their entire lives. Faure 76(74,75). In summary, lifelong education must become the overarching principle on which all aspects of education are designed.  
Faure 76(181-182)

#### Tough: The Adult's Learning Projects

A major study conducted by Canadian researcher Allen Tough and published in The Adult's Learning Projects: Approach to Theory and Practice in Adult Learning in 1971, contains significant data regarding the nature of self-education. Through systematic scrutinization of the independent learning endeavours of adults, Tough identified the widespread existence of 'learning projects', highly deliberate efforts

to gain certain knowledge and skill or to change in some other way. Tough asserts that these learning projects constitute effective vehicles for individuals to direct their own learning. Tough 285(7). In the course of his study, Tough investigated the nature of these projects, the activities involved, the time involved and the help required for success, including the origin of this assistance. Tough probed intensely into various reasons for beginning and continuing major learning efforts and in recent years has published additional data on self-planned learning. Tough began by offering the following definition of a 'learning project':

A learning project is a series of related episodes adding up to at least seven hours. An episode is a well-defined period of time that is held together by the similarity in intent, activity or place of the thoughts and actions that occur during it. The episode has a definite beginning and ending, and is not interrupted for more than 2 or 3 minutes. Many episodes are between 30 and 60 minutes in length, but some are shorter or longer. In each episode, the person's desire to gain and retain certain definite knowledge and skill is dominant. Tough 285(7).

Tough discovered that the vast majority of adults of all ages, all occupational backgrounds and educational levels and in several countries, do engage in learning projects. He found that the average person conducts eight distinct learning projects per year and spends an average of one hundred hours per learning effort. Tough 285(1,13). Over seventy percent of these learning projects are self-initiated and directed and no more than twenty percent involve formal educational institutions. These learning projects are generally problem-oriented rather than subject-oriented; people seek the learning for practical utilitarian purposes. Tough 285(28-39). Approximately one-half of the motivation in these learning endeavours is derived from a desire to attain specific knowledge, skill or self-change. Tough 285(1,4). Tough writes that:

The most common motivation for a learning project is some anticipated use or application of the knowledge and skill. The person has a task - raising a child, writing a report for the boss, handling a case, teaching a class, fixing or improving something around the home, sewing a dress - and learns certain knowledge and skill in order to perform the task successfully. Less common is curiosity or puzzlement, or wanting to possess the knowledge for its own sake. Also rare is learning for credit toward a degree, certificate, driver's licence, or other certificate: it is about 5% of all learning projects, with the precise figure ranging from less than 1% to 15%. Tough 269(8)

Tough's definition of learning projects has been constructed to include a wide range of major learning endeavours. Any method may be included; reading, listening, observing, attending classes, reflecting, practicing, getting answers to questions. The only criteria for inclusion is that the individual's primary intention during the episode is to gain and retain certain definite knowledge and skill. This term 'knowledge and skill' also includes changed awareness, competence, habits, attitudes, sensitivity, confidence, etc. Self-planned learning, classroom learning, learning guided by a friend or group of peers and learning guided by programmed instruction are all included. Non-credit learning is included along with learning for a credit or degree or a certificate. Learning for highly practical reasons, to make a good decision, build something, raise a child, perform some task, is included as are learning efforts motivated by curiosity, interest, puzzlement, and enjoyment. Major adult learning efforts, though tied together by a strict definition, exhibit a fascinating diversity and energy. Tough 269(2)

Tough also devotes a portion of his study to the examination of psychological characteristics of individuals engaged in self-directed learning; he considers the influence of these characteristics on individual propensity toward self education. Tough 285(175):

Many of the person's current personality or psychological characteristics will also influence the amount of time he spends at learning. If the person is outstanding in some of the following characteristics, for example, he will probably conduct more learning projects than most people: (1) level of mental ability; (2) energy level; (3) degree of initiative and aggressiveness in daily life; (4) degree of deliberateness and rationality in daily life; (5) Amount of insight into himself; (6) amount of current knowledge and skill; (7) strength and number of interests; (8) positive perceptions regarding the pleasure, usefulness and appropriateness of learning; (9) extent to which he is future-oriented, and willing to put forth effort in hopes of later gratification, rather than living essentially for the present (Kuhlen,1963); (10) importance in his life for growth, expansion, achievement, creativity, self-actualization (compared to motivation from lower-level needs, anxiety, threat, deficiency, defensiveness and protection, attempts to satisfy the real or imagined demands of others); (11) past or anticipated residential mobility; (12) general readiness to change, and optimism about the future (Johnstone and Rivera, 1965); (13) amount of margin (a concept being developed by Howard McClusky), that is, the amount of energy, power, time, money and other resources left over after the person deals with his current minimum tasks and routine demands; (14) strength of motivation for achievement (Parker and Paisley,1966); (15) amount of enjoyment from using the mind; (16) amount of curiosity, and amount of pleasure from exploring new fields and phenomena; (17) clarity of life goals; (18) competence at setting learning goals; (19) extent to which his self-concept and self-assessment are clear and accurate rather than denied or distorted; (20) extent to which he perceives positive consequences in the development of new media and educational technology (Rees and Paisley,1967); (21) extent to which he deals with a problem rather than its symptoms, understands the heart of the problem, realistically perceives his own role in causing a problem, and feels that he should accept at least partial responsibility for solving his problems. The absence of most or all of the characteristics just listed will usually reduce the number of learning projects that a person begins. Tough 285(175)

In the study, Tough also outlines additional characteristics which negatively influence the propensity to undertake learning projects and suggests that a deeper understanding of several characteristics such as: self-concept; long-term goals; values, attitudes and beliefs; developmental tasks, role changes, transitions and personal crises is necessary before one can predict, with any assurance, the amount of learning an individual will initiate in any one year. Overall, Tough's 'high' learners are strikingly like the ideal, self-actualized individuals described by contemporary humanistic psychologists. It seems that the supremely healthy individual is the most likely lifelong learner. Tough 285(175)

Tough asserts that formal education must cultivate in learners the personal characteristics required to undertake personal learning projects. Self-initiated learning projects must be encouraged and supported in order to develop a society of highly competent learners. Tough writes that in addition to answering personal learning needs, learning projects by members of a society enrich the world and hold promise for the future of society:

Learning projects by members of a society are a means to a better future for that society ... The individual as well as society benefit from his successful attempts to learn. He gains new abilities and competence, new strength and confidence, an enlarged understanding of the people and environment around him. Tough 285(4)

It is important that governments, educational and other public institutions actively initiate and support this type of educational approach. In summary, Tough states that:

One finding is clear: adults want additional help and competence with planning and guiding their learning. Hopefully adult educators will respond by adopting a fresh, broader purpose: to foster the entire range of major learning efforts, not just group instruction and pre-programmed courses. Tough 269(19)

Overall, Tough's studies confirm the extraordinary extent of self-directed learning and provide revealing clues as to the specific nature of this kind of learning.

Knowles: Self-Directed Learning

Another major contributor to this field of research is Malcolm Knowles. In his book, Self Directed Learning, written in 1975, Knowles offers the following definition of self-directed learning:

In its broadest meaning, "self directed learning" describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. Knowles 147(18)

In addition to this definition, Knowles offers a valuable and comprehensive comparison of assumptions and processes of teacher-directed versus self-directed learning. This information is best presented by means of the charts in Self Directed Learning.

1. A COMPARISON OF THE ASSUMPTIONS OF TEACHER-DIRECTED (PEDAGOGICAL) AND SELF-DIRECTED (ANDRAGOGICAL) LEARNING.

About	Teacher-directed learning	Self-directed learning
Concept of the learner	Dependent personality	Increasingly self-directed organism
Role of learner's experience	To be built on more than used	A rich resource for learning
Readiness to learn	Varies with levels of maturation	Develops from life tasks and problems
Orientation to learning	Subject-centred	Task or problem-centred
Motivation	External rewards and punishments	Internal incentives, curiosity

2. A COMPARISON OF THE PROCESSES OF TEACHER-DIRECTED (PEDAGOGICAL) LEARNING AND SELF-DIRECTED (ANDRGOGICAL) LEARNING.

Elements	Teacher-directed learning	Self-directed learning
Climate	Formal authority, Competitive, Judgmental	Informal, Mutually respectful, Consensual, Collaborative, Supportive
Planning	Primarily by teacher	By participative decision making
Needs diagnosis	Primarily by teacher	By mutual assessment
Setting goals	Primarily by teacher	By mutual negotiation
Learning plan design	Content units, course syllabus, Logical sequence	Learning projects, Learning contracts, Sequenced in terms of readiness
Learning activities	Transmittal techniques, Assigned readings	Inquiry projects, Independent study, Experiential techniques
Evaluation	Primarily by teacher	By mutual assessment of self-collected evidence

Knowles theory of 'andragogy' is the art and science of helping people learn, of actively involving them in the process, as distinct from 'pedagogy', the art and science of teaching, especially children. Knowles states that it is tragic that most individuals know only how to be taught, that they have not learned how to learn. Knowles 147(14). He documents clearly the reasons why this condition constitutes a tragedy and why a self educative approach is needed. Included are the following:



1. There exists convincing evidence that people who take the initiative in learning (proactive learners) learn more things, and learn better, than do people who sit at the feet of teachers passively waiting to be taught (reactive learners). They enter into the learning more purposefully and with greater motivation. They also tend to retain and make more use of what they learn better and longer than do reactive learners.
2. Self-directed learning is more in tune with our natural processes of psychological development. When we are born, we are totally dependent personalities. We need parents to protect us, feed us, carry us, and make decisions for us. But as we grow and mature we develop an increasingly deep psychological need to be independent, first, of parental control, and then, later, of control of teachers and other adults. An essential aspect of maturing is developing the ability to take increasing responsibility for our own lives - to become increasingly self-directing.
3. Many of the new developments in education- the new curriculums, open classrooms, nongraded schools, learning resource centres, independent study, nontraditional study programs, external degree programs, universities without walls, and the like - put a heavy responsibility on the learners to take a good deal of initiative in their own learning. Students entering into these programs without having learned these skills of self-directed inquiry will experience anxiety, frustration, and often failure, and so will their teachers.
4. We are entering into a strange new world in which rapid change will be the only stable characteristic. This simple truth has several radical implications for education and learning.
  - a. It is no longer realistic to define the purpose of education as transmitting what is known. In a world in which the half-life of many facts (and skills) may be ten years or less, half of what a person has acquired at the age of twenty may be obsolete by the time that person is thirty. Thus, the main purpose of education must now be to develop the skills of inquiry. When a person leaves schooling he or she must not only have a foundation of knowledge acquired in the course of learning to inquire but, more importantly, also have the ability to go on acquiring new knowledge easily and skillfully the rest of his or her life.
  - b. There must be a somewhat different way of thinking about learning. Typically, we think of learning as what takes place in school - it is "being taught". To be adequate for our strange new world we must come to think of learning as being the same as living. We must learn from everything we do; we must exploit every experience as a "learning experience". Every institution in our community - government agency, store, recreation organization, church - becomes a resource for learning, as does

every person we have access to - parent, child, friend, service provider, doctor, teacher, fellow worker, supervisor, minister, store clerk and so on and on. Learning means making use of every resource - in or out of educational institutions - for our personal growth and development

- c. It is no longer appropriate to equate education with youth. In the civilization of our forefathers it may have been possible for people to learn in their youthful years most of what they would need to know for the rest of their life, but this is no longer true. Education- or, even better, learning - must now be defined as a lifelong process. The primary learning during youth will be the skills of inquiry and the learning after schooling is done will be focused on acquiring the knowledge, skills, understanding, attitude, and the values required for living adequately in a rapidly changing world. Knowles 147(16)

Knowles created the concept of 'learning contracts' as a means of developing the skills of inquiry required for self-directed learning. Knowles asserts that learning experiences, methods and materials must suit the learner's stage of development and take into consideration environmental and personal conditions. Readiness to learn, Knowles says, is a product of a need to know or do something in response to various kinds of developmental tasks or life problems. Each individual possesses a unique pattern of readiness in learning. Learning contracts accommodate differences in learning readiness and style. They include objectives, resources, strategies, evidence of accomplishment, and a means of validating accomplishment. Learning contracts assist self-directed learners in the organization and structuring of personal learning endeavours.

In order to effectively utilize this concept of learning contracts, Knowles has defined a new and active role for teachers in the self-directed learning process. Teachers act as facilitators and resource personnel in a learning process planned and managed by the learner. Genuineness as a person and

openness about feelings replace traditional protective instructional authority. The teacher performs the role of procedural guide and co-learner within the framework of a process structure rather than that of unchallenged expert within a content structure. Knowles 147(33-34,37-38). Teachers require an substantial repertoire of tools, devices and experiential procedures to assist self-directed learners in the management of their learning activities. Knowles 148(18). Teachers, through their guidance, should develop the following competencies of self-directed learning in their students:

1. An understanding of the difference in assumptions about learners and the skills required for learning under teacher-directed learning and self-directed learning, and the ability to explain these differences to others.
2. A concept of self as being a non-dependent and a self-directed person.
3. The ability to relate to peers collaboratively, to see them as resources for diagnosing needs, planning learning, and learning; and to give help to them and receive help from them.
4. The ability to diagnose personal learning needs realistically, with help from teachers and peers.
5. The ability to translate learning needs into learning objectives in a form that makes it possible for their accomplishment to be assessed.
6. The ability to relate to teachers as facilitators, helpers, or consultants, and to take the initiative in making use of their resources.
7. The ability to identify human and material resources appropriate to different kinds of learning objectives.
8. The ability to select effective strategies for making use of learning resources and to perform these strategies skillfully and with initiative.
9. The ability to collect and validate evidence of the accomplishment

of various kinds of learning objectives.

Knowles states that these competencies do not constitute luxuries in our society. He asserts that the "why" of self-directed learning is survival - survival of the individual and survival of the human race. He writes:

Clearly, we are not talking here about something that would be nice or desirable; neither are we talking about some new educational fad. We are talking about basic human competence - the ability to learn on one's own - that has suddenly become a prerequisite for living in this new world. Knowles 147(17)

Knowles' contributions to the understanding of self education are substantial and significant. He sums up his ideas by stating strongly that future educational enterprise must be organized around the concept of lifelong education and the development of lifelong learners.

#### Gibbons: Experts Without Formal Training

Published in 1980, Toward A Theory of Self-Directed Learning: A Study of Experts Without Formal Training, provides valuable information relating to the process of self-directed learning. The study was undertaken by a self-education study team at Simon Fraser University in Canada. The team of researchers was lead by Maurice Gibbons.

By studying the biographies of twenty acknowledged experts without formal training beyond high school, the researchers sought to uncover shared characteristics and experiences that might provide clues as to how

individuals become successfully self-directing in learning and accomplishment. The sample was restricted to those experts whose contribution was made in the last one hundred years. Four different groups of subjects were represented: entertainers; inventors, explorers and creators; people of letters, science and philosophy; and administrators, organizers and builders. Gibbons 94(45). Data in the following areas was extracted from the literature:

1. Background (family, community, personal history)
2. Personal characteristics
3. Learning methods
4. Relationships
5. Living conditions
6. Key life incidents
7. Behavior motivation, causes and rationales
8. Attitudes, opinions and philosophies. Gibbons 94(45)

An analysis of this information lead to the identification of one hundred and fifty-four characteristics. These characteristics were ranked according to extent of apparent influence on the development of relevant expertise. Of these, the forty rated most important were analyzed in-depth. The forty most prominent characteristics are listed on the following page:

- |   |  |
|---|--|
| 1. Primary Experience in the Area         | 23. Sensitivity To Others                              |
| 2. Industriousness                        | 24. Development of Interest In Youth                   |
| 3. Perseverance                           | 25. Personal Charisma                                  |
| 4. Self-Disciplined Study                 | 26. Avid Reading (Specific To Field)                   |
| 5. Curiosity                              | 27. An Incident that Led to a New Perspective          |
| 6. Single-Minded Pursuit                  | 28. Emotionally Warm Family Environment                |
| 7. Creativity                             | 29. A Primary Relationship is Vital to Life and Career |
| 8. Ingenuity                              | 30. Psychological Good Health                          |
| 9. Self-Confidence                        | 31. Conflict in the Field of Expertise                 |
| 10. Natural Ability                       | 32. Strong Personal Guiding Principles                 |
| 11. Assertiveness                         | 33. Busy, Active Home Atmosphere                       |
| 12. Intelligence                          | 34. Optimism   |
| 13. Independent Exploration               | 35. Pleasing Appearance                                |
| 14. Observation                           | 36. Family Coherence                                   |
| 15. Confirmational Support from Others    | 37. Evidence of Good Memory                            |
| 16. Integrity                             | 38. Mother Was Major Parental Influence                |
| 17. Nonconformity                         | 39. Accident-Free Life                                 |
| 18. Ambition                              | 40. Sense of Humour                                    |
| 19. Effect of the Economic Environment    |  |
| 20. Effect of Personal Major Achievements |  |
| 21. Physical Good Health                  |  |
| 22. Altruistic Motives                    |  |
- Gibbons 94(46)

In addition to these characteristics, the study revealed a great diversity in the kinds of expertise developed by these individuals and in the kinds of skills they required to become expert in their fields. The researchers also found that the accomplishment of these experts is derived from their extra-curricular life experiences rather than through formal educational means. These people tend to focus sharply upon one particular area of activity; maintaining unbroken concentration on one problem, project or cluster of skills. These subjects also have an unusual strength of character

which enables them to pursue their purposes even against great odds.

Gibbons 94(47). It was found that expertise was developed, in each case, through:

... active, experiential, self-directed, situational, often challenging means rather than the passive, abstract-theoretical, teacher-directed means which often occur in classroom situations. Gibbons 94(47)

These findings lead to the formulation of the following description of self-directed education:

In self-directed education, the individual masters all the activities usually conducted by the teacher: selecting goals, selecting content, selecting and organizing learning experiences, managing one's time and effort, evaluating progress and redesigning one's strategies for greater effect. In addition, the student of self-directed learning must have the initiative to launch these processes as well as the personal motivation to continue learning, even when there is no pressure, guidance or extrinsic reward. In self-directed education the student has the major responsibility for the purposes and methods of learning as well as the achievement of learning involved. Gibbons 94(51,52)

The authors of this study have transformed their analyses into fourteen hypotheses about education. They advocate a form of schooling that would effectively prepare students for a life of self-directed learning and attainment:

1. In self-education the locus of control is in the self-educator whereas in formal education the locus of control is in institutions, their representatives, or their prescriptions. Teaching for self-education involves helping students to internalize control over their own learning.
2. Self-education is usually a concentrated effort in one field rather than a general study of many. Teaching for self-education involves helping students to identify and become expert at the activity of activities that may become central in their lives.

3. Self-education is usually applied education - learning for immediate application to a task, and from the practical experience involved in executing it. Teaching for self-education involves integrating theoretical studies with technical training and practical application. It means learning for a specific use now rather than learning for possible use years later.
4. Self-educators are self-motivated, that is, they are committed to achievement in the field of their choice, even when faced with difficulties. Teaching for self-education involves helping students to generate their own drive toward their own goals rather than stimulating them to pursue goals set for them by others.
5. Self-education is usually guided by a vision of accomplishment, recognition or rewards valued highly by the individual. Teaching for self-education involves helping students to see themselves successfully experiencing very desirable attainments. It involves learning to plan an effective way of making that vision a reality.
6. Self-educators tend to settle on the particular field in which their interests, talents, past experiences, and opportunities are combined. Teaching for self-education involves patterns of exploration which enable students to try out a wide range of fields of activity.
7. Self-educators tend to settle on the unique pattern of formal, informal and casual methods by which they learn best - drawing from such possibilities as study, observation, practice, trial and error, apprenticeship, productive activity, group interaction, events, and projects. Teaching for self-education involves helping each student to develop a personal learning style.
8. Self-education involves the development of attributes traditionally associated with people of character: integrity, self-discipline, perseverance, industriousness, altruism, sensitivity to others, and strong guiding principles. Teaching for self-education should promote, model, and reward the development of personal integrity rather than the opportunistic pursuit of offered rewards, of self-discipline rather than obedience, of inner drive rather than the avoidance of punishment of the pursuit of artificial rewards, of caring rather than sustained competition and of strong internalized principles rather than externally imposed rules.
9. Self-education involves the development of attributes usually associated with self-directed and unique, even radical, people: drive, independence of thought, nonconformity, originality, and talent. Teaching for self-education involves promoting drive rather than passivity, independence rather than dependence, originality rather than conformity, and the talents that make individuals unique rather than tasks that make them all act the same.



10. Self-educators use reading and other process skills to gain access to the information and guidance they need in their projects. Teaching for self-education involves training in the process skills, such as reading and remembering especially at the moment students urgently need to gain access to information.
11. Self-education emerges as a theme that runs through a number of important experiences in the person's youth; later experiences maintain and develop the theme until it becomes a conscious focus of choices in the person's life. Teaching for self-education involves helping students to identify themes emerging in their lives, to build on those they choose, and to create new themes they desire.
12. Self-education is best cultivated in a warm, supportive, coherent environment in which people generally are active and there is a close relationship with at least one other person. Teaching for self-education involves creating an active environment in which a student's self-directed activities are warmly supported and there are many opportunities to form close working relationships.
13. Self-educated people seem to like others and to be liked or admired by them; they seem to be healthy in attitude, body and mind. Teaching for self-education involves promoting a holistic approach to learning so that students not only master some knowledge or skill, but they also develop a healthy attitude toward themselves, others, the world and their activities.
14. In addition to cultivating expertise, the characteristics described above outline a process of education suitable for the development of a mature personality, for achieving self actualization and for the process of learning. Teaching for self-education involves helping each student to become an expert, a participant and a person.  
Gibbons 90(53-55)

These principles have become the basis for programs in self-education, including a challenge program based upon individually negotiated learning contracts.

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