

University of San Diego

Digital USD

---

Dissertations

Theses and Dissertations

---

1994

## The Influence of Glasser's Control Theory and Reality Therapy on Educators: A Case Study

Debra Cullinane EdD  
*University of San Diego*

Follow this and additional works at: <https://digital.sandiego.edu/dissertations>



Part of the [Leadership Studies Commons](#)

---

### Digital USD Citation

Cullinane, Debra EdD, "The Influence of Glasser's Control Theory and Reality Therapy on Educators: A Case Study" (1994). *Dissertations*. 602.

<https://digital.sandiego.edu/dissertations/602>

This Dissertation: Open Access is brought to you for free and open access by the Theses and Dissertations at Digital USD. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital USD. For more information, please contact [digital@sandiego.edu](mailto:digital@sandiego.edu).

THE INFLUENCE OF  
GLASSER'S CONTROL THEORY AND REALITY THERAPY  
ON EDUCATORS: A CASE STUDY

by

Debra Cullinane

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Education

University of San Diego

1994

Dissertation Committee  
Mary Scherr, Ph.D., Director  
Johanna Hunsaker, Ph.D.  
John Chamley, Ed.D.

ABSTRACT OF THE DISSERTATION  
THE INFLUENCE OF CONTROL THEORY AND REALITY THERAPY ON  
EDUCATORS: A CASE STUDY

Debra Cullinane, University of San Diego, 1995. P.

Director: Dr. Mary Scherr.

The influence of Glasser's control theory and reality therapy on educators' perceptions of change, relationships and self reflection has to date not been researched. The purpose of this study was to investigate and describe the influence that control theory and reality therapy training had on educators in one school district. A case study method was chosen because of its descriptive and evaluative strength in educational settings, its qualitative character and its flexibility. All educators currently employed who had participated in one week of training or more were sent a fifteen item survey. From the group of 100 who received the survey, 69 responded. Educators who had participated in one advanced week training or more, were asked to volunteer for interviews. Of the 14 to volunteer, eight were certified in reality therapy and six had advanced training. There were five men and nine women; of these there were three principals, three counsellors, five teachers, and three teacher support workers. Three of the interviewees were 50-54 years of age, four were 45-49, four were 39-44, two were 34-38 and one was in the 29-33 age range.

Interviews and the open ended questions on the surveys elicited rich, heartfelt accounts of how the training had influenced educators' personal and professional lives. As a result of the data analysis on questions about change, relationships and self reflection, a number of themes were identified.

The themes of this study indicate that for the large majority of participants the training influenced the way they cope with change in terms of their interpersonal

communication and personal reflection skills, heightened their awareness of their own and other's needs and increased their self confidence. Participants perceived their engagement in self reflection increased and had become qualitatively different since taking the training. Their handling of conflict in their personal and professional relationships was positively influenced by the training. Findings indicate that those who had taken advanced training were more strongly influenced by the training than those who had only completed the basic training, the women were more influenced than men, and the training was perceived to be the key influencer, not age.

## Dedication

This study is dedicated to the women and men who accept responsibility for improving the world through their own conscious evolution and through their participation in interdependent relationships.

## Acknowledgments

Certainly no other experience in my life has made me more aware of the difference between product and process. Completion of this study was one of the longest processes I have ever undertaken, and hopefully the resulting product is reflective of the time and effort it required. The process and product would have been impossible without the many wonderful people in my life. They are present in every word of this study and deserve my eternal gratitude.

To all who gave themselves to the interview process I thank you for caring enough about the future of the training to trust me with your reflections and dreams, hopes and fears. I will never forget those intimate hours we shared and the wisdom you expressed.

To all who completed surveys I thank you for your candor, time and commitment; your participation will make a difference with regard to future training and certainly to the strength of this study.

To all the wonderful supportive friends and colleagues who consistently displayed an interest in this study, offered encouragement and repeatedly volunteered to help I thank you for keeping me going. You have no idea how much your smiles and genuine interest motivated me.

I must also thank a number of individuals for their unconditional support and undying confidence in me.

With every part of me I thank my parents, my brother and his family, and my grandparents who have never doubted me; they have always loved and honoured me and my projects, even when I have lost hope.

I thank Joan more than she can imagine for the hundreds of hours she spent transcribing and for the total commitment she made to this study. Her reverence for the process inspired me, as did her selflessness.

I thank Cathy for her thorough editing under the less than ideal situation of limited time. Her expertise in written expression helped make this document much easier to read and more understandable.

I thank Nancy for adopting this study as her own and for devoting herself to it until the final moment of its completion. Her commitment to perfection encouraged me to persevere. Her partnership reassured me that I work best in a collaborative situation.

I thank Ed for refusing to let me put my job before the completion of this study and for the long term mentorship and friendship.

I thank my roommate Verna for the countless hours we spent walking the beach or drinking coffee in contemplation of what to study, why and how. More importantly I thank her for her light, joy and relentless quest for understanding.

I thank my friend Paige for always knowing I could do it, even when I did not. Without her constancy, enthusiasm, humour and faith I would not have made it.

I thank my friend Doug for his steady encouragement and persistent assurance that the mountain was not too high, nor was it too rough for me to handle.

I thank my adviser Mary for her commitment to quality and her tact and diplomacy when faced with my drafts. She was indeed always a caring guide to the process and a respectful inspector of the product.

I thank Johanna for her confidence in me and her ability to always help me put things in perspective.

I thank John for his consistently positive, yet critical input and his steadfast effort in meeting my timelines.

And finally I thank those who are beyond this plane for providing the grounding I so desperately needed when I lost sight of my purpose.

## TABLE OF CONTENTS

### ABSTRACT OF THE DISSERTATION

DEDICATION .....	ii
ACKNOWLEDGMENTS .....	iii
<b>CHAPTER 1: STATEMENT OF THE ISSUE.....</b>	<b>1</b>
INTRODUCTION .....	1
THE ISSUE .....	4
PURPOSE OF THE STUDY .....	6
RESEARCH QUESTIONS .....	7
SIGNIFICANCE OF THE STUDY .....	7
DEFINITION OF TERMS.....	9
LIMITATIONS AND ASSUMPTIONS OF THE STUDY.....	10
<b>CHAPTER 2: REVIEW OF THE LITERATURE .....</b>	<b>13</b>
INTRODUCTION .....	13
SYSTEMS THEORY .....	13
<i>Systems Change</i> .....	13
<i>Relationships in Systems</i> .....	19
<i>Self Reflection in Systems</i> .....	28
CONTROL THEORY AND REALITY THERAPY .....	35
<i>Change</i> .....	37
The Training .....	44
<i>Relationships</i> .....	47
<i>Self Reflection</i> .....	50
A Critique .....	53
ADULT DEVELOPMENT THEORIES .....	54
<i>Change</i> .....	54
<i>Relationships</i> .....	64
<i>Self Reflection</i> .....	68
Mindfulness .....	69
Staff development and reflection .....	71
CHAPTER SUMMARY .....	75
<b>CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY .....</b>	<b>76</b>
CASE STUDY METHODOLOGY .....	76
THE SITE.....	77
PARTICIPANTS .....	78
<i>Criteria for Selection</i> .....	78
<i>Profile</i> .....	79
PILOT STUDY FOR THE SURVEY .....	79
DATA COLLECTION .....	79
<i>Interviews: Walking and Talking</i> .....	80
<i>Surveys: More than Quantitative Data</i> .....	84
<i>Documentation: A Paper Path</i> .....	86
DATA ANALYSIS.....	87
LIMITATIONS .....	88



<b>CHAPTER FOUR: THE FINDINGS.....</b>	<b>89</b>
GLASSER'S TEN STEPS TO DISCIPLINE .....	89
<i>Control Theory and Reality Therapy in the District.....</i>	89
<i>Two Day Quality School Workshops .....</i>	92
<i>School Grants.....</i>	93
<i>Beyond Reality Therapy Training.....</i>	94
<i>Present Status of the Training and More .....</i>	95
THE SURVEYS.....	95
<i>Levels of Training, Gender, Age, and Position.....</i>	96
<i>Change Questions .....</i>	99
Open-ended Question on Change.....	99
Change - Theme I - Skills.....	99
Change - Theme II - Needs.....	100
Change - Theme III - Confidence .....	100
<i>Self Reflection.....</i>	102
Open ended responses to questions on self reflection.....	102
Reflection - Theme I - Self Talk .....	103
<i>Relationships.....</i>	105
Open ended questions on relationships.....	106
Relationships - Theme I - Needs Awareness.....	107
Relationships - Theme II - Having The Confidence To Stand Up For Oneself .....	110
<i>Those in disagreement or strong disagreement with survey questions .....</i>	112
THE INTERVIEWS .....	113
<i>Change.....</i>	113
Change - Theme I - Skills For Dealing With Change.....	115
Change - Theme II - Increased Understanding of Needs .....	116
Change - Theme III - Confidence .....	118
<i>Age.....</i>	120
<i>Self Reflection.....</i>	120
Self Reflections by Interviewees.....	121
Self talk - the process .....	122
Self talk - the content.....	124
<i>Perceptual Systems .....</i>	125
<i>Relationships.....</i>	126
Relationships - Theme I - Perseverance to Ensure Mutuality.....	127
Relationships - Theme II - Detachment and Self Evaluation Skills .....	129
Relationships - Theme III - Challenging Tradition .....	131
<i>General perceptions about the training.....</i>	133
<i>Miscellaneous comments .....</i>	137
<i>Training Drawbacks .....</i>	139
SUMMARY OF FINDINGS.....	140
<b>CHAPTER SUMMARY.....</b>	<b>142</b>
<b>CHAPTER 5: INTERPRETATION AND RECOMMENDATIONS .....</b>	<b>144</b>
<b>PURPOSE.....</b>	<b>144</b>
<b>METHOD .....</b>	<b>144</b>
<b>MAKING MEANING OF THE FINDINGS .....</b>	<b>145</b>
THEME NUMBER ONE: NEEDS .....	146
THEME NUMBER TWO: SKILLS.....	150
THEME NUMBER THREE: CONFIDENCE.....	156

<b>ANSWERING THE RESEARCH QUESTIONS.....</b>	<b>161</b>
<b>IMPLICATIONS .....</b>	<b>164</b>
<b>PERSONAL IMPLICATIONS .....</b>	<b>165</b>
<b>PROFESSIONAL IMPLICATIONS.....</b>	<b>166</b>
<b>RECOMMENDATIONS TO THE DISTRICT .....</b>	<b>168</b>
<b>RECOMMENDATIONS FOR FURTHER STUDY.....</b>	<b>171</b>
<b>CONCLUSION.....</b>	<b>172</b>
<b>REFERENCES.....</b>	<b>174</b>
<b>APPENDIX .....</b>	<b>187</b>
<b>DATA COLLECTION INSTRUMENTS.....</b>	<b>187</b>
<b>HUMAN SUBJECTS FORM.....</b>	<b>258</b>

**LIST OF TABLES**

**SURVEY RESPONSES BY GENDER, TRAINING, AND POSITION..... 97**  
**SURVEY RESPONSES BY AGE ..... 98**

## APPENDICES

### INTERVIEW GUIDE

<i>Consent to Act as a Subject</i> .....	187
<i>Interview Questions</i> .....	188

### LETTERS AND SURVEY

<i>Letter to Superintendent of Schools, Quesnel School District, April 1994</i> .....	190
<i>Letter requesting completion of survey, June 1994</i> .....	191
<i>Letter requesting completion of survey, August 1994</i> .....	192
<i>Follow-up letter to complete survey, September 1994</i> .....	193
<i>Thank you letter to survey participants, September 1994</i> .....	194
<i>Demographic Survey Form</i> .....	195
<i>Survey for the Control Theory/Reality Therapy Research Project</i> .....	196

### SURVEY STATISTICS

<i>Survey Results for All Subgroups</i> .....	199
<i>Survey Results for Subgroup Gender</i> .....	202
<i>Survey Results for Subgroup Years in Education System</i> .....	208
<i>Survey Results for Subgroup Age</i> .....	225
<i>Survey Results for Subgroup Level of RT Training</i> .....	240
<i>Survey Results for Subgroup Current Position</i> .....	249

HUMAN SUBJECTS FORM .....	258
---------------------------	-----

## CHAPTER 1: STATEMENT OF THE ISSUE

### Introduction

The evolution of human consciousness is based on a theory guided by three fundamental principles (Darling, 1993; Morgan, 1993; Harman, 1988). The first principle of human consciousness addresses the notion that humankind is in a constant state of transformation and that humans can consciously choose to participate in their evolution (Ornstein and Ehrlich, 1989). Anthropologist Edward T. Hall (1959) said that no study of human beings is complete without considering how they evolve through a complex circular, multi-level process of transformation and change. The second principle underlying the theory of human consciousness development is that humans are interconnected, or in relationship, at a sub-molecular level, with each other and with all that exists in the universe (Hawking, 1990). According to Krishnamurti (1970), a well known Zen guru, the universe is not separate parts composed of you and me, the trees and sky; the universe is a composite of relationships among all that are in it. The universe is holistic. The last principle of human consciousness posits that personal reality is subjective and that humans become aware of their own version of reality through self reflection. In Native Indian cultures, for example, awareness of one's own reality may be acquired through vision quests (Mails, 1991).

These three principles, the inevitability of change, the centrality of relationships, the creation of our own reality through self reflection, have been the subject of human dialogue for thousands of years. Anthropologists (James, 1990;

Tedlock, 1975; Hall, 1959; Castaneda, 1968), philosophers (Frankl, 1959; Heidegger, 1982; Etzioni, 1992), eastern spiritualists (Kornfield 1993; Suzuki, 1970; Houston, 1993), and psychologists (Maslow, 1971; Jung, 1957; Rogers, 1980; Csikszentmihalyi, 1990) have collectively referred to one or more of these fundamental principles of human evolution.

I began my own journey towards recognizing these principles as recurring life themes when I worked for eight years with First Nations People (Native Indians) in northern British Columbia. Reading Eastern spirituality, particularly Zen Buddhism, attending conferences and devouring writings in the Human Potential movement by Marilyn Ferguson (1980), Jean Houston (1982), and Bob Samples (1981), as well as studying such topics as human consciousness and learning theory for my educational psychology degree, led to my current thinking about the development of human consciousness as a holistic, subjective and reflective process.

The relatively modern (1920's) principles of quantum theory are in alignment with the three human growth principles endorsed by philosophers, eastern spiritualists, and aboriginal cultures (Krishnamurti, 1970; Mails, 1991; Frankl, 1959). Scientists of today, like their early 20th century colleagues, are recognizing and valuing the interrelationship of humans with all of nature. They are acknowledging the paradigm which holds that everything in the universe is in a constant state of transformation and flux, and they are accepting what Natives, Eastern spiritualists and philosophers have long contended - personal reality is subjective.

Understanding the basic principles of quantum theory and ancient philosophy can help all who are interested in changing human systems and larger organizational systems (Wheatley, 1993). Wheatley said understanding these principles

can move us toward holism, toward understanding the system as a system and toward giving primary value to the relationships that exist among seemingly discrete parts...When we view systems from this perspective, we enter an entirely new landscape of connections, of phenomena that cannot be reduced to simple cause and effect, and of the constant flux of dynamic processes (p.9).

Knowledge of the ancient, yet recently popularized, idea that human consciousness evolves is integral to effective living in the future (Houston, 1993). Making the transition to fully acknowledge these principles in our daily lives would undoubtedly have a significant impact on school systems, and especially on the educators within the systems. The business community is far ahead of education in recognizing the subjective nature of reality, the pivotal role of relationships and inevitability of constant change. These insights are relatively common in the business world (Senge, 1990). In order to keep pace with business as they incorporate the wisdom of ancient scholars, education professionals need the opportunity to explore the implications of self reflection, interconnectedness, and constant change on the education system. They must be given the opportunity to see how everything is interrelated and predisposed to constant change (Fullan, 1994). Through their inquiry they may choose to accept, or even welcome change and they may come to recognize the importance of actively participating in the process.

But how might educators prepare for a changed paradigm that goes beyond objectivity, separation of the world into parts, and hierarchical relationships to a paradigm that encompasses that which is characterized by constant change, evolving relationships and ongoing self reflection. Glasser's control theory and reality therapy training offers one possible strategy for educators to develop an understanding of what

a paradigm that includes these three principles might mean to them personally and to the education system.

### The Issue

The education system as we know it is not working, according to systems theorists and educators (Sarason, 1990; O'Neil, 1993; Sizer, 1992; Bolman & Deal, 1991; Argyris, 1964; Fullan, 1991). The system, at its inception, was based on the Tayloristic ideal that the more humans dominated their environment, the more objective they were; the more they planned and the more they dissected everything in the world, the better chance they had of survival. For example, in a school system operating from this industrial paradigm, specialization of jobs was expected, standardization of work performance was monitored closely by administrators, and policy was written in isolation from practice. Clocks, bells, rows of desks were also part of the schools operating under the industrial paradigm. These mechanistic institutions are long past serving their purpose say business and educational writers and leaders (Senge, 1990; Sizer, 1992; Autry, 1991; Sarason, 1990; Barker, 1992; Morgan, 1993). Futurist thinkers call for a new and improved approach to the way we operate our school systems. I suggest that the knowledge available from ancient cultures, coupled with systems theory, control theory and reality therapy, and adult development theory have immense potential for addressing the futurists' request for changing the way we view human systems, or for changing our paradigm.

The three basic assumptions of systems theory, which, for the purpose of this study includes quantum theory, are supported by Eastern and Native Indian philosophy. The first assumption of systems theory is that any system, whether one person or one organization, is in a constant state of evolution. The second assumption of systems theory is that everything in the universe is interrelated, and the last



assumption holds that humans change themselves and the world around them through self referencing.

Some adult development theorists make assumptions similar to those of systems theorists, Eastern religions, and the Native cultures. Gould (1978) for instance said that continuous adult transformation or change occurs through self referencing and self defining. Souvaine, Lahey and Kegan (1990), like Gilligan (1982), and Miller (1986), look upon adult development as an evolutionary process fostered by being in relationship with others. The notions of continuous change in adulthood, and the central role of relationships and self reflection in promoting adult growth, parallel the basic assumptions posited by systems theory and ancient philosophy. However, new skills and attitudes must be acquired if an adult is to evolve from exclusively viewing the world from a paradigm characterized by stability, control over the environment, and objective reality to viewing the world from a more expanded perspective characterized by constant change, subjective reality and holism.

In the early 70's, Dr. William Glasser, a psychiatrist, developed a theory and a process for helping people acquire the skills and attitudes needed for understanding changes in their own lives and the lives of others. His human system theory, like systems theory (Morgan, 1986; Senge, 1990) and adult development theory (Gould, 1980; Gilligan, 1982; Jung, 1957), is based on three key assumptions: Life is experienced in terms of relationship with self and the environment; individuals are constantly self reflecting to make sense of their world, and individuals are ever changing their behaviors and perceptions as they seek to control their environment.

Glasser's thesis, based on the Control System Psychology of William Powers (1973), a student of cybernetics, is that humans, like machines, are control systems that address the contradictions or disequilibrium in their environment via input and

output feedback loops. By extending Power's and Wiener's (1950) cybernetic systems theory into psychology, Glasser formulated a psychological theory he called control theory. He also devised a process for assessing how an individual system was currently functioning, and he called this interactive, relational process, reality therapy. Glasser's control theory and reality therapy training (CT/RT) have the potential to assist individuals, and ultimately organizations, in developing the skills and attitudes needed for dealing with the transformative, self reflective and relational processes required of evolving human systems.

Research regarding the influence of Glasser's control theory and reality therapy on healthy adults is virtually non-existent in the United States, Canada or other parts of the world. Studies have been limited to describing its impact on children and youth in schools, as well as on adults who are receiving therapy.

The turn of the century is rapidly approaching, and the requests for alternative methods for enabling humans to cope with change are increasing in their frequency and intensity. The potential for control theory and reality therapy to address this request has been noted in a number of school districts in the U.S. and Canada. Therefore, given the limited amount of research regarding the influence of control theory and reality therapy training on healthy adult development, and given the number of school districts who are utilizing Glasser's training with adults to cope with changing systems, an investigation of the training's influence is warranted.

#### Purpose of the Study

The purpose of this case study was to investigate how Glasser's control theory and reality therapy have influenced educators' perceptions of change, relationships and self reflection in one school district over the past six years.

### Research Questions

1. How have control theory and reality therapy training influenced educators' perception of self?
2. How have control theory and reality therapy training influenced educators' perceptions of self reflecting and self evaluating?
3. How have control theory and reality therapy training influenced educators' perceptions of change or transformation?
4. How have control theory and reality therapy training influenced educators' perceptions of professional and personal relationships?
5. How have control theory and reality therapy training influenced educators' perceptions of reality?

### Significance of the Study

The school district under study had been involved with Glasser's ideas since 1978. The program originated in one secondary school as a result of a counselor's interest in Glasser's ten steps to discipline. The ten step program spread to a number of elementary schools from 1978 to 1988. In 1989 an elementary counselor participated in the basic week training of control theory and reality therapy. Soon after, a second counselor followed suit, followed by eight Native paraprofessionals and five teachers.

At the beginning of the control theory and reality therapy program's implementation the school board offered support by funding training for the counselors and Native education paraprofessionals. After noting the enthusiasm of counselors and paraprofessionals, teachers, principals, and other paraprofessionals, even the board members developed an interest.

Teacher involvement in 1990 led the teachers' union professional development fund to give financial support for training teachers. Due to increasing teacher interest in the program the teachers' professional union elected to keep the \$450 tuition required for each of the first and second weeks of training. In addition the board, through contractual obligations, covered the \$500 required for participant's substitute costs.

By 1991 the number of teachers and principals who had taken the five day training sessions was substantial enough to ignite interest in shorter two day workshops to focus on issues related specifically to student discipline and curriculum. These two day workshops were not part of the control theory and reality therapy training program, although they extensively incorporated Glasser's ideas. The training was provided by the same independent consultants from Vancouver and Saskatoon who had offered basic and advanced week training; they were also members of Glasser's faculty.

From 1988 to 1990 senior administration and board members saw and heard, through informal feedback, the benefits of the CT/RT program and the workshops. Consequently they chose in the third year to allocate a total of \$25,000 to the three secondary schools to support the training of 39 teachers (13 in each school). By September, 1994 over 300 people had participated in basic intensive week (BIW), advanced intensive week (AIW) or certification week (CW), and/or the two day workshops. Close to \$200,000 had been spent by the district (teachers and board) on trainer fees and substitute time.

The length of time Quesnel had been involved in the training was longer than the majority of districts in Canada and the United States, and the amount of time and money devoted to the program was unique according to officials in the Institute for

Reality Therapy in Los Angeles. However, over the district's six year training period no district-led evaluation of control theory and reality therapy's impact on participants had been conducted.

Hundreds of school districts across the United States and Canada are employing Glasser's ideas, particularly since the publication of *Quality School* (1990), but formal collection of data pertaining to the impact of these ideas on adults or adult development has not occurred. Because the school district under study had been working with Glasser's ideas since 1988, information gleaned by this research should provide subsequently involved school districts with valuable insights into how Glasser's CT/RT training influenced educators' personal and professional growth.

#### Definition of Terms

**Control theory** is a psychological theory, based on cybernetic systems theory, which explains why and how all living creatures behave (Glasser, 1982). It is based on the theory that we are all driven by five basic needs - survival, love, power, fun and freedom. The needs dictate how we must live our lives. All of our behavior is an attempt to satisfy one or more of these five needs, and all of our behaviors are consciously chosen. If we can learn to choose effective, responsible behaviors, which in practice means learning to control our actions and thoughts in a way that we satisfy our needs and do not deprive others of a chance to satisfy theirs, we will usually be happy, healthy, and in effective control of our lives.

**Reality therapy** is a method of counseling developed by Dr. William Glasser (1965), which focuses on the client's present behavior and on whether this behavior is capable of getting the client what he or she wants. It emphasizes that effective or not, we are all responsible for choosing our behavior, especially our actions and our thoughts. The goal of the therapy is to assist people in accepting control of their lives. The

control theory/reality therapy training program which ultimately leads to certification, is an 18 month program requiring a minimum of 200 contact hours. Three 40 hour, intensive weeks of training are each separated by five days of supervised practice.

Each of the five practice days may be spread over a number of months.

**Growth enhancing relationships** result in a sense of interconnectedness, mutual empathy, mutual empowerment and greater self knowledge.

**Professional relationships** are those relationships an individual has at work; these may include ones with adults and/or children.

**Personal relationships** are those relationships an individual has with family and close friends, or people with whom one works.

**Self reflection** is taking the perspective of standing outside oneself and looking back upon oneself to make meaning from what one observes, feels or experiences.

**System** is the interdependent parts of an organism or organization unified to form a whole.

**Autopoiesis** is the characteristic of living systems to continuously renew themselves and to regulate this process in such a way the integrity of their structure is maintained (Wheatley, 1994).

**Cybernetics** seeks to design, in principle, information processing computers, which parallel human behavior and brain functions (Wiener, 1948).

#### Limitations and Assumptions of the Study

The study has the following limitations.

The fact that I have worked in Quesnel for the past seven years and have been instrumental in implementing Glasser's ideas could be a limitation. Although I do not bring an unbiased attitude to the study, I believe my experience with the program from its inception, and the rapport I have built with respondents over the years has been to

my advantage in obtaining rich data. I sought to minimize the impact of my potential bias in a number of ways. I asked questions to gather both negative and positive feedback. I used survey and interview methodology to allow a comparison between data collected via personal contact and that collected anonymously. I allowed respondents to review transcriptions of interviews to allow them an opportunity for revision or deletion. Finally, I conscientiously worked to bracket my beliefs and assumptions by making them explicit.

Merriam (1988), in her description of the researcher's role, suggests "the investigator must have an enormous tolerance for ambiguity, must be a good communicator, and must be highly sensitive to the context, to the data, and to personal bias" (p. 52). I believe my experience as a school psychologist, counselor and special education administrator has prepared me to take on this role and to embrace the assumptions inherent in naturalistic inquiry.

Qualitative case study research is descriptive of one situation; generalizability is not the intended goal. Investigation of one school district's experience with the control theory and reality therapy program is intended to shed light on how the training influenced one particular group of educators' perceptions of change, relationships and self reflection.

This study restricted its scope of investigation to educators who had taken basic intensive week control theory and reality therapy training. A more comprehensive description of the influence of the program could have been obtained if all the interconnected systems were studied (i.e. school, district office, classrooms, community), but time and funding made such extensive research prohibitive.

This study made the following assumptions:

Human beings, like organizations, are systems which are self referential, interconnected and interdependent with their immediate and their most distant environments (Chopra, 1993; Morgan, 1993).

Human beings, like organizations, are systems in a constant state of transformation and flux, meaning they evolve and change through a process of dialectic exchange and feedback loops (Morgan, 1986).



## CHAPTER 2: REVIEW OF THE LITERATURE

### Introduction

This literature review includes three main sections: systems theory, control theory and adult development theory. Within each of these sections I discuss change, relationships, and self reflection.

### Systems Theory

#### Systems Change

The predominantly hierarchical structures of modern organizations have persisted since the time of the Roman armies. Therefore, changing how organizations have traditionally operated will undoubtedly challenge those who recognize the need for it. The challenge of dealing with change is great because it is happening faster, is broader than ever before, and is continuous, according to futurists (Barker, 1992; Harman, 1988; Naisbitt and Aburdene, 1990; Popcorn, 1991; James, 1990; Houston, 1993; Toffler, 1990). Identifying the best methods for coping with the change is undeniably a predominant theme in organizational and system theory today (Kanter, Stein, Jick, 1992).

The impact of the reform and restructuring movement, which has attempted to address change in education over the past 10 years, was called into question by many educators (Sarason, 1990; Rosenholtz, 1990; Fullan, 1993; Cuban, 1988a; Lieberman, 1992; Bolman and Deal, 1991). These educators concluded that the change movement in education was largely cosmetic, or to use Fullan's term, the

reform movement changes were largely devoted to 'first order' or structural change.

Structural change in education systems was attempted through mechanisms such as site-based management, 'flattening the hierarchy' through shared decision making, community involvement, and curriculum redesign, but observable differences in school system functioning was difficult to discern. Cuban (1988a) said, "Despite the rhetoric of reform, basic ways of schooling children have been remarkably durable over the last hundred years" (p. 71). Clearly, to the critics such as Fullan (1994) and Lieberman (1992), the reform movement within the education system was not working effectively.

It seems that the education system is no more able to transform itself en masse than any other public institution. The 'restructuring' initiatives in the 1980's, brought on by the publication *A Nation at Risk* (National Commission on Excellence in Education 1983), have been replaced in the 1990s with 'systemic reform' initiatives. Even today, confusion over what public schools should achieve, combined with a lack of support policy for these achievements, has helped to prevent widespread change (O'Neil, 1993).

So why has reform in education and other organizations failed? Reforms to facilitate change have, according to organizational theorists, failed in large part because of limited attention to the role individuals play in organizational change. Regarding the prominence the individual should play in the reform movement, many systems theorists have asserted that in order for positive, conscious change to occur in organizations, we must acknowledge the role of individuals in the organization and their ability to shape reality; at the same time we must look at the systems within which they work (Morgan, 1993; Senge, 1990; Bellah, Madsen,

Sullivan, Swidler, Tipton, 1985; Denhardt, 1981). The vital role of the individual in organizational reform was apparent to Morgan (1993) when he stated:

...[individuals] do make and shape their world and have the ability to do so anew...I believe that change, though often difficult, begins with individuals; that, if people want to change their world, they have to start with themselves; and that individual change becomes social change when a critical mass of people begin to push in the same direction (p. 275).

Denhardt (1981) further supported the central role individuals play in system change. He said:

...the central question is no longer how the individual may contribute to the efficient operation of the system, but how the individual may transcend the system. What becomes most clear is that action in organization is not simply organizational action, but rather personal action. To see the individual as central rather than a consequence of organized forces in the environment is to permit the possibility of meaningful self-reflection and in turn the kind of action embraced by the term 'praxis' (p. 3).

What was clear to those in the habit of studying systems, was that organizations can not change without individual change at a deep psychological, or second order level (Fullan, 1991; Cuban, 1998b). At these deep levels McWhinney (1992) said we are more likely to reach "a sudden understanding of a person who is very different than ourselves...or we (may develop) an appreciation of other realities by deep exploration and cowork with people of other realities" (p. 60).

Deep change required changing how we routinely view people and situations, suggested Fullan (1991). Further in support of this notion, Morgan (1993) in his book, *Imaginization - the Art of Creative Management*, said when

individuals and organizations are trying to change they can "get trapped by the images that they hold of themselves...that genuine change requires an ability to see and challenge these self-images in some way...The aim...is to disrupt normal ways of seeing so that people can ask constructive questions about what they are seeing and what they should do" (p. 288).

How do individuals come to disrupt their normal ways of seeing, or make changes in their beliefs and perceptions of reality? According to systems theorists (Conner, 1993; Fullan, 1991; Wheatley, 1993; Morgan, 1993; Senge, 1990; McWhinney, 1992) the first step to change required the willingness to compare internal norms of reality to what was perceived to exist externally (autopoiesis). When this autopoietic process was performed inside the head of an individual or among team members in an organization, and when the comparison of the internal and external norms were found to match, there was no perceived need for change. However, if a state of disequilibrium or mismatch was found to exist, an organization could either face the challenge of altering its behavior to make changes, or it could become resistant or frightened.

Conner (1993) offered suggestions for how individuals and organizations could overcome their fear of change; he suggested they should work to increase their resilience. Resilience is the ability to demonstrate both strength and flexibility in the face of frightening disorder. The way to assimilate change in self and organization is to increase resilience which requires the ability to demonstrate both strength and flexibility in the face of frightening disorder. The magnitude of change is greater than ever before, Conner asserted, and the key global issues humans face are monumental. This evidence of turbulent times is seen in (a) faster communication and knowledge acquisition, (b) a growing worldwide population,

(c) increasing interdependence and competition, (d) limited resources, (e) diversifying political and religious ideologies, (f) constant transitions of power, and (g) ecological distress (p. 39).

A consequence of these seven concerns as well as many other global issues is that organizations, like individuals, need to change dramatically to absorb the 'future shock', or impact of too much change in too short a time. The secret to coping is not to press harder or to do more but to shift perceptions toward change and how it is managed and to become resilient. According to Conner (1993) resilient people:

1. Display a sense of security and self-assurance based on their view of life as complex but filled with opportunity (Positive);
2. Have a clear vision of what they want to achieve (Focused);
3. Demonstrate a special pliability when responding to uncertainty (Flexible);
4. Develop structured approaches to managing ambiguity (Organized);
5. Engage change rather than defend against it (Proactive) (p. 238).

In his book he described in great detail the attributes required for becoming positive, focused, flexible, organized and proactive. He proposed a resilience continuum that placed danger-oriented people on one end and opportunity-oriented people on the other. His attributes of resiliency were specific and concrete enough to serve as a 'receptivity to change scale' for any individual or an organization.

However, individuals and organizations needed more than resiliency to work through the process of change says Fullan (1991). They needed to also consider the relevance of the change, their readiness and their resources. Fullan and Conner (1993) jointly warned that change is far more complex than we have perceived it to

be in the past, and quick solutions are untenable, given the complexity of today's issues.

Further to Conner's (1993) ideas on the increased need for resiliency Shipka (1994) and Adams (1994) believed that change required shifting values. First and foremost, they said organizations must learn how to collectively change the beliefs and values before change will naturally flow. In other words, changing organizations and society requires transforming personal values and beliefs (Harman, 1988; Ferguson, 1981; Hawley, 1993; Bergquist, 1993; McWhinney, 1992; Henderson, 1991; Denhardt, 1981; Conner, 1993; Nirenberg, 1993). The question is, how do personal values change?

Nirenberg (1993) suggested the key to reforming values and developing new traditions lay in changing behaviors in three areas: technology, collaboration, and community. The first change, Nirenberg (1993) said, should be in the creation of new telecommunications technology to allow the bureaucratic hierarchy to mutate "into a network of multiple power centers rather than the single power center atop a pyramidal organization." ( p. 9). This shift is in keeping with Toffler's (1990) notion of bloodless transfer of power or powershifting. Secondly, Nirenberg said individuals should work to change our management structure. Total quality management, which is based on self-management by teams, is an example of extending democracy into the workplace, with the intention that collaboration will be the positive result. Once collaboration on values and beliefs takes hold workplace communities form. The third reform which should occur in the new millennium, said Nirenberg, is the creation of community.

Communities must be intentionally developed and may be the product of collaborative work teams (Nirenberg, 1993). Nirenberg envisioned that the self-

managing work teams, which share leadership and responsibility for each other's welfare and effectiveness, ultimately create a sense of community. In the teams, each individual was empowered to "participate fully in the governance of the organization" (p. 10). Workers, he posited, were tired of working at the expense of their own personal growth needs, and would welcome opportunities to work in communities which were collaborative and growth focused.

Like Conner (1993), Bergquist (1993) reflected on the context needed for personal growth in postmodern times, and suggested individuals must establish a new sense of workplace community characterized by commitments, collaboration, dedication, partnerships and love. He emphasized the need for individuals, when creating community, to consider the relationship between the individual and collective without losing sight of the fact that we can only find ourselves by uniting with others, and at the same time, by looking inward to our internal sanctuary.

Thus at the heart of survival in a turbulent, postmodern world is the capacity for synthesis, love and sanctuary. We must be able to draw together or synthesize that which seems diverse or ambiguous in hybrid organizations. We must be able to love and build a sense of community among men and women who live with the complexities...We must be able to find personal sanctuary in a world of organizational turbulence (Bergquist, 1993, p. 254).

#### Relationships in Systems

We can not remain egocentric or out of relationship and still grow, according to system theorists (Wiener, 1948; Denhardt, 1981; Powers, 1973; Morgan, 1993). Relationships are by definition what a system is made of, and are the key to system growth and change, insisted Senge (1990), Nirenberg (1993), and Wheatley (1993). Relationships are circular in nature and encourage us to think

about change in terms of loops rather than lines, and to replace the idea of individual causality with the idea of mutual causality (Morgan, 1986). Numerous relationships combined form a network or community.

Networking, as a process of relating, is essential to individuals of the future, the futurists said, as it concretizes the web of interconnectedness necessary for transforming and changing (Bergquist, 1993; Shipka, 1994). Dialogue among individuals leads to the formation of this web of wholeness. Dialogue that promotes shared meanings of language, culture and values is vital to the formation of a feeling of interdependence. Information and idea sharing within a network, and visionary leadership, are the key determinants for how individual systems and organizations evolve, claimed Wheatley (1993).

The necessity of developing a network of interdependent relationships within a workplace community is supported by many system thinkers (Toffler, 1990; Shipka, 1994; Harman, 1988; Sergiovanni, 1992a; Etzioni, 1992; Nirenberg, 1993; Fullan, 1991; Barth, 1990; Glickman, 1993; Morgan, 1993). These relationships become the core of system change. Sergiovanni (1992b) said, "Communities are defined by their centers. Centers are repositories of values, sentiments, and beliefs that provide the needed cement for uniting people in a common cause" (p.41).

Toffler (1990) suggested the behaviors, such as subjectivity, intuition, passion and power sharing, which we adopt in a regular family situation should be what we strive for in new interdependent organizations. Shipka (1994) proposed that individuals, embarking on the journey of change toward interdependence, needed to "possess inquisitiveness, patience, the ability to observe what's just out of range, cultivation of a beginner's mind, a sense of humor about oneself, the ability to deeply listen, openness to examining and changing long held beliefs, developing



a field of view rather than a point of view, holding recovery as more important than perfection" (p. 134). Participants in change for Toffler's (1990) 'post bureaucratic' times will require intuitive sensitivity, empathy, guile, guts and old-fashioned emotions, all of which characterize family life.

For system changes to be enduring, Adams (1994), like other futurists, contended we must "change our beliefs and values at a psychological level and our habits at a physical level" (p. 235). We must admit that action plans made during team retreats are seldom successful unless we change our habits, mental models or 'default settings'. "We must alter how we think about the situation by questioning our beliefs and testing our assumptions," said Adams (p. 226).

For us to make enduring changes in our habits and enhance our potential to form meaningful relationships, Adams (1994) asserted individuals must be prepared to: (a) make commitments that are passionate and heartfelt, (b) develop structures that support repetition or practice, (c) reward new behaviors, (d) change to align with held values and purpose, and (e) change a step at a time. Shipka (1994) discussed the need to nurture a systems orientation in relationships. She urged people to "engage in breakthrough experiences about how they work together as well as about the work they are doing. When we sit together and explore the how of being together - whether at work or not - we become more and more conscious not only of the specific systems in which we live but also of the nature of systems in general" (p.132).

Personal growth development is a prerequisite to the evolving of relationships in organizations (Senge, 1990; Morgan, 1993; Block, 1993; Henderson, 1991; Bergquist, 1993; Handy, 1989; Harman, 1988; Spice, 1994; Sizer, 1992; Fullan, 1991; Ferguson, 1981; Covey, 1989). There is also a critical

need for shifting values and beliefs about relationships in organizations from the traditional hierarchical, bureaucratic interactions to the placement of a higher value on non-hierarchical, collaborative relationships.

Senge (1990) suggested that shifting values begins with self discipline. The goal of self discipline is to become "personally masterful". Personal mastery involves the individual in making behavioral choices, holding creative tension by keeping the goal in view while seeing current reality, and clarifying one's personal vision. Through the practice of personal mastery and his four other disciplines - team learning, building shared vision, mental models, and systems thinking - an individual can achieve a new state of being at the personal and interpersonal level.

The essence of being connected at the interpersonal level can lead to a sense of interconnectedness within a system, Senge (1990) asserted, and this process of feeling interconnected as part of a system is developmental. Systems thinking, he said

leads to experiencing more and more of the interconnectedness of life and to seeing wholes rather than parts. Whenever there are problems in a family or in an organization, a master of systems thinking automatically sees them as arising from underlying structures rather than from individual mistakes or ill will. Likewise, personal mastery leads to an increased sense of 'beingness', awareness of the present moment, both what is happening within us and outside of us, and to heightened experience of 'generativeness', of being part of the creative forces shaping one's life (p. 375).

Senge (1990) explained that in the process of developing systems thinking people, individuals first speak with a new language, but their behaviors and values remain the same. Next, beliefs and values begin to loosen in response to their

language and different thinking, consequently they may adopt new rules for action. Finally, when the rules can be enacted under stressful or ambiguous situations, there is proof that people have changed their assumptions and values. As said previously, changing values at the organizational or individual level must start with the individuals changing their values.

Senge (1990) said that one of the paradoxes of changing organizations is that it is both collective and highly individual, but "learning organizations can only be built by individuals who put their life spirit into the task. It is our choices that focus the spirit" (p. 360). Fullan (1994) concurred when he said, "It's individuals working, first of all, despite the system, and secondly, connecting with other kindred spirits, who will begin to develop the critical mass that changes the system" (p.2).

Covey (1989) believed that enduring change of individuals required balancing the four dimensions of ourselves - physical, social/emotional, mental and spiritual. Quick and easy techniques work for the short term. The challenge is for organizations to look to the long term and to help individuals choose behaviors that bring more than temporary success for themselves and their organizations. Fullan (1991) said the reason most social reforms failed was that we have neglected to consider the phenomenology of change - " how people actually experience change is distinct from how it might have been intended" (p. 4). Organizations must look at the impact of change on individuals and the collective, and work to understand the meaning change has on both. "Solutions must come through the development of shared meaning. The interface between individual and collective meaning and action in everyday situations is where change stands or falls" (p. 5).

With regard to school change, Sarason (1990) claimed the educational reform movement failed because reform efforts were aimed at parts of the system, not at the whole. He said reform was focussed primarily by student needs; faculty needs were ignored. He believed, "The public school exists for students. Period. The university exists primarily for its faculty" (p. 137). The implication was that nothing exists for teachers, yet they were singled out in the reform movement. However, isolating one part of a system for reform or change does not lead to systemic change. We must remember that the interrelational nature of a system must be held in constant focus because no single part can be held responsible for, nor is capable of, ensuring that change happens.

All systems, are by definition, interrelated. All parts of the system have to be considered when change is made - that includes students *and* teachers. The development of students and educational personnel should be the function of a school. Sarason (1990) said, "...we have to give up the belief that it is possible to create the conditions for productive learning when those conditions do not exist for educational personnel" (p. 145). Cuban (1988b) attributed the lack of impact from many attempts at school reform to first order changes rather than second order changes. Second order changes alter the fundamental ways organizations function and they take the form of strategies such as goal setting, defining role descriptions and developing a collaborative work culture. In the 1990's, Fullan believed, second order changes will demand much of our attention if reform efforts are to be successful.

Dialogue as a form of second order change is critical, as it allows for the reduction of tensions created by a mismatch between what is desired and what exists. Tensions that arise from the dialectic process of unfolding contradiction will

always be present in organizations said Morgan (1986), because they are inherent in change. "The dialectical viewpoint encourages us to understand the generative oppositions that shape our world and to manage change by reframing these oppositions" (p. 268). Addressing the dialectic tensions between structures such as hierarchical versus teamed leadership, logical decision making versus intuitive decision making, and clear role descriptions versus flexible responsibilities is necessary for systems which aim to create the interconnectedness of a collaborative community (Morgan, 1986; Wheatley, 1993; McWhinney, 1992; Fullan and Hargreaves, 1991).

Fullan and Hargreaves (1991) said a collaborative, communication filled culture is characterized:

...not by formal organization, meetings or bureaucratic procedures. Nor are cultures of collaboration mounted for specific projects and events. Rather, they consist of pervasive qualities, attitudes, and behaviors that run through staff relationships on a moment-by-moment, day-by-day basis. Help, support, trust and openness are at the heart of these relationships. Beneath that, there is a commitment to valuing people as individuals and valuing the groups to which people belong (p.48).

The dialectic between individual and the collective was the primary theme of Denhardt's (1981) book *In the Shadow of Organization*. He said an individual's quest for meaning was "a process of negotiation and renegotiation, and when the dialectic relationship was overbalanced in favor of the group, unbearable tension was placed on the individual psyche" (p. 37). This tension may threaten the person's ability to relate to one's colleagues in a positive fashion, hence, making them resistant to change.

Harman (1988), Hawley (1993), Bennis (1993), Conger and Associates (1994), and Morgan (1993) addressed the personal and interrelational changes needed for organizational transformation from slightly different perspectives than Fullan (1991) and Sarason (1990). Harman said we must rely on the "perennial wisdom", or distillation of human experience over thousands of years found in native traditions, various religions, and Eastern spiritual philosophy, if we are to effectively navigate through the 'future shock' we are currently experiencing. He called for a new sense of spirituality heightened consciousness and a willingness to see ourselves and our organizations as part of the entire global system. Hawley (1993), a businessman who wrote *Reawakening the Spirit in Work*, also believed in the need for a new sense of spirituality to deal with work and the changes occurring in organizations. He perceived we can change the future by blending four elements: the head, the heart, the hand, and what Sergiovanni (1992a) so reverently referred to as the spirit.

Block (1993) said a revolution was needed at the level of the heart and the wallet. He believed spiritual values and the desire for economic success can be fulfilled simultaneously; it is not a matter of either/or. He suggested that if a sense of unity with spirit, rather than the heart is the goal, economic success was assured. He said, "spirituality is the process of living out a set of deeply held personal values, of honoring forces or a presence greater than ourselves. It expresses our desire to find meaning in, and to treat as an offering, what we do" (p. 48).

Also on the topic of the relationship between spirituality and economic success, Conger, a McGill University professor of organizational behavior, who also edited *Spirit at Work* (1994), contended, like Block (1993), Hawley (1993) and Harman (1988) that we could meet our economic needs without sacrificing our

souls. In fact, if we were to truly create community in the workplace, we must acknowledge our spirituality. Conger said, "Our workplace is one of our most important communities. Yet it is perhaps the least equipped to be a real community." (p. 16).

New age sentiments which focus on the spiritual, emotional and physical well being of the individual and community are spreading into the workplace (Popcorn, 1991; McDonald, 1994; Chopra, 1992). Three prominent magazines in the United States and Canada ran front cover stories in 1994; *Macleans* in October, *Newsweek* and *Psychology Today* in November and December. People are no longer prepared to work in the dehumanized environments which typified the industrial model of organizations, research by various futurists and spiritualists indicated. People want to be reinvigorated with a sense of purpose and a feeling of belonging (Harman, 1988; Conner, 1993; Wheatley, 1994; Nirenberg, 1993; Henderson, 1991; Hawley, 1993; Renesch, 1994). Personal growth "will ultimately influence the organization in dramatic new ways as individuals share their concerns on the job," said Shipka (1994).

Shipka (1994) risked being considered radical when she expressed her thoughts on the kind of change individuals in organizations must make. She said we should see leading and participating in change as a sacred responsibility. To her this responsibility required "adopting a systems view, challenging how we [always] view growth as positive, and facing up to what life on earth at the end of the 20th century will be for everyone on the planet" (p. 135).

Wheatley (1993), Chopra (1993), Eisler (1987) and Darling (1993) went in another, yet equally powerful, direction when they asserted that quantum theory played a role in understanding human thought, change processes and reality

creation. They believed human thoughts are energy which has the transformative power to change individuals and systems; this power to change systems is called "autopoiesis".

Wheatley (1993), Darling (1993) and Morgan (1986) contended that an autopoietic structure was never resting. It was always making an effort to reach beyond itself in order to construct and deconstruct its environment. An autopoietic structure is also always self referencing or seeking continuous feedback to renew itself while maintaining its integrity. To Morgan (1986) the theory of autopoiesis encourages us to understand the transformation or evolution of living systems as the result of internally generated change. Rather than suggesting that a system adapts to an environment, or that the environment premeditatedly selects the system configuration that survives, autopoiesis places principal emphasis on the way a human or organizational system interacts to shape its own future. It is the pattern, or whole, that evolves, not the individual parts of the system.

#### Self Reflection in Systems

Harman (1988) contended that the "window to our unconscious is through our feelings, emotions and inner imagery" (p. 85). These feelings and images can be accessed through traditional meditative disciplines (Harman, 1988; Alexander, Davies, Dixon, Dillbeck, Druker, Oetzel, Muehlman, Orme-Johnson, 1990; Bergquist, 1993; Vaughn 1979). Such introspective processes increase our self awareness, promote an awareness of our oneness with the universe, awaken our capacity to know ourselves without ego, instill trust in our intuitive mind, and encourage us to make choices that we understand to be in everyone's highest good (Vaughn, 1979).



Hawley (1993) and Block (1993) suggested that having the courage and self-discipline to discover our inner selves, our deeper spiritual selves, was a prerequisite to developing the integrity or wholeness organizations needed for thriving in the coming millennium. We demonstrate our integrity and wholeness, Hawley said, by having character. How do organizations acquire character? Hawley offered fourteen examples of strategies, tactics, mental states, attitudes and routines organizations and individuals might use to 'recharacter' themselves. He recommended, for example, that individuals practice acceptance, inner listening, openness, purity, and goodness. He essentially described taking virtuous action to develop character. On such virtues as integrity and spirituality, Block (1993) said: outward glances at some point need to turn inward. Bringing our own spirituality into the workplace is an inward journey. The revolution begins in our own hearts. It is the conversation about the integrity of our own actions that ultimately gives us hope...Our consciousness is where the revolution begins. Fifty percent of the work we need to do is on ourselves. The other 50 percent is outward... (pp. 39-40).

Organizations and leaders within them should consciously strive to embark on a voyage to character, to understanding the inner self, at the individual and system level (Hawley, 1993; Harman, 1988; Block, 1993). Such a journey inward can clear a path for innovation and creativity, and ultimately effective problem solving and system improvement. Coping with the complexity of the world requires more than rational-empirical thought. As Harman asserted, we must siphon from the perennial wisdom if we are to change organizations for the better.

Innovative, changing organizations must look inward for their solutions at the individual and system level.

In any reform effort, the hardest change is the inside work, the emotional work. Creating partnership in a work setting is a shift in beliefs and a personal shift in the way we make contact with those in power...If there are not transformations inside each of us, all the structural change in the world will have no impact on our institutions (Block, 1993, p. 76).

Reform of educational organizations must be at the level of individual values and beliefs if the system is to change. According to Fullan (1991),

Beliefs guide and are informed by teaching strategies and activities; the effective use of materials depends on their articulation with beliefs and teaching approaches and so on ...Changes in beliefs... challenge the core values held by individuals regarding the purposes of education (p. 41-42).

Changes are made in individual's behavior before they are made in their beliefs.

With change in behaviors comes a new experience and a subsequent breakthrough in meaning and understanding.

Osterman and Kottkamp (1993) contended that reflective practice is key to organization change. They said, "Reflective practice is based on the beliefs that organizational change begins with us, that unless we change behaviors, organizations will not change...To create change, then, we must examine our own behaviors carefully, bring unexamined assumptions to awareness and consciously self-monitor both our behaviors and our assumptions" (p. 1). Behavioral changes occur they asserted, when there is a perceived incongruity between what we intend and what we perceive exists. Osterman and Kottkamp compared a reflective practice approach to organizational change to a more traditional approach toward change. They said that the purpose of professional development was once primarily

for knowledge acquisition, whereas the purpose of reflective practice is behavioral change.

Change was traditionally thought to occur by standardizing knowledge and applying rational thought; reflective practice assumes that change occurs through self awareness and emotional, social and cultural thought, in addition to rational thought. In a reflective model, content is more focused on practice and personal knowledge, than on theory and public knowledge. The process of professional growth was traditionally individualistic, didactic, passive, expert-driven instruction, with the learner subordinate. The reflective process of professional growth is characterized by dialectic interaction, experimentation, collaboration, facilitation-driven instruction. Learning is seen as an active process whereby the agent is engaged in research.

When working with a group of principals to change the way their district operated, Osterman and Kottkamp (1993) engaged the administrators in a course on reflective practice. The principals reported the process affected them in such a way that they began to talk about (a) changing their view of the world and seeing things in new and different ways; (b) changing their attitudes and beliefs; (c) changing their practice; and (d) changing the nature of their relationships with professional colleagues from seeing themselves as isolates to seeing themselves as part of teams.

In his writings on postmodern organizations, Bergquist (1993), discussed the reflective process required for personal and organizational transformation in the postmodern era. He said

Postmodern conditions usually require small steps toward renewal rather than elaborate plans. These conditions also require a shift to different levels of understanding and modes of learning...In the postmodern world, we must

look to an inner sense of self and to an outer structure of support and community of shelter, stability, and insight in an edgy and turbulent world...We must discover ways to make commitments and take action, while keeping a relativistic stance in a world that no longer allows for simple values or answers or for a stable ground of reference. We must often look to that which is old and that with which we disagree to find the balance and the kernel of truth we need to navigate successfully in our turbulent and confusing postmodern world. We return to the wisdom found in virtually all premodern cultures concerning the facade of progress and the ephemeral nature of planning. While standing on the edge of a postmodern world, we must discover wisdom in the patience and persistence of premodern man. We must return to premodern perspectives regarding the sacred nature of human organizations and once again listen to enlightening stories regarding our own human history and destiny. Only in this way can we successfully tend the complex and irreversible fires of the postmodern world (p. 14).

Morgan (1993) suggested in post modern times, organizations and the individuals within them, need to learn and re-learn to use 'imaginization' if they are going to survive on the planet. "Imaginization as an approach to change, seeks to mobilize the potential for understanding and transformation that rests within each and every one of us. It seeks to challenge taken-for-granted ways of thinking and, in the process, open and broaden our ability to act in new ways" (p. 276). Morgan belongs to the social-constructionist school of thought which is built on the belief that human consciousness and awareness transform and shape reality. Fullan (1991) contended that unless those who work in systems, school and otherwise, are willing to acknowledge the subjectivity of their reality and transform it, change will

not occur because "ultimately the transformation of subjective realities is the essence of change" (p. 36).

Wheatley (1993) said that systems wishing to evolve in the future should (a) acknowledge the existence of multiple realities in a world that is subjective, and (b) recognize that the world is shaped by our interactions and relationships, because everything is interconnected. Evolving organizations and individuals should engage in a reflective process of scanning their environment, comparing what they see to the norms they desire, and adjusting or maintaining according to the perceived discrepancy or match. In organizations wishing to change, the monitoring of ineffective relationships through a reflective process must be the central focus. Teams working together promote change, and effective teams must be willing to self reference. Wheatley noted that perhaps "self-reference is the best tool of all for leaving behind the clock-like world of Newton" (p. 147).

Self referential actions or feedback loops are essential features of any system or organization that hopes to evolve into the future (Morgan, 1986; Wheatley, 1993; Osterman and Kottkamp, 1993; Nirenberg, 1993; Senge, 1990). By continuously extending into the surrounding environment to gather information, systems are able to stay resilient but flexible. The transformation that occurs as a result of scanning an organization's larger environment, comparing what is observed to internal norms, and adjusting the organization's behavior accordingly ensures survival, change and hopefully evolution. Morgan said, "change unfolds in a circular pattern of interaction" (p. 247). Relations within the interactions "are always in a state of flux and stability exists in the midst of the flux." (p. 253).

Self reference is what "facilitates orderly change in turbulent environments because a system can, through the self referential process, identify whether or not it

is in a state of disequilibrium, and then re-organize or self renew" (Wheatley, 1993, p. 88). Self referencing creates a "stability that encourages learning from past mistakes, and it provides the time and space for the essential questioning and testing of assumptions about change" (Bergquist, 1993, p. 237). Change in a postmodern world can not be planned; it must be a process of trial-and-error learning or groping, Bergquist postulated.

In an environment of change where trial-and-error is prevalent, recognition of multiple realities is necessary. Multiple truths must be allowed to exist simultaneously (Denhardt, 1981). McWhinney (1992) made no assumptions about what one true reality would look like because he assumed "reality to be essentially unknowable; any image we have of reality is, at best, a belief" (p. 24). In *Paths of Change*, he described a number of alternative realities he had found people to use i.e. social, sensory, unitary and mythic. Individuals follow different paths to reach resolutions, and the "resolution of major issues is likely to require a complex interworking of many such sets of two or more realities" (p. 57). The ability to see multiple realities is vital to the resolution of conflicts. "Conflict is induced in every consciously chosen change...it is present in every process of intentional change, and all methods of change must deal with conflict...", said McWhinney (p. 61).

Conflicts occur as a consequence of our different perceptions of reality or truth, and the more we struggle with determining a 'collective real' or a shared perception of reality, the more complex the issues and the more challenging it is to find solutions. The resolution of issues demands that we approach change with an understanding that change itself generates difficulties.

Our understanding of change differs with our underlying beliefs about reality. The meaning of change depends on the individual's concept of reality

(McWhinney, 1992, p. 10). "Differences in the construction of reality provide not only the conditions of interpersonal, social, and international conflict, but also the patterns through which we organize society" (p. 22). These differing beliefs may be cause for conflict. "Conflicts arise from the constructions of (our) minds, from the beliefs and styles by which an individual or group makes a choice; only incidentally are they in the content of the issue" (p. 22). Acceptance and understanding of diverse ideas and world views, such as those promoted by multiculturalism, feminism, communitarianism and post modernism are a crucial part of learning to work from a new paradigm or different reality of organization (Harman, 1988; Bergquist, 1993; Etzioni, 1992; Eisler, 1987; Wheatley, 1993; Morgan, 1986).

Change, McWhinney (1992) presumed, is a process of movement from what is innate, or currently the reality, toward a preferred or intended reality. "The intended reality takes control over the innate, leading from the problem to the solution" (p. 66). He suggested that a third reality is called upon to evaluate what to do to reach a solution; this reality is determining the direction to take. Sustained change requires unambiguous direction said McWhinney. "It is difficult to hold on to intentionality if we allow ourselves to keep seeing the world through a multiplicity of realities. Blindness and courage both serve intentionality" (p.67).

#### Control Theory and Reality Therapy

Training in Glasser's theory and therapy gives individuals many skills to reflect upon their lives and their interactions with others, and to make positive changes in both areas. Glasser's theory was based on Norbert Wiener's cybernetics which was a model of systems theory. Wiener's cybernetics received major attention in the 1930's among engineers seeking to design innovative controlling

devices. Powers (1973), a student of Wiener's and a guiding force in Glasser's thinking said that when engineers conceptualized control theory they "succeeded in discovering a kind of organization which could have inner purposes and which, instead of reacting to external forces, could sense and act on the world around it and thus control aspects of that world" (p. ix).

Glasser's idea for reality therapy began before he came upon Power's ideas. His insight into an unorthodox manner of working with mentally ill patients began when he was in residency in the Veterans Administration Hospital in West Los Angeles in the 1950's. He was mentored by a Dr. Harrington, who taught Glasser that what the client was doing or thinking now was far more important than focusing on the past or dealing extensively with feelings. Glasser eventually wrote a book in 1960 entitled *Mental Health or Mental Illness*. In 1965 he wrote *Reality Therapy*, which sold over one million copies. In 1968, after working in the field of education, he wrote *Schools Without Failure* which was also made into a film when it became popular with educators.

Reality therapy training weeks began in the late sixties as Glasser gained a following of counselors, nurses, social workers, clergyman and others in the helping professions who were anxious to improve their skills in using reality therapy. In the early 1970's the Institute for Reality Therapy was formed in Los Angeles and has grown to the extent it changed its name in 1993 to The Institute for Control Theory, Reality Therapy and Quality Management. Control theory was developed to provide the theoretical basis for Glasser's reality therapy in 1977, after he read William Power's *Behavior: The Control of Perception* (1973).

In 1990 Glasser wrote *Quality School*, which in essence integrated his ideas on education and his ideas about control theory related to the functioning of the



human system, with a description of the reality therapy techniques needed to make education learner friendly. The notion of a 'quality school' was timely. In the late 80's and early 1990's, W. Edwards Deming was being heralded as the father of the total quality movement in business; thus Glasser's condensation of his fourteen points into three for application in an educational setting served him well in gaining attention from the education community. Shortly after writing the book he formed a Quality School Consortium whereby schools signed a contract with the Institute, and for a fee of fifty dollars, agreed to go through Glasser's prescribed phases for becoming a quality school.

The phases essentially required school staffs in the first year to read and discuss his book chapter by chapter; the second phase or year they agreed to participate in Basic Intensive Week training. The third phase involved the trained teachers working with their students to teach them control theory. The final phase (the integration phase), although not formally developed, was expected to involve the teachers in becoming lead-teachers. These lead-teachers would focus on changing "the curriculum so that what we ask students to learn will, in itself, persuade them to expend the effort to do quality work" (Quality School Consortium Training Program, 1990, p. 6).

There are approximately 125 schools from across the U. S. and Canada who are members of the Quality Schools Consortium. Most of those schools have been working toward the quality school concept for one to two years.

#### Change

Glasser's (1984) control theory held that behavior is controlled internally rather than externally as the Behaviorist's posited in their stimulus/response theory. Glasser's theory of behavior assumed that human beings are systems who have

basic needs, similar to the needs defined by Maslow. Satisfying these psychological, genetically encoded needs is what motivates us to behave; we are always trying to control our world to get what we need and want. "Our behavior is our constant attempt to control our perceptions" (Glasser, 1986, p. 53). Essentially everything we do, according to Glasser, is reflective of our best attempt to meet our five basic psychological needs: love and belonging, freedom, fun, personal power or achievement, and survival. Every individual has the same five needs, however, the manner in which they choose to meet them is unique to each person.

For example, going for a jog satisfies my need for fun, but to someone else hang gliding might satisfy their need for fun. In a hang gliding experience I would quickly choose to focus on my survival need. I choose jogging, someone else chooses hang gliding, but both are behaviors selected because they allow each of us to meet our need for fun. I want safety and exercise, the hang glider presumably wants adventure and challenge. A person's wants are unique to him or her, but their needs are universal. Control theory explains why, and to a great extent how, all living organisms behave; all we do all of our lives is behave (Boffey, 1993). It contends that all of our behavior is purposeful, and that purpose is always to attempt to satisfy basic needs built into our genetic structure. It was called control theory because all behavior is our best attempt at the time to control *ourselves* (so that we can control the world we live in) as we continually try to satisfy one or more of these basic needs (p. 1).

Reality therapy as a cognitive theory is based on the assumption that people are ultimately self-determining and are capable of consciously taking charge of their lives. Glasser's approach is both anti-deterministic, said Corey (1991), and positive. Glasser's theory described how and why people attempt to control the

world around them and it teaches them ways to satisfy their needs and wants more effectively. When what they perceive in the external world is different from what they want as determined by their internal world, some form of behavior is initiated. The impetus to act is sparked by the perceived difference between the internal and external, according to Glasser (1984). Glasser labeled this difference a 'perceptual error'.

A perceptual error such as pain is a strong error signal; it tells us to change what we are doing. For example Glasser said that when he experienced a crushing disappointment, he got a sharp tearing pain in his chest as an error signal. To alleviate the pain he had to then change his behavior. This may mean that he first changed the picture of what he wanted to more closely align it with what he was getting. He could then choose a different behavior that ensured the changed picture and current perceptions match. Thus, the error was eliminated.

Where do wants or pictures of what we want come from? How do I develop different wants than my friends or family? Glasser believed that our wants are based on the pictures we have stored in our memory. These pictures represent the most need satisfying times in our lives; this storage place is our 'picture album' or our 'quality world'. As we go through life, from birth to death, we store pictures of those experiences which were exceptionally meaningful to us or, in Glasser's words, we store pictures of experiences that maximally satisfied a particular need. Glasser's basic needs, which are believed to be genetically encoded, are similar to those espoused by Maslow (1954) in his theory of motivation. Glasser did not organize his needs hierarchically, as Maslow did.

According to Glasser, we all have thousands of 'best' pictures stored in our 'quality world picture albums'; we put these pictures into our albums because we

have perceived them to represent our most need satisfying experiences. The world we presently perceive is continuously compared with our stored ideal 'quality world' pictures representing experiences which we found were especially need satisfying. There is, however, no one real world, said Glasser (1981):

All we ever know of the real or external or outside world is the energy that comes from the world and strikes the sensory receptors of our perceptual system. Everything else that we claim is the real world is in fact our own perception of that world, perceptions which we constantly try to change so that they coincide with the world in our head (p. 90).

The ideal picture in a person's head is based on an experience the individual had where she perceived her needs to be met. A person may be moved to change, or to reorganize these quality world pictures when there is a new more need satisfying experience to replace the one she had in her quality world picture album. We may not always be conscious of this change in quality world pictures, but the more conscious or aware we are of the two worlds, the real world and the world in-our-head, the more we are likely to understand that other people have unique in-the-head worlds.

Glasser (1981) said the main reason we might tend to think the real world is the same as the world in our head is that we are dealing more with things than people. Once we start dealing more with people than things, as we are doing in the non-industrial model of collaborative organizations, we increase the chances for constant frustration. That is unless we are committed to keeping our in-the-head and their in-the-head worlds in mind. Further he added

...even when we become aware that all of us live in our own world it is easy to forget...and we...must also learn that with people, unlike things, we must

continually compromise and negotiate if we wish to find common ground in our personal worlds. It takes a long time and a lot of pain, and still many of us fail to realize how hard it is to get our world, even partly, to coincide with their world when we are dealing with people (pp. 123-124).

Glasser referred to the external world or the real world as reality, but in *Stations of the Mind* (1981), he said we are actually incapable of perceiving the world as it is. He added, what we "claim is the real world in fact is our own perceptions of that world, perceptions which we constantly try to change so that they coincide with the world in our head" (p. 91). Essentially we perceive reality, Glasser believed, in terms of our own needs, and our behaviors are based on our perceptions of reality, rather than reality. We therefore have unique realities; no two peoples' are exactly the same.

We behave in order to meet our needs. Glasser (1984) suggested we have four behaviors in our behavioral system to meet our needs: feeling, thinking, doing, and having a physiological action or bodily experience. These behaviors are used simultaneously by individuals to get what they want and consequently to satisfy their needs. For instance, if I want to meet my love and belonging need I call a friend; within the anticipation of that act all four of the behavioral components can be found. I have a *feeling* of loneliness and connect with someone; I *think* about the last time my friend and I were together and how loved I felt; I got a warm *sensation* in my stomach as I recall our time at the lake, and I *act* by picking up the phone. All of these behaviors happen in an instant because, Glasser contended, each element of the behavioral system is an integrated part of the bigger system; therefore, one part of the system does not function without the other three.

Glasser's training program, held over a period of 18 months, teaches control theory, in addition to reality therapy counseling skills. This teaching is done by grouping participants in threes or dyads, as well as allowing them to work alone. Central to his pedagogy is non-coercive interaction between student and instructor, collective determination of quality and self-evaluation of every activity. His Quality School Consortium and *Quality School* book are based on these three principles of student/instructor interaction.

At the core of reality therapy training are the 'procedures that lead to change'. These are the fundamental steps in the reality therapy process. Trainees (counselors) who are working to develop counseling skills must use the following 'procedures leading to change' to work with their clients:

1. The counselor should attempt to create a supportive environment within which clients can begin to make changes in their lives. To create this environment counselors should consistently:

- Be friendly and listen to their clients' stories.

- Try not to talk about events in the past unless these events can be easily related to present situations.

- Avoid discussing clients' feelings or physiology as though these were separate from their total behaviors.

- Accept no excuses for irresponsible behaviors.

- Avoid punishing.

2. Focus on clients' present total behaviors; their doing, thinking and feeling at the moment. Help them to learn the difficult lesson that painful and self-destructive as these may be, all total behaviors are chosen.

3. Ask clients what they want now, their present pictures. Then expand this to the directions they would like to take their lives. If they say they do not know, continue to focus on what they are doing now (total behaviors) to make sure that they are consciously choosing their present directions.

4. Encourage clients to make the following evaluation, 'Does your present behavior have a reasonable chance of getting you what you want now and will it take you in the direction you want to go?'

Usually, clients answer 'no', which means that where they want to go is reasonable but their present behaviors will not get them there. Counselors should then help them plan new behaviors. For example, 'I want to improve my marriage but to do so I will have to treat my spouse differently.'

In the rare situation in which they answer 'yes' to the evaluation question, it means that they see nothing wrong with their present behavior or where they want to go. Counselors should then continue to focus on the client's present behaviors and keep repeating the core question in a variety of ways.

5. Make a plan but before it is attempted, both client and counselor should agree that it has a good chance to succeed. Once it is made, ask for a commitment to the counselor. Clients who make commitments tend to work harder.

This method of counseling, based on control theory, is aimed at helping people gain more effective control over their lives. It can also be used by those who are trained to improve the effectiveness of their own lives. William Wallace (1986) when comparing reality therapy to other therapies said, "Reality therapy focuses on what clients are consciously able and willing to do in the present situation to change behavior they have judged ineffective or growth disrupting. The touchstone of reality therapy, then, is responsibility, both for self and others"

(p. 163). He added, "...reality therapists can accept almost any constructive, responsible changes in their clients' behavior as evidence of therapeutic progress. Moreover, their clients' willingness to do something in a meaningful way for others can be viewed as a strong indicator of the degree of depth of change in their clients" (1986, p. 187). Central to accepting responsibility for oneself and others is the fulfillment of one's needs. The most critical factor for fulfilling one's needs, said Glasser, is a person whom we genuinely care about and whom we feel cares about us (1965, p. 12).

### The Training

The training process for becoming proficient in the use of control theory and reality therapy consists of five parts: The Basic Intensive Week (BIW), the Basic Practicum, the Advanced Intensive Week (AIW), the Advanced Practicum, and the Certification Week (CW). Basic Intensive Week is designed to teach the concepts of control theory psychology and reality therapy. The number of participants is limited to 13 to ensure as much one-on-one instruction as possible. The BIW consists of at least 27 contact hours, during which there are lectures, demonstration role-plays and experiential exercises. This is to allow participants exposure to the basic control theory and reality therapy ideas, and also to provide them with an opportunity to experience their own effectiveness. The participant is expected to become familiar with Glasser's control theory-reality therapy chart and *The Control Theory-Reality Therapy Workbook*. The instructor demonstrates the use of reality therapy concepts in a variety of role-play settings and establishes an environment in which the participants can comfortably begin the implementation of the concepts and strategies. Attention to a safe supportive learning environment is a top priority in the training. Inviting settings like hotel suites, homes or resorts are selected as



training sites because of the ambiance and sense of community they are designed to promote. The learning environment is intended to be totally need satisfying; participants' needs for fun, freedom, love and belonging, and power are constantly given consideration by the instructors.

Basic Practicum is arranged by the practicum participant within the six months between the time of Basic and Advanced Intensive Week. The practicum consists of a minimum of thirty hours which are usually spread over five days. A ratio of one instructor to six participants is required.

The purpose of the Basic Practicum days is to assist the participant in becoming more familiar and experienced with the concepts and techniques of control theory and reality therapy. The participant is expected to read more of the works of Dr. Glasser, and to submit case reports which demonstrate her/his utilization of the ideas in his (Glasser's) work. During the five days participants may practice role plays using reality therapy, do presentations of a control theory concept, view videos demonstrating and discussing reality therapy and control theory, and receive information from the instructor on the relationship between control theory and reality therapy.

In order to attend AIW the practicum supervisor must recommend to the AIW instructor that the participant has demonstrated adequate knowledge of control theory and skills of reality therapy. AIW is primarily designed to afford the participant an opportunity to study the concepts of control theory and reality therapy (CT/RT) in much greater depth and to integrate the concepts to a greater degree in their own lives. The AIW instructor must not be the same as the BIW instructor, according to Institute policy.

During the thirty hour AIW, the participant is expected to be involved more actively than during the BIW. There is more emphasis on role-playing and the processing of the role-plays by the participant. It is during this stage of the program that the participant begins to focus on the interrelationship of the various components of the process, i.e. playing the role of counselor in a round robin situation, giving feedback in a group, demonstrating knowledge of the element of control theory a particular reality therapy strategy is intended to address. Participants are expected to participate fully in role-playing as both client and counselor, and to explore the utilization of reality therapy concepts with a wide variety of client populations. Instructors place a much heavier emphasis on the need to understand the behaviors of both clients and counselors from a control theory perspective.

The Advance Practicum days are organized in the same format as the Basic Practicum, but with the addition of preparation for attendance at Certification. Participants are expected to read more works of Glasser as well as other literature on the topic of CT/RT. They are also expected to continue the process of integrating the skills and concepts in relationship to themselves and others. Participants at this stage of the training concentrate on more intensive role-playing as client and counselor, and they focus on learning more about how to give positive and constructive feedback effectively to other participants with respect to their work as counselors. After the successful completion of the five Advanced Practicum days participants are recommended for Certification Week (CW). No less than eighteen months is permissible between attendance at the BIW and attendance at CW. This is to ensure optimal learning and integration of the CT/RT concepts.

Certification Week consists of 32 contact hours, and during the week participants are observed for the purpose of evaluating their knowledge and skills. Participants are expected to demonstrate their level of competence in using the concepts of reality therapy to deal effectively with a variety of familiar and unfamiliar client groups. They are expected to role-play as both counselor and client, and to evaluate their ability to give constructive and accurate feedback to other participants. A twenty-minute presentation demonstrating their ability to teach control theory and reality therapy and displaying their understanding of the concepts and skills is also expected. Should participants not be successful in this week they will be given special attention and offered the opportunity to retake any training necessary in preparation to repeat the Certification process. Beyond certification, someone wishing to become an instructor for any of the five levels must complete five more levels of training.

#### Relationships

Any organism is held together by the possession of the means for the acquisition, use, retention, and transmission of information, said Glasser (1981), Arbib (1972), Powers (1973), and Wiener (1948). A beehive acts in unison because of the intercommunication of its members. In cybernetic theory, which is the basis of Glasser's control theory, all the parts of the human system are interdependent, and communication among the parts in a networking fashion is essential. The chain of transmission through the human nervous system occurs through feedback loops.

Change occurs in relationships when two individuals, who are part of a family or organizational system, collaborate through a feedback loop process of comparing each of their desired ideals with what they each perceive to exist.

Morgan (1986) said, "Feedback [loop] mechanisms can explain why systems gain or preserve a given form, and how this form can be elaborated and transformed over time" (p. 246).

According to Glasser (1981), a relationship is actually two relationships, one in each person's head. Success of a relationship depends on keeping the relationship that is mutually perceived to exist in the real world as close as possible to the pictures those relating to each other have in their heads. However, conflict in these pictures is to be expected. Glasser said the way to deal with conflict is to take a look at what it is each person has in his or her ideal picture albums, compare pictures and cooperatively identify what can work for both parties.

Relating using reality therapy is unlike relating using other counselling theories based on a stimulus-response model, because it assumes that every person can discover, through personal guided self reflection, how to satisfy their needs and wants. Understanding one's own internal world can improve one's ability to maintain positive long term relationships in Glasser's (1981) view.

People who understand control theory and reality therapy will not depend on external commitments like marriage or a simple shared internal need like sex to keep them together. They will understand the tremendous importance of sharing their internal worlds and will work out ways to expand common interests and behaviors. And also very aware of the importance of keeping errors low, they will not criticize or attempt to control their partner in areas they do not share. They will understand that to work out the inevitable conflicts that arise from intimacy they must quickly be ready to compromise and negotiate because love and belonging can not survive conflict (p. 244).

Glasser (1981) believed that conflict arising from conflicting world views can be very draining particularly when it is long term and unresolved as in the case of minority groups. "...to be a minority is to be in almost constant angry conflict between what you perceive you must do to get along and what you would like to do to satisfy your own needs" (p. 137). As we age he suggested that we may also become more aware of the conflicts that exist between ourselves and others because we are paying more attention to our own needs, but we must strive to attain perceptive balance or compromise to minimize conflicts. He posited that if we do not learn to negotiate our differences we will become more and more anxious as time goes on, "fearing that each new demand will unbalance the control systems that are keeping us from conflict, and disrupt the relationship with blowups that may drive a permanent wedge between us and a loved one" (p. 138). Unresolved conflicts will pile up as we get older so we should seek to deal with them before they accumulate.

Relationships, to Glasser (1981), are a matter of finding common ground within our personal worlds that we can agree on as the 'real' world, and these relationships take time and effort. To maintain long-term relationships we must not only have a high degree of overlap in our personal worlds, we must also develop a tolerance for the parts that do not overlap.

If we are willing to have conflict there is no doubt that we can control other peoples' behavior, Glasser (1980) said, but the catch is that the controller has to be there to control all the time (p. 143). This is the model of industrial management, as well as many traditional relationships - husband and wife, parent and child, teacher and student. Over time resentment builds in relationships in which control and punishment have to be used to maintain the power.

However, most punishment produces only short-term control. Even trying to force ourselves to do something like go on a diet without replacing the old behaviors with new ones leads to us feeling frustrated. Glasser (1981) said, "We must learn we can't simply stop any more than King Canute could stop the tide. We can, however, learn a more effective behavior, or we can seek help" (p. 142). What Glasser is addressing with regard to the relationships we have with ourselves and others is that we can not successfully force ourselves or others to do something. With ourselves or with others, the only reasonable courses of action are compromise and negotiation in situations of conflict. According to Glasser, moving from the stimulus response view that we can make others behave to a control theory view takes approximately two years.

Because relationships between people are dynamic, frustrations or errors with each other are to be expected, but with knowledge of control theory individuals can work together to find error-reducing behaviors. If no such behaviors are found, compromise is the only solution. Glasser (1981) said, "In the end unresolved conflicts destroy relationships, and the longer they exist the harder they are to resolve" (p. 237). By working through potentially confrontational situations we increase our chances to meet one of our most basic needs - love and belonging.

#### Self Reflection

Conscious awareness of our own psychological needs, quality world pictures, perceived worlds and the behaviors we employ to meet our needs, requires intensive and continuous self reflection on our individual systems. Futuristic thinkers urged individuals to consciously be aware, through self reflection, that their perceptions are unique to them (Houston, 1993; Chopra, 1993; Fox, 1979;

Tart, 1994; Kelly, 1955; Morgan, 1993). These individuals believed that their perceptions create reality. Glasser (1981) concurred with these futurists when he said,

None of us lives to any extent in the real world, because all that's out there is bits and pieces of energy, the first order. Even though there is nothing in the way our nervous system is set up to give us this information the world we mostly live in is the world in our head. The more we concentrate on learning (and using) this almost unlearnable fact, the more we will negotiate and make the compromises necessary to fulfill the needs of our basic social nature (p.127).

Glasser offered reality therapy as a tool for systematically reflecting on one's own reality. This tool, in its simplest form, is a series of questions which an individual can use to ask herself about what her control system (needs, wants, behaviors) is perceiving. The questions focus a person's thoughts on her quality world, and on the behaviors she is choosing to address a particular picture.

To reflect on my current state of mind and body using reality therapy I might ask myself, "What do I want?" Then I could ask, "What am I doing?" and "Is what I am doing getting me what I want?" If the answer is negative I would ask myself, "Am I prepared to do something different to get what I want?" These questions are intended as self reflective probes to aid the process of internally sorting, classifying and increasing understanding of who we are and what we are doing.

As Corey (1991) and Ford (1989) suggested, the goal of reality therapy is to challenge individuals to evaluate what they are doing and to assess how well their behavior is working for them. Ultimately this behavioral assessment should lead

them to making choices that will enable them to meet their needs more effectively. This behavioral change process however requires an internal dialogue with oneself; a reflection on what currently exists and what is wanted.

Part of our internal world, called our reorganizing system, is our greatest source of new, creative behaviors, according to Glasser (1981). We gain access to this reorganizing or creative source through the self-reflective process of meditation. Glasser defined meditation as a way in which we can gain access to this (reorganizing) system, and tap its potential power. (p. 248). He cautioned, however, that the human reorganizing system

is a random system and that even if we gain access to it we don't necessarily receive help from it, but if we tap it in this way there is a chance that we will. When the reorganization system acts through the process of meditation it is like a powerful healer who may or may not decide to help us but will not hurt us under any circumstances. It is the regular access that makes the difference... (p. 248).

Meditation helps individuals gain more effective behaviors and Glasser (1981) did not limit the method of meditation to the traditional quiet reflective transcendental model. He suggested that running, chanting, yoga, swimming, or any behavior that takes effort and occupies our mind or predominates for a time in our inner world will help us to gain access to our inner creative, reorganizing source. He said that the meditative behavior "...can be literally anything as long as what we do is a low-error activity and we do it in such a way that we accept ourselves" (p. 253).

The goal in the meditative state is to have no error or frustration signals.

With no error signal there is no active need for any part of our behavior system to function beyond the simple, almost automatic, meditative



behavior; therefore, what may happen is that in this low-error state we become aware of our own reorganization (creativity) system. It becomes conscious to us in bits and pieces or in insightful random flashes. We even can experience long states of what we describe as altered consciousness, because for this low-error time we do not need our mind for usual activities...we reach a total positive addiction state of mind or, in Zen terms, satori (Glasser, 1981, p. 251).

After these meditative experiences Glasser (1981) posited that individuals are more in control of their lives. They tap into the creative resource of their reorganization system, and it gives them strength and a sense of power and confidence.

#### A Critique

Glasser's ideas in the clinic or in schools are not immune to questioning by counseling theory critics. When comparing therapeutic methods, Corey (1992) found the fact that Glasser discounted dreams and the unconscious to be a weakness. He also perceived that his approach was appropriate for less complex problems as it tended to discourage exploration of deeper emotional issues. Corey felt that control theory was vulnerable to practitioners who want to 'fix' clients quickly (p. 457).

Corey (1991) also worried that CT/RT may be applied simplistically with the counsellor assuming the role of expert who determines how a client should change. He believed this could be avoided if feelings and emotions were explored more in CT/RT and if the past was given more attention as discounting it can lead to a superficial solution. He said, "Many of the behavioral methods used in reality therapy do not seem to address some of the deeper and long lasting personal

struggles" (p. 390). Glasser's failure to recognize that some cultural minority clients may be reluctant to say what they need, was another limitation Corey noted. To address his concerns about Glasser's CT/RT, he encouraged counsellors to use it artfully and not blindly (p. 391).

Wallace (1986) also warned that because the reality therapy approach is so highly verbal and rational, it can not be used successfully with autistic or mentally handicapped clients. Burks and Steffire (1979) expressed concern with the procedures for change aspect of reality therapy saying that by relying on the creativity of the counselor and client for plans and alternative behaviors, options may be limited.

### Adult Development Theories

#### Change

Most adult development theorists believed that adulthood is characterized by change and adaptation. Conceptualization of the endpoint of the adult change process varied among the developmental theorists. Piaget (1954) said that the final stage of growth is "formal operations"; Pascual-Leone (1990) conceived of the "ultraself"; Souvaine, Lahey and Kegan (1990) posited "the interindividual self"; Alexander, Davies, Dixon, Dillbeck, Druker, Oetzel, Muehlman and Orme-Johnson (1990) offered the "post-representational self"; Kohlberg (1990) put forward the "one with the cosmos self"; Jung (1971) and Levinson (1990), identified the "individuated self" and Erikson (1982) suggested the "wise" self as the final stage of adult growth. We are driven toward these endpoints by an innate desire to transform (Gould, 1978).

Some adult development theorists point out that the changes, which occur during the development toward these endpoints, are predictable and associated with age. Other adult psychology theorists propose that development is a matter of greater

adaptation; still others say adult growth is primarily a matter of change in personality. Erikson (1982), Levinson (1990) and Gould (1978), saw development in adulthood as a sequential process. They defined adult change as a continuous process, which for the most part, is characterized by stability and patterned or predictable growth.

Erikson (1982) was one of the earliest theorists to study the changes in adult development. He added to Freud's psycho-sexual development the notion of psychosocial development. He proposed that a sequence of eight stages typified the human life span. Development at each stage, he said, is supported by growth in the one previous; "...each step is grounded in all the previous ones and...gives new connotations to all the 'lower' and already developed states as well as to the higher and still developing ones" (p. 59). Each of the eight periods, defined by Erikson, is characterized by engagement in specific tasks, i.e. developing social friendships.

Erikson (1982) labelled this process of developing in a predetermined sequence, 'epigenesis'. The sequential unfolding, or epigenetic changes over a lifetime, occurs through the resolution of tension between two bipolar constructs, i.e. trust vs. mistrust, intimacy vs. isolation. The resolution of each tension is important for ensuring growth to the next developmental level. However, completion of the tasks at each level or step does not mean that an individual never addresses the task again. Erikson believed there will always be times when we have to relearn a task; more importantly, he said, learning of tasks should occur at their critical stages.

Erikson (1982) studied adult growth and change from the perspective of society, history and personality. This broad approach is not followed by many others, said Levinson (1980). Theorists primarily tend to align with one particular psychological aspect of development, such as personality, motivation or adaptation, then give secondary consideration to the biological, and sociological perspectives. For

example, Neugarten (1968), who was one of the leading personality adult development theorists, looked at adulthood primarily through the lens of personality, which is a psychological construct. She said, "If psychologists are to discover order in the events of adulthood, and if they are to discover order in the personality changes that occur in all individuals as they age, we should look to the social as well as the biological clock, and certainly to social definitions of age and age-appropriate behavior" (p. 146).

Levinson (1990), like Erikson (1982), saw adult growth as sequential and associated with specific ages of development through the life course. Because he studied only men, he proposed there are four 'seasons of a man's life'. These seasons overlap, he contended, and they are interspersed with transition periods: stage one encompassed from birth to age 22; stage two age 17 to 45; stage three age 40 to 65, and stage four age 60 and older. He looked for patterns in the life course which follow a sequence of unfoldings to create a life structure.

Adult development theorists generally assume (a) developmental change is a continuous process not limited to any one stage of life, (b) change occurs in various interrelated social, psychological, and biological domains of human development, (c) change is sequential, and, therefore, it is necessary to view each stage of life in relation to the developmental changes that precede and follow it, (d) changes in individuals must be considered in the context both of the prevailing norms of the day and of the historical time within which one lives (Okun, 1984).

Gould (1978) saw adult development as a sequential resolution of internal crises that occur at predictable stages in one's life. Adulthood, to Gould, was an act of transformation from child to adult. Of the process he said, "By striving for a fuller, more independent adult consciousness, we trigger the angry demons of childhood consciousness. Growing and reformulating our self-definition becomes a dangerous

act. It is the act of transformation" (p. 25). He identified seven steps to the transformation process:

1. Recognize our tension and confusion.
2. Understand that we respond to two contradictory realities.
3. Give full intensity to the childhood reality: that is, let it be real.
4. Realize that both contradictory realities still exist. We're not sure which one is real.
5. Test reality. Take a risk that discriminates one view from the other.
6. Fight off the strong urge to retreat just on the edge of discovery.
7. Reach an integrated, trustworthy view of a section of reality unencumbered by the demonic past.

Like Gould (1978), Levinson (1990) did not discuss beyond middle age, nor did he address the differences between genders in terms of development, although he did include females in his study. Levinson, Gould, and Neugarten (1964) spotlighted mid-life (age 40-50) as a time of significant change, not in personality but sociological respects. To emphasize the significant changes in mid-life Levinson coined the phrase 'mid-life crisis'. Gould said mid-life is a time for an adult to shed irrational or illusionary thoughts such as (a) I will be safe forever, (b) it is impossible to live without a partner, and (c) no change exists beyond the family. Neugarten suggested the changes in middle age lead to (a) altered perception of time and death, resulting in more introspection, contemplation and reflection, (b) sense of decreased ability to control the environment, (c) a decline in psychic energy, (d) a reversal of sex roles, (e) increased rigidity.

Growth toward an endpoint in adult life is achieved, the stage developmental theorists say, by constant transformation from one state to another. Transformation

occurs through resolution of tensions or crises between what is and what is expected (Piaget, 1954; Erikson, 1982; Gould, 1978; Levinson 1990). These dialectic tensions are believed to be central to the transformation process. When individuals wrestle with the disequilibrium created by contrasting concepts such as trust and mistrust they must successfully reach a favorable ratio of trust before moving on to the next tension. Fiske (1990) attributed the tension from unexpected stressors (i.e. health problems) during adult life with the greatest influence in adult change and transformation.

Gilligan (1982), Miller (1986), and Noddings (1984) further supported the theory that all individuals must work through dialectic tensions in the process of human transformation, but the tensions these theorists highlighted were markedly different from those posited by Erikson (1982) or Levinson (1990). The difference in tensions can largely be attributed to the fact that previous developmental theorists had primarily studied only men's psychological and moral development.

Gilligan (1990) looked at moral development in her book, *In a Different Voice*, and described her three research studies which highlighted men's and women's conceptualization of self and morality, experiences of conflict, and choice. Her goal in doing the studies was to

expand the understanding of human development by using the group left out in the construction of [developmental] theory to call attention to what is missing in its account. Seen in this light the discrepant data on women's experience provide a basis upon which to generate new theory, potentially yielding a more encompassing view of the lives of both sexes (p. 3-4).

Gilligan's (1982) findings regarding growth transitions for women indicated that women move in adulthood from concern about their individual survival (self focused), to concern for goodness (focused on responsibility for self and others, and

making choices), and finally to concern for truth (focused on caring, interdependence and relationships). Gilligan found that women have to learn that self-sacrifice is not virtuous, but being true to oneself and having integrity are. Women live with tension between: Self-development and a responsibility for others, passivity and assertion, care for self and care for others, intimacy and independence, and justice and care. Relationships and care are shown to be central to women's decision making, but the challenge is to consciously include themselves in the caring.

On the other hand, Gilligan (1982) found that men focused on an ethic of rights and fairness. They develop from a state of independence to interdependence, the opposite of women. They move from a position of believing that everyone should be considered equal to recognizing the need to allow for differences between other and self, and they change to understand the existence of multiple truths. Men tend to develop intimacy through a transformative process where they replace self attention with attention and connection with others.

Changes in adulthood have been associated with the psychology of personality, as well as stage theory (Costa and McCrae, 1989). Personality, Costa and McCrae declared, should be the focus of adult development, because change can best be measured by studying change in individual traits. When using longitudinal and cross sectional research designs to test for change in adult personality, Costa and McCrae noted that personality is stable after age thirty:

A comparison of available data from many designs supports the view that most personality variables neither increase nor decrease much for most people across the adult life span. These findings are of great importance in understanding the course of norm aging. Age is only weakly related to personality traits; attempts to describe periods of life in terms of characteristic dispositions are

therefore unlikely to succeed...Adults of all ages show a wide range of individual differences, and these differences are likely to be more important in predicting well-being, coping and interpersonal relations than age (p.57).

Are the individual differences to which Costa and McCrae (1989) refer stable, or do they shift randomly or systematically over time? Erikson (1982), Levinson (1990) and Gould (1978) would suggest that the changes occur sequentially over the life span. However, the content of the change varies among the theorists, because the phenomena observed for possible change are not consistent. Levinson (1980) looked at increasing individuality as well as social structures as one ages; Erikson studied stages with specific tasks for each stage, and Gould viewed change from the perspective of maturation. Costa and McCrae proposed that perhaps the study of changes in personality traits would be informative to the field of adult psychology since adult personality development has so little to do with chronological age.

When Costa and McCrae (1989) reviewed personality trait studies using self report and personality inventories they found that, "Although most adults see themselves as basically stable in personality, many perceive changes in themselves. When these perceptions are tested against objective data, however, they find little or no support" (p. 64). This theory was determined on the basis of longitudinal research involving five major dimensions of personality (i.e. neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness).

The subjects in Costa and McCrae's (1989) studies were asked to describe themselves at the present time. The results showed stability in personality over time. For the most part, they said "it appears that self-perceived changes in personality are misperceptions" (p. 65). However, Maciel, Heckhausen and Baltes (1994) suggested stability of the adult personality may not necessarily be accurate.



The evaluation of evidence [for stability] hinges on what criteria to accept (e.g., objective vs. subjective indicators), what aspect of change and stability is considered (e.g., level of functioning vs. rank order of inter- as well as intraindividual differences), what amount is seen as demonstration of stability vs. change, and whether the measures used are sensitive to change in the first place (p. 68).

They further suggested how a sense of efficacy and control in beliefs advances adults through the instability of development toward a state of wisdom. Studying wisdom and how it develops was a recommendation by Maciel et al. (1994). They were of the opinion that further researching of adulthood will reveal "that human development across life continues to strive for advances, even though the biology of the aging individual may suggest otherwise...it is that special challenge for a culture of old age to outwit the limitations of biology" (p. 92). They believed wisdom may be achieved by individuals who consciously take responsibility for their world and their development in it, not only simply through the aging process.

Maciel et al. (1994) found consistent evidence to show that personality needs to be considered in context, because much of the measurement process may not be sensitive enough to the individual circumstances of the changing goals and contexts of adult life. If constructs such as generativity and wisdom were studied more in depth, adult personalities would probably show significant variability.

When subjects were asked by Maciel, Heckhausen and Baltes (1994) to describe the changing process of aging, rather than their present state, significant variance was found. Maciel et al. question Costa and McCrae's (1989) assertion regarding the stability of adult personality, by referring to the numerous aspects of personality that are not stable:

...over and above an impressive degree of stability, the relative instability during adult years suggests that individuals adapt and change when faced with normative and non-normative [i.e. loss of job or other unexpected event] experiences of serious consequence. In addition, some components of personality appear to be more stable than others. While the commitment to cognitive problem solving, dependability, and outgoingness, for example, were the most stable dimensions across the life course, self-confidence, warmth, and assertiveness were found to be more reactive to the hazards and opportunities of experience (p. 69).

The recommendations of Maciel et al. (1994) supported George Kelly's (1955) personal constructivist theory. Kelly's ideas about personality strongly supported the notion that we are flexible in the construction of our world. Kelly described the flexibility we employ when we cognitively construct our world. He said, "Man looks at his world through transparent patterns or templates which he creates and then attempts to fit over the realities of which the world is composed" (p. 8-9). Kelly, as an adult developmental theorist, yet also a phenomenologist, disagreed with the inevitability and directionality of developmental stages as described by Erikson (1982). He proposed the personal construct theory (PCT) of development which is based on personal choice. PCT does not assume an "inevitability of content or structure in the occurrence of stages, [nor does it assume] a directionality in the developmental process toward extraspective (as opposed to introspective) definitions of psychological maturity" (Vaughn & Pfenninger, 1994, p. 177). Kelly held the existentialist view that existence follows thought, therefore, predicting future events meant having control over the events and understanding them.

Free will and a constructivist view, which assumed that we create our own reality in the change process, characterized Kelly's (1955) personal constructivist theory. "PCT does not deny contextual constraints on meaning generation, but it champions the individual's ability to transform herself as well as the contexts she is in. In this sense, PCT endorses a much more potent version of autopoiesis [change through self referencing] than do the stage theories" (Vaughn & Pfenninger, 1994, p. 185).

Kelly (1955) did not expect the adult personality to be stable. In his view a person "is essentially form in motion, creatively changing and reconstructing over time" (p. 47-48). Changes are not seen to be merely additive in nature, but are qualitatively different. Kelly also did not believe in the necessity of resolving tension between bipolar constructs, as proposed by theorists Erikson (1982) and Levinson (1990).

Kelly (1955) did not refute the existence of developmental stages; he merely claimed that individual choice to direct his or her own developmental course should receive primary recognition. About people's evolution in their choice making he said, "As one's anticipation of hypotheses are successively revised in the light of the unfolding sequence of events, the construct system undergoes a progressive evolution. The construction of one's life is based upon this kind of experience" (p. 72). Vaughn & Pfenninger (1994) emphasized that Kelly's personal constructivist theory, which they called a 'soft developmental theory', helped us understand personal change and development as the evolution of increasingly complex systems of meaning.

In describing the power of viewing development as a personal constructive process, Cantor and Harlow (1994) said, "There is considerable richness and variety in the content of personal constructs, and this variety allows for constructive

alternativism, the notion that the same event may give rise to an infinite number of construals, or be 'seen' in multiple ways" (p. 139). Flexibility and adaptability are, to them, the outcome of believing we personally construct our world.

### Relationships

Adult relationships are alluded to by all the adult development theorists, from Jung (1952) to Gould (1978), but it is only the more recent theorists who give in-depth attention to family and career relationships. Although Levinson (1990), in his 40 interviews with men, asked about their choices in terms of occupation, marriage and family, and Gould postulated adult development to be progressive acts of transformation involving family and career, it is not until Gilligan (1982) that relationships are given a prominent place in adult development. She noted that women were excluded from psychological theory and are assumed to develop, like men, with a focus on individuation and autonomy. Until the time of her research the goal of independence, autonomy and distinctness was seen as the ultimate achievement in adulthood.

Gilligan (1990), Miller (1986b), Souvaine et al. (1990) and Noddings (1984) contended that interdependence, a sense of connectedness, and responsibility are the feminine outcomes toward which adults might grow. Participation in meaningful relationships with family and friends was seen by these women developmental theorists to be as important as independence was to the earlier male developmental theorists.

Souvaine et al. (1990) and Miller (1986a) sought to understand the nature of adult relationships, and offered insights into meaningful relationships and their development. Souvaine et al. described the ultimate interdependent relationship of human systems as one in which each system or person is functioning as an 'interindividual'. This self is in a state of equilibrium characterized by a lack of threat

from, or intolerance toward other perspectives, said Souvaine et al. They suggested that the interindividual self was capable of subjectively constructing a reality whereby they experience self in the context of the interaction between systems, rather than simply seeing themselves as an independent system.

The sequence of the three phases Souvaine et al. (1990) proposed for the development of the interindividual self began with the institutional self, which is followed by the transitional self, and culminates with development into an interindividual self.

The institutional self compared to Piaget's (1954) stage of post formal thought in which individuals saw themselves and others as autonomous, self defining, self regulating and self responsible. Neither person, at the institutional stage, would try to influence the other's perception of reality, but would merely strive to confirm his or her own version of reality.

Souvaine et al. (1990) characterized the transitional self as transcending the institutional self when an individual "can reflect not only upon her own process of creating, but also upon the functioning of others' systems so as to evaluate whether she can 'trust or disconfirm' their contributions to an interaction... "(p. 245). The transitional self welcomes feedback and offers it to others with the intent of making meaning. A sentence from the interview examples Souvaine et al. used to explain the transitional self helps to explain how this stage is different from the institutional self, "So , I think the greatest sort of inner sense of competence is if my evaluations of myself, positive or negative, are confirmed by other people in ways which I can trust or disconfirm. It can be either way so that I can learn" (p. 244).

The transitional self interacts with others to improve in its own life, and has personal growth in mind as the end product. Examples of transitional self

interactions can be found in relationships between students and teacher or between two classmates. In these relationships, at least one of the transitional individuals needs to be obtaining feedback from the other person for the purpose of self improvement. When the self no longer is satisfied with this level of interaction which is solely for the purpose of personal outcome or product, the possibility for developing the interindividual self arises.

The interindividual self, as Souvaine et al. (1990) described, has: an inability to evaluate with certainty any one product or transformed product; the interindividual self constructs a new subjectivity that experiences self in the context of the interaction between systems. The evidence of the more equilibrated nature of this self lies in the lack of threat from, or intolerance toward, other perspectives (p. 250).

The interindividual self can accept responsibility for itself, but can also accept a mutuality of influence between systems. Miller (1986a) referred to this type of relationship as 'growth enhancing' because of its mutuality and sense of connectedness. Gilligan (1990) contended that personal transformations in such interindividual relationships "arise out of the recognition of the paradoxical interdependence of self and relationship, which then overrides the pure logic of formal reason and replaces it with a more encompassing form of judgment, a polyphonic structure that is able to sustain the different voices of justice and care" (p. 224). Lakoff and Johnson (1980) described the mutuality of interindividual relationships when they referred to the development of self-understanding and the skills needed to understand oneself. They said:

Self-understanding seems prior to mutual understanding, and in some ways it is. But any really deep understanding of why we do what we do, feel

what we feel, change as we change, and even believe what we believe, takes us beyond ourselves...At a minimum, the skills required for mutual understanding are necessary even to approach self-understanding (pp. 232-233).

A hallmark of interindividuals is that they can operate on four levels; they can think about self and other as well as what is and what could be.

Interindividuals can simultaneously hold visions in their heads of the real and the ideal, and can see another as part of themselves while also seeing themselves as separate.

The role of relationship in adult development is being given far more attention today than in the past, thanks to the feminist influence. Wheatley (1993), who wrote *Leadership and the New Science*, urged us to create systems in our lives "that respond to this new world of relationships in which we act as grand evocateurs of reality. Our old views constrain us. They deprive us from engaging fully with this universe of potentialities" (p. 73).

Bolen (1994) said we need to "bear witness to one another's lives" in our relationships" (p. 110). When 'bearing witness' we listen and come to know the significance of what we hear. She said in our relationships,

We all share a need to be totally honest, to be able to speak to another human being who accepts us as we are, and believes in us, about what we have done and what was done to us, about what we hope for think about, fear, and feel...By listening with compassion, we validate each other's lives, make suffering meaningful, and help the process of forgiving and healing to take place. And our acceptance may make it possible for a person who feels outside the human community to gain a sense of belonging once more. (p. 110-111).

### Self Reflection

Transformation of self, toward any of the adult development goals previously identified, demands continual self reflection (Gould, 1980; Hunt, 1984; Bennet, 1994; Pascual-Leone, 1990; Alexander et al., 1990; Piaget, 1954; Jung, 1957). Piaget believed, according to Souvaine et al. (1990), that the "ability to 'stand outside' the system to reflect *upon* it rather than for it to be the very means of one's own *reflecting*, is the essence of what it is to develop" (p. 229).

An ideal example of how self reflection is used between two people who are skilled at reflecting on themselves, each other and their relationship, can be found in the interaction of figure skating couples. They must be skilled at reflecting on their own actions, offering their partner suggestions how he or she might improve, taking feedback on their own performance and finally offering and accepting input on their mutual performance. They must be in a continual process of creating something new. Essentially they are evolving themselves and creating a 'we' through reflection - inwardly, outwardly and collectively. This means that individuals are continually reflecting on more than their own feedback; they are including input from other systems and in the case of the interindividual relationships constructing "a new subjectivity that experiences self in the context of the interaction between systems" (Souvaine et al., 1990, p. 250).

Self-referencing to discover the self is a critical component of adult development (Alexander et al., 1990; Aiken, 1993; Kelly, 1955; Rogers, 1983; Maslow, 1971). To adult development theorists, self exploration to understand one's own perceptions, make meanings and acknowledge feelings, are key determinants of how we develop as adults. Self reflection, according to Rogers (1980), moved adults toward openness, self trust, a willingness to be continually in a process of change and



increased spontaneity. To Langer, Chanowitz, Palmerion, Jacobs, Rhodes and Thayer (1990) self reflection also lead to 'mindfulness'.

### Mindfulness

Langer et al. (1990) described how developing the self reflective skill of mindfulness can lead to an optimal level of adult growth; they stressed that this optimal level of self understanding does not necessarily develop chronologically, as early developmental theorists suggested. Rather, Langer et al. said:

...by virtue of mindful involvement in any process within one's larger lifespan, one becomes less like a projectile propelled along a predetermined trajectory and more like a free-flying bird. If this is so, then the process of aging does not necessarily have a single endpoint and, in principle, development can proceed non-sequentially rather than incrementally as the person ages. By non-sequentially, we mean that the order people ordinarily assume to exist between stages and substages in any developmental process is not inevitable. Moreover, we believe it is possible both (1) to move bidirectionally from a given 'stage' to any other 'stage' without passing through intermediate ones, and (2) to construct any number of new and different stages or states. We do recognize that a particular developmental sequence could be fixed once the goal and path to it have been mindlessly accepted. If either the path or the goal, however, is mindfully modified, so too may be the developmental sequence. This view opens the possibility of positive growth in late adulthood (p. 115-116).

Mindfulness, according to Langer et al. (1990) and Tart (1994), required stepping out of the habitual, conditioned responses we have to the world. It means reflecting on how reality is constantly changing; therefore our habits of thought, feeling and acting also need to change. It means creating new distinctions rather than

relying on old ones. It means awakening, being fully conscious of our environment by sensing, looking and listening. It means being "openly aware of everything, all the time. As a result of this constant and deepening mindfulness, everything else will follow" (Tart, 1994, p. 26). By being mindful Langer et al. and Chopra (1993) contended that the biological changes traditionally expected can be reversed. Langer said we can reverse the 'premature cognitive commitment' we have to developing in a predetermined fashion because our mind can "exert powerful control over physiological processes" (p. 131).

Many who have studied multiple realities support the notion that our minds determine our reality at every level, and that through self reflection we can consciously determine our reality (Langer et al., 1990; Tart, 1994; Kelly, 1955; Kegan and Lahey, 1984; Chopra, 1993; Fox, 1979; Wheatley, 1993; McWhinney, 1992; Glasser, 1982; Alexander et al., 1990; Morgan, 1993). These authors, from a wide variety of disciplines, support the view that by being mindful or consciously aware of the power of thought a person can change or transform his/her psychological, physical and spiritual self. Langer et al. Said, "We are advocating the view of the individual as an active organism who is able to 'take' the environment in one meaningful way or another. We postulate that in exercising this choice and acting mindfully, people are able to take part in directing the course of their development" (p. 126).

Meditation increases 'mindfulness', thereby increasing an individual's ability to consciously effect his/her development and the impact of change on his/her life (Alexander et al., 1990; Glasser, 1982; Tart, 1994; Starhawk, 1987; Hawley, 1993; Chopra, 1993). Mindfulness to Alexander et al. was a matter of being 'cosmically

conscious'. They asserted that relationships are enhanced when individuals are fully aware or conscious of themselves.

To the degree that individual identity is stable and deep, there is a strong foundation for mutually fulfilling relationships with others, and identity is no longer threatened by intimacy. In contrast to the identity of the bounded self, which is largely based on social roles and values (outward referring), identity in cosmic consciousness is based on direct experience of one's inner foundation in Being, or 'amness', which is fully stable and self-referring and therefore not threatened by outward events. This allows a growth of intimacy with the environment that is completely unrestricted by self-protecting needs or motives and that characterizes development from cosmic consciousness to the stage of refined cosmic consciousness, and finally to a stage of complete unity between Self and world. (p. 316).

#### Staff development and reflection

Dialogue and self reflection are critical to adult learning and development, said Oja (1991). She suggested that keeping in mind what is known about the role of reflection in adult development is essential when organizing staff development activities. Quality staff development should address the issues of self reflection, peer support, understanding another person's role through 'role taking', and learning in a supportive environment.

Oja (1991) believed that adult learning is enhanced when periods of new learning are followed by periods of reflection. Systematic reflection, she said, enabled individuals to confront their old assumptions and behaviors. When teachers challenge their old ideas and adopt new behaviors and curriculum, it is important to ensure that feedback and support from colleagues are readily available.

Oja (1991) stated that it is essential that the adult learner have psychological and personal support expressed through understanding, empathy, and warm personal regard from others. If the learner feels anxiety or frustration he or she will likely retreat to the comfort of old assumptions and patterns of thinking. Therefore, the learning environment for adults must be perceived to be safe and conducive to risk taking.

Once a safe environment is set, Oja (1991) proposed that adult learning is best promoted through the processes of reflection and role-taking. Role-taking to Oja (1991) is pivotal to adult learning. It is a matter of developing the ability to "take into account the perspective of others, to understand a situation from another person's point of view, and to act 'as if' by assuming the role of another" (p. 51). This skill in her opinion offered a primary means for personal and social development. She suggested that to learn and develop adults should utilize two different types of role-taking activities:

First, to develop the ability to accurately understand another's point of view, one can initiate interpersonal communication skills training. Individuals can be helped to listen to another person and then to communicate back to that person an accurate statement of the feelings and the content of the message. Second, to develop their confidence and ability to take on more complex roles in the classroom, school, and district, teachers can be encouraged to actively try out new roles, such as group process observer or group discussion leader...(p. 52).

Oja's (1991) writings parallel those of Robert Garmston (1993), who is the father of the peer feedback process labelled 'cognitive coaching'. Garmston defined cognitive coaching as a process in which two teachers explore the thinking behind their practices by asking each other questions which increase their ability to self-monitor,

self analyze, and self-evaluate. He said, "It requires extensive coaching skills and teaches a set of strategies for creating a school environment that fosters teachers' abilities to make changes in their own thinking and teaching" (p. 58). Teachers become able to function in a bicognitive fashion. "To be bicognitive means to be able to attend to both relationship and task, to be both student- and teacher-centered" (p. 60). Through the process of cognitive coaching, teachers develop the ability to deeply reflect, which helps them in problem-solving and decision making, and they become models of risk taking, open-mindedness, and continuous learning.

Active reflection is also supported by the ideas of Dewey (1933), Schon (1987), Rogers (1983) and Canning (1991). Questions which prompt reflection according to Canning might be: Can you talk more about that? Why do you think that happens? What evidence do you have about that? What does this remind you of? What if it happened this way? Do you see a connection between this and ...? How else could you approach that? What do you want to happen?

Self questioning and questioning by others can clearly help us to be more reflective about our lives, declared Canning (1991) and Lee and Barnett (1994). In a study on reflection Canning, a professor at the University of Northern Iowa, interviewed her colleagues and her student teachers who were enrolled in graduate courses. She asked them to explore how reflection felt to them and how they did it. She reported that her respondents generally found that "reflection was an interpersonal experience leading to insight about themselves as actors in their worlds. It prompts changes in self-concept, changes in perception of an event or a person(s), or plans for a change in some behavior" (p. 21). Lee and Barnett (1994), in discussing the merit of reflective questioning said, "Reflection is essential to educators' capacity to think

about their practice but also about *how* they think, their implicit theories, and the sense they make of their experiences" (p. 16).

When teachers are taught how to help each other through the process of reflective questioning, and when they can explore their own implicit theories in action, they are in a much stronger position to consider changes in their behavior (Schon, 1983; Lee and Barnett, 1994; and Osterman and Kottkamp, 1993). Lee and Barnett gave examples of the type of questions used to clarify, link and find purpose.

Clarifying questions are: Tell me about how your reading program is organized and delivered? What happened when you spoke to the parents? A linking question might be: How has this experience validated or changed your thinking? A purpose or consequence question would be: What kinds of outcomes do you anticipate occurring if the children start this program?

Osterman and Kottkamp (1993) believed that reflective practice is the key to changing ourselves and organizations, but they suggested it is not a quick fix, nor is it a viable change tool for individuals who wish to retain control over their learning environment. They said the reflective movement requires people:

who will join us in the 'quiet' approach to change, who will move the frontier that awaits us in almost every school and university in this nation, who are willing to risk so as to grow and improve our own professional practice while working with others to improve themselves. If we have learned anything in our personal journeys with reflective practice, it is that only through changing ourselves do we have any hope of changing others. That simple and overlooked truth is at the very center of becoming reflective (p. 189).

## Chapter Summary

According to systems, CT/RT, and adult development theories, change is a process adults inevitably experience as part of living. The influence individuals have on this process was a prominent theme throughout the literature review and consequently became a focus of the data collection. Evolving relationships between adults, in organizations, and in their personal interactions was also a recurring theme in the literature; therefore, it has become a focus for study. Also, the importance of self reflection through questioning and dialogue was noted throughout the literature review. It was seen as a critical component to system change at the individual and organizational levels. The outcome of the literature review guided the investigation toward change, relationships and self reflection among educators who had participated in control theory and reality therapy training.

## CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

### Case Study Methodology

For this study I used interviewing, surveying and document reviewing to evaluate the influence of control theory and reality therapy on educators. The case study methodology allowed for gathering educator opinions, collecting descriptive data, and generally for gaining an understanding of the dynamics of the CT/RT training program. The naturalistic approach of case studies offered the needed flexibility to study the process of educator development over the course of the training program.

Essentially, the case study method was the research design of choice for this investigation because of its descriptive and evaluative strength in educational settings, its qualitative character, and its flexibility. It enabled me to explore the influence of a professional development program without undue restrictions.

Given that the Quesnel School District has used CT/RT for the past six years and that it has not systematically evaluated the impact of the program, an investigation to gain a broad perspective of its influence was warranted. A case study allowed for gathering data by fanning out to get a broad brush picture of the current situation.

Since 1989, approximately 120 teachers, administrators and ancillary assistants in the school district had voluntarily participated in one week (Basic Intensive Week), two week (Advanced Intensive Week) or three week (Certification Week) training sessions as part of Glasser's Institute for Control Theory and Reality Therapy certification process. Of the 120 there were 100 who were employed in the district at the time of the study; this group became the unit of analysis.



The flexibility of the method enabled me to approach the participants with predetermined questions while recognizing that the format could be adjusted in progress according to the feedback I was receiving. Because the CT/RT program dealt largely with adult growth, a qualitative, flexible style of exploration was needed. Human growth and change is a multifaceted, complex process and as Guba and Lincoln (1989) suggested, the power of a case study is its ability to "deal with the presentation of multiple social realities, with the construction of those constructions, with deciding how to make the case for each construction, and with deciding about what data can or may be marshaled to support, defend, or render uncredible any given construction" (pp. 135-136).

Merriam (1988) pointed out that case study evaluation of educational issues has been popular since the 1970's. She said case studies are valuable when (a) the future of a program is contingent upon an evaluation being performed, and there are no reasonable indicators of programmatic success which can be formulated in terms of behavioral objectives or individual differences; (b) the objective of the evaluation is to develop a better understanding of the dynamics of a program; (c) it is important to leave a descriptive account; and (d) when a common language is desired to allow the results of a study to be communicated more easily to non researchers (pp. 30-31).

#### The Site

The site for collecting the qualitative information was the Quesnel School District. The rural district, located in central British Columbia had, at the time of the study, a total student population of 5200, a teaching staff of 340 full time equivalents, 30 district and school based administrators, 50 teaching assistants and approximately 80 support workers i.e. bus drivers and custodians. Over the past four years, all 500

employees in the district were given the opportunity to participate at some level in the control theory/reality therapy training.

### Participants

#### Criteria for Selection

All 100 individuals who had completed at least one BIW received surveys through the regular mail system. In the covering letter, which accompanied the survey, I asked participants for interviews. Only those individuals who had completed advanced intensive week (AIW), or certification week (CW) were asked to volunteer for interviews after they completed the survey. The choice to limit interviews to those with AIW or CW was based on the belief that those who had experienced the second week of CT/RT training had greater opportunity to integrate the concepts into their own lives and, therefore, had more insight into its influence. Since the target population in the sampling frame included everyone in the district who had taken a certain level of training, there was no need for random sampling.

Because had I requested interviews by mail in late August, one week before school started, it became necessary to telephone all 21 eligible respondents to ask that they volunteer for interviews, rather than waiting for them respond to the written invitation in the covering letter of the survey. Fourteen, from a possible 21 informants, volunteered for interviews when I phoned them. Informants were telephoned in alphabetical order. If they were not home I called them again until I had reached a total of fourteen. The number fourteen was arbitrary in the sense that I was striving to interview at least half of the individuals who had advanced training, but when additional people volunteered I did not turn them down.

### Profile

In all there were 14 interviewees: five men and nine women. Three principals, three counselors, five teachers and three support service teacher assistants comprised the group of fourteen educators. Of these fourteen, eight were certified in reality therapy (three of these eight were also basic supervision supervisors), and the other six had advanced reality therapy training. Their ages ranged, but the majority were forty and older: Three of the interviewees were in the 50-54 age range, four were in the 45-49 range, four were in the 39-44 range, two were in the 34-38 range and one was in the 29-33 range. Given the relatively small number in each category and the size of the district, I chose to only gather information about an interviewee's level of training and gender, otherwise their identity might have been determined.

### Pilot Study for the Survey

When the survey and interview questions were drafted in late August 1994, I faxed them to five experienced reality therapy and control theory instructors with whom I had worked over a number of years. Two of them had been extensively involved in the training for Quesnel. I asked them to first complete the survey, then give me feedback as critical consumers. They all returned the survey with only minor suggestions. I incorporated the suggestions they made into the final survey form.

### Data Collection

Multiple methods of collecting data were employed for this research. Interviews, surveys and document review formed the basis for studying the impact of the control theory and reality therapy program on the Quesnel educators.

Content of the survey questions and interviews was based on the literature review of systems theory, control theory and adult development theory. Three

recurring themes in that literature were change, self-reflection and relationships; therefore, the questions were directed at these three topics. Specific questions for the survey and interview forms were based on the interview questions used by Belenky, Clinchy, Goldberg and Tarule (1986) in *Women's Ways of Knowing - The Development of Self, Voice, and Mind*, Gilligan's (1982) *In a Different Voice* and the Souvaine et al. (1990) chapter in the Alexander et al. text, *Higher Stages of Human Development*.

#### Interviews: Walking and Talking

Semi-structured interviews pose questions to allow for individual responses because it is assumed that individual respondents define the world in unique ways (McMillan and Schumaker, 1984). Although the semi-structured interview question is open-ended it is fairly specific in its intent (p. 152). Further to this Merriam (1988) said

the purpose of the less structured interview is not to put things into someone else's mind (for example, the interviewer's perceived categories for organizing the world) but rather to access the perspective of the person being interviewed...In the semi-structured interview, certain information is desired from all the respondents. These interviews are guided by a list of questions or issues to be explored, but neither the exact wording nor the order the question is determined ahead of time...[S]ome of the same open-ended questions are asked for all participants, and some time is spent in unstructured mode so that fresh insights and new information can emerge (pp. 73-74).

To gain an understanding of the appropriate format for questions I relied on the ideas of Spradley (1979), Patton (1980), Glesne (1992), Stake (1988), Guba and

Lincoln (1989), Merriam (1988), Yin (1984). I also read through a variety of dissertations to gain a sense of the type of demographic questions usually asked. I went into the interview situation recognizing that the quality of information obtained during an interview is largely dependent on the interviewer (Patton, p. 279). For the interview I tried to ensure a variety of behavior, value, feeling, knowledge, and sensory questions as recommended by Patton. I used probes and follow-up questions to "deepen the response to a question, to increase the richness of the data being obtained, and to give cues to the interviewee about the level of responses that was desired" (Patton, p. 324). I worked to maintain neutrality (lack of judgment) during the interview although I cannot say I behaved as I had been taught to do when administering a Weschler Intelligence Scale for Children (WISC).

During the administration of the WISC we were taught to make maximum effort to give no feedback to a child that would give her any hint whatsoever about her performance. I detested the role because I do not believe it is possible to be completely neutral; our bodies reveal our thoughts no matter how plastic we perceive ourselves to appear. Patton (1980) acknowledged this reality when he said:

because qualitative methods are highly personal and interpersonal, because naturalistic inquiry takes the researcher into the real world where people live and work, and because in-depth interviewing opens up what is inside people - qualitative inquiry may be more intrusive and involve greater reactivity than surveys, tests and other quantitative approaches (p. 356).

The fourteen semi-structured interviews were done primarily in Quesnel at my home. Informants were given the opportunity to select the interview location most comfortable to them, i.e. their home, their school, some other

private location, or my home. All but three interviewees selected my home; the other locations were in the informants' homes and a school.

As we walked, during the first part of the interview, I noticed the leaves were beginning to change and the air was the kind of cool a northerner recognizes as a foreshadowing to the icy cold air that was coming soon. The walking trail took us along the edge of two riverbanks, through the residential section of the oldest part of town and through the middle of two small city parks. It always takes about 50 minutes to walk 'the loop', the five kilometer circle trail put in by the city three years ago. I heard that one apartment resident along the trail had counted one thousand people doing the walk on a Sunday last spring. The walk has come to be recognized as a perfect activity for having a leisurely conversation with a friend.

This is the walk I took with ten of the people I interviewed prior to our formal question and answer session. I had not seen most of the fourteen people in eight months, therefore, we needed a time to reconnect and establish a degree of comfort.

At initial contact, I asked each of the interviewees if he/she wished to go for a walk or have a cup of coffee before engaging in answering specific interview questions in the presence of a microphone. This strategy was used to develop rapport with the interviewees so that the actual interview time might occur at a deep level of communication.

Originally, when planning the interviews I had not anticipated how effective the walk or coffee time before the interview might be in setting the stage for an in-depth recorded interview. After several walks I realized I was gathering sufficiently rich data and a second interview would not be necessary.

Ten of the fourteen interviewees chose to walk or have coffee prior to the more formal time spent answering questions into a tape recorder. During the hour walk or visit we caught up on each other's lives and without exception discussion occurred as to how the CT/RT training was being applied in the interviewees lives. Invariably, during the taped session reference was made to something in the less formal time of the interview process when we were walking or having coffee.

When the interviewees came to my home they were offered a beverage and a comfortable seat in a sunny room with many windows that allowed them to look outside at the trees and grass. I sat across the coffee table from them with my back to the windows and placed the tape recorder in between us.

The actual recorded time of the interviews was approximately one and a half hours, but the time I spent with each respondent amounted in total to 2-3 hours. All the formal interviews were taped and transcribed and the transcriptions were returned to the interviewees for changes or corrections (Guba and Lincoln, 1989).

The focus of the interviews was on change, self reflection and relationships; approximately five questions were asked in each these three categories and probes were used where ever I felt them warranted (see appendix A for protocol). Of course, additional questions were asked whenever I intuitively believed one of the interviewees might have a particular insight or opinion about some aspect of the training program.

Despite interviewee willingness to cast aside the issue of anonymity, their names have been changed and great care has been taken to reduce the possibility of correlating comments and interviewee. To minimize the potential of interviewee identification, only gender and level of training have been used as identifiers.

Because a profile of those who volunteered would leave them open to identification, only the minimum descriptive data is given in this study.

I did three short follow-up interviews to re-record short sections of protocols which were not audible to the transcriber or myself. These follow-up interviews were approximately one half hour in length.

My intention in the process of interviewing was to make the dialogue as informal as possible yet directed toward the original fifteen questions. As I interviewed I gained insights into the three topic areas and formulated further questions for the subsequent interviewees. The dialogue was in conversational style such that some questions were answered incidentally. Because of the mutual training experience, the interviewees and I had in control theory and reality therapy, it was more natural at times for me to express an understanding or acknowledge a similar experience than to sit in silence. This was particularly important when the interviewees knew I had experienced marital challenges similar to what they were describing, or that I had been involved with them in a difficult situation in a school where they worked. I could not, nor did I think it appropriate to try, to strictly adhere to a clinical, neutral approach when delivering the interview questions, or when acknowledging the answers.

#### Surveys: More than Quantitative Data

The purpose of this survey was to gather descriptive information about how all the educators, who had participated in control theory and reality therapy training, perceived it to influence their personal and professional lives.

The survey process followed the steps recommended by Jaeger (1988), Fraenkel & Wallen (1990) and Cohen & Manion (1980): (a) determine method of distribution and return of the surveys; (b) construct a sampling frame; (c) construct the



survey instrument; (d) conduct a pilot study; (e) revise the survey; (f) mail the finalized questionnaires; (g) reduce and analyze the data.

Demographic data, such as gender, age, marital status, level of education, years in the work force, current position, and details on the amount of training in control theory were collected as part of the survey and interview instruments. Five people who are certified, but work outside the school district, participated in the pilot study. Three of the five were Basic Week instructors for the Institute for Control Theory, Reality Therapy and Quality Management. All minor suggestions for changes were made to the survey and the next day they were sent out, along with self addressed and stamped envelopes.

Surveys, like the interviews, were based on the five research questions which reflect three themes in adult development literature - change, self-reflection and relationships. The survey items were designed such that a Likert scale format could be used for response. One open ended question was included under each of the three themes because as Macmillan and Schumacher (1984) state, "Open ended items exert the least amount of control over the respondent and can capture idiosyncratic differences" (p. 145).

The survey was developed with the intent of ensuring that Jaeger's (1988) assumptions about survey results were met: (a) the questions had construct validity; (b) respondents understood the questions; (c) respondents interpreted the questions as intended; (d) respondents were willing to respond; (e) respondents had the knowledge needed to respond; (f) they were honest in their responses; (g) responses were recorded accurately; (h) responses were interpreted accurately; (i) responses were transcribed and aggregated accurately (p. 326).

The initial method of survey distribution was through the regular postal service. All one hundred educators involved in the control theory/reality therapy training received surveys. The forms were numbered to allow identification of the respondents should follow-up contact be necessary. They were asked to return their completed forms through the regular mail system. Pre-addressed and stamped envelopes were provided. The surveys were addressed to be returned to my home address in Quesnel, but many of them were returned through the school mail system. On the first mailing 58 surveys were returned. One week after the final return date for the first surveys a reminder letter and a second form were sent. A tea bag was enclosed as an incentive to return the form the second time round. On this cycle, respondents were given a self addressed envelope and asked to return the surveys to my secretary in the district administration office. Since the majority of stamped envelopes were returned through the district office even though stamps were supplied it did not appear as if returning the surveys through the district office was prohibitive. The 'teabag' reminder led to the return of 15 more surveys, bringing the total returned to 73 or 73 percent. However, only 69 were returned in the required amount of time.

#### Documentation: A Paper Path

The third source of data, other than interviews and questionnaires, was documentation related to the implementation of control theory and reality therapy training program gathered over the period from 1988 to 1994. Merriam (1988) suggested caution with reviewing documents because they may be misinterpreted, or lack authenticity and accuracy. The responsibility to determine authenticity rests with the researcher, and Merriam offered a number of questions to ask to ensure document legitimacy (p. 107). Where adequate precautions are taken, documents are good

sources of data because they may be easily accessible, contain information that would take enormous time to gather, offer stability, and are unobtrusive.

### Data Analysis

Interview data were analyzed after the first five interviews, because I realized, with the help of interviewee feedback, that virtually all three sections had been covered after a two to three hour interview. Therefore, a second or third interview would likely only lead to repetition. I decided then to extend the eight original scheduled interviewees to fourteen and to do only one interview with each rather than two or three.

As I completed interviews I took the tapes to a transcriber who produced a printed copy of the interviews. When finished with an interview the transcriber gave me a written copy which I reviewed for accuracy; we then sent a copy to the interviewee for their review. Interviewees were asked to add, delete or change anything they wished, and to return it as soon as possible to the transcriber who then revised the returned copies and sent me a final copy.

Upon receipt of the surveys, at either the school district office or via regular mail, I first recorded the number, then I sent a thank you letter offering the respondent 10% off a dinner at my favorite Italian restaurant in Quesnel (no cost to me); then I filled out a computer data sheet to be scanned for compilation of descriptive data. The three open ended questions on the survey forms were analyzed according to their number, and then themes, recurring ideas and language patterns were identified under the topics of change, self reflection and relationships (Yin, 1984; Patton, 1980). The detail and length of responses to the open ended survey questions provided more data than was expected. Numerous survey forms had lengthy comments in addition to their Likert scale responses.

Compilation of the survey data into table form was done by scanning the survey protocols with the district scanner. A frequency distribution by percentages, with measures of central tendency and variability, was conducted using the demographics and the responses to the survey questions.

Data derived from document review were summarized, in table form, to facilitate ease of understanding.

When the interview data were transcribed, the surveys were summarized and the documents were analyzed; categories, typologies and themes were developed from the open-ended responses (Merriam, 1988). This was done by first reading through each open-ended response, then identifying recurring statements and categorizing the statements under common headings or themes.

#### Limitations

The accuracy of the information gathered in the questionnaire and interviewing process is never guaranteed, although face to face contact increased the potential for authenticity.

A case study method has the potential to oversimplify or exaggerate a situation or lead readers to infer that the part discussed is reflective of the whole (Merriam, 1988).

The amount of money the individuals spent on the program could interfere with the results as participants who completed AIW had paid approximately 90 dollars for each of their five supervision days. Those who were certified had paid for 10 supervision days. Paying for the CT/RT training might have influenced their responses as they sought to rationalize their expenditure.

## CHAPTER FOUR: THE FINDINGS

### Glasser's Ten Steps to Discipline

In 1977, Glasser's ten steps to discipline were introduced at Quesnel Secondary School by a counselor; the program quickly became the foundation for the school's discipline policy and attracted attention from other schools in the district. In 1978, the district elementary counselor and the former Quesnel Secondary School counselor, in a new district position as Director of Special Services, began sharing Glasser's ideas with other interested schools. Over the ten years from 1978 to 1988, the elementary counselor provided numerous workshops on Glasser's ten steps to discipline to school staffs and to parent groups. According to Skinner (1993), by 1983 Glasser's ten steps to discipline formed the basis of discipline plans in several schools in the district, and the district's policy book had been changed to encourage the use of Glasser's steps in dealing with students who had discipline problems.

### Control Theory and Reality Therapy in the District

Glasser's control theory and reality therapy program, which went much beyond the ten steps, was introduced to the district in September of 1988 following my August basic week training. I took the training to enhance my counseling skills as I had been appointed to an elementary counselor position the previous June. After taking the training it was apparent to me that Glasser's theory, and the techniques for personal growth and problem solving, would be invaluable for all educators and students in the district.

To address our belief in the merits of the CR/RT training, the elementary counselor, the Director of Instruction, and I agreed to make Glasser's reality therapy

program a focus for the Special Services department. Our first step in this district initiative was to train the two counselors so that we could share Glasser's ideas throughout the district in our roles as itinerant counselors; our second step was to extend the training to others. By July 1990, two years after my first week training, I had completed the basic week supervisor training, the other elementary counselor had completed advanced intensive week (AIW), two other itinerant teachers, four classroom teachers, and six Native tutorial assistants had completed basic intensive week (BIW). Funding for the BIW training came from the Special Services department.

To address the issue of funding, in October 1990, I submitted a proposal to the teachers' union professional development committee requesting that they allocate funds to teachers to cover the full cost of registration in BIW and AIW. The union agreed and teachers who received the training cost of \$425 (per person) also had substitute costs paid by the Board as part of their collective agreement with the teachers.

The first group of eight teachers attended BIW in February 1991 (Marie Skinner, Professional Development Chairperson, personal communication, 1990/10/31). The teachers' union subsequently funded approximately fifteen teachers per year for participation in BIW, and five or six for participation in AIW.

Skinner (1993) stated that her committee funded five BIW sessions and three AIW sessions between 1990 and 1992. All costs for practicum supervision days, were the responsibility of the participant, regardless of their position (i.e. district staff, administrator or Native tutorial assistant). This decision was made based on the recommendation of Shelley Brierley who is a senior faculty member at Glasser's institute and owner of Oasis Consulting in Vancouver. In keeping with Glasser's philosophy that individuals must take responsibility for their own learning, she felt it

was important that the district not pay for all phases of the training. Personal commitment through sharing costs was seen as critical to learning, and to long term integration of Glasser's concepts.

In 1992, thirteen teachers from each of the three secondary schools were offered training to assist them in dealing with the growing discipline problems in their schools. Funding for the 39 secondary teachers came in a circuitous fashion. In 1991, the principal of Quesnel Secondary School made a plea to the Board for dollars to pay an attendant to watch disruptive students in a time-out room. If a teacher needed to remove the student from a class, a time out room was available. Support for this plan was given for one year, but the Board and school decided at the end of the year that it was not the most effective use of the money because student behavior was not improving.

The Board was asked by Senior Administration (Superintendent, Assistant Superintendent, Director of Instruction and District Principal) if they would support re-allocating the 'time out attendant' money to the three secondary schools for BIW training. This suggestion received support, and over the 1992-1993 school year the three secondary staffs participated in BIW.

As with the secondary teachers, school administrators were trained at the expense of the Board. Principals who had not taken the training through their school or on their own, were offered the training at a 'principals only' BIW in August 1992 (Ron Poole, President Administrator's Association, personal communication, 1991/12/13).

By the end of the 1992-93 school year approximately 100 educators had completed BIW; 25 of these had also done AIW; 12 had finished certification week (CW), and 3 were basic practicum trainers. The current superintendent has attended basic week and has wholeheartedly supported the program since he introduced

Glasser's ideas into the secondary school in 1978. The former board chairperson completed AIW, and the present chairperson fully endorses the program's implementation.

#### Two Day Quality School Workshops

In addition to the Reality Therapy training, the district became involved in the Quality School two day training with Diane Gossen in 1991. Diane offered two day training sessions as a supplement to Glasser's basic and advanced training, and introduced participants to the notion of Glasser's quality school. Diane, like Shelley, is an independent consultant and a senior faculty member with Glasser's Institute for Control Theory, Reality Therapy and Quality Management.

Late in November 1991, I wrote a memo to the newly appointed superintendent, making a plea for funds for the two day sessions which would allow 50-60 people at a time to receive some form of quality school training. He agreed with the proposal, and any district employee who was interested in attending the two day workshops, which focused on needs, behaviors and discipline versus punishment, was given the opportunity. Parent evenings were also provided.

Participant evaluations, which were requested at the end of each of Diane's workshops, contained enthusiastic comments on the usefulness of Diane's ideas. One participant said the workshop was useful because it " [made] us think about alternate ways of disciplining our class - working it out with specific 'problem' children - using a positive constructive approach rather than being negative - thinking through better/different ways of dealing with your own family situation" (summary of January 23/24, 1992 evaluation forms).

Throughout the time Diane was in Quesnel, her workshops consistently received very high to superior ratings by 95 to 98 percent of the participants. In the 1991-93 period there were six two-day sessions given to over 300 district participants.



These two-day experiences motivated individuals to take further RT/CT training; one enthusiastic participant said: "I'm thrilled to have been involved, especially as a first year teacher. I feel that this will be [life] course altering for me, professionally. I felt a connection, immediately, to the concepts and procedures presented and that was great! I'm very interested in the one week reality therapy workshop" (Evaluation summary from April 27/28, 1992). On the other hand those who had already taken BIW still found the two day workshop to be of benefit. One participant said, "Doing both the reality therapy basic week and the two day quality school workshop was beneficial - more chance to internalize/practice. Hopefully everyone will have the opportunity to do both" (Evaluation summary from April 27/28, 1992).

Documents I wrote to the Superintendent December 18, 1991 and February 5, 1992, suggest that costs in the 1991-92 school year were in the neighborhood of \$68,000, in the 1992-93 school year \$60,000 and in the 1993-94 school year \$20,000. The 1992-93 figures do not include substitute costs; therefore the total cost would be considerably higher. A rough estimation is that the district had spent close to \$200,000 from 1990 to 1995 on the introduction, implementation and institutionalization of Glasser's ideas.

#### School Grants

In 1993, \$10,000 of the \$25,000 Quality School grant money was offered to schools to enable them to provide staff level inservice on the topic of quality schools. To receive grant money, schools made proposals to a team of principals, teachers and support workers who allocated no more than \$1000 to each school for activities such as bringing in speakers to talk to the whole staff about quality school concepts, or for release time for teachers to work on school discipline policies. There were more schools that applied than money available; unfortunately only 10 schools received

support due to limited dollars. They reported the expenditure on various activities related to CT/RT was worthwhile.

#### Beyond Reality Therapy Training

In January 1992, Shelley Brierley worked with the Board for three days on communication skills, the basics of CT/RT, team building and problem solving. It was one of the few occasions that the Board worked directly to improve their teaming; the fact that they chose a Reality Therapy trainer was an indication of their commitment to Glasser's concepts. In May, 1992, Diane Gossen worked for a day with the District Support Services team of 18 people on identifying quality and team building. She and Shelley also visited three schools on the grant money provided through the quality school funds.

In October, 1992, through the encouragement of Diane Gossen, a video was made in Quesnel by the *Video Journal*. Diane convinced the production company to come to Quesnel, as it was a model district for demonstrating the use of Glasser's ideas. The *Video Journal*, a Salt Lake City based company, produces ten hour long education videos per year, and sells subscriptions in regular journal fashion. A subscription is \$2000 per year. The quality of the video production had attracted such noted presenters as Michael Fullan, Al Mamary, William Glasser, and Jon Bonstingl. The opportunity to be spotlighted by an international video company was exciting to all who had learned Glasser's ideas. Anyone who was interested in participating in the video production was asked to volunteer; there were more volunteers than the production company had time to video. This abundance of willing participants was taken as a testimony to the district employees' commitment to the CT/RT training program, as well as an expression of pride in their skill development.

### Present Status of the Training and More

BIW continues to be offered at least once per year in the district, and the goal for 1994-95 is to offer it three times and AIW at least once.

At Board retreats in September 1994 and April 1995, the Board elected to include self-evaluation, a central element in the reality therapy training, as a key component of their growth and development plan. The new district policy on discipline is replete with reference to Glasser's and Gossen's ideas on improving behavior and making misbehavior an opportunity for learning.

Thus, according to documentation and my memory, the period from 1990 to 1994 was a fertile time for the growth of Glasser's ideas in the Quesnel School District. The degree of influence his ideas had on the educators is explored further in the survey and interview data which follows.

### The Surveys

Of the 100 survey forms sent to educators who had completed BIW, 75 were returned, but only 69 were returned within the time recommended. The surveys consisted of 15 questions divided into three sections, which addressed the topics of change, relationships, and self reflection. In each of the three topic areas there were five questions; four were answered on a Likert scale and one was open-ended. Tabulation of descriptive data from the 12 questions and responses to the three open-ended questions was conducted on 69 surveys. The descriptive statistics, compiled from the 69 surveys were confined to agree, or strongly agree responses due to the very large percentage of positive responses on the majority of the questions. The appendix contains descriptive data showing the small percentage of respondents who were undecided or were in disagreement.

Those who had taken the AIW or CW were noticeably more positive about the influence of the training than those who had BIW. The prevailing opinion of the

survey participants is that the program positively influenced their lives in terms of their perception of change, their self reflection, and their relationships at work and home.

#### Levels of Training, Gender, Age, and Position

Comparison of individuals who have participated in the three levels of training, suggested that individuals vary in how they were influenced by the program according to their differing levels of training. Certified people indicated stronger influence than those who had taken the AIW training, and the AIW people indicated stronger influence than the BIW people. One hundred percent of the 12 CW people agreed, or strongly agreed, with all but one of the survey questions, and on that one question there was 85% agreement. Eighty-six percent or more of the AIW trainees indicated agreement or strong agreement on 10 of the 12 survey questions. In contrast, only 70% of those who had taken BIW agreed with six of the 12 questions; they were undecided or in disagreement with the other six questions. In other words, on six of the questions 70% of the BIW respondents believed the training had been influential with regard to their perceptions of change, self reflection and relationships. The 70% figure is a markedly different from the 86% or 100% agreement of the AIW and CW people. On only three questions was eighty percent agreement found among the BIW respondents.

Survey Question Responses by Gender, Training, and Position

(percentage of those who agreed or strongly agreed)

	M	F	Total.	Basic Wk.	Adv. Wk.	Cert.	Tchr.	Princ.	Supp. Wrkr.
TOT.	31	38	69	54	8	7	46	13	10
#1	87	89	89	87	88	100	82	100	100
#2	68	79	74	68	88	100	65	92	90
#3	63	76	71	66	88	100	65	85	80
#4	71	89	81	75	100	100	76	85	100
#5	94	100	97	96	100	100	98	92	100
#6	68	87	78	73	88	100	72	93	90
#7	58	86	73	67	86	100	68	84	77
#8	78	92	86	81	100	100	83	93	90
#9	46	69	57	50	76	100	48	69	80
#10	54	69	62	57	88	85	53	85	80
#11	71	82	77	74	75	100	69	92	90
#12	48	66	58	49	88	100	52	62	80

Glancing over the average scores for each question it appears women were generally more positive about the influence of the program than men; principals and support workers were noticeably more positive about the training than teachers, and older respondents were more positive about the influence of the program than younger ones.

Survey Responses by Age

(percentage of those who agreed or strongly agreed)

	29-33 yrs	34-38 yrs	39-44 yrs	45-49 yrs	50-54 yrs
	Total 6	Total 11	Total 17	Total 16	Total 19
	M-3, F-3	M-2, F -9	M-6, F-11	M-8, F-8	M-12, F-7
#1	83	82	77	100	85
#2	33	72	65	87	84
#3	34	73	64	81	79
#4	67	82	83	82	84
#5	99	100	100	94	95
#6	50	82	76	87	79
#7	40	92	59	80	78
#8	50	91	83	94	90
#9	33	62	53	57	62
#10	50	72	59	63	64
#11	67	92	59	82	84
#12	33	73	53	51	69

The following analysis of survey questions regarding respondents' thoughts on how the CT/RT training influenced their perceptions of change, self reflection and relationships reflect how the CT/RT training process was perceived.

### Change Questions

On the topic of change, all 69 respondents were generally complimentary about the role CT/RT had played in their lives: 89% stated they agreed, or strongly agreed, that they had changed considerably over the past few years, and 74% indicated they agreed or strongly agreed that the control theory and reality therapy CT/RT training had influenced how they had changed. A full 81% agreed, or strongly agreed, that the training had influenced how they behaved. When asked whether the training had influenced how they perceived change itself, 76% agreed, or strongly agreed, that it had influenced their perception of change.

### Open-ended Question on Change

Three of the most common themes to come out of the open-ended question on change were (a) increased problem solving, analyzing, reflecting, communicating and questioning skills; (b) increased understanding of the needs of self and others; and (c) greater confidence and acceptance of self.

### Change - Theme I - Skills

The first recurring theme, in the open ended change section of the surveys, was the notion of improved skills. One of the most frequent changes educators noted was the increased skill they had acquired for questioning, problem solving, analyzing, communicating, and stopping to think before acting or reflecting. One respondent said, "In conflicts I now stop to look at others in terms of what need they are trying to satisfy and I quite often stop to analyze myself in the same way". Another said, "I am more able to be in 'effective control' in working through professional conflicts". Yet another commented, "The simple questioning technique has helped when dealing with a problem - [it's] simple and straight forward. No blame placing". And still another stated, "I have changed the way that I deal with others. I feel more relaxed within and therefore I am calmer when dealing with a problem."

Change - Theme II - Needs

An increased ability to understand, accept and work with people who have differing wants and needs was the second theme on the change section of the survey. An indication of the increased ability to understand another's wants, following training, can be seen in this comment by one enthusiastic respondent:

I make a greater effort to see another person's point of view. Finding their picture is important to a good business or personal relationship. I find it easier to accept another person's opinion and move from there on a topic. I learned to differentiate between another person's behavior and the person themselves. I find the positive in people and events. I feel better about myself.

In applying this increased understanding and acceptance of other's needs to children, three educators exclaimed:

1. "I listen more to student problems and help them work their own problems through."
2. "I help students to problem solve instead of just nagging - we sit down and make plans for fixing things - annoying habits, forgetting books, calling out, anything."
3. "I am a lot calmer with my children at home and at work. Not as quick to over react -make snap decisions or yell. In most discussions I am able to listen better, with a more open mind and to realize that my way isn't the only way."

Change - Theme III - Confidence

The third common theme on the open ended change question was increased confidence, less stress and an enhanced ability to accept responsibility for meeting one's own needs. A full 70% of the males (a total of 31) and a much higher percentage of the females, 89% ( at total of 38) said the CT/RT training had influenced their self confidence. Women's remarks on the open ended question



referred more frequently to increased confidence and assertive ability than did the men's. One CW female respondent, when commenting on the behavioral changes she had made in her life since gaining confidence through the CT/RT training, said:

I don't let others walk all over me ( more assertive in my own way, not the way others think I should be). I choose to change if it suits me, not just because I think I should so others will be happy or will like me better. I don't try to change others as much ( I know better). I have taken responsibility for my needs. I'm not perfect and am a creature of habits, therefore, at times I revert to my old self.

Another woman, who had AIW training, when reflecting on her increased assertiveness and recognition of her right to meet her own needs, said:

I am much more able to keep my own system in control when holding a discussion or interview which would normally have pulled me into an emotional turmoil. Because I'm a very empathetic person it was always very difficult for me to maintain any kind of internal disassociation, to keep my own system in control. I used to consistently get sick the last week before Xmas holidays because of all the stresses involved with the season both at home and school. After taking basic week, I started to examine this, evaluated my needs, where the stress was coming from and what I could do to relieve it. Haven't been sick since taking the RT.

One woman described the behavioral changes she had made in her life since taking the CT/RT training, and gaining more confidence. She said by:

internalizing the 'needs' philosophy, I was able to honor my own needs enough that I followed a life-long inclination to stop eating meat...Developing and honoring my own 'quality world' freed me to develop in areas of me, of my own life philosophy, that I had ignored and even rejected in the past. My

belief system has become radically different, and I now feel more in harmony with myself and my world...My focus is now much more future oriented than past oriented...I am able to allow others their own reality, their own 'quality world', (although this is still easier for me to do with the 'others' that I work with and socialize with than it is with the 'others' in whom I have a major emotional investment --my children, my husband....)When I allow it there is a lightness to my being. It comes, I think from not being weighted down by the heaviness of other people's realities crowding in and imposing themselves upon my emerging self.

Her description served as an example of how a changed sense of self confidence can broadly influence one's life.

#### Self Reflection

The second section of the survey addressed how the CT/RT training had influenced respondents' use of self reflection. Respondents were 93% in agreement that self-evaluation was key to personal and professional growth, and 78% were in agreement that applying CT/RT techniques to themselves had helped them reflectively work through issues. The CT/RT training was perceived by 73% of those surveyed to have helped in understanding that their perceptions were unique to them. When asked if they believed CT/RT had influenced their skill in thinking about and reflecting on their own behaviors, 86% agreed or strongly agreed it had been influential.

#### Open ended responses to questions on self reflection

The open ended self reflection question asked survey respondents to describe a time they had used CT/RT to talk themselves through a crisis. The situations they described were divided relatively equally among work and home settings, i.e. family conflict, student swearing, hostile colleague.

Reflection - Theme I - Self Talk

By far the most frequent behavior identified to resolve the crisis was self talk, using Glasser's reality therapy procedures for change questions. When using Glasser's reality therapy procedures for change respondents indicated they ask themselves questions such as: "What do I want? " "What am I doing to get it? " "Is it working? " "What can I do to make it work? "

A situation described by an elementary teacher illustrates how she employed self questioning in a crisis situation.

A parent and her daughter coming to talk after school - making claims that her daughter didn't enjoy being in my classroom and had changed from being a happy student to an unhappy student. Yet, her daughter hung around my yard on week-ends and holidays asking if she could do some work for me. In order to stay away from patterns of accusing and denial I kept asking myself questions, 'What does the parent/daughter want?' 'What do I want?' I was able to steer them both into analyzing what they wanted.

In personal crises, respondents were equally adept at using Glasser's questioning strategies. One woman described how she dealt with a long term family issue about sailing. She told how she asked herself questions to better understand her reluctance to sail with her family.

Each summer the family wants to go sailing which I also enjoy but my tolerance for high winds and extreme keeling is far less than their's and always has resulted in yelling matches (conflict!). Asked myself: Do I have the skills to handle the sailing part? Am I able to explain my feelings about the fear and keep my system in control? Was I being reasonable, respectful of my family? What need is not being met? Where's the mismatch coming from?

By using the reality therapy questions on herself and communicating with her family she changed her thinking to the degree she was able to actually enjoy sailing.

Another woman devoted many pages to describing how she used self reflection to help her work through her father's death. Lengthy excerpts from her writing illustrate how she integrated the CT/RT theory and skills into her self talk at the time of her father's death. In the scenario she is angry at her brother-in-law who has refused to participate in the family grieving process; consequently her sister is unable to participate.

I was furious! All the exhaustion and the pain and the buried grief of that week exploded in me! I could feel my heart pounding, I was sweating, I couldn't catch my breath. I felt such need and such despair. I was falling apart. And then I heard this voice inside asking:

Q. Why are you choosing this behavior?

A. I'm not choosing this behavior. I need to grieve. I've given and given and given all week. Now I need to be supported.

Q. Yes, and...

A. And he's being such a jerk! He had no right to deny me this!

Q. But why are you choosing this behavior? What is it doing to you?

A. I'm not choosing this behavior. It's all his fault! He's such a selfish \$%&\* jerk.

Q. But you've always known he's a jerk--that's not a surprise. Why are you choosing this behavior?

A. I don't know why I'm choosing this behavior. (And I could feel myself begin, ever so slightly, to relax, to breathe, to calm myself.) I don't do anger well. I don't have much experience at it.

Q. Then why are you choosing to anger?

A. Maybe I'm choosing to anger because I must. Because I know that anger is a natural part of grief. I'm angry that it hurts so much. I'm angry at the God I was taught to believe in as a child, and I can't be angry at him because my father loved him and anyway I can't be angry at him because I don't even believe in him anymore! I'm angry that I was tricked into such a love because if I didn't love so much it wouldn't hurt so much now.

Q. What do you need?

A. I need to be loved and supported through this.

Q. Can you find that love and support?

...I sometimes wonder how I would have made it through that time without Reality Therapy. I certainly could have become alienated from my mother, not allowing her her own reality, because our ways of expressing our mutual grief were so different. I could have lashed out at my sister and, in my own pain, have said things that would have been impossible to erase. I could have continued in my anger and become consumed by it, even to the point of developing emotional and physical disabilities.

Self talk was clearly seen as a salvation to this woman in her time of family crisis. She asked herself questions that helped clarify her feelings and thoughts, and select appropriate actions.

Thus self-talk or self questioning, according to survey respondents, was a key to the self reflective process.

### Relationships

The third section of the surveys explained how educators perceived their home and work relationships to have been influenced by reality therapy and control theory training. An average of 55% indicated they agreed, or strongly agreed, that their personal lives had improved since take the training; 62% of all surveyed agreed their

work relationships had changed. Work relationships were seen to be influenced by the training according to 54% of the males and 69% of the females.

Interestingly, 45% of the males surveyed had a positive perception of how their home relationships had changed for the better, while 66% of the females perceived their home relationships to have changed. When comparing levels of CT/RT training, only 50% of the respondents who had completed BIW felt the training had improved their home relationships, but 76% of those who had AIW training agreed, or strongly agreed, that their personal relationships had improved after having the training. All of those with CW completed (seven in total) agreed their home relationships had improved with the training.

In the matter of influenced work relationships, 57% of the BIW trainees agreed the training was influential, 88% of the those with AIW training perceived the CT/RT training as influential and 100% of the CW respondents agreed their work relationships had been impacted by the training.

When asked if the manner in which they dealt with conflict had changed, 77% of the respondents agreed or strongly agreed that their handling of it had changed, and that the CT/RT training had been influential in this change. A full 82% of the women surveyed agreed the CT/RT training had helped them in handling conflict, and 71% of the men agree it had helped. When looking at how respondents aligned according to level of training, 74% of the BIW people agreed or strongly agreed that the training had helped them deal with conflict; 75% of those who had taken AIW training and 100% of those who had finished CW agreed the CT/RT training had helped them in conflict situations.

#### Open ended questions on relationships

Answers to the open ended questions about changed relationships following the CT/RT training revealed a tendency toward improved relationships with children,

students, colleagues, spouses, and self. Respondents noted they had changed in their relationships with others in two fundamental ways. First, they more readily accept and honour other people's needs as well as their own, and second they have an increased willingness to stand up for themselves. Acceptance of self and other's needs and increased willingness to stand up for what one believes were the two emerging themes for the open ended relationship section of the survey.

#### Relationships - Theme I - Needs Awareness

On reviewing her changed relationships with her children and her ability to accept their needs, one mother said, "I have learned to let them make their choices. I listen and respect their way of dealing with problems. I don't try to fix things for them. I let them fix themselves. I feel I have given them the tools they need and they are doing just fine. " A father said, "My relationship with my own children (ages, 27, 25, 22) has changed. I have given them the power to make their own decisions by working through the four questions of reality therapy." Another mother described the improved relationship with her daughter: "[We have] better communication. As a result we have grown closer. I now have more confidence and respect for her as an intelligent adult who is very capable of looking after her needs and happiness. " This same mother in describing how she is different in the mother/daughter relationship said, "I no longer try to fix everything (problems etc.); I lead her through RT questions. [I'm] not as controlling. I no longer try to change her to be what I think she should be."

Another mother wrote with significant pride about how she had changed her relationship with her daughter, from one of surface tolerance to genuine acceptance of each other. She described how her daughter voluntarily sought counseling from a reality therapist as a result of her dialogue with her mother about concepts of the CT/RT training. This mother said:

Generally relationships with family (my most important relationships) have improved becoming more relaxed and accepting. However, probably the relationship that has changed the most is my relationship with my daughter. My hopes and expectations for her were based on my own needs, and pressures for her to meet those were subtle but constant. While having a loving relationship with me, she was aware of the expectations and not comfortable with them and consequently not meeting her needs or mine. She would phone late, knowing I would be asleep and she would just have to talk to her dad. Since RT I have been able to recognize and verbalize the importance of her meeting her own needs and creating for herself a clear picture of what she wants and what her life and career should be like to please her. She has taken RT counseling sessions and returned to university taking courses she wants to! Our personal relationship has become much more relaxed and pressure free.

Another woman offered insights into how the CT/RT training made a difference in her marriage because she had increased her awareness and acceptance of her spouse's needs. She said:

My relationship with my husband has improved as I practice my 'listening skills', which has improved our lines of communication. I also force myself to carry through with a discussion or disagreement to ensure we understand each other now that I recognize the 'fight or flight' syndrome. This has helped us to resolve many issues in a constructive way.

Improved relationships at work were frequently mentioned by respondents with regard to both the adults and children they encounter. Four educators effectively described how their acceptance of students and colleague needs had changed. The first said:



The relationships with my students are different. I take less responsibility, give them more freedom, attempt to really see their 'picture' and leave the control with them. It makes counseling easier and fun. I feel less guilt over anything and maintain my effectiveness. The students seem to respond very positively. We laugh a lot. I spend my time focusing on caring about them, and when possible letting them know (pointing out) how capable they are acting.

The two male educators, who had attended BIW training with 12 other staff members, albeit from two different secondary schools, commented on how they saw their relationships with staff changing after taking the training because of a shared language. Their statements are strong indicators of the program's influence on professional relationships. One man said:

My relationship with staff members has changed and in particular those with the basic week of CT/RT. It is different because of the common language we share. We are more able to move from the 'complain to me' conversation to problem solving. As a result, I feel we are more supportive toward each other and this has created closer, more meaningful relationships.

The other male educator said:

Just about all relationships on our staff improved after 14 of our school took the basic week training. Much of the restructuring, retooling, and rethinking [at this school] began with this one week course. My perception is that our school has improved vastly in relationships over the last five years.

A fourth educator discussed how her relationships with students had been influenced by the CT/RT training because she was letting them take more responsibility for their own equipment and materials. She commented:

I have close dealings with students who require specialized equipment to help them in the classroom. More often than not, these students don't want to use it and in the past I've found myself being annoyed with them. Although I'm not pleased with the fact that these kids are choosing to miss information they could be getting by using the equipment, I now realize it is their choice, I can't control what they choose to do - I can only make recommendations. The difference in me is that I realize this is not my choice, nor is it within my control to choose for them - I can only make choices for myself.

#### Relationships - Theme II - Having The Confidence To Stand Up For Oneself

The next theme which came out of the survey respondents comments on relationships was that the respondents perceived an increased confidence in their ability to stand up for other's needs, as well as their own needs. Comments from the next three respondents exemplify how the CT/RT training was seen to influence self confidence. One respondent commenting on how she felt more confident said, "I am less affected by personal criticisms and I try to meet my own needs before I try to please other people. This doesn't mean that I am selfish, but in meeting my own needs I am happier in myself and this is reflected, hopefully, in how I interact with others."

When referring to how her confidence had developed and how her appreciation of her own needs had improved one educator said:

...I now allow and honor my uniqueness, my beliefs, my 'weirdness'. I take joy in knowing that we each have different realities and that, because there are practical people like my mother and others like her, that I am free to be a 'flake', if I choose...For the first time in my life, my initial reaction to myself is love and acceptance, rather than criticism and defensiveness.

Another woman commenting on her heightened confidence stated:

I am more confident in myself. I feel I can handle situations without being stressed out. I am quite relaxed in what I do. I like to help people but I don't do it in an overbearing way. When I help people I teach them to help themselves using CT/RT of course.

Rather than improving the relationships they were in, some people saw the CT/RT training as a springboard to get them out of relationships because they had come to respect their own needs and had the ability to stand up for themselves. One woman said:

Most of my relationships have changed since CT/RT. I am dropping a lot of relationships that don't work and have no depth. I'm not feeling like every friendship or relationship must last for life. The relationships I have continued are stronger and deeper, I believe, because I can ask questions, dig into topics and issues and go after what I need in each relationship. I have given myself permission to have certain people for certain relationships - no one person must meet my every need.

In addition to improving relationships increased self confidence appeared to help respondents lower their stress at school, as indicated by the next two statements. An educator commenting on his reduced stress at school said, "I don't 'sweat' the little things and worry less about things which are beyond my control. I ask myself, 'Does it really matter?' more often. I am more relaxed with my students and my teaching." A female educator said, "[I've] lightened up, [I] use more humor, put more onus on kids and use RT at home."

Thus standing up for themselves in relationships and in stressful situations was made easier for participants who had taken the CT/RT training.

Those in disagreement or strong disagreement with survey questions

Of course, not all of the comments about the CT/RT training were positive, although the clear majority were. Of the 62 comments made on the open ended change question, there were four less than positive comments. These four fell under the 'didn't make any difference' category. Those who did not find the program of any value were those who had only taken BIW training. Even those four comments were not negative, they simply stated that the program had made no noticeable difference.

On the open-ended self reflection question only two respondents, out of the 54, mentioned that they were not influenced by the program, and their statements were neutral, not negative. On the open-ended relationship question there were four respondents, out of the 49 in total, who gave written feedback, which suggest that they were relatively neutral about the influence of the program. The four generally expressed sentiments along the line of this respondent, "I feel I haven't changed much re: relationships since taking the training because I thought in a reality therapy kind of way before; I just never put it into a theory in my head."

The CT/RT training program certainly did not influence everyone, but judging from the amount of negative feedback, it did not have a negative effect; it may have simply left participants neutral. The least positive responses came from those with BIW training when they were asked about improvements to their relationships. Their distribution of agreement and disagreement was almost equally divided on the three questions which asked whether their relationships had improved at home, at work and generally. Of interest however is the fact that 74% agreed, or strongly agreed, that they were better at dealing with conflict even though they did not see their relationships improving. One has to wonder with whom they are in conflict if their

improved ability with conflict did not influence their personal or professional relationships.

### The Interviews

The process of interviewing was truly a homecoming experience for me. After being away from the district for eight months, and wondering whether there was really any support system remaining there for me, I was overwhelmed with the reconnecting process made possible by engaging in dialogue on control theory and reality therapy. The fourteen interviewees, as well as some of the people I surveyed, spent many hours with me outside the interview or survey time discussing the impact of the CT/RT program on the district, their schools, their students and themselves. The topic generally fascinated everyone because they had all witnessed remarkable changes in the district since the program had begun, but had not had the opportunity to reflect on the change. Discussions where I shared my perceptions always followed the interviews and even then I was reluctant to offer detailed opinions. I assured everyone they could read the resulting document for my thoughts and I felt confident many would as they were keen to know how 'their' program appeared to others.

A summary of the interviews is organized under the same three headings as the survey results: change, self reflection and relationships. By and large the same themes surfaced in the interviews as were found in the surveys. The great amount of interview data help to enrich and flesh out the themes which emerged in the surveys. Interviewee's thoughts on how control theory and reality therapy training influenced their perceptions of change, self reflection and relationships reveal much about the program's impact on individuals in the Quesnel School District.

#### Change

All through the interviews, when describing how control theory and reality therapy had made a difference in their ability to deal with change, the interviewees

were positively effusive. First, they expounded on how they felt so much more in control in changing environments simply because they had the behaviors and skills to handle what ever happened. Their comments on change generally sorted into three themes. They felt they had better skills in listening to both themselves and to others; they felt they were much more skilled at using questions to clarify, analyze and diffuse tense situations within themselves, and between others, and they felt more skilled at standing back and reflecting, rather than immediately jumping in.

The second prominent theme the interviewees noted regarding the influence of the CT/RT training was an increased understanding of the importance of first looking at their own needs and wants, and then either helping others to look at their needs and wants or accepting the other's needs as different but equal to their own. The third theme, or thread, running throughout this section on change was a heightened sense of self confidence, and a willingness to act on this recognition.

This section on change is organized around the three themes which emerged from the interview data: increased skills, greater needs awareness and improved confidence. Comments portraying how interviewees used problem solving, analyzing, reflecting and questioning skills to handle change are first discussed. Second, evidence of interviewees' increased understanding of their own and others' needs is presented, and third examples of how interviewees' increased confidence, self acceptance and willingness to act is shared. An additional topic addressed in this section is the issue of age and how it was perceived by interviewees to have or have not influenced their behaviors. Interviewees were asked if they could attribute the changes they perceived in themselves to age rather than to the training in reality therapy. Unanimously they said age was not responsible for their change.

Change - Theme I - Skills For Dealing With Change

When describing how she dealt with change, Kate, who is certified in CT/RT said, "I'm far more comfortable with change...with seeing it as a positive thing, even though I often have major errors in order to make those changes...The result of the change is what I choose to make it: I can grow from it, or I can choose to let it spin me down." Melissa, who has advanced training said: "I'm certainly not afraid of it. I'm quite willing to change now. And I would say the 'past me' did a lot of self evaluation and negativity crap which I think got in the way of trying to change."

When asked to give an example of a time when she had to work through a change in her life, Kate, who said she was comfortable with change, described an occasion when she had gone away for few weeks, only to return home to find her husband had sold their house. To work through the sudden change Kate said she used numerous questioning skills on herself; these skills are apparent as she recounts the house episode:

I had to decide whether I was going to fuel the back wheels of anger and frustration and hurt, because my husband had sold the house without consulting me. Or, what choices did I have? Did I want to flip it, in terms of how I was perceiving it, and say, 'Well, the house was an old house. I could have a new house. I could have whatever I wanted in it. It could be the way I wanted it. And it could be a really positive experience. And so that's what I did. I asked myself ...'Is this feeling upset and hurt helping me? Or is it hurting me? Well, what can I do to help me?' And then I flipped it.

A number of interviewees, (like the woman in the survey section who spoke about death) remarked on how death was a change they had faced in the past, and they described how they handled it differently after having the CT/RT training because they had better skills.

When describing how the CT/RT training had influenced him, Eric made remarks revealing how his problem solving and reflecting skills had changed. To explain the process he follows when faced with change, he said: "I think, what are the beliefs I have, and I think the training has helped me to do that - to sit back and say, you know, 'What really is the problem here? Is the problem that it's just a new way to do it and you don't have the skills yet to do it? Or is it something I don't want to do?'"

The skills like standing up for herself, having the vocabulary to do so and recognizing the act of standing up for herself as an act of caretaking - for herself, were the behaviors Nicky mentioned when asked about dealing with change. She said:

I stood up to my mother for the first time and said I'm not doing this anymore. Then once I took RT, then I was able to stand up to my family and say, this is what I need and I'm not going to do certain things anymore. And I think the one thing that was really valuable about the RT was that it gave me some vocabulary to deal with things that I did or didn't want to do, and maybe [helped me] reflect on my needs. And it made me aware, upon reflection, that really what I had done earlier was taking care of myself. And now I won't let things build to a frustration level as far.

#### Change - Theme II - Increased Understanding of Needs

The second theme that ran through the change section of the interviews, was increased understanding of needs - self and others. Interviewee responses suggested they had a willingness to be responsible for meeting their own needs, while simultaneously recognizing the importance of helping or allowing others to meet their's. The previous comment, from Nicky, spoke to the notion of needs as does the next interviewee. Melissa waxed eloquently on the issue of how meeting her own



needs, and how helping others meet their's is in her view more effective than her taking on the responsibility for meeting other's needs. She said:

A lot of it has to do with not getting yourself involved in that ownership and being responsible and caring very much about what happens for them but allowing them to be in control of themselves...It allowed me to be responsible for what I need to own and I don't have to own everybody else's stuff so I can focus a lot more on me...it validated me and helped me sort out my own beliefs. Coming from a Christian background, you know, you get fed a lot of this stuff that you're responsible for everybody else and you have to sort out how you can be responsible for everybody else but...you're responsible for yourself and part of being responsible for other people is allowing them to be responsible for themselves...My perception of what RT talks about is that of being in control of ourselves, and letting other people be in control of themselves, and looking at what that whole picture looks like. Some people can interpret that you're not giving enough. But that's not true. What you become, to use a counseling phrase, is a more effective helper. Because you don't get your own needs met through those individuals right?...The more effective we can become the more effectively we can help others. I have worked in this system for 22 years and watched many counselors, teachers and people in helping professions as they work. You cannot help people by getting your own needs met through them. That's the bottom line. When you learn how to meet your own needs...you become more effective in the helping professions.

While keeping in mind one's own needs, and avoiding the responsibility for others needs is important in a change process, Mark adamantly stressed that because

he had come to know how to attend to his own needs, he was now less selfish in considering the rest of the system. He said:

I take more time to analyze the change and how it affects me and how I can fit into it...and its not just me now I consider, I think more of the whole system I guess. But, I'm also making sure that I get what I need in this change process...I can react instantly and selfishly or I can stop and think about it and consider more than just me.

#### Change - Theme III - Confidence

The third theme which came out in the change section of the interviews was increased confidence in oneself. All the interviewees mentioned an increased sense of themselves, and assuredness in their actions that they did not have prior to taking the training. Melissa simply said, "I am more confident and reflective..." while Rita went on at some length to describe her enhanced confidence:

It's easier to give yourself permission to speak from you heart after the training...Because I can say to myself that what I say counts. What I say is important and it counts and if you don't like it sorry...I can do it for myself and I can reflect for myself; it's a personal thing. I'm not trying to make brownie points and I can let go of that because of the training...It allows you to accept the fact that you are you, and that's a good thing...It gives you total acceptance of yourself, when you think about RT, when you think about Control Theory, you can accept the fact that you are who you are.

Denise said that before RT she wasn't sure of herself; she was always second guessing herself. She said: "I gained [confidence] in knowing what I could do. I gained confidence in knowing that I don't have to fix people. I think it's just given me confidence to know that I was okay with what I could do and with what I couldn't do."

Hal gave a beautiful account of how he had gained confidence in facing an unpleasant situation just the day before the interview. He said:

I had an experience yesterday where a lady at the fair who had been selling in one of the booths, made the mistake of taking some friendship bracelets into the mid-way area and she shouldn't have been there. There was a rather rude, crude individual with the mid-way and she came to me crying saying he had been extremely foul to her. And I think Glasser's theory has given me the confidence to just make the decision of what I'm going to do so I approached the fellow, shook his hand and told him who I was and what the problem was...I don't know if I would have had the confidence to have - he was a pretty big man - I don't know if I would have had the confidence to do that a number of years ago. But with my experiences and with the theory, I think that has built my confidence to be able to deal with a situation like that. And to smile all the time I'm doing it.

Walt, a man in his fifties, said he was 'more aware and more confident' and could comfortably ask for feedback from other people without fear. Mark, a man of similar age, spoke at length about how he was less fearful of change after the CT/RT training. He said:

It (CT/RT training) eliminates a little of the fear. Not all of it. I'm not a person who has such control over myself. But you know the gut fear comes up but then I've got a framework to think about how my own interests and needs need to be met. Just knowing the needs, I can go through them and I've got a category. I'll say, 'Okay, now how does *me* fit in with those things or that change?' And that lessens the fear, and then I'm a little bit more open to the advantage the change may offer...

### Age

As an addition to my original questions on change, I asked all the interviewees if they might attribute the different way they dealt with change to growing older. All fourteen responded with relative certainty that aging could not explain the way they currently dealt with change. Kate, who is close to retirement said, "Absolutely not, I think there's lot of people of my age who are nowhere near this, and conversely on the other side of that, when I look at my colleagues who are far younger than I am, I'm seeing that they've had the same changes happen to them. I've also seen it happen for kids. So I don't think it's age related." Rita, nearing 40, laughed when asked if she could attribute her differing ability to deal with change to age. She said, "I hardly think so. It is pretty much Control Theory...I think differently about who I am and how I behave..." Walt, who is also nearing retirement said: "I have friends my age who don't do any reflecting....I don't know if its age related, I really don't; some of it could be. I'd have to really think that through a lot more."

Mark who is also in his fifties said:

[Age] has a mellowing effect okay. But I also think that before RT I was always looking for some method of being able to be self-critical, or to look at my behaviors and think about what they were, what was wrong with them and which ones I could change to make things better so I would be happier. Now, I've got a method.

For the most part they all saw change as inevitable and they perceived the CT/RT training had helped them in dealing with it; age was not seen to have a significant influence in interviewees' minds.

### Self Reflection

Throughout the interviews, when self reflection questions were discussed, the procedures for change were consistently identified as the primary tool used for self

reflection. There was limited variance among the interviewees on the primary strategies used for self reflection; they all referred directly or indirectly to the strategy of using the procedures for change questions.

When asked to describe themselves before and after the control theory and reality therapy training no one hesitated to reflect on how they were different. Much of the shift they made in their behaviors and attitudes they attributed to self reflection or self talk. They felt that the content of their self reflection or self talk was different after the training.

The analysis of the self reflection section of the interviews is divided into four parts: self reflections, self talk, content of self talk and perceptual systems.

#### Self Reflections by Interviewees

Words and phrases the interviewees used to describe themselves before the CT/RT training included: controlled, blaming, lacking in confidence, negative, aggressive, hostile, repressed, non-reflective, scared, bitch, manipulative and controlling. After the training they used words like: confident, open, risk taker, attentive to needs, even keeled, balanced, stronger, more assertive, more effective, more in control, and more knowledgeable. The numerous but relatively brief quotes which follow illustrate the level of self exploration the interviewees engaged in during the interview.

Rita, who is certified said, "I'm more confident and I'm more reflective about the part I play in a relationship whether it's a meeting at work or whether it's at home in my marriage or with my son. I look more at me being responsible to make changes for making it better, not blaming other people."

Mark, when discussing his move toward more reflective behavior after taking the CT/RT training said:

I was an aggressive person, quite often perceived as hostile, not really a good listener and when I was listening it was to gather information to attack. Those tendencies are still there, but I think I probably have become a better listener to people's feelings. Just better for me. I'm not talking any kind of perfection, okay. And that's been a major change in my life and has probably affected my relationships in a major way...The hostility has lessened. I'm assertive and I hope it is in a positive way.

Hal said: "I used to beat up on myself and say 'I should have done this or I shouldn't have done that. Or 'Man I sure blew that' or 'I'm not doing this good enough.' And I think what I'm saying to myself now is, 'I did the best I could on it. If somebody could do better let them try.' I think my self-esteem has boosted, because of that [training]."

Overall most of the interviewees referred to feeling more confident and more conscious of their behaviors when they reflected on themselves after the training. They attributed this difference largely to the control theory and reality therapy process whereby the individual asks himself questions, or does 'self talk' to clarify, make meaning and integrate the theory with their behaviors.

#### Self talk - the process

When questioned about the practice of self talk, all interviewees professed to continuous use of this strategy. Most saw self talk as the questions and the dialogue someone uses with her or himself before making a decision or taking an action, while self evaluation occurs when evaluating whether or not the decision has worked. The interviewees all had excellent examples of how they talked to themselves to get out of a negative spiral or to resolve some issue. The following school scenarios illustrate how educators used self talk in dealing with student behavior.

Mark beautifully described how he self evaluated in a classroom to improve the instruction that was beginning to take a down turn:

In a math class that I have with kids having difficulty in math I was at the beginning of the year and it was going well. Then it started getting raggedy. And I started to think: What's going on? Why's this happening? It must be something I'm doing. I might be setting these kids off so I examined the things I was doing. I realized I was not giving them enough time to be recognized in class. We were concentrating always on the subject and a little bit of fun but most on the subject. So I worked out a method of letting each kid have a chance, not every lesson, where they could be a star and shine and everybody looked at them. And it's not everybody looking at them because they're being the clown because this time everybody is looking at them because they're the star.

Nicky said she uses self talk a lot. She specifically described her thoughts when she was teaching a class in which some students were not attending.

I'll notice something going on in the corner and I'll think, 'What's going on over there?' Do I really want to interrupt the class to do this, to bring these kids back right now? I wonder what they're talking about? Maybe it's more important than what I'm saying to the whole class right now. Maybe it's more relevant to them than what I'm saying. (Laughter) I ask myself, 'Do I really want to interrupt the flow of what's going on? It's quiet; it's not disturbing anybody else'. Whereas I might have five years ago thought 'How dare they not be listening to me all the time?' How could they possibly have anything more important ...And I'd go right off the deep end because two kids weren't listening to me out of a class of thirty. You know I think I am far more

respectful now. There might actually be something in their lives that's more important than what I have to say.

Dorothy, when working beside a very low functioning student with special needs who spat at her, outlined how she engaged in self talk to work through the rather difficult situation.

There was an episode in which a student spit at me and hit me and where I didn't lose control. I just looked at him and told him I didn't like what he was doing, but before I did that I almost lost it and had to say to myself repeatedly, 'What is it you want? What is it you want? And I thought I just want him to go back to the classroom. So once I knew what it was I wanted, my control came back and I just told him, 'We need to go to the classroom when you do that.' And he shook his head, 'No.' So I thought what do I do? So the RT kicked in. Okay what question am I supposed to be throwing at him? So I just asked him 'What do you want to do?' So he told me he wanted to go outside. I told him first he needed to go to the classroom and finish his work and then we would go outside. I told him I would take the timer so when he heard the bell ring we would go out. And that worked, but it wasn't like ordering him to go in that classroom or else.

Self talking as the interviewees suggest is largely a matter of self questioning and self evaluating for the purpose of reflection.

#### Self talk - the content

In the metacognitive process of 'reflecting upon the reflecting' they had done when asked about their old age, the interviewees for the most part said they looked to their needs and wants to guide them. When asked questions like, "How would you like to be described in your old age?" they indicated they engaged in self talk to walk themselves through what they wanted and needed. In answering the question they



noted they were much more positive and self accepting than they were prior to the CT/RT training. A number of the interviewees noted that previously they would not have been willing, or able, to formulate an answer to the question about their old age because thinking about, and then publicly describing themselves, was not something they had done before or felt comfortable doing.

Three primary characteristics of self talk were identified as the interviewees reflected on its content (a) awareness of their own and other's needs; (b) self acceptance; and (c) self questioning skills.

#### Perceptual Systems

Interviewees unanimously agreed that humans are unique perceptual systems who form their own pictures of reality and who choose to apply this understanding to their behaviors. Various examples serve to illustrate how the interviewees perceived each person as a unique perceptual system that chooses her/his behavior.

Rita described how her recognition of unique perceptual systems gave her increased respect for other people's perspectives.

I can also see other people's points of view much easier, because I know that they have different perceptions based on their experience and based on their wants...So I guess I have become more empathetic. I can change how I perceive things and how I look at something, and that has helped me in every part of my life.

Walt on the topic of differing realities said:

I believe we choose our reality and we choose our behavior. My perceptions are unique, as are everyone's. I think that probably hit me the most when I was in Australia. That's when I realized that their [Aborigines] reality was so different from mine and their whole way of life was different, and what I now

realize is that their world is not my world. I therefore have more empathy, and maybe more compassion and understanding.

Sue described how she used to perceive that people were just stupid if they did not see her reality, whereas now she will ask questions of them to clarify their reality. She said, "If somebody is telling me something, and I'm not quite sure, I'll say, this is what I'm thinking that you're talking about - is that right? So that they can clarify it. Whereas before I would not say anything."

The CT/RT training engages individuals in considerable discussion about how their perceptual systems are unique, and how the quality world pictures they create from what they experience, makes them all different. They grow to understand that individuals each formulate their own reality, but acting on this understanding requires consistent self reflection. This aspect of the training reflects the phenomenological foundation (Corey, 1992; Kelly, 1955) upon which it is based.

#### Relationships

During the interviews, almost all the interviewees alluded to how their relationships were influenced by the CT/RT training. These comments are not restricted to the relationship portion of the interviews; reference to relationships was also made during the questioning on change and self-reflection.

The three emergent themes found in the self reflection and change section are also apparent in the relationship portion of the interviews; reference to the themes of acceptance of one's own and other's needs, increased communication skills and improved self confidence is also made throughout the responses to questions about relationships. According to interviewees, ideal work and home relationships are ones in which there is mutual acceptance of needs; where problem solving, reflecting and conflict resolution are commonly practiced skills, and where individuals are confident in standing up for themselves.

Consistently interviewee comments suggested that the CT/RT training significantly influenced their behaviors in all these areas. In this section on relationships the three themes of needs acceptance, communications skills and confidence are extended and enriched by interviewee disclosure of behaviors not found as readily in other sections of the interviews.

The first theme, which suggested interviewees showed greater acceptance of self and other's needs since the CT/RT training, was extended in the relationship portion of the interviews. The needs theme developed to include an almost relentless commitment to working through issues, or perseverance in confronting issues, thereby insuring that both person's needs are mutually satisfied. The second theme of increased skills was supplemented, in the relationship section, with the skills of detachment and self evaluation. Interviewees consistently reported they were able to step back and detach in relationships, and to allow others to meet their needs in ways they had not previously. They also recounted how they continuously self evaluated in their ideal relationships. The third theme of increased confidence was broadened in the relationships section to include a willingness to challenge both family and societal tradition.

#### Relationships - Theme I - Perseverance to Ensure Mutuality

Persevering with a relationship to ensure mutuality in meeting individual needs was a strong theme in the relationship section of the interviews. When interviewees were asked about their relationships they reported the CT/RT training had influenced how they had come to perceive ideal relationships. They saw them as highly mutual. As Rita shares her perceptions of what makes an ideal relationship, the themes of mutuality and commitment to the relationship are apparent. To her the ideal relationship essentially takes on a life of its own. The ideal relationship she said is:

...a person knowing when to support me and when to help and when to back off. Its someone who loves me mutually as I do them. It's wonderful. The relationship itself is self evaluative in that that person understands that we speak about the relationship, and we speak openly about it - where it's going and where its headed. We celebrate wonderful things about the relationship. I know that I am extremely, extremely honored and special because I know that people don't all have that. So it's neat talking about it, but it's very, very difficult talking about it because it is pushing all kinds of boundaries for me. Its hard to talk about relationships openly and honestly and I know I have done it with this person so I'm very lucky. It's almost like a dance, a ballet, where the person is lifting someone high up into the air and being the ground for them. But knowing when to do that. It's not static. It's something that is very dynamic and keeps growing and changing and ebbing and flowing...True ideal relationship for me is like a dance, where you're supporting, but where you're knowing when to back off, you're knowing when to go in, you're knowing when to question, you're knowing when to not question. It's kind of filled with opposites and paradoxes. But the other person understands that as well. And it's talking about it that's really important. Oh, I'm getting all mushy, but words almost don't describe it.

Mutuality was also the theme in Walt's description of his relationship with his best friend. When asked how, and if, the training had influenced his perception of an ideal relationship, Walt said it definitely had, and he then proceeded to describe his relationship with his best male friend:

The ideal relationship is one where there is mutual trust. You accept the other person for themselves and not what you want them to be. And [they are] someone you can share with and together you can meet your needs. However,

not to the exclusion of everyone else. You never feel like you're tied down to that person; you're free yet you care deeply for each other. They are able to listen to you even though they may not be able to fully understand your concern.

Dorothy, a mother of a teen age daughter away at college gave a vivid account of how her mother/daughter relationship had evolved since she had taken the CT/RT training. The following description of a reformed relationship illustrated her perception of how CT/RT training was influential.

[Before] we would talk but it was just superficial talk like 'How are you?' It was not how we feel talk. Since I've taken the course, I've been pushing this stuff at her and now we get on the phone and have these deep talks. How she's feeling and she doesn't feel embarrassed in talking to me about it. I don't think I would have known how she felt about the relationship [with her boyfriend] if she had not trusted to tell me about it. Not confident about telling me I guess or close enough to tell me. Now I think she knows that I'm not going to put her down or try to tell her what to do so that has changed...There's more open communication, more communication. Especially so in the last year and a half that it's really kicked in and I put it all toward my training. It's always something that I have wanted to have with my daughter but I didn't know how to go about it.

Dorothy's account demonstrated a persistence in working on the relationship to get it to be mutually need satisfying.

#### Relationships - Theme II - Detachment and Self Evaluation Skills

Detachment, or the art of stepping back to reflect and make choices, appeared frequently in the interviewees' descriptions of their most significant relationships and in their descriptions of how they handled conflict in relationships. Detaching did not

appear to mean lack of caring; it was more a matter of not losing perspective of one's own or the other person's needs and the innate drive to satisfy those needs. Dorothy's description of her interactions with her daughter demonstrated the skill of detachment.

...instead of trying to control her or fix everything I think I've changed my way of thinking - it's more of an adult relationship now [she is 28 years old]...I don't try to fix things for her. We talk things through and she basically comes to her own conclusions of how she wants it to be. She actually sent me a Mother's Day card and she wrote at the bottom 'Thank you for listening to me and for not telling me what to do.'...I know I can depend on her to do what she needs to do and we don't suffocate each other.

Walt, a middle aged man whose children are grown and away from home, said his relationships with his wife and daughters had definitely changed since taking the CT/RT training. His comments served to effectively illustrate how he had developed the skill of detachment:

By sharing more of this with my wife and with my daughters there is less stress. Things that I once reacted to are now put into perspective in a different way...My wife's not trained in RT/CT but I know quite well when something's bothering her so when I ask one of those noted questions 'Does it really matter?' or 'Can I do anything to make it better?' or 'Is it helping?' or 'Can you think of a better way?' it starts the process of solving the problem and reducing the stress.

Rita showed how self evaluation and detachment helped her work through conflict in relationships at home and work. She said she made comments to herself in a conflict situation such as: "It's okay, it might not be solved today." or "What's the worst that can happen?" She gave a specific example of a conflict situation as a parent:

I used to jump in and try to solve it all. And I guess that in some ways I still do, but I do it differently. I do it armed. I'm more conscious of what I'm doing. Before I would have done it unconsciously. Now I know exactly what I'm doing and I don't know what the results will be, but I know that I've done this, and I've asked this question. I could almost write it down at the end and before I would never have been conscious of my own behavior.

Walt also demonstrated detachment and self evaluation skills when he described how he handled conflict in all his relationships, but he did not lose sight of others' needs:

I don't join the conflict. I am able to control myself and analyze better what is the cause of the conflict. I also look for what the people want and need. I ask the questions and this helps clarify the problem and may start us toward a CT solution. I find it helpful because I am in control of myself and if something is making me spin my wheels I know what to do about it. In conflict resolution it has been helpful to know that everyone's perception of reality is markedly different and it may be this that is causing the conflict.

Melissa succinctly stated the steps she had learned to follow in detaching during a conflict situation, "Step number one is you don't get physiologically or feeling involved in the conflict if you can. You work to keep thinking uppermost. Secondly, I focus on the person who is angry. [I ask myself] 'What's happening for them and why do they have to exhibit this kind of behavior right now? How can I work with them to help them change their behavior?'"

#### Relationships - Theme III - Challenging Tradition

Throughout their descriptions of relationships interviewees continuously made reference to behaviors that broke them out of their traditional roles. Behavioral expectations within marriages, families, friendships and the workplace were challenged by interviewees.

Dorothy, described how her perception of marriage had changed. She spoke of how she came to recognize her high freedom need and then how she had the confidence to act on it. This recognition and subsequent action had an impact on her marriage. She said:

Before I was thinking that we needed to do everything together. If it was a good relationship we would have been together all the time. That's not my picture anymore. I think communication has a lot to do with it. I have my own interests and we don't have to suffocate each other. It's much better. I think I found out when I was taking the course that I had a very high freedom need. And I think that throughout this [30 year] marriage this freedom need had wanted to come out, but I wasn't letting it or I didn't know what it was because I had these pictures of what a relationship was supposed to be. I think probably because of how I was brought up. I don't think he ever stopped me from doing anything; it was me that was stopping myself. He's never been controlling, but it's the picture I had that you don't do that. If I wanted to go on holidays [vacation] by myself or with the girls, I never would because my picture was that you don't do that. I think finding out about my needs and finding out that all those years when I thought I was so happy I don't think I was really happy. I just went along. So I'm much happier now that I can meet my freedom needs and go for it (laughter). And it doesn't make a difference in our relationship in the sense that he hasn't been upset that I've done it. In fact I think he's encouraged it.

Denise perceived that she was more equipped after the CT/RT training to let go of a family relationship that was not working. Her comments expressed how she was confident enough to break with tradition:



I have a brother-in-law that I have decided I don't need in my life anymore. When my sister died it was sad because that man had missed a lot of things with my sister because he had a drinking problem. But I wasn't angry at him, I just decided I felt sorry that my sister had stayed with him but she had made that choice. She loved him. So I couldn't do anything about that. But I choose not to relate with him. I don't need him.

Rita's stepping out of the role of teacher to befriend a parent in a school meeting was another example of how interviewees, through the influence of the CT/RT training, had the confidence to break with tradition. Rita described how she established a different kind of relationship with a parent:

A parent's getting upset, the principal is getting upset, everyone's starting to 'churn', and it's really over something than can be solved. So I validate the parent and say something like 'This is really difficult for you' and I'll just come out of the positional role and talk like a friend.

All interviewees expressed that they viewed relationships differently at work and home since the CT/RT training, and that they consciously choose to break out of traditional roles or family norms.

#### General perceptions about the training

The last question I asked everyone on the relationship portion of the interview related to how interviewees overall perceived the CT/RT training to have influenced their lives. All the comments, to the person, were positive. Of course given that these individuals had invested considerable personal time and money into the CT/RT training, their positive comments are to be expected. It is the change in behaviors they described that seems to be the greatest testimony to the positive influence of the program. The CT/RT program had influenced attitudes and abilities in three areas: (a) their confidence in themselves - they felt empowered; (b) their continual attention

to their own and other's needs; and (c) their new repertoire of skills in relating to others and in reflecting on themselves. Essentially the interviewees felt the CT/RT training had positively influenced their outlook on life, and their behaviors. The following nine comments powerfully convey the interviewees' perception of how CT/RT generally influenced them.

Carl said:

It's coalesced all the stuff I've learned over the last few years into a focus that I never had. It's given me a framework. I wish I had it 20 years ago...It's a system that works for me. It's radically changed how I see myself and how I see others.

Kate said:

It's made huge differences in my life. Surfacely it's made huge differences in my job and what I do in my job...Deeper it has certainly changed how I work with people. I'm totally different. It's neat talking about this because I hadn't realized how totally different I am in that I self evaluate...and I treat people differently. I think I judge them less, in that when I go back into control theory I can see where they're coming from more (that empathetic part)...At home it's made huge differences in how I treat my family and how I look after myself. I guess that's been the hardest part is looking after myself and I'm still working on that... it gives you support so that you can work on yourself...so that you can see the differences you are making. So that you can be making paradigm shifts and labeling it as such and understanding your behavior. It's made me conscious of relating to everyone in my life, and of the choices I make much much more than before.

Walt maintained:

It's made a lot of difference in myself and my family. Learning from other people taking the courses and learning with them gave me a wealth of new knowledge. It's probably made me more reflective than before...I'm thinking differently as I have a different picture of how people 'work'. ...RT has helped me help many people at school. I know with students that their 'picture', their reality is unique and different from mine. Their perceived world is a collage made from their experiences. It's made me a better person because now I realize their reality is so different from mine. For me, part of my real world changed and in my new world everything is a new adventure and experience.

Dorothy asserted:

I think I'm more assertive without being aggressive, without hurting people...I'm more confident in what I do. I think I'm probably a happier person; probably a lot happier person...I think I'm still me and these things were always there in me, but I was holding them in. Now I'm letting them out. Now I'm not scared to let them out, of taking a risk. I think before the most important thing to me was that people like me. Now that's not the biggest concern because I might do it [not be assertive] and they still wouldn't like me.

Mark confessed:

Professionally it's made me able to deal with people with less tension. I'm not walking around gritting my teeth and wanting to eat people, which is nicer for me and probably nicer for them (laughter). In my personal life I have looked at relationships and evaluated them and a couple of them I have recently ended

because they were really non-productive relationships both for me and for the other person and I feel much better not letting them drag on.

Denise declared:

It's made me more comfortable. I'm happy with it. I have an understanding of something that I can use to help other people. I find I relate with it at work - with my peers, and with students I work with. I can relate with the people I deal with at the Board level. All around, it's helped me be able to deal with things in my life so I don't get stressed or burned out. If I hadn't had RT I would have been burned out a long time ago, but I've known how to meet my own needs during this process.

Sue remarked:

Its made a big difference. I'm a lot more confident. I know what makes me happy and I know how to make myself happy. I don't just rely on somebody else to make me happy. That was a big thing with me before I took the training. If only I could...then I would be happy. The big difference is knowing about our needs and how to meet them and that it's all up to me to do it.

Melissa claimed:

It hasn't made a huge difference, but it has made a significant difference. It's put a lot of finesse into things that I had before. Its given me a graphic way to handle abstract concepts. It's been a reaffirmation that I knew that and some other people agree with me. I think it has assisted me in working on self confidence and self esteem. Yeah, I think it has been significant.

Finally, Hal stated:

It seems once you've studied Glasser's theory it's almost a part of you, it's in your mind all the time, you know. It's always there, so obviously it has

changed you. If you're not using it constantly then it's there when you're thinking through something afterward. You know it's easy now to say, 'Well next time I will do this differently.' I don't say to myself anymore, 'Oh, I shouldn't have done that.' I just carry on from there. It's over and done. I think that's how it's shaped my thinking.

#### Miscellaneous comments

Over the course of the interviews we veered into territory slightly off the beaten track to discuss such things as values and beliefs, what specifically was the difference between BIW skills and AIW skills, what activities in the training process made a difference, and what were the drawbacks of the program. We even speculated on how people in general were different after taking the CT/RT training and how a school might be different when many of the staff were involved in CT/RT training. Comments related to these questions follow.

When making reference to values, Walt felt the training had significantly influenced the way he viewed things. He said: "I'd say it's within the training where you're really think about things [values] like that. All of the training is listening to other people, you do role plays and it may not be written but it comes out in discussions. I know that's what neat about the whole training is the interaction with other people." Kate said her basic beliefs had changed, but not her values.

My basic beliefs have certainly changed in terms of understanding: all behavior is purposeful, our whole perceptual system, the four components of behavior, our needs and our driving behaviors. My values are still the same in terms of honesty, etc., but certainly it has changed my belief system.

Comparison of the skills acquired in BIW and AIW came quite easily to Denise. Certainly, the difference in how those two groups responded to the survey suggested that advanced training takes individuals to a whole new level of integration

with regard to Glasser's concepts. When reflecting on the difference in her abilities after AIW she indicated that the true power of the CT/RT training became apparent only after her completion of AIW.

Mark, supported what Denise said and indicated he felt AIW was essential.

I think it is important that people take advanced week, too. I think that if you just go into the first week that's when, if you are really skeptical, you can walk away and say, 'Ah, I knew all that stuff, and it's not new'. It's because you haven't practiced it enough. Glasser knew what he was talking about when he laid out the steps to certification...I think advanced week is at least a minimum before a person can say, 'I'm going to make a decision on this'.

The CT/RT training process itself, aside from the content, seems to contribute in no small way to the training's influence. When asked what about the CT/RT training was particularly influential, Nicky described the process as an opening up to consciously being vulnerable. She attributed this conscious choice to the quality of training offered.

I think it is the depth of the training. You don't just get lectured at for a day or two. You're with the same group of people for four and a half days and you're doing a little bit of theory and then you're practicing it and then you're debriefing that. Then you go back and you do a slightly different angle of the theory and you put in that piece and then you go and practice it. It seems to make a lot of sense with learning theory because they're practicing as well and they're talking about their experience... here's a natural progression built on skill level upon skill level. People that you hardly know at the beginning of the five day session, you're quite comfortable with [at the end]. I think a lot of it has to do with the fact that level upon skill level. People that work hard in a group and you keep mixing...There's a feeling of safety...What goes on in the

training is private...and I think that helps build the willingness to be vulnerable. I think that if you truly believe in taking responsibility for your own behavior then change is going to come...It's a leap of faith in the other people's caring and a trust level to expose yourself to that much. But if you don't do it you're not going to grow internally...It changes the depth, the level of commitment and analysis...the whole atmosphere that's built up at training makes it a safe thing to do. And once you've done it [been vulnerable] and seen nothing terrible or drastic happened then it's easier to take that leap of faith in the outside, or in the real world. So you incorporate that into your own way of operating day to day.

#### Training Drawbacks

Identification of drawbacks to the program was infrequent, but this shortage is understandable given that the interviewees had contributed so much of themselves to it. They were undeniably the converted, hence they were not disposed toward noticing program failings. However, in all good things there can be improvement. Most interviewees could not identify downfalls of the program, but a few thought there could be improvements. Melissa said:

I think one of its criticisms it is narrowness...when people don't have anything else to measure with [other psychological theories] they don't have an eclectic view. [The training] is made stronger for people who have had a chance to balance it off a range of other systems.

Nicky and Denise mentioned the cost of the CT/RT training as being prohibitive, and the lack of availability of the trainers was seen as a frustration. Eric worried that CT/RT the training had taught him and his wife to be over analytical. Their thinking about things too much might not have happened if he were a truck

driver, never having taken the training "because I wouldn't be asking myself all the questions all the time".

Hal and Melissa speculated on how they thought the CT/RT training had affected others on their staffs. Hal ventured that, "[The program] probably gave them more confidence and a better understanding of how to handle situations better - without getting emotional. I think they handle them more competently". When reviewing the impact the training had on her school Melissa said: "...it's sort of become part of the culture. All those things that go on with quality - offshoots of quality schools, off-shoots of the kinds of discipline, pro-active approaches and restitution rather than discipline - all has made an incredible difference at the school".

#### Summary of Findings

The themes of mutual awareness of self and other's needs, questioning, detachment, self evaluating, problem solving skills and confidence with a will to act were evident throughout this relationship analysis and the subsequent discussion of how the interviewees perceived the overall influence of the CT/RT training on their lives. These themes appeared to be inextricably embedded in the majority of the interview comments; possibly they are fundamental to the influence of the training.

Of course there are many ideas the interviewees shared that are not acknowledged or shared in this analysis. As I went through the interviews numerous times I was repeatedly struck by how wise and genuine the interviewees were in their comments. The frequency of positive remarks may appear as though I were biased in my selection, but the interview and survey results attest to the fact that participants in the CT/RT training perceived the program to have influenced them positively.

No one appeared to take the request for an interview lightly. They appeared to relish the opportunity to review their growth and transformation since beginning the program. I only hope my selection of quotes and my highlighting of key ideas



does justice to the wonderful words interviewees and survey respondents used to describe their growth experiences. My appreciation must go also to all those surveyed, particularly those who spent time sharing their thoughts in the open ended questions. The sheer number of their responses gives credibility to the interviews.

On the surveys, three themes emerged when respondents described how the program had influenced their concept of change (a) increased understanding of the needs of self and others; (b) increased skills in problem solving, communication and questioning; and (c) increased confidence and acceptance of self. These three themes were echoed throughout the interviews in all three sections. In the relationship portion of the interviews an elaboration of these themes emerged. To interviewees, understanding each others' needs in an ideal or highly effective relationship meant persevering with the relationship to ensure mutuality in need satisfaction. The skills which strongly surfaced in the relationship questions of the interview were detachment and self evaluation. Both of the skills were frequently evident in interviewee statements about their relationships. The third theme of increased confidence was found to be so strong in the relationship section that interviewees were confident enough to challenge traditional norms of family and work.

The open ended survey question, which addressed self reflection, had one primary theme - self talk. It was identified as the key strategy or skill respondents used when faced with a crisis, or decision making situation. The clear majority agreed that they use a self questioning or self talk process to take them through the procedures for change questions of reality therapy. They employed questions like 'What do I need?' 'What am I doing to meet that need?' 'What can I do differently?' Once they have asked these and other similar questions of themselves, they indicated that they extended out to asking similar kinds of questions of others around them.

On the surveys, the majority of respondents indicated their relationships at work and home had been influenced by the control theory and reality therapy training. There was a larger majority who agreed that the CT/RT training had helped in conflict resolution. In the open ended section of the surveys, respondents offered insights into how their relationships were influenced. Numerous examples were given in the survey analysis showing how the CT/RT training had influenced home relationships. There was also frequent mention of how it had influenced work relationships. Their comments fell into three main themes: how their home and work relationships had improved, how they were more aware and appreciative of their own, and other's needs, and how they were more confident and willing to stand up for themselves in all relationships. These themes are again similar to the themes identified in the change and self reflection sections of this analysis of the interviews: skills, needs and confidence.

In the interviews this pattern held true; however the conviction of the interviewees, as to the influence of the CT/RT training, was much stronger. They all indicated that they were much more capable and confident in conflict situations (confidence theme), and that they all felt their relationships (needs theme), and their ability to be in relationship (skills theme), had improved immensely since taking the training. They not only saw their relationships shifting significantly toward the better, but their lives in general improving since the CT/RT training.

#### Chapter Summary

Over the past seven years, from 1988-1994, the Quesnel School District had committed thousands of dollars toward the introduction, implementation and institutionalization of Glasser's reality therapy and control theory. Potentially every employee and very possibly every student could have been influenced by Glasser's ideas. The question is: "Has this influence been beneficial to the students and the

educators? " The complete answer to this large question is beyond the scope of this study, but if personal testimonies of 14 educators and if the surveyed opinion of 69 educators are any indication of the influence Glasser's ideas have had, one could say with certainty it had been very positive.

The persistence of the three themes: increased confidence and a will to act on it; increased awareness, acceptance and tolerance of the needs of oneself and other's, and increased problem solving, questioning, analyzing and reflecting skills throughout the analysis, suggested that those involved in the study perceived the training to be beneficial. The most prominent outcome was that the majority of survey respondents and all of the interviewees were in agreement that the program had positively influenced them. And of course the strongest indication of the CT/RT training's influence can be found in the individual comments the interviewees made as they eloquently shared their growth experiences, their trials and their fears. They reported their perceptions of change, self reflection and relationships to be undeniably different and better. Now it remains to be seen in the chapter five interpretation what difference these findings might mean to the district.

## CHAPTER 5: INTERPRETATION AND RECOMMENDATIONS

### Purpose

Human transformation, and how and why it happens, has long been an intriguing topic to social scientists. This study's purpose was to explore if and how Glasser's reality therapy and control theory training had influenced the transformation of some educators in the Quesnel School District. Three potential avenues of human transformation were studied: change, self reflection and relationships. The literature review and the data collection were organized by these headings.

### Method

A total of 100 educators who had completed Basic Intensive Week training in Control Theory and Reality Therapy were surveyed, 14 of whom were asked for in-depth interviews. Those I invited for two three hour interviews had completed Advanced Intensive Week (AIW) or Certification Week (CW). Educator position, age, gender, and level of training were key descriptors for the survey data.

The 69 survey respondents and 14 interviewees reported their perceptions of change, self reflection and relationships to be undeniably different as a result of the control theory and reality therapy training. It remains to be seen in this chapter what this difference might mean to these educators as they work long term in their school communities, what difference it might mean to the further utilization of control theory and reality therapy in school environments, and what difference it might mean for individual teacher training and staff development.

This chapter assumed that the process of working from the data outward to the literature review, would provide the best framework for integrating both bodies of information. By working outward, or from the specific to the general, I sought to tie the themes derived from the interview and survey data to the literature review information on change, self reflection and relationship. To accomplish this integration of information this chapter will proceed in the following order: (a) making meaning of the findings in Chapter Four; (b) discussing the three themes found in the data in relation to the literature; (c) answering to the research questions; (d) presenting implications of the findings; and (e) making recommendations for the future.

#### Making Meaning of the Findings

The findings of this study are unremarkable in the sense that educators who voluntarily attend teacher inservice usually leave the experience relatively satisfied. Teacher satisfaction may come from the fact that they had a day away from the school, that they had a chance to get reacquainted with their colleagues, or that they actually may have enjoyed the training activity or workshop. The large majority of educators who responded to the survey or to personal interviews clearly indicated they were satisfied with the experience of taking the control theory and reality therapy training (CT/RT). But what made the CT/RT training worthy of study when other workshops, do not necessarily warrant the detailed study conducted in this dissertation?

One of the criteria that made the CT/RT training worthy of study in Quesnel was the long term, relatively free flowing implementation cycle it followed. Another was the countless voluntary hours educators had given to learning the concepts and skills, and their heartfelt testimonials about the experience. Interestingly, there was never a district strategic plan to implement the control theory/reality therapy training.

There was never a mandate to have a set number of people complete the CT/RT training in a certain time frame. There was never a list of outcome behaviors for the participants to demonstrate. In other words, there was no clear aim, as Fullan (1991) would have said, for the firing. So how did the level of CT/RT training in the district evolve to the present status of over 120 people having taken BIW training, over 300 district employees having attended two day sessions on Quality Schools, and over 250 parents having participated in an evening on control theory, reality therapy and the notion of a quality school? This evolution occurred, despite the fact that those seeking practicum supervision had to use their own funds, because they and the other people who volunteered found meaning in the training, or to use Senge's (1990) words, they gained a sense of 'beingness' or 'personal mastery'.

The kind of personal mastery the individuals in the study reported, could be categorized into three predominant themes: (a) increased understanding of their own and others' needs, and the perseverance to develop mutuality in relationships; (b) increased skills in the areas of questioning, problem solving, reflecting, self evaluating, and detaching; and (c) increased confidence and self acceptance with a resulting will to take action even if it meant questioning norms.

#### Theme Number One: Needs

Awareness of one's own needs, and the needs of others, is the first theme to be discussed, and not surprisingly, it is the foundation of Glasser's training in control theory. The backbone of his psychological theory is that humans have five genetically encoded needs, and that every single behavior they have is employed for the purpose of addressing one or more of these needs. The primary method for individuals to take charge of their behavior he said is to first reflect on what need they want met, and then to determine the behavior that will get them what they want. Individuals in this study appeared to have integrated CT/RT through many aspects of their lives by first

looking to their needs for self understanding, and then making behavioral decisions regarding the best process for meeting those needs.

The study participants consistently alluded to how they referred to their five basic needs before behaving. Over the course of the training, participants said they first recognized they should make reflecting on their needs a priority, and secondly they recognized that by doing so they were not being selfish. Participants saw they could change their behaviors to meet their needs, if they were first aware of what their needs and wants were. However, knowing how to meet their needs brought with it the necessity for taking action or behaving differently. Participant willingness to make behavioral changes, to meet their needs and ultimately to create mutuality in relationships where everyone's needs were met, was simply an outcome of: looking at what they perceived to exist, comparing it to what they perceived would be *more* need satisfying, and then acting to reduce or eliminate the discrepancy between what presently existed and the desired situation (Glasser, 1990; Osterman and Kottkamp, 1993; Gould, 1978 ).

The willingness and desire to compare presently existing perceptions or internal norms to an ideal picture is an autopoietic process (Wheatley, 1993). To Glasser (1990) this comparison is the only way a person can get his or her needs satisfied, which fundamentally means it is the only way he can be in effective control of his life. To Gould (1978) the comparison of what is, to what could be, is the primary avenue to personal transformation. A vigilant attitude of comparing the reality one sees, to the one desired, helps a person to be in effective control or to be happy.

When an individual is happy because she is capable of making sure her needs are met, she is understandably more capable of feeling concern for another's happiness. Mark's comment, in his interview on change, aptly illustrated how

someone who has taken the training can consciously choose to meet his needs without perceiving it as selfish, then he can move on to having concern for another's needs. In fact by knowing how to, and believing that is it okay to, meet his needs he is empowered to be concerned for other's needs. Mark said, "I take more time to analyze the change, how it affects me, how I can fit into it, and it's not just me now I consider, I think more of the whole system I guess. " It is as though legitimizing the right to be concerned for his own needs freed him to say what he needed, and at the same time awakened in him the will to attend to other's needs in a new way. Rather than being an act of selfishness, stating his needs and wants was in fact a freeing behavior because it allowed and empowered others to do the same. Mutual sharing and understanding of each other's needs and wants is critical to good relationships in a family or an organization (Gossen, 1992).

When futurists and organizational change theorists (Senge, 1990; Toffler, 1990; Denhardt, 1981) discuss change, they appeal to leaders and system planners to recognize the individual needs of those who work in the organizations. They repeatedly ask that the role of the individual be given priority in an organization because past attempts to restructure and reform from a systems perspective, rather than a personal perspective, have not worked. They say the very core of how we think and behave should be reevaluated and disrupted in organizations. We need to create the opportunity for mind changes (Fullan, 1994), mind shifts (Handy, 1989; Morgan, 1993), or mindfulness (Langer et al., 1990) at the level of the individual. Disrupting normal ways of seeing things is critical to change (Shipka, 1994). It seems that training in control theory and reality therapy may provide a vehicle for the shifting of minds or questioning habitual perceptions simply because individuals are consistently encouraged to be aware of who they are in terms of their needs and wants, as well as their values. Once they have this enhanced sense of self it seems



they are more receptive and responsive to the diversity of viewpoints that exist in their larger community or organization.

First, acknowledging the tension which may arise because of individuals having different realities, then seeking to understand the differing world views rather than dismissing them, is a critical step to coping with change (Gould, 1978). Clearly the findings of this study suggest that individuals who have taken the CT/RT training are receptive to, and actually seek to understand the diversity of other's needs and wants. In Conner's (1993) view they would be termed resilient, and in Conger's (1994) view they would be labeled community builders.

Glasser did not directly discuss creation of community in his writings, although the notion of creating a quality school, by his definition, implies community formation. The therapeutic method Glasser advocated for a quality school has implications beyond helping individuals accept self responsibility; it can lead participants toward accepting global responsibility as they gain increasingly more awareness of the role mutual relationships play in their lives.

This ability to be concerned for others is what Noddings (1984) spoke of as caring, and should two or more people be fortunate enough to be engaged in mutual caring for each other's needs, as well as their own, interdependency can occur. Comments by respondents suggest that they develop a sense of interdependency after AIW. They seemed to follow a three step process of learning how to address their own and then other's needs. First, respondents described developing a sense of self efficacy. They recognized the responsibility for meeting their own needs, and an accompanying responsibility for acting on this recognition. Second, they commented on how they developed in their desire to support others in meeting their needs, but they did so with the understanding that they could not take responsibility for meeting other people's needs. Third, they developed in their desire to create a caring

environment in which both self and other could meet in the middle and find the common ground so critical for healthy relationships (Glasser, 1990).

Certainly Souvaine et al. (1990) ascribed to the view that meaningful, mutually supportive relationships are developmental. They suggested that individuals evolve by moving from a state of only seeing their own reality, to seeing another's reality, and then honoring the different reality. Souvaine et al. labelled the individuals who accepted responsibility for their own needs, while also accepting responsibility for helping the other person in meeting his/her needs, as interindividuals. Achieving the interindividual state of mutual awareness, which included a capacity for meaningful, growth enhancing interaction was defined by Souvaine et al. (1990) as an ideal way for 'being in relationship'. When two people can be self aware, can consistently seek to support each other in their developing self awareness, and can relentlessly commit to mutuality, interdependence is believed. Interdependent relationships are the kind of relationships study participants consistently referred to. That being the case it would be safe, and somewhat conservative in fact, to suggest that control theory and reality therapy training promoted the development of interdependence by encouraging mutual focusing on basic needs.

#### Theme Number Two: Skills

Just as the concept of increased awareness of needs was not a surprising theme to emerge from the data, neither is the notion of increased skills. The reality therapy training program is devoted to increasing the skills of its trainees. The training is designed to directly teach such skills as: questioning, listening, communicating, reflecting and self evaluating. Nonetheless, the interesting contributions of this study may be the light it sheds on why these skills and others develop from participation in

the CT/RT training, and how this training may be valuable in fostering skills that make personal and organizational change easier.

There was a clear message in the findings that CT/RT trainees credited the program with: Improving or developing their abilities to self-reflect, self-talk, self-question, stop before taking action, analyze, listen, confront, accept responsibility for themselves, stand up for what they believed in, accept feedback, tolerate and understand others, overcome fear, detach, accept themselves, take risks, be in relationship, practice patience, live a balanced life and welcome change. This is an impressive list and these are skills some people work a lifetime to acquire, yet I found when reading through each of the interviews there was direct or implied reference to these abilities in almost all the interviews. These are the skills with which counselling books by writers are replete (Corey, 1992). They are the primary skills taught to those in helping professions, but how often does teacher training enable educators to successfully integrate these skills into their lives? From the interviewees' descriptions, it would seem they did not feel they had a strong foundation of these skills before the training, even though all but three had education degrees. The counsellors in this study were the exception to this lack of foundational skills; they had the fundamentals before the CT/RT training but it added a new and significant dimension to their previously established repertoire of skills.

So what about the CT/RT training most effectively promoted the integration and application of various counseling skills? It is my belief, based on experiences of taking the CT/RT training, working with many people who have taken AIW, and certainly from analyzing the interviews, that what contributed most to integration and application of counselling skills is the CT/RT trainings' focus on a safe, needs satisfying environment, the duration of the CT/RT training, the amount of practice time built into the weeks and practicum days, the focus on self evaluation, and the

emphasis on peer support and instructor modeling. Nicky, one of the interviewees, suggested that the training is a safe, needs satisfying place where people can be vulnerable and "take a leap of faith in the other people's caring and trust". She went on to describe how, once people feel safe, they learn that they can expose their inner selves, and in the process they eventually come to have a deep appreciation for self-reflection skills, their peers' skills, and the role these skills play in helping them develop an integrated approach to counseling.

It is as though the skill level demonstrated by the interviewees followed a developmental process from a feeling of safety, to a sense of enjoyment in knowing how to satisfy their needs in the class as well as outside of it, to a commitment to learning the skills and the theory, and ultimately to integrating the skills and theory into their whole lives.

In moving through the four steps of skills acquisition precipitated by the CT/RT training, individuals went from wanting safety, to feeling enjoyment, to making commitment and finally to experiencing integration. In this development toward integrating theory with practice, the participants utilized the complex skills listed above, and many more. Among all those skills, however, there was one consistent overriding skill that seemed to precipitate the greatest growth and served as the guide for all the other skills. That skill was the systematic ability to self talk, self question, self evaluate, or to use the broadest term self reflect.

When asked how self talk was different from self evaluation, a number of interviewees said they felt self talk occurred all the time, particularly when a decision needed to be made. Self evaluation was seen as done after a decision had been made using self talk. The self evaluation questions one used might be, "Was it the right choice, and if not what could be done to improve next time?" Self questioning, as expressed in the interviews, appeared to be one aspect of talking to oneself. It seems

reasonable, given the definition of self reflection used in this study, that self evaluation, self questioning and self talk could come under the umbrella of self reflection. They are all aspects of the bigger concept, which essentially involves standing back and looking at oneself to make meaning from what one observes, feels or experiences.

Self reflection is said to be the key to personal change and transformation (Piaget, 1954; Rogers, 1980; Jung, 1959). Self reflection can be a valuable part of the person growth process, but the benefit gained from looking inward depends on the methods or skills used in this process of inner exploration. To simply reflect on what one has done does not automatically mean improved self understanding. A systematic method for self reflection is necessary, and one is offered in the form of Glasser's control theory and reality therapy training.

Reality therapy was intended for the purpose of systematic self reflection. Glasser designed it as a tool for individuals to systematically reflect by asking themselves questions about such things as their quality pictures, their wants and their behaviors. Interviewees unanimously indicated that they used the reality therapy skill of reflection before and during the performance of such actions as problem solving, dealing with conflict, understanding differing realities, engaging in team work and evaluating their own values and beliefs.

Through the processes of self reflection, the individuals who took the CT/RT training at the AIW level were enabled to move along the control theory and reality therapy training continuum from needing a safe environment, to knowing how to meet their needs, to committing to learning the skills and theory, and ultimately to integrating the concepts into every aspect of their lives. The capacity to integrate CT/RT into one's life seemed to carry with it an understanding that other people in that person's life would not escape being touched by the training. By definition,

relationship means the interrelating of one person with another, so it stands to reason that the new skills and knowledge of one person will consequently influence those with whom she/he comes into close contact.

The skills of listening, honouring another person's needs, and questioning for clarification and understanding could be applied to relationship development, as effectively as they could to personal development. Current organizational change theorists (Bennis, 1993; Bergquist, 1993), and educational reformers (Barth, 1990; Sarason, 1990) and communitarian philosophers (Etzioni, 1992; Sergiovanni, 1992b) place heavy emphasis on relationship skills such as engagement dialogue, creation of a shared vision, community building, and networking. They contend that individuals in changing organizations need many new skills and behaviors to function in communities or to build teams.

Toffler (1990) declared that the behaviors needed for dealing with change are the same as those needed in a family: sensitivity to others, empathy and courage. Other futurists and organizational change theorists (Sergiovanni, 1990; Conner, 1993; Spice, 1994; Adams, 1994), when discussing the abilities needed for individuals to become relationship builders, use virtuous words like patience, humor, openness, resilience, spirituality, heart, compassion and courage. These relationship building skills are not structural re-organization skills; they are skills vital to the promotion of deep, second order change (Cuban, 1988a). Second order change requires burrowing to the value and belief level of individuals and this digging is made possible by employing the relationship building skills promoted by the CT/RT training.

How individuals change their beliefs and values has been the topic of many change theorists (Nirenberg, 1993; Denhardt, 1981; Henderson, 1991; Hawley, 1993). Glasser believed that individuals change their values when they perceive something to be more need satisfying than something else. For example, when

Dorothy, quoted in Chapter 4, changed her picture of what she valued in a mother/daughter relationship, from one of control and authority to a relationship of friendship and equality, she was motivated to change her values. She was probably motivated to make the change in her relationship because her values had shifted from an emphasis on control and authority, to valuing connection and equality. To make the change in how she related to her daughter was a risk because her daughter might have initially taken advantage of her mother's attempt to be a friend, rather than an authority figure. Any move from power-over to power-with carries a risk (Starhawk, 1987;), but the potential gain of a different kind of relationship was obviously worth it to Dorothy.

The level of skills displayed by the interviewees may go beyond what Glasser expected when he designed a therapeutic program to take people who were out of effective control to a state of being in effective control of their lives. The people interviewed appeared to exceed Glasser's conceptualization of taking individual responsibility. These interviewees were desirous of taking collective responsibility, or choosing to operate at a self-actualized level, as Maslow (1971) would say. Gould (1978) would suggest they have followed the steps toward transformation.

The findings hint that there will likely be more and more Dorothys, as trainees develop the skills and self awareness that enable them to risk making changes in their personal and professional lives and relationships. Ultimately they may choose to risk influencing change beyond relationships in their immediate vicinity, to influencing the wider community, at town, provincial, national and global levels.

Thus, the skills such as self evaluation and reflection, that the interviewees explicitly attributed to themselves, along with the inferred skills such as detachment and patience, from their interview comments, appear to have been influenced to a large extent by the CT/RT training.

### Theme Number Three: Confidence

Self acceptance, confidence in one's abilities, standing up for oneself, changing from negative to positive self talk, challenging tradition, and practicing self caretaking form the core of the third theme derived from the data. An additional aspect of this theme of increased self confidence was the will and commitment to take action. In other words, the study participants said the training had helped them feel more confident and more caring about themselves, and it also enabled them to consciously act in non traditional ways in their external and internal environments.

The first question that might come to mind for a taxpayer is, "Why would we want to pay to improve a teacher's self confidence?" One only has to be made aware of the writings on self-efficacy (Bandura, 1977), the writings on the connection between self understanding and mutual understanding between people (Lakoff and Johnson, 1980), or other self development research (Jung, 1957; Souvaine et al, 1990; Maslow, 1954; Csikszentmihalyi, 1993) to recognize there is a direct link between how someone feels about herself, and her ability and capacity to learn, change and take responsibility for herself and others.

The California Task Force to Promote Self-Esteem and Personal Social Responsibility (1992) clearly recognized the link between self awareness and personal accountability and responsibility. The document first addressed how being personally accountable and responsible required integrity of character; the task force stated that the more individuals appreciate themselves the more inclined they are to behave responsibly with others. On self esteem, the document stated:

Integrity of character must also [in addition to family and community] be nurtured within ourselves. We must learn to prize our uniqueness, to affirm our worth, to appreciate our significance, to stand for ourselves, and to remind ourselves of our value in the communities that nurture us. A well-nurtured



character combines with an appreciation of one's own worth and importance to foster a healthy, productive citizen...

The document correlated self worth with responsible action when it stated:

Acting responsibly toward others thus requires that we have the ability to appreciate our own worth and importance. Appreciating our own worth is the foundation from which we are able to recognize and act in appreciation of the values of others. Informed compassion goes beyond sympathy. It actively values the differences in all human beings. Responsible caring for others means knowing when to say no as well as when to reach out...In learning to appreciate our own gifts, we learn to appreciate and encourage the individual personhood gifts of other persons.

It is the belief of adult development theorists like Erikson (1982) that humans never stop learning about themselves. They are always working through the resolution of internal dialectic tensions or deliberating over moral dilemmas, of the kind Kohlberg (1990) and Gilligan (1982) present. Adults do not obtain a level of self-esteem in adulthood never to return to childhood levels. Self esteem, like other personal attributes, is not static. The point is that adults have issues around self esteem, as do children and youth, and it requires ongoing attention. This fact was evident in the interviews with the number of individuals who referred to their changed sense of self esteem, since taking the CT/RT training.

With a heightened sense of self, educators are more inclined to extend beyond themselves in their work with their students and other adults. They are more inclined to think of the system beyond themselves or to participate in the type of system level thinking to which Senge, Kleiner, Roberts, Ross, & Smith (1994) referred. Clearly the interviewees were inclined to think beyond themselves to the system level in their families, as well as in their schools. They generally appeared to feel a sense of

competence in handling all aspects of the systems they were part of, from personal relationships to classroom environments.

A sense of control over their destinies seemed to prevail. Senge et al. (1994) said that personal mastery goes beyond skills and competencies to "approaching one's life as a creative work, living life from a creative as opposed to a reactive viewpoint" (p. 141). The interviewees' comments were certainly more proactive in tone than reactive, and they resoundingly stated that they consciously chose to take responsibility for what happened in their lives. According to Senge's definition, the interviewees could easily consider themselves as personally masterful.

Senge et al. (1994) contended that a sense of personal mastery was a prerequisite to the openness needed for changing mental models, to creating and committing to shared visions, and to team learning through dialogue and discussion. Therefore, feeling personally in charge and confident in one's life has the potential to have system wide benefits. The California Task Force document powerfully described the relationship between self appreciation and taking actions to benefit others.

The more we appreciate our own worth and importance, the more we are able to recognize and appreciate the worth and importance of others as well... Yet simple awareness is not enough. True appreciation of the worth of others will lead us to action, to deeds through which we treat others with dignity and respect. The primary way in which we show respect to others is to step out of the state of anxious self-concern long enough to give others our attention to listen, to understand, to care. Valuing the significance of being human prompts us to reach out to other human beings in need, to value and support those institutions and rights on which the opportunity to be authentically human depends, such as the home of each person's individual and cultural

heritage, our democratic government, and an appreciated, healthy, growing environment.

The results of this study attest to how enhanced self understanding and self appreciation can fuel an interest in learning and risk taking, which can ultimately ignite the desire to make a difference beyond ourselves. Individuals appeared to make choices and construct their world in ways which broke them out of their usual mental models and personality patterns. These actions support Maciel et al. (1994) and Kelly's (1955) theory that personality is not necessarily stable or sequential in its development but is largely determined by individual choices.

The organizational theorists (Nirenberg, 1993; Denhardt, 1981) repeatedly admonish systems change makers for not considering needs and the choices of individuals in their organizational change initiatives. The time is past, they say, when humans are willing to be seen as resources to be manipulated for the purpose of satisfying organizational initiatives (Conner, 1993; Bergquist, 1993). The workplace should become a community characterized by strong relationships, interdependence, and dialogue (Sergiovanni, 1990; Hawley, 1993; Wheatley, 1993). A fundamental stepping stone to this mutual regard and collaboration, if the psychologists and organizational theorists are correct, is self esteem or self confidence.

When Maslow (1971) organized his hierarchy of needs, he made self esteem a pre-requisite to self-actualization. Self actualization has long been recognized as the highest level of self understanding. Those who are self-actualized, his research showed, are those who: (a) experience fully, vividly, selflessly, with full concentration and total absorption; (b) make the choice to grow instead of being fearful on a daily basis; (c) work to let their true self emerge; (d) take responsibility for themselves by looking within; (e) are courageous and listen to their own heart even if it means being unpopular, or a nonconformist; (f) work to do well at the thing

they want to do; (g) have peak experiences when they feel certain moments where everything flows; and (h) spend time trying to gain self knowledge by figuring out who one is, what he is, what he likes, what he doesn't like, what is good for him or bad, what his mission is, and all the while looking for where he has built defenses to block self knowing.

The interviewees attributed to themselves many of the self actualized characteristics Maslow (1971) identified. That is not necessarily to say they are self-actualized, only they could determine where they are on Maslow's hierarchy, or if it is not viewed as a hierarchy, where they would place themselves functionally in his various domains. The needs he conceptualized were similar to Glasser's, so it is not surprising that Glasser's techniques and concepts would influence CT/RT trained individuals' ability to address the needs Maslow described. For the purposes of this data interpretation, it is most important to recognize that having a feeling of self esteem and self confidence is fundamental to self actualization, and that one of the key characteristics of a self actualized person is that she has a desire to know herself. Once she has that level of understanding, she strives to help others, and becomes committed to taking action toward mutuality.

Therefore, the taxpayers should rest assured that any program which systematically and effectively helps educators to have self confidence and esteem, over the long term, is a program worth supporting. People who have positive self esteem have the daring to act and do for themselves, and others. They have a sense of independence, a lack of desire to fix what is wrong with others, the ability to self reflect, and they feel confident in decision making. Systems, according to Senge and others, need individuals who have self esteem and who are seeking self-actualization. They are then able to work on changing the system from the inside out. The

interviewees' remarks strongly suggest that the training has significantly helped them move toward self-actualization.

For example, a number of the women who moved from behavior characterized by shyness, self deprecation, and introversion toward more confident, self-determining extroverted behavior, attributed much of this shift in their actions to the training.

The men in this study did not change from being shy according to their comments, but they did appear to become more confident in being non aggressive, more interdependent, and more open to admitting their weaknesses. In a sense the men became more able to embrace feminine values, and the women did the reverse. Thus, increased confidence and the will to act in new ways was the third theme. Gilligan (1982) suggested that as adults age, men move from aggressive, independence to assertive interdependence, and that women shift from passive dependence to assertive interdependence.

#### Answering The Research Questions

The questions I asked in the study were designed to provide information that would shed some light on the influence of Glasser's control theory and reality therapy training on the educators in the Quesnel School District. The answers to those questions, although they have been addressed indirectly throughout this chapter, are summarized in the following section.

Question Number One: How did the training influence educators' perceptions of themselves?

Over the course of the CT/RT training educators moved from a perception of themselves as reactors to the external world to an increasing sense of being self-determining participants in their internal and external world. They noted how they felt they could end relationships, stop before reacting in a conflict situation or accept

their shortcomings; these sort of awarenesses indicate a changed sense of self. Those who had completed advanced intensive week were stronger in their belief that the program had influenced their sense of self than were those who only had basic intensive week training.

Increased self confidence, self awareness, and the ability to stand up for what they believed, even if it was not the norm, were changes participants consistently noted since taking the training. An increased self confidence with a will to challenge traditions and norms of family and institutions was evident in the interviews.

Question Number Two: How did the training influence educators' perceptions of self reflecting and self evaluating?

Following the CT/RT training, the educators discussed how they came to see their own self reflections as worthy and reliable sources of information. They used self talk, self questioning and self evaluation continuously to guide them in their behavior. Over the course of the CT/RT training it seems they came to value reflection more, particularly for its role in helping them stop and think about how to meet their needs (and its role in helping them employ a systematic method for selecting appropriate behaviors).

Educators in this study came to perceive self reflection as key to personal growth, and they recognized their own roles in helping others reflect on, and evaluate, their behaviors with respect to their impact on themselves and those around them. They used reflective practice to resolve tensions within themselves and between themselves and others. In reflection relationship building was also used extensively.

Question Number Three: How did the training influence educators' perception of change?

Educators became less resistant to change and in some cases learned to welcome it. They came to know they could maintain effective control and get what they needed, while simultaneously recognizing what others needed.

Educators came to see themselves as change agents and leaders in modeling change. They did not have to wait for others to take action; they recognized their responsibilities to self and others in addressing change.

Educators developed resiliency and adaptability because they accepted change as continually present. They realized that they could not expect to control what happened around them, but they could control their perceptions of what happened.

Question Number Four: How did the training influence educators' perceptions of professional and personal relationships?

For those who had taken advanced or certification week, the training influenced their perceptions of relationships. They acquired a new understanding of mutuality, and developed skills for making mutual, growth enhancing relationships happen. They learned that they did not need to control others in a relationship to get their needs met, they simply needed to be honest about their own needs and be willing to allow and support others in meeting their needs.

In conflict situations, the educators strongly indicated that following the training, they had gained skills for maintaining their presence of mind, and a tool bag of techniques for handling what ever might happen. Their perceptions of what conflict was had shifted. When they recognized that conflict was likely to occur because everyone has unique world views, they came to see disagreement as a natural order of things. It was how they handled the disagreement that mattered most.

Educators became more aware of creating community. They had the skills and beliefs to enable them to engage in meaningful dialog and collaborative decision making.

Question Number Five: How did the training influence educators' perceptions of reality?

Educators were consistent in their recognition that we all have our own perceptions of reality. It appeared for the most part that this awareness existed before the training according to the survey results. Where the educators seemed most influenced is in understanding that they are responsible for creating their own reality, accepting that responsibility and allowing others to do the same.

They respected other's realities and saw that sharing perceptions of each other's reality was important as it would increase understanding of needs and wants. Sharing and understanding differing realities helped them in dealing with diversity of ideas and conflict.

#### Implications

This study may shortly be pushed to the back of the shelf by those who read it, but the influence of the training on the daily lives of the educators and those they touch each day will probably endure for many years. Human change is difficult to show, even when it is limited to concrete and measurable skills, but when the subjective qualities of human growth and change are studied, change is much more difficult to measure or identify.

It is certainly not within the realm of this study to judge the present or future impact 69 CT/RT trained people might have on a system of 330 teachers and 5200 students. Yet learning that these 69 people have been influenced in the three theme areas to the degree that they were, does have significant implications for their individual personal and professional lives. The next two sections of this chapter will discuss personal implications and professional implications of the study.



### Personal Implications

The CT/RT training had a significant influence on the personal lives of the educators in this study, particularly to those who have had advanced or certification week training, although the basic week trained people certainly indicated they had shifted in their perspectives of change, self reflection and relationships. The findings suggest that participants in the CT/RT training are more able to be fully human, as Maslow (1971) would have said. They are more hopeful, have a greater sense of meaning and purpose in their lives, fewer self doubts, more courage, and a sense of control. Csikzentmihali (1993) would say they would be more inclined to experience a state of 'flow' because they are able to act decisively and with less self consciousness. Having this bold approach to life has major health implications both psychologically and physiologically (Chopra, 1993). Wellness research consistently points out that self understanding and self efficacy are major factors in determining longevity and one's current health status. Therefore, the number of sick days, and the amount of time needed for doctor's appointments, and one's overall attitude toward life should be positively influenced by people taking the CT/RT training over the recommended 18 month period.

The personal relationships of the interviewees were clearly influenced by the CT/RT training, particularly those who were certified or had advanced training. Only half of those with BIW reported their relationships were influenced although how they dealt with conflict was perceived to be improved by three quarters of all surveyed. All participants reported they could look at conflict differently, and analyze their role in it with new eyes. A number of interviewees referred to the resolution of conflicts, or improvements in formerly non-communicative relationships after having the training. Such comments affirm the potential for the CT/RT training to have a

positive impact on a person's life with regard to their relationships and conflict resolution.

### Professional Implications

People reported themselves as being more flexible, and tolerant of change. This attitude has positive implications for organizations like school districts, because the changing times require people who are not afraid of change. Senge's learning organization is far more possible in an environment supported by individuals who are open to change, and who want to initiate it. The relating, reflecting, self evaluating, problem solving and self awareness gained from the training can support and guide the process of creating dynamic learning organizations or communities.

The ability of trainees to be in relationships in deep and influential ways has enormous potential for organizational change because the key vehicle for change, the theorists say, is relationship. Leadership is primarily about relationship; therefore the training could potentially awaken the leadership abilities in those who take it. This awakening brings the notion of a community of leaders into the realm of possibility. When individuals can allow leading to be the responsibility of more than one person, and share in the leading themselves, the potential for replacing the non-hierarchical, single leader organization with a more collaborative, collective style of leadership is increased (Block, 1993; Starrett, 1993).

Dowrick (1991) in her book on intimacy and solitude described the attributes of good relationships at home or work: (a) having a sense of self; (b) being flexible in attitudes and responsibilities; (c) having a familiarity with one's needs; (d) having the confidence that you can afford to be aware of the other's needs, (e) respecting other's differences; (f) having clarity about what you can not tolerate; (g) distancing yourself from what you cannot change; and (h) having the desire to live fully in the present. Chopra (1992) offered similar insights into what makes a good relationship;

he heavily stressed the necessity of knowing oneself and loving oneself before expecting to be fully present in healthy relationships. These relationship issues are taught in the CT/RT training. Therefore, it would be safe to say that the professional relationships engaged in by trainees would be qualitatively different after taking the CT/RT training. If relationships within them change the organization will naturally change (Denhardt, 1981; Wheatley, 1993).

The CT/RT training allowed participants to see how they could integrate their personal and professional lives through the application of Glasser's theory and techniques. It awakened in them a recognition of who they are, and helped them to see that there is much to be gained by being open and honest about their needs at work in the same way they would be at home. Satisfying one's needs is necessary at home and at work; therefore needing fun at work or needing love and belonging at work, is important and essential for long term effectiveness. Given this, organizations could expect to say a non coercive environment evolved because those who are trained are more capable of meeting their needs and helping others meet theirs in a collaborative manner. Therefore, the potential for creating a quality school, where quality, self-evaluation and non-coercion are the foundation, is brought closer to reality when educators focus on making school a needs satisfying place (Byrnes, Cornesky, Byrnes, 1992).

A readiness for learning is fostered by the CT/RT training because risk taking, which is key to learning, is encouraged. To those with a risk taking attitude professional development and staff development initiatives would be more attractive. Possibly the trainees after their experience with second order change would feel comfortable steering their own and their staff's future learning away from surface level learning toward values level learning.

The British Columbia curriculum entitled *Thinking in the Classroom* (1993) recognized the skills of reflection and self evaluation as integral to thoughtful learning. Educators who have taken the CT/RT training, which is intended to apply across all disciplines at all grade levels, will be prepared to model and teach the concepts in this curriculum. The document described some of the attributes that characterize most reflective thinkers who devote their greatest attention to questioning, making connections, representing and reflecting. These four reflective behaviors include pausing and thinking before doing, taking risks, offering questions and responses, recognizing the gist of an experience, problem solving, making connections with past experiences, verbalizing thinking and learning strategies, and behaving in principled and empathetic ways to demonstrate caring and concern about improving the world. It is clear that these British Columbia school system skills for reflective learners are similar to the skills participants identified in themselves following the training.

The art and science of being a reflective practitioner continues to be recognized among education scholars as the premier skill for making change (Schon, 1990). Those individuals who have taken the CT/RT training should be given recognition for their skills and understandings with regard to change. The district in essence has its own corps of change specialists if it is willing to recognize that change starts with the individual.

#### Recommendations to the District

The recommendations I would make to the educators and board members in the Quesnel School District, given the findings of this study, are:

1. The District should continue to give long term support to the reality therapy and control theory training for individuals in the district. The program is undeniably making a positive difference in the personal and professional lives of the

educators with regard to their ability to address change, engage in reflective practice and make commitments to relationships.

2. The District should continue to encourage schools to embark on the never ending journey toward becoming a quality school and part of a quality district. The knowledge, skills and attitudes Glasser believed necessary for lead management are those fostered by the reality therapy and control theory training. The promotion of quality schools could include funding for staff development in the form of workshops, training or release time to attend CT/RT supervision days (Joyce, Wolf & Calhoun, 1993).

3. The District should continue to offer two day sessions with trained IRT facilitators to help educators implement Glasser's ideas in classrooms and schools.

4. The District should plan to encourage individuals to take advanced training by offering some financial support because the greatest impact of the program appeared to occur after the second week of training. Integration and application of Glasser's theory and practice were most evident among those who had had more time and practice in working with the concepts. Participation in the program should continue to be voluntary if it is to be congruent with the control theory philosophy, which encourages self responsibility.

5. The District should strive to integrate the reality therapy and control theory concepts within and outside the system. Board members, support workers and parents should continue to be a part of the training. Clearly the CT/RT training influenced how people perceive and participate in change, relationships and self reflection; these are all considerations for the learning organizations of the future.

6. The District should continue to develop district and school policies supportive of a quality environment. This is an environment in which the following are promoted and practiced: non-coercion, lead management, collaborative decision

making, and self evaluation. Systems theory, control theory and adult development theory strongly align with the employment of these practices to help adults perform to their maximum as individuals and in teams (Glasser, 1969; Kohn, 1986; Miller, 1981; Moore, 1994).

7. The District should promote implementation of programs which facilitate peer support for learning such as cognitive coaching (Garmston & Costa, 1993). This type of peer development program should be used to enhance the growth of mutual relationships which are already occurring among trainees. Peer helping among educators is known to improve classroom practice.

8. Educators who have taken the training should continue to work on improving themselves and the system through further control theory and reality therapy training, and take comfort in knowing that their growth and change means system growth and change unbounded by past constructions (Crawford, Bodine & Hoglund, 1993; Kelly, 1955).

9. The District should support the development and implementation of curriculum materials K to 12 that are congruent with the CT/RT and quality school philosophy (Walz & Bleuer, 1992).

10. The District should encourage networking among CT/RT trainees to maintain and improve the skill levels and best practices.

11. The District should strive to ensure the use of CT/RT and quality school theory and practices in all classrooms through monetary and non monetary encouragement. The concepts need to be overtly shared with all students. Hiring practices should include consideration of CT/RT as a valued area of expertise.

12. Due to the apparent effectiveness of the format modeled by the CT/RT training, future staff development programs should ensure that training is: Extended over a number of years, involves frequent opportunity for practice, occurs in a

psychologically safe environment, is voluntary in nature, involves self evaluation, incorporates role playing, and relies on instructor modeling and peer support.

13. Future innovation in the District should keep individual needs and system needs in mind recognizing that second order change is made possible only by changing individual values and beliefs (Fullan, 1994).

14. To enable educators to better understand the change process, systems theory, leadership theory, and adult development should be overtly discussed and referred to, and taught, whenever possible.

15. The District should encourage leadership which promotes and supports the common principles shared by control theory, adult development theory, and systems theory. Leadership of this kind would recognize the role of self reflection, relationships and change in educator and system development.

#### Recommendations For Further Study

This study spotlighted educators in Quesnel who had participated in Glasser's control theory and reality therapy training. The primary question to be investigated was: How did Quesnel educators perceive they had been influenced by the training in three areas: change, self reflection and relationships? There are many other questions about educator growth and development which are also worthy of study. For example, exploration on the influence the training had on instructional practices is also a possible area for further research. Identifying how student attitudes and learning has been influenced by educator training would be valuable for gaining understanding about the training program. A phenomenological inquiry into the experience of being certified would help to illuminate the deeper meaning of the training. A case study of a school which is seeking to become a quality school would also be informative. As Corey (1992) suggested, any study of the influence of reality therapy is worth doing given the limited amount of research that has been done with it

to date. In the Quesnel School District evaluation and assessment of the training should be ongoing to ensure the influence of the program is being monitored system wide.

### Conclusion

I wonder if many who have done qualitative research find they were unable to adequately predict the wisdom of the people they interviewed, observed or surveyed. I wonder if all qualitative researchers who have had the privilege of probing into life's meaning with another human being feel a sense of awe at the human capacity to learn and develop toward higher states of awareness. I wonder if all of us who are honored with the opportunity to do indepth interviews come away from the experience far richer? I feel, as a student of human behavior, I am far richer, because I never expected 'dry research' to so deeply touch my heart, soul and spirit; and far richer, because I had not recognized how the act of interviewing could take on its own life form.

Change, self reflection, and relationships were the main areas I studied. Educators felt that following the CT/RT training they could comfortably participate in change. They indicated also that they had an enhanced ability to resolve internal tensions, improve relationships, appreciate the subjectivity of reality, and practice mindfulness.

Futurists and systems theorists state that change at the individual level is the most fundamental requirement to system or organizational change. Thus if the development or transformation of individual educators in Quesnel was positively influenced by the CT/RT training the school system will logically benefit from their training in control theory and reality therapy.

Undeniably, the educators in this study who had taken advanced training or certification week are on the positive end of the continuum toward being resilient



(Conner, 1993); self actualized (Maslow, 1954); interindividual (Souvaine, 1990); mindful (Langer, 1990); communitarian (Etzioni, 1992); transformed (Gould, 1978); interdependent (Gilligan, 1982); constructivist (Kelly, 1955); and bicognitive (Garmston and Costa, 1993). The impact of educators inclined toward these characteristics cannot be fully estimated, but it would be safe to say, given all the literature on the pivotal role of personal mastery in system change, that the educators in this study will have a positive impact on those with whom they come in contact - students, parents and fellow educators. They are certainly capable of leading change, modeling reflection and engaging in meaningful relationships. They have the potential to be of great influence, just as they have been influenced by the control theory and reality therapy training.

## References

- Adams, J. (1994). Catching the wave: Changing minds in a changing world. In John Renesch (Ed.), Leadership in a new era. (pp. 223-236). San Francisco: New Leaders Press.
- Aiken, L. (1993). Personality - theories, research, and applications. Englewood Cliffs: Prentice Hall.
- Alexander, C., Davies, J., Dixon, C., Dillbeck, M., Druker, S., Oetzel, R., Muehlman, J. & Orme-Johnson, D. (1990). Growth of higher stages of consciousness: Mararishi's vedic psychology of human development. In C. Alexander & E. Langer (Ed.), Higher stages of human development. (pp. 286-341). New York: Oxford Press.
- Arbib, M. (1972). The metaphorical brain: an introduction to cybernetics as artificial intelligence and brain theory. New York: John Wiley & Son, Inc.
- Argyris, C. (1964). Integrating the individual and the organization. New York: John Wiley & Sons, Inc.
- Autry, J. A. (1991). Love and profit the art of caring. New York: William Morrow and Company, Inc.
- Bandura, A. (1977). Self efficacy. Psychological Review, 84, 191-215.
- Barker, J. (1992). Future edge: discovering the new paradigms of success. New York: William Morrow and Co., Inc.
- Barnett, B. And Lee, G. (1994). Using reflective questioning to promote collaborative dialogue. Journal of Staff Development. 15. pp. 10-15.
- Barth, R. (1990). Improving schools from within. San Francisco: Jossey-Bass.
- Belenky, M., Clinchy, M., Goldberg, N. and Tarule, J.(1986). Women's Ways of Knowing - The Development of Self, Voice, and Mind. New York: Basic Books.

- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). Habits of the heart. New York: Harper and Row.
- Bennet, C. (1994). Promoting teachers reflection through action research: what do teachers think? Journal of Staff Development, 15 (1), pp. 34-38.
- Bennis, W. (1993). An invented life - reflections on leadership and change. New York: Addison-Wesley Publishing Co.
- Bergman, S. (1991). Men's psychological development: A relational perspective. Paper presented at a Stone Center Colloquium.
- Bergquist, W. (1993). The postmodern organization - mastering the art of irreversible change. San Francisco: Jossey-Bass Publishers.
- Block, P. (1993). Stewardship. San Francisco: Berrett-Koehler Publishers.
- Boffey, B. (1993). Reinventing yourself: A control theory approach to becoming the person you want to be. Chapel Hill, N.C.: New View Publications.
- Bolen, J. S. (1994). Crossing to avalon. San Francisco: Harper.
- Bolman, L. G. & Bolman & Deal, T. E. (1991). Reframing organization. San Francisco, CA: Jossey-Bass Inc. Publishers.
- British Columbia Assessment, Examinations and Reporting Branch (1991). Thinking in the classroom - resources for teachers. Victoria, B. C.: Ministry of Education Publications.
- Burkes, H., & Steffle, B. (1979). Theories of counseling. 3rd ed. New York: McGraw-Hill.
- Byrnes, M., Cornesky, R. & Byrnes, L. (1992). The quality teacher: implementing total quality management in the classroom. Bunnell, FL: Cornesky & Associates Press.

- California Task Force to Promote Self-Esteem and Personal Social Responsibility (1992). In Walz, G. R. and Bleuer J. C. (Ed.), Student Self-Esteem, Vol. 1, pp. 27-34. Ann Arbor, MI: Counseling and Personnel Services.
- Canning, C. (1991). What teachers say about reflection. Educational Leadership 48 (6) pp. 18-21.
- Cantor, N. & Harlow, R. (1994). Social intelligence and personality: flexible life-task pursuit. In Sternberg, R. & Ruzgis, P. (Ed.), Personality and Intelligence (pp. 137-168). New York: Press Syndicate.
- Castaneda, C. (1968). The teachings of Don Juan: a Yaqui way of knowledge. New York: Pocket Books.
- Chopra, D. (1992). The higher self - audio tapes. Niles: Illinois: Nightingale - Conant Corporation.
- Chopra, D. (1993). Ageless body, timeless mind. New York: Harmony Books.
- Cohen, L. & Manion, L. (1980). Research methods in education. London: Croom Helm.
- Conger, J. (1994). Spirit at work. San Francisco: Jossey-Bass.
- Conner, D. (1993). Managing at the speed of change. New York: Villard Books.
- Corey, G. (1991). Theory and practice of counselling and psychotherapy. Pacific Grove, CA: Brooks/Cole Publishing.
- Corey, G. (1992). Groups process and practice. Pacific Grove, CA: Brooks/Cole Publishing.
- Costa, A. and Garmston, B. (1994). Cognitive Coaching. Norwood, MA: Christopher-Gordon Publishers.
- Costa, P. and McCrae, R. (1989). Personality continuity and the changes of adult life. In M. Storandt & G. VandenBos (Ed.), The adult years: continuity and change. Washington: American Psychological Association Press.

- Covey, S. (1989). The seven habits of highly effective people. New York: Simon & Schuster.
- Crawford, D., Bodine, R. and Hoglund, R. (1993). The school of quality learning - managing the school and classroom the Deming way. Champaign, Ill.: Research Press.
- Csikszentmihalyi, M. (1990). Flow - The psychology of optimal experience. New York: Harper & Row.
- Csikszentmihalyi, M. (1993). The evolving self. New York: Harper & Row.
- Cuban, L. (1988a). Why do some reforms persist? Educational Administration Quarterly, 24 (3), pp. 329-35.
- Cuban, L. (1988b). A fundamental puzzle of school reform. Phi Delta Kappan, 70 (5), pp. 341-44.
- Darling, D. (1993). Equations of eternity. New York: Hyperion Publishing.
- Deming, W. (1982). Out of the crisis. Cambridge, Mass.: M.I.T.
- Denhardt, R. B. (1981). In the shadow of organization. Lawrence, KA: Regents Press.
- Dewey, J. (1933). How we think. Boston: Heath.
- Dowrick, S. (1991). Intimacy and solitude. New York: W. W. Norton & Co.
- Eisler, R. (1987). The chalice and the blade. San Francisco: Harper.
- Erikson, E. (1982). The life cycle completed. New York: Norton & Co.
- Etzioni, A. (1992). The spirit of community. New York: Prentice Hall.
- Ferguson, M. (1980). The aquarian conspiracy. Los Angeles: J. P. Tarcher, Inc.
- Fiske, M. (1990). Change and continuity in adult life. San Francisco: Jossey-Bass Publishers.
- Ford, E. (1989). Freedom from stress. Scottsdale, Ariz.: Brandt Publishing.
- Foster, W. (1986). Paradigms and promises. Buffalo, N. Y.: Prometheus Books.

- Fox, M. (1979). A spirituality named compassion and the healing of the global village, humpty dumpty and us. Minneapolis: Winston Press.
- Fraenkel and Wallen (1990). How to design and evaluate research in education. Hightstown, NJ: McGraw Hill.
- Frankl, V. (1959). Man's search for meaning. New York: Washington Square Press.
- Fullan, M. (1991). The meaning of educational change. New York: Teachers College Press.
- Fullan, M. (1993). Change forces. London: Falmer Press.
- Fullan, M. (1994). Change starts with the individual. In ASCD Update, 36 (4).
- Fullan, M., and Hargreaves, A. (1991). What's work fighting for? Working together for your school. Toronto, Ontario, Canada: Ontario Public School Teachers' Federation; Andover, Mass.: The Network.
- Garmston, R. (1993). Reflections on cognitive coaching. Educational Leadership, 2, 57-61.
- Gilligan, C. (1982). In a different voice. Cambridge, Mass.: Harvard Press.
- Gilligan, C. (1990). Moral development beyond adolescence. In C. Alexander & E. Langer (Ed.), Higher stages of human development. (pp. 208-228). New York: Oxford Press.
- Glasser, W. (1965). Reality therapy: a new approach to psychiatry. San Francisco: Harper.
- Glasser, W. (1969). Schools without failure. New York: Harper & Row.
- Glasser, W. (1981). Stations of the mind. New York: Harper & Row.
- Glasser, W. (1984). Control theory. New York: Harper & Row.
- Glasser, W. (1986). Control theory in the classroom. New York: Harper & Row.
- Glasser, W. (1990). The quality school. New York: Perennial Library.

- Glesne, C. & Peshkin (1992). Becoming qualitative researchers. New York: Longman Publishing.
- Glickman, C. (1993). Renewing America's schools. San Francisco: Jossey-Bass.
- Goldberg, P. (1983). The intuitive edge. LA: Jeremy Tarcher Inc.
- Gossen, D. (1992). Restitution: restructuring school discipline. Chapel Hill, N. C.: New View Publications.
- Gould, R. (1978). Transformations: change and growth in adult life. New York: Touchstone.
- Gould, R. (1980). Transformations during early and middle adult years. In N. Smelser & E. Erikson (Ed.), Themes of work and love in adulthood. (pp. 213-237). Cambridge, Mass.: Harvard Press.
- Guba, E. & Lincoln, Y. (1989). Fourth generation evaluation. Newbury Park, CA.: Sage Publications, Inc.
- Hall, E. (1959). The silent language. New York: Doubleday.
- Handy, C. (1989). The age of unreason. London: Arrow Books Ltd.
- Harman, W. (1988). Global mind change. Sausalito, CA.: Warner Books, Inc.
- Hawking, Stephen (1990). A brief history of time: from the big bang to black holes. New York: Bantam Books.
- Hawley, J. (1993). Reawakening the spirit of work. San Francisco: Berrett-Koehler Publishers.
- Heidegger, M. (1982). On the way to language. New York: Harper and Row.
- Henderson, H. (1991). Paradigms and progress. Indianapolis, IN: Knowledge Systems.
- House, E. R. (1993). Professional evaluation. New York: Sage Publications.
- Houston, J. (1982). The possible human. Los Angeles: Houghton Mifflin.
- Houston, J. (1993). Life force. Wheaton, Ill.: Quest Books.

- Hunt, S. (1984). The role of leadership in the construction of reality. In B. Kellerman (Ed.), Leadership: Multidisciplinary Perspectives, (157-178). Englewood Cliffs, NJ: Prentice-Hall.
- Institute for Reality Therapy (1990). Programs, policies, procedures and materials manual. Canoga Park, CA
- Jaeger, (1988). Complimentary methods for research in education. Washington, DC: AERA.
- James, J. (1990). Visions from the heart. Seattle, WA.: Bronwen Press.
- Joyce, B. Wolf & Calhoun, E. (1993). The self renewing school. Alexandria, VA. Association for Supervision and Curriculum Development, p. 1- 49.
- Jung, C. (1957). The undiscovered self. New York: Penguin.
- Jung, C. (1971). The portable Jung. New York: Viking Penguin Inc.
- Kanter, R., Stein, B. & Jick, T. (1992). The challenge of organizational change: how companies experience it and leaders guide it. New York: Macmillan, Inc.
- Kegan, R. & Lahey, L. (1984). Adult leadership and adult development: a constructivist view. In B. Kellerman (Ed.), Leadership: Multidisciplinary Perspectives, (199-230). Englewood Cliffs, NJ: Prentice-Hall.
- Kelly, G. (1955). The psychology of personal constructs. New York: Norton.
- Kohlberg, L. & Ryncarz, R. (1990). Beyond justice reasoning: moral development and consideration of a seventh stage. In C. Alexander & E. Langer (Ed.), Higher Stages of Human Development (pp. 191-207). New York: Oxford University Press.
- Kohn, A. (1986). No Contest. New York: Houghton Mifflin.
- Kornfield, J. (1993). A path with heart. New York: Bantam.
- Krishnamurti, J. (1970). Self knowledge. In Sohl, R. & Carr, A. (Ed.), The Gospel According to Zen. (pp. 95-104). New York: Mentor.



- Lakoff, G. & Johnson, M. (1980). Metaphors we live by. Chicago: The University of Chicago Press.
- Langer, E., Chanowitz, B., Palmerino, M., Jacobs, S., Rhodes, M., and Thayer, P. (1990). Nonsequential development and aging. In C. Alexander & E. Langer (Ed.), Higher Stages of Human Development (pp. 191-207). New York: Oxford University Press.
- Lee, G. & Barnett, B. (1994). Using reflective questioning to promote collaborative dialogue. Journal of Staff Development, 15, (1) p.16-21.
- Levinson, D. (1980). Toward a conception of the adult life course. In N. Smelser & E. Erikson (Ed.), Themes of work and love in adulthood. (pp. 265-290). Cambridge, Mass.: Harvard Press.
- Levinson, D. (1990). A theory of life structure development. In. C. Alexander & E. Langer (Ed.), Higher stages of human development. (pp. 35-53). New York: Oxford University press.
- Lieberman, A. (1992). Teachers - their world and their work: implications for school improvement. New York: Teachers College.
- Maciel, A., Heckhausen, J. & Baltes, P. (1994). A life-span perspective on the interface between personality and intelligence. In Sternberg, R. & Ruzgis, P. (Ed.), Personality and Intelligence (pp. 61-103). New York: Press Syndicate.
- Mails, T. (1991). Fools Crow - wisdom and power. Tulsa, Oklahoma: Council Oak Books.
- Maslow, A. (1954). Motivation and personality. New York: Harper and Row.
- Maslow, A. (1971). The farther reaches of human nature. New York: Penguin Books.
- McDonald, M. (1994, October). Mainstream North America is on a massive search for meaning in life. MacLeans Magazine, pp. 44-48.

- McMillan, J. & Schumacher, S. (1984). Research in education: a conceptual introduction. Boston: Little, Brown & Co.
- McWhinney, W. (1992). Paths of change: strategic choices for organizations and society. London: Sage Publications.
- Merriam, S. (1988). Case study research in education - a qualitative approach. San Francisco: Jossey-Bass Inc.
- Miller, J. (1981). The compassionate teacher. New York: Prentice Hall.
- Miller, J. B. (1986a). Toward a new psychology of women.(3rd ed.) Boston: Beacon.
- Miller, J. B.( 1986b). What do we mean by relationship? Paper presented in the Adult Development Course. University of San Diego.
- Moore, T. (1994). Soul Mates. New York: Harper Collins.
- Morgan, G. (1986). Images of Organization. London: Sage Publications.
- Morgan, G. (1993). Imaginization. London: Sage Publications.
- Naisbitt, J. & Aburdene, P.(1990). Megatrends 2000. New York: Avon.
- Neugarten, B. (1964). Personality in middle and late life. New York: Atherton Press.
- Neugarten, B. (1968). Adult personality : toward a psychology of the life cycle. In Middle age and aging a reader in social psychology. B. L. Neugarten (Ed.), Chicago: University of Chicago Press.
- Nirenberg, J. (1993). The living organization. San Diego: Pfeiffer & Co.
- Noddings, N. (1984). Caring - a feminine approach to ethics and moral education. Berkeley, CA.: University of California Press.
- O'Neil, J. (1993). Turning the system on its head. Educational Leadership (51) 1, pp. 8-13.

- Oja, S. (1991). Adult development: insights on staff development. In A. Lieberman and L. Miller, (Ed.). Staff development for education in the '90s. New York: Teachers College Press.
- Okun, B. (1984). Working with adults: individual, family, and career development. Monterey, CA.: Brooks/Cole Publishing Company.
- Onstein, R. And Ehrlich, P. (1989). New world new mind. New York: Touchstone.
- Osterman, K. and Kottkamp, A. (1993). Reflective Practice: linking professional development and school reform. Planning and Changing. V 22, n 3-4, p. 208-217.
- Pascual-Leone, N. (1990). Reflections on life-span intelligence, Consciousness and Ego Development. In C. Alexander & E. Langer (Ed.), Higher stages of human development. (pp. 258-285). New York: Oxford Press.
- Patton, M. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.
- Piaget (1954). The construction of reality in the child. New York: Basic Books.
- Popcorn, F. (1991). The Popcorn report. New York: Doubleday.
- Powers, W. (1973). Behavior: the control of perception. Chicago: Aldine Publishing.
- Renesch (1994). A commitment to change in context. In John Renesch (Ed.), Leadership in a new era. (pp. 1-6). San Francisco: New Leaders Press.
- Rogers, C. (1980). A way of being. Boston: Houghton Mifflin.
- Rogers, C. (1983). Freedom to learn. Columbus: Charles E. Merrill Publishing.
- Rosenholtz, S. (1990). Education reform strategies: will they increase teacher commitment? In Ann Lieberman (Ed.), Schools as collaborative cultures: creating the future now. New York: Falmer Press.

- Samples, B. (1981). Mind of our mother. New York: Addison Wesley.
- Sarason, S. (1990). The predictable failure of educational reform. San Francisco: Jossey Bass.
- Schon, D. (1983). The reflective practitioner. New York: Basic Books.
- Schon, D. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass Publications.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., & Smith, B. (1994). The fifth discipline fieldbook. New York: Doubleday.
- Senge, P.M. (1990). The fifth discipline. New York: Doubleday and Currency.
- Sergiovanni, T. (1990). Value added leadership. Orlando: Harcourt Brace Jovanovich.
- Sergiovanni, T. (1992). Moral leadership. New York: Jossey-Bass, Inc.
- Sergiovanni, T. (1992). Why we should seek substitutes for leadership. In Educational Leadership, 49 (5) pp. 40-45.
- Shipka, B. (1994). A sacred responsibility. In John Renesch (Ed.), Leadership in a new era. (pp. 125-136). San Francisco: New Leaders Press.
- Sizer, T. (1992). Horace's school. Boston: Houghton Mifflin.
- Skinner, M. (1993). The implementation of reality therapy and control theory into the Quesnel School District. Unpublished Masters thesis Gonzaga University, Spokane, WA.
- Souvaine, E., Lahey, L. & Kegan, R. (1990). Life after formal operations: Implications for a psychology of the self. In C. N. Alexander & E. J. Langer (Ed.), Higher Stages of Human Development. (pp. 229-257). New York: Oxford University Press.
- Spice, M. (1994). For radical change: the buck stops here. In J. Renesch, Leadership in a new era. (pp. 236-250). San Francisco: New Leaders Press.

- Spradley, J. (1979). The ethnographic interview. Holt, Rinehardt & Winston, Inc.
- Stake, R. (1988). Case study methods in educational research. In R. Jaeger (Ed.), Complementary methods for research in education (pp. 251-300). Washington: American Educational Research Assoc.
- Starhawk (1987). Truth or dare. San Francisco: Harper.
- Starrett (1993). The drama of leadership. London: Falmer.
- Suzuki, D. (1970). East and west. In Sohl, R. & Carr, A. (Ed.), The Gospel According to Zen. (pp. 79-86). New York: Mentor.
- Tart, C. (1994). Living the mindful life. Boston: Shambhala Publications.
- Tedlock, D. (1975). Teachings from the American Earth - Indian Religion & Philosophy. New York: Liveright Publishing.
- Toffler, A. (1990). Powershift. New York: Bantam.
- Vaughn, F. (1979). Awakening Intuition. New York: Anchor Books.
- Vaughn, C. & Pfenninger, D. (1994). Kelly and the concept of developmental stages. Journal of Constructivist Psychology. 7 (177-190)
- Vojtek, R. (1994). Twenty-five years in organization development: a conversation with Richard Schmuck and Philip Runkel. Journal of Staff Development, 15 (1) pp. 46-50.
- Wallace, W. (1986). Theories of counseling and psychotherapy. Newton, MA.: Allyn and Bacon.
- Walz, G. & Bleuer, J. (1992). Student Self Esteem. Ann Arbor, Michigan: Counseling and Personnel Services.
- Wheatley, M. (1993). Leadership and the New Science. San Francisco: Berrett-Koehler Publishers.
- Wheatley, M. (1994). Leadership and the new science. In J. Renesch, (Ed.), Leadership in a new era. (pp. 211-222). San Francisco: New Leaders Press.

Wiener N. (1950). The human use of human beings. Boston: Houghton Mifflin.

Wiener, N. (1948). Cybernetics or control and communication in the animal and machine. Cambridge, MA.: M.I.T. Press.

Yin, (1984). Case study research: Design and methods. Beverly Hills, CA: Sage.

1

**CONSENT TO ACT AS A SUBJECT IN A UNIVERSITY OF SAN DIEGO  
STUDENT'S RESEARCH PROJECT**

I have been asked to participate in an interview related to Glasser's control theory and reality therapy as part of a study conducted by Debra Cullinane. I understand I will be participating in a series of two or three interviews over a 2-3 week time frame and these interviews will take approximately one hour each.

The purpose of the interview is to investigate the influence Glasser's control theory and reality therapy has had on my perceptions of change, relationships and self reflection. The information gathered will be used to gain an understanding of the how the program may have impacted on my personal and professional life.

I understand that these interviews will be audio taped with permission and I will have an opportunity to edit my comments after each interview is transcribed. Audio cassette tapes will be kept by the researcher and numbered for confidentiality. Transcription, if done by other than the researcher will be referred to by said number. The audio tapes will be erased after the dissertation is granted final approval. My interview will be transcribed verbatim.

I understand my participation is entirely voluntary and may be withdrawn at any time. There is no agreement, written or verbal, beyond that which is expressed in this consent form.

I, the undersigned, understand the above explanation and consent to voluntarily participated in this research.

\_\_\_\_\_  
(participant's signature) (date)

\_\_\_\_\_  
(researcher's signature) (date)

**Interview Questions**  
**University of San Diego**  
**Influence of Control Theory on Educators**  
**Dissertation Interview Guide**

This guide is presented as a framework for the interviews. It is not intended to be an exhaustive list of questions.

Thank you so much for giving me some of your valuable time, especially at the beginning of the school year when I know you are so busy. This interview is going to touch on three themes: change, self-reflection and relationships. I mentioned these in my first letter to you. I'd like to start our conversation with the topic of change.

**Change**

We all experience times of change in our lives that makes an impact in such a way that we may remark, "I'll never be the same."

1. Can you describe a time of change in your life where you might have thought this?.
2. Do you feel there would be a difference in how you dealt with the change before and after control theory/reality therapy training? Why?
3. Has control theory/reality therapy influenced the way you presently perceive change? How? To what degree?
4. Has control theory/reality therapy influenced the way you behave with regard to change? How? To what extent?
5. How has control theory/reality therapy influenced your sense of responsibility for yourself? How is this different than before the training?

**Self-Reflection**

1. How would you describe yourself to yourself before and after the control theory/reality therapy training?
2. To what do you most attribute the change?
3. Some of the time when we are faced with a problem we may talk to ourselves inside our head as we work through a solution. Do you engage in self talk? Describe a time you have used it and what did it say to yourself?
4. Tell me about self evaluation. How and when do you do it?
5. Glasser says we are unique perceptual systems. Do you believe we each perceive reality differently because of our perceptual systems? If so what does this mean to your behavior?
6. How you would like to be described in your 'old age'?
7. What did you go through in your mind to answer that question?
8. How is reflecting on a question such as the one about your old age different after taking the training?



**Relationships**

1. **Looking back over your life, what has made your relationships with people at home and work meaningful?**
2. **Have any of your relationships at home or work been influenced by you taking the control theory/reality therapy training? How have they been influenced?**
3. **How has control theory and reality therapy influenced your perception of relationships?**
4. **Have you recently had a relationship with someone who helped you shape the person you are? Describe that relationship. What made it meaningful?**
5. **Describe how you deal with conflict. Has control theory and reality therapy training changed the way you think about conflict?**
6. **What difference has control theory/reality therapy made in your life?**

**Debra Cullinane**  
**6596 Friars Road, #103**  
**San Diego, California**  
**92108**

John Uzelac, Superintendent  
401 North Star Road  
Quesnel, B.C.  
V2J 5K2  
April 20, 1994

Dear John,

I have finally identified the topic and methodology for my dissertation. I am sure it will come as not surprise to you that I want to look at the impact of Glasser's control theory and reality therapy on the development of educators in Quesnel. In order to carry out this investigation I need to interview 10 people who have taken advanced or certification training and I need to send out questionnaires to all educators who have taken basic week. This process should take me approximately 2-3 weeks and I would like to gather this data in late August and early September of 1994.

I have yet to complete my proposal, but part of it contains the location of the study so I need your permission to complete my proposal. My research thus far, John, indicates that little or no doctoral level research has been done on the impact CT/RT has on adults so I see this as an opportunity to evaluate the six year program in Quesnel and at the same time fill a gap in the research on Glasser's ideas.

I look forward to hearing from you and trust your response will be as favourable as I anticipated. Thank you for giving this some of you valuable time. (From what I hear B.C. is not the best place to be right now, but it could be worse, we could be Alberta educators. )

Sincerely,

Debra Cullinane  
cc Ed Napier

## Influence of Control Theory

Debra Cullinane  
6596 Friars Road, #103  
San Diego, CA  
92108  
phone: 691- 299-4964

191

JUN 16 1994

June, 1994-

**To All Quasnel Teachers, Support Service Workers, and Principals who have completed Reality Therapy Basic, Advanced or Certification Weeks,**

Congratulations on completing another year. I hope it was a good one for you. I can't say that I missed the snow, but I did miss the relatively clean air. (Yes, I have been gone in case you had not noticed.)

Enough idle chatter. (I know you have a million things to do. ITS YEAR END!! I have not forgotten what it is like, I promise.) I need your help. Surprise. Surprise. I need you to complete a 20 item survey in August. Not now! I will also be asking a few of you for interviews so I know you will be excited to participate in those too, in August. Ha!

For my dissertation I am looking at how control theory and reality therapy training may have influenced your perceptions of change, yourself, and your relationships. Light topic, hey. I thought the information would help us better understand the impact of the program, and also help me graduate. I am not giving you the survey yet because (1) you do not have time and (2) I have not had it passed by my committee. I just wanted to let you know I will be putting it in the mail in late August; I ask that you complete the survey and return it by the beginning of September. I will enclose a stamped envelope so you can return the results directly to me. (I'm being awfully presumptuous aren't I.)

I hope you have a **GREAT, NEED SATISFYING** summer. I know it is well deserved (again).

Thanks in advance for the help. Give me a call if you have any questions, or answers!

Sincerely,

Debra Cullinane

Debra Cullinane  
297 Harper  
Quesnel, B.C. V2J 1R8

August, 1994

Dear

*I apologize for this letter not being more personal after not seeing you for eight months but... I've been occupied elsewhere as you may or may not be aware. I am asking for your voluntary participation in a survey I am doing through the University of San Diego.*

*According to the records in the District office, you have taken at least Basic Week in Reality Therapy, so I have enclosed a survey instrument, concerned with Glasser's control theory and reality therapy. Individuals in Quesnel, who have participated in basic week training or beyond, are asked to volunteer.*

*The purpose of this study is to look at how control theory and reality therapy training may have influenced your perceptions of three things: change, self-reflection and relationships. The enclosed instrument has been pretested by reality therapy instructors and certified individuals to make it possible to acquire information in a minimum amount of time. Your participation is voluntary and you may withdraw at any time. All information obtained is strictly confidential. A code number, available only to the researcher, appears on the survey for purposes of follow-up letters and record keeping. The results of the completed study will be shared with you, the board, and of course, the university.*

*I am greatly appreciative of your participation in this study. Please complete the attached survey and return it, along with the consent form, in the enclosed stamped, addressed envelope by September 9th, 1994. I would welcome any additional comments you may wish to include about the survey or the subject of control theory and reality therapy training. If you have any questions or need clarification, I can be reached at 992-7133, or you can leave a message with Olive at the D.A.O. to have me call you.*

*If you have had advanced or certification weeks and are willing to participate in an interview to further describe your experience with Control Theory and Reality Therapy, please call me as soon as possible. I need to do two one-hour interviews with eight participants before September 9th, so I need to know if you are interested by August 30th at the latest. If more than eight of you volunteer, I will do a random selection.*

*Thanks tons,*

*Debra Cullinane*

*Encl.*

*P.S. Please return the survey in the addressed envelope by September 9th, 1994.*

Debra Cullinane  
297 Harper Ave.  
Quesnel, B.C.  
V2J 1R8

September 16, 1994

Dear Bert,

Hope your year is beginning to take on a shape resembling normal. I'm sure you are up to your eyeballs in work so I have enclosed something to give you an excuse for a little break. While you have your feet up with your tea I would really appreciate you taking 10 minutes to complete my control theory/reality therapy survey. The purpose of the study is to look at how control theory/reality therapy training may have influenced your perceptions of : change, self-reflection and relationships.

I have received approximately half of the 100 I sent out, and according to University of San Diego regulations I have to persist in sending reminders until I have a much higher return rate. I do apologize for the timing. I know you have a billion other more important tasks.

I trust after all this you received my original survey form on Control Theory and Reality Therapy. If you did not receive a form I am enclosing another copy. Your participation is of course voluntary and you may withdraw at any time. All information obtained is strictly confidential. A code number, available only to the researcher, appears on the survey for purposes of follow-up letters and record keeping. The final results will be shared with you , the board and the university

Please return your completed form to Olive at the DAO or to the address on your original letter by September 27th. :ct }

**THANK YOU SO MUCH FOR YOUR HELP!!**

Deb

Debra Cullinane  
(Address until December 15, 1994)  
6596 Friars Road, #103  
SAN DIEGO, CA 92108  
Phone: 619-299-4964

September 30, 1994

Dear

Thank you so much for participating in my research on Control Theory and Reality Therapy. Your contribution makes a difference for me immediately, and hopefully for the District, long term.

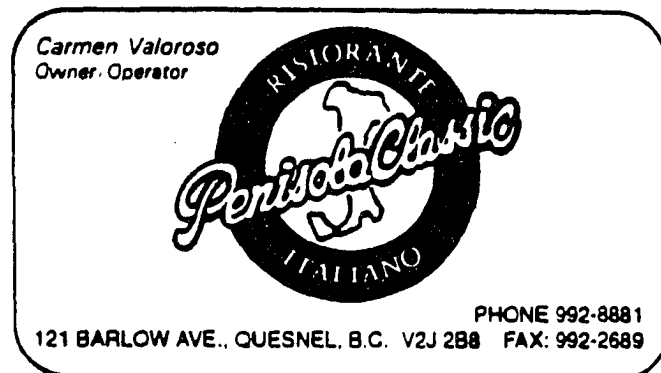
In appreciation of your help, you are entitled to a 10% discount at the *Penisola Classic Ristorante Italiano*. This offer does not apply to their weekly specials or alcohol. It can only be used between now and December 18, 1994.

Please take this letter with you to the restaurant to receive your discount.

Again, thanks for your support. I will see you in January and, with any luck, I will by then have a document of research results worth sharing with you.

May your needs always be met!

Love,



**DEMOGRAPHIC SURVEY FOR THE CONTROL THEORY/REALITY THERAPY RESEARCH PROJECT BY DEBRA CULLINANE - AUGUST 1994 - Survey # \_\_\_\_\_**

Please check the answer which describes you.

1. Your age:

24-28	<input type="checkbox"/>	45-49	<input type="checkbox"/>
29-33	<input type="checkbox"/>	50-54	<input type="checkbox"/>
34-38	<input type="checkbox"/>	55-59	<input type="checkbox"/>
39-44	<input type="checkbox"/>	60-64	<input type="checkbox"/>

2. Gender

male	<input type="checkbox"/>
female	<input type="checkbox"/>

3. How long have you been working in the education system?

0-6 yrs.	<input type="checkbox"/>	21-27 yrs.	<input type="checkbox"/>
7-13 yrs.	<input type="checkbox"/>	28-34 yrs.	<input type="checkbox"/>
14-20 yrs	<input type="checkbox"/>	35-41 yrs.	<input type="checkbox"/>

4. What is your current position?

teacher	<input type="checkbox"/>
principal	<input type="checkbox"/>
support worker	<input type="checkbox"/>

5. What is your level of control theory/reality therapy training?

basic week	<input type="checkbox"/>
advanced week	<input type="checkbox"/>
certified	<input type="checkbox"/>
2-day session with Diane Gossen	<input type="checkbox"/>

**SURVEY FOR THE CONTROL THEORY/REALITY THERAPY RESEARCH PROJECT CONDUCTED BY DEBRA CULLINANE** - Survey # \_\_\_\_\_

The purpose of this questionnaire is to gain some understanding of how you perceive control theory and reality therapy training. Please check the answer which most closely represents your perceptions.

*In retrospect, rate the value of this training to your personal and professional development:*

0   1   2   3   4   5   6   7   8   9   10

Poor Excellent

Change

1. I have changed considerably in the past few years.

<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Control theory/reality therapy training has influenced how I have changed.

<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Control theory/reality therapy training has influenced how I perceive change.

<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Control theory/reality therapy training has influenced how I behave.

<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. What are the most significant changes you have made in your life since taking the control theory/reality therapy training?

---

---

---

---

---

---

---

---

---

---







Date: 11-09-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

*ALL SUBGROUPS*

Total Respondents: 69      rt research project      Subgroup Respondents: 69

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*

A: 18.8%    B: 69.6%    C: 2.9%    D: 7.2%    E: 1.4%  
 f = 13      f = 48      f = 2      f = 5      f = 1      Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*\*

A: 20.3%    B: 53.6%    C: 14.5%    D: 7.2%    E: 4.3%  
 f = 14      f = 37      f = 10      f = 5      f = 3      Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*

A: 18.8%    B: 52.2%    C: 15.9%    D: 10.1%    E: 2.9%  
 f = 13      f = 36      f = 11      f = 7      f = 2      Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree... \*

A: 18.8%    B: 62.3%    C: 10.1%    D: 5.8%    E: 2.9%  
 f = 13      f = 43      f = 7      f = 4      f = 2      Missing = 0

Date: 11-09-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 50.7%    B: 46.4%    C: 2.9%    D:    E:  
 f = 35    f = 32    f = 2    f = 0    f = 0    Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*

A: 20.3%    B: 58.0%    C: 13.0%    D: 7.2%    E: 1.4%  
 f = 14    f = 40    f = 9    f = 5    f = 1    Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

  = Strongly Agree..... \*\*\*\*\*  
 E = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 28.8%    B: 43.9%    C: 10.6%    D: 13.6%    E: 3.0%  
 f = 19    f = 29    f = 7    f = 9    f = 2    Missing = 3

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree... \*

A: 27.5%    B: 58.0%    C: 7.2%    D: 5.8%    E: 1.4%  
 f = 19    f = 40    f = 5    f = 4    f = 1    Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 14.5%    B: 42.0%    C: 27.5%    D: 13.0%    E: 2.9%  
 f = 10    f = 29    f = 19    f = 9    f = 2    Missing = 0

Date: 11-09-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 10.1%    B: 52.2%    C: 21.7%    D: 14.5%    E: 1.4%  
 f = 7        f = 36        f = 15        f = 10        f = 1        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 27.5%    B: 49.3%    C: 10.1%    D: 11.6%    E: 1.4%  
 f = 19        f = 34        f = 7        f = 8        f = 1        Missing = 0

Item 12 = I am better at being in relationship with others since...

= Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 15.9%    B: 42.0%    C: 26.1%    D: 14.5%    E: 1.4%  
 f = 11        f = 29        f = 18        f = 10        f = 1        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69      rt research project      Subgroup Respondents: 31

Subgroup Selection:  
Inc. Gender      = 1 = MALE

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*

A: 9.7%      B: 77.4%      C:      D: 9.7%      E: 3.2%  
f = 3      f = 24      f = 0      f = 3      f = 1      Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*\*\*

A: 6.5%      B: 61.3%      C: 12.9%      D: 9.7%      E: 9.7%  
f = 2      f = 19      f = 4      f = 3      f = 3      Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*

A: 16.1%      B: 48.4%      C: 16.1%      D: 12.9%      E: 6.5%  
f = 5      f = 15      f = 5      f = 4      f = 2      Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*

A: 19.4%      B: 51.6%      C: 12.9%      D: 9.7%      E: 6.5%  
f = 6      f = 16      f = 4      f = 3      f = 2      Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 41.9%    B: 51.6%    C: 6.5%    D:    E:  
 f = 13    f = 16    f = 2    f = 0    f = 0    Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 12.9%    B: 54.8%    C: 19.4%    D: 9.7%    E: 3.2%  
 f = 4    f = 17    f = 6    f = 3    f = 1    Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

  = Strongly Agree..... \*\*\*\*\*  
 b = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 19.4%    B: 38.7%    C: 9.7%    D: 25.8%    E: 6.5%  
 f = 6    f = 12    f = 3    f = 8    f = 2    Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 19.4%    B: 58.1%    C: 9.7%    D: 9.7%    E: 3.2%  
 f = 6    f = 18    f = 3    f = 3    f = 1    Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*  
 = Agree..... \*\*\*\*\*  
 \ = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 6.5%    B: 38.7%    C: 29.0%    D: 19.4%    E: 6.5%  
 f = 2    f = 12    f = 9    f = 6    f = 2    Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 6.5%      B: 48.4%      C: 19.4%      D: 22.6%      E: 3.2%  
 f = 2      f = 15      f = 6      f = 7      f = 1      Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 16.1%      B: 54.8%      C: 3.2%      D: 22.6%      E: 3.2%  
 f = 5      f = 17      f = 1      f = 7      f = 1      Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 3.2%      B: 45.2%      C: 25.8%      D: 22.6%      E: 3.2%  
 f = 1      f = 14      f = 8      f = 7      f = 1      Missing = 0



Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69                      rt research project                      Subgroup Respondents: 38

Subgroup Selection:  
Inc. Gender                                      = 2 = FEMALE

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*  
D = Disagree..... \*\*\*  
E = Strongly Disagree...

A: 26.3%	B: 63.2%	C: 5.3%	D: 5.3%	E:	
f = 10	f = 24	f = 2	f = 2	f = 0	Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*  
E = Strongly Disagree...

A: 31.6%	B: 47.4%	C: 15.8%	D: 5.3%	E:	
f = 12	f = 18	f = 6	f = 2	f = 0	Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*  
E = Strongly Disagree...

A: 21.1%	B: 55.3%	C: 15.8%	D: 7.9%	E:	
f = 8	f = 21	f = 6	f = 3	f = 0	Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*  
D = Disagree..... \*  
E = Strongly Disagree...

A: 18.4%	B: 71.1%	C: 7.9%	D: 2.6%	E:	
f = 7	f = 27	f = 3	f = 1	f = 0	Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 57.9%    B: 42.1%    C:            D:            E:  
 f = 22      f = 16      f = 0          f = 0          f = 0          Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree...

A: 26.3%    B: 60.5%    C: 7.9%      D: 5.3%      E:  
 f = 10      f = 23      f = 3          f = 2          f = 0          Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*  
 E = Strongly Disagree...

A: 37.1%    B: 48.6%    C: 11.4%    D: 2.9%      E:  
 f = 13      f = 17      f = 4          f = 1          f = 0          Missing = 3

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*  
 D = Disagree..... \*  
 E = Strongly Disagree...

A: 34.2%    B: 57.9%    C: 5.3%      D: 2.6%      E:  
 f = 13      f = 22      f = 2          f = 1          f = 0          Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 21.1%    B: 44.7%    C: 26.3%    D: 7.9%      E:  
 f = 8          f = 17      f = 10      f = 3          f = 0          Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 13.2%    B: 55.3%    C: 23.7%    D: 7.9%    E:  
 f = 5        f = 21        f = 9        f = 3        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*  
 E = Strongly Disagree...

A: 36.8%    B: 44.7%    C: 15.8%    D: 2.6%    E:  
 f = 14        f = 17        f = 6        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 26.3%    B: 39.5%    C: 26.3%    D: 7.9%    E:  
 f = 10        f = 15        f = 10        f = 3        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.  
Page: 1

Histogram

Total Respondents: 69                      rt research project                      Subgroup Respondents: 9

Subgroup Selection:

Inc. Years in Educ.System = 1    0-6 YRS

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 22.2%    B: 66.7%    C:                      D: 11.1%    E:  
f = 2            f = 6            f = 0            f = 1            f = 0            Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 11.1%    B: 66.7%    C:                      D: 22.2%    E:  
f = 1            f = 6            f = 0            f = 2            f = 0            Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 22.2%    B: 44.4%    C: 22.2%    D: 11.1%    E:  
f = 2            f = 4            f = 2            f = 1            f = 0            Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 22.2%    B: 66.7%    C:                      D: 11.1%    E:  
f = 2            f = 6            f = 0            f = 1            f = 0            Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 55.6%    B: 44.4%    C:            D:            E:  
 f = 5        f = 4        f = 0        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 22.2%    B: 55.6%    C: 11.1%    D: 11.1%    E:  
 f = 2        f = 5        f = 1        f = 1        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 11.1%    B: 55.6%    C: 11.1%    D: 22.2%    E:  
 f = 1        f = 5        f = 1        f = 2        f = 0        Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 33.3%    B: 55.6%    C: 11.1%    D:            E:  
 f = 3        f = 5        f = 1        f = 0        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 22.2%    B: 33.3%    C: 11.1%    D: 33.3%    E:  
 f = 2        f = 3        f = 1        f = 3        f = 0        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 10 = Relationships at work have improved since I have taken CT/RT

- A = Strongly Agree..... \*\*\*\*\*
- B = Agree..... \*\*\*\*\*
- C = Undecided..... \*\*\*\*\*
- D = Disagree..... \*\*\*\*\*
- E = Strongly Disagree...

A: 22.2%	B: 22.2%	C: 33.3%	D: 22.2%	E:	
f = 2	f = 2	f = 3	f = 2	f = 0	Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

- A = Strongly Agree..... \*\*\*\*\*
- B = Agree..... \*\*\*\*\*
- C = Undecided..... \*\*\*\*\*
- D = Disagree..... \*\*\*\*\*
- E = Strongly Disagree...

A: 44.4%	B: 22.2%	C: 22.2%	D: 11.1%	E:	
f = 4	f = 2	f = 2	f = 1	f = 0	Missing = 0

Item 12 = I am better at being in relationship with others since...

- A = Strongly Agree..... \*\*\*\*\*
- B = Agree..... \*\*\*\*\*
- C = Undecided..... \*\*\*\*\*
- D = Disagree..... \*\*\*\*\*
- E = Strongly Disagree...

A: 22.2%	B: 22.2%	C: 33.3%	D: 22.2%	E:	
f = 2	f = 2	f = 3	f = 2	f = 0	Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69

rt research project

Subgroup Respondents: 16

Subgroup Selection:

Inc. Years in Educ.System = 2 7-10 YRS

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 12.5%    B: 50.0%    C: 12.5%    D: 18.8%    E: 6.3%  
 f = 2        f = 8        f = 2        f = 3        f = 1        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 18.8%    B: 37.5%    C: 18.8%    D: 12.5%    E: 12.5%  
 f = 3        f = 6        f = 3        f = 2        f = 2        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A:            B: 56.3%    C: 18.8%    D: 12.5%    E: 12.5%  
 f = 0        f = 9        f = 3        f = 2        f = 2        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 6.3%        B: 62.5%    C: 12.5%    D: 6.3%     E: 12.5%  
 f = 1        f = 10       f = 2        f = 1        f = 2        Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 43.8%    B: 56.3%    C:            D:            E:            Missing = 0  
 f = 7        f = 9        f = 0        f = 0        f = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 18.8%    B: 43.8%    C: 18.8%    D: 12.5%    E: 6.3%    Missing = 0  
 f = 3        f = 7        f = 3        f = 2        f = 1

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 20.0%    B: 40.0%    C: 20.0%    D: 13.3%    E: 6.7%    Missing = 1  
 f = 3        f = 6        f = 3        f = 2        f = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 12.5%    B: 56.3%    C: 18.8%    D: 6.3%    E: 6.3%    Missing = 0  
 f = 2        f = 9        f = 3        f = 1        f = 1

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 12.5%    B: 37.5%    C: 25.0%    D: 18.8%    E: 6.3%    Missing = 0  
 f = 2        f = 6        f = 4        f = 3        f = 1



Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 6.3%	B: 50.0%	C: 18.8%	D: 18.8%	E: 6.3%	
f = 1	f = 8	f = 3	f = 3	f = 1	Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 18.8%	B: 56.3%	C: 6.3%	D: 12.5%	E: 6.3%	
f = 3	f = 9	f = 1	f = 2	f = 1	Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 18.8%	B: 37.5%	C: 12.5%	D: 25.0%	E: 6.3%	
f = 3	f = 6	f = 2	f = 4	f = 1	Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69                      rt research project                      Subgroup Respondents: 25

Subgroup Selection:

Inc. Years in Educ.System = 3    14-20 YRS

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree..... \*\*  
E = Strongly Disagree...

A: 28.0%    B: 68.0%    C:            D: 4.0%    E:  
f = 7        f = 17       f = 0        f = 1       f = 0        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*  
E = Strongly Disagree... \*\*

A: 28.0%    B: 44.0%    C: 20.0%    D: 4.0%    E: 4.0%  
f = 7        f = 11       f = 5        f = 1       f = 1        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 24.0%    B: 48.0%    C: 16.0%    D: 12.0%    E:  
f = 6        f = 12       f = 4        f = 3       f = 0        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*  
E = Strongly Disagree...

A: 24.0%    B: 60.0%    C: 12.0%    D: 4.0%    E:  
f = 6        f = 15       f = 3        f = 1       f = 0        Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 60.0%    B: 36.0%    C: 4.0%    D:            E:  
 f = 15      f = 9          f = 1      f = 0          f = 0          Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 28.0%    B: 56.0%    C: 8.0%    D: 8.0%    E:  
 f = 7      f = 14      f = 2      f = 2      f = 0          Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 44.0%    B: 40.0%    C: 8.0%    D: 8.0%    E:  
 f = 11      f = 10      f = 2      f = 2      f = 0          Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 32.0%    B: 60.0%    C:            D: 8.0%    E:  
 f = 8      f = 15      f = 0      f = 2      f = 0          Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 20.0%    B: 36.0%    C: 32.0%    D: 12.0%    E:  
 f = 5      f = 9          f = 8      f = 3      f = 0          Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 8.0%      B: 56.0%      C: 20.0%      D: 16.0%      E:  
 f = 2      f = 14      f = 5      f = 4      f = 0      Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 32.0%      B: 44.0%      C: 12.0%      D: 12.0%      E:  
 f = 8      f = 11      f = 3      f = 3      f = 0      Missing = 0

Item 12 = I am better at being in relationship with others since...

: Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 20.0%      B: 36.0%      C: 32.0%      D: 12.0%      E:  
 f = 5      f = 9      f = 8      f = 3      f = 0      Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69                      rt research project                      Subgroup Respondents: 12

Subgroup Selection:

Inc. Years in Educ.System = 4      21-27 YRS

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*  
B = Agree..... \*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 8.3%      B: 91.7%      C:              D:              E:              Missing = 0  
f = 1      f = 11      f = 0              f = 0              f = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*  
B = Agree..... \*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 8.3%      B: 91.7%      C:              D:              E:              Missing = 0  
f = 1      f = 11      f = 0              f = 0              f = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*  
B = Agree..... \*\*\*\*  
C = Undecided.....  
D = Disagree..... \*\*\*\*  
E = Strongly Disagree...

A: 25.0%      B: 66.7%      C:              D: 8.3%      E:              Missing = 0  
f = 3      f = 8      f = 0              f = 1              f = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*  
B = Agree..... \*\*\*\*  
C = Undecided.....  
D = Disagree..... \*\*\*\*  
E = Strongly Disagree...

A: 25.0%      B: 66.7%      C:              D: 8.3%      E:              Missing = 0  
f = 3      f = 8      f = 0              f = 1              f = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 41.7%    B: 58.3%    C:            D:            E:  
 f = 5        f = 7        f = 0        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 16.7%    B: 75.0%    C: 8.3%        D:            E:  
 f = 2        f = 9        f = 1        f = 0        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

  = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 20.0%    B: 50.0%    C:            D: 20.0%    E: 10.0%  
 f = 2        f = 5        f = 0        f = 2        f = 1        Missing = 2

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 41.7%    B: 50.0%    C:            D: 8.3%        E:  
 f = 5        f = 6        f = 0        f = 1        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree... \*\*\*\*

A: 8.3%        B: 66.7%    C: 16.7%    D:            E: 8.3%  
 f = 1        f = 8        f = 2        f = 0        f = 1        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 16.7%    B: 66.7%    C: 8.3%    D: 8.3%    E:  
 f = 2        f = 8        f = 1        f = 1        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 33.3%    B: 58.3%    C:            D: 8.3%    E:  
 f = 4        f = 7        f = 0        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

a = Strongly Agree..... \*\*\*\*  
 b = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 8.3%    B: 66.7%    C: 16.7%    D: 8.3%    E:  
 f = 1        f = 8        f = 2        f = 1        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

total Respondents: 69      rt research project      Subgroup Respondents: 7

Subgroup Selection:  
Inc. Years in Educ.System = 5      28-34 Yrs

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 14.3%      B: 85.7%      C:      D:      E:  
f = 1      f = 6      f = 0      f = 0      f = 0      Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 28.6%      B: 42.9%      C: 28.6%      D:      E:  
f = 2      f = 3      f = 2      f = 0      f = 0      Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 28.6%      B: 42.9%      C: 28.6%      D:      E:  
f = 2      f = 3      f = 2      f = 0      f = 0      Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 14.3%      B: 57.1%      C: 28.6%      D:      E:  
f = 1      f = 4      f = 2      f = 0      f = 0      Missing = 0



Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 42.9%    B: 42.9%    C: 14.3%    D:            E:  
 f = 3        f = 3        f = 1        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... )  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 71.4%    C: 28.6%    D:            E:  
 f = 0        f = 5        f = 2        f = 0        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 28.6%    B: 42.9%    C: 14.3%    D: 14.3%    E:  
 f = 2        f = 3        f = 1        f = 1        f = 0        Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 14.3%    B: 71.4%    C: 14.3%    D:            E:  
 f = 1        f = 5        f = 1        f = 0        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
   Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 42.9%    C: 57.1%    D:            E:  
 f = 0        f = 3        f = 4        f = 0        f = 0        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: B: 57.1% C: 42.9% D: E:  
 f = 0 f = 4 f = 3 f = 0 f = 0 Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: B: 71.4% C: 14.3% D: 14.3% E:  
 f = 0 f = 5 f = 1 f = 1 f = 0 Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: B: 57.1% C: 42.9% D: E:  
 f = 0 f = 4 f = 3 f = 0 f = 0 Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69

rt research project

Subgroup Respondents: 0

Subgroup Selection:

Inc. Years in Educ.System = 6 35-41 YRS

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

There are no valid responses in the data file for this question.

Item 2 = CT/RT training has influenced how I have changed.

There are no valid responses in the data file for this question.

Item 3 = CT/RT training has influenced how I perceive change.

There are no valid responses in the data file for this question.

Item 4 = CT/RT training has influenced how I behave.

There are no valid responses in the data file for this question.

Item 5 = I believe self-evaluation is key to personal & prof. growth.

There are no valid responses in the data file for this question.

Item 6 = I use CT and RT techniques with myself to help me work thru

There are no valid responses in the data file for this question.

Item 7 = Since I have taken CT/RT training, I understand that my

There are no valid responses in the data file for this question.

Item 8 = I am more skilled at thinking about my behaviours than I was

There are no valid responses in the data file for this question.

Item 9 = I perceive relationships in my personal life have improved

There are no valid responses in the data file for this question.

Item 10 = Relationships at work have improved since I have taken CT/RT

There are no valid responses in the data file for this question.

Item 11 = How I deal with conflict has changed for the better since...

There are no valid responses in the data file for this question.

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 12 = I am better at being in relationship with others since...

There are no valid responses in the data file for this question.

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

total Respondents: 69

rt research project

Subgroup Respondents: 6

Subgroup Selection:

Inc. Age

= 2 29-33

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 33.3%    B: 50.0%    C:            D: 16.7%    E:  
f = 2        f = 3        f = 0        f = 1        f = 0        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree.....  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A:            B: 33.3%    C: 50.0%    D: 16.7%    E:  
f = 0        f = 2        f = 3        f = 1        f = 0        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 16.7%    B: 16.7%    C: 16.7%    D: 50.0%    E:  
f = 1        f = 1        f = 1        f = 3        f = 0        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 16.7%    B: 50.0%    C: 16.7%    D: 16.7%    E:  
f = 1        f = 3        f = 1        f = 1        f = 0        Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 66.7%    B: 33.3%    C:            D:            E:  
 f = 4       f = 2       f = 0       f = 0       f = 0       Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 50.0%    C: 16.7%    D: 33.3%    E:  
 f = 0       f = 3       f = 1       f = 2       f = 0       Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

  = Strongly Agree.....  
 L = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 40.0%    C: 40.0%    D: 20.0%    E:  
 f = 0       f = 2       f = 2       f = 1       f = 0       Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 16.7%    B: 33.3%    C: 33.3%    D: 16.7%    E:  
 f = 1       f = 2       f = 2       f = 1       f = 0       Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree.....  
 P = Agree..... \*\*\*\*\*  
   : Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 33.3%    C: 16.7%    D: 50.0%    E:  
 f = 0       f = 2       f = 1       f = 3       f = 0       Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 50.0%    C:            D: 50.0%    E:  
 f = 0        f = 3        f = 0        f = 3        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 16.7%    B: 50.0%    C: 16.7%    D: 16.7%    E:  
 f = 1        f = 3        f = 1        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A:            B: 33.3%    C: 16.7%    D: 50.0%    E:  
 f = 0        f = 2        f = 1        f = 3        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69      rt research project      Subgroup Respondents: 11

Subgroup Selection:  
Inc. Age                      = 3 34-38

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*\*\*

A: 18.2%    B: 63.6%    C:            D: 9.1%    E: 9.1%  
f = 2        f = 7        f = 0        f = 1        f = 1        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*\*\*

A: 27.3%    B: 45.5%    C: 9.1%      D: 9.1%      E: 9.1%  
f = 3        f = 5        f = 1        f = 1        f = 1        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*\*\*

A: 18.2%    B: 54.5%    C: 18.2%     D:            E: 9.1%  
f = 2        f = 6        f = 2        f = 0        f = 1        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*\*\*

A: 18.2%    B: 63.6%    C: 9.1%      D:            E: 9.1%  
f = 2        f = 7        f = 1        f = 0        f = 1        Missing = 0



Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 45.5%    B: 54.5%    C:            D:            E:  
 f = 5        f = 6        f = 0        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 27.3%    B: 54.5%    C: 9.1%        D: 9.1%        E:  
 f = 3        f = 6        f = 1        f = 1        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 45.5%    B: 45.5%    C:            D: 9.1%        E:  
 f = 5        f = 5        f = 0        f = 1        f = 0        Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 36.4%    B: 54.5%    C: 9.1%        D:            E:  
 f = 4        f = 6        f = 1        f = 0        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 27.3%    B: 36.4%    C: 36.4%        D:            E:  
 f = 3        f = 4        f = 4        f = 0        f = 0        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 27.3%    B: 45.5%    C: 18.2%    D: 9.1%    E:  
 f = 3        f = 5        f = 2        f = 1        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 45.5%    B: 45.5%    C:            D: 9.1%    E:  
 f = 5        f = 5        f = 0        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 36.4%    B: 36.4%    C: 18.2%    D: 9.1%    E:  
 f = 4        f = 4        f = 2        f = 1        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69                      rt research project                      Subgroup Respondents: 17

Subgroup Selection:  
Inc. Age    = 4    39-44

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 17.6%      B: 58.8%      C: 5.9%      D: 17.6%      E:  
f = 3          f = 10          f = 1          f = 3          f = 0          Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*\*\*

A: 17.6%      B: 47.1%      C: 5.9%      D: 17.6%      E: 11.8%  
f = 3          f = 8          f = 1          f = 3          f = 2          Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*

A: 17.6%      B: 47.1%      C: 11.8%      D: 17.6%      E: 5.9%  
f = 3          f = 8          f = 2          f = 3          f = 1          Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*\*

A: 23.5%      B: 58.8%      C:              D: 11.8%      E: 5.9%  
f = 4          f = 10          f = 0          f = 2          f = 1          Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 58.8%    B: 41.2%    C:            D:            E:  
 f = 10      f = 7            f = 0            f = 0            f = 0            Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 29.4%    B: 47.1%    C: 5.9%        D: 11.8%      E: 5.9%  
 f = 5            f = 8            f = 1            f = 2            f = 1            Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 23.5%    B: 35.3%    C: 17.6%      D: 17.6%      E: 5.9%  
 f = 4            f = 6            f = 3            f = 3            f = 1            Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 17.6%    B: 64.7%    C:            D: 11.8%      E: 5.9%  
 f = 3            f = 11            f = 0            f = 2            f = 1            Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 11.8%    B: 41.2%    C: 23.5%      D: 17.6%      E: 5.9%  
 f = 2            f = 7            f = 4            f = 3            f = 1            Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree.....  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 58.8%	B: 58.8%	C: 11.8%	D: 23.5%	E: 5.9%	Missing = 0
f = 10	f = 10	f = 2	f = 4	f = 1	

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 29.4%	B: 29.4%	C: 11.8%	D: 23.5%	E: 5.9%	Missing = 0
f = 5	f = 5	f = 2	f = 4	f = 1	

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 11.8%	B: 41.2%	C: 17.6%	D: 23.5%	E: 5.9%	Missing = 0
f = 2	f = 7	f = 3	f = 4	f = 1	

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69                      rt research project                      Subgroup Respondents: 16

Subgroup Selection:  
Inc. Age    = 5    45-49

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 18.8%      B: 81.3%      C:              D:              E:  
f = 3              f = 13              f = 0              f = 0              f = 0              Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 18.8%      B: 68.8%      C: 12.5%      D:              E:  
f = 3              f = 11              f = 2              f = 0              f = 0              Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 12.5%      B: 68.8%      C: 18.8%      D:              E:  
f = 2              f = 11              f = 3              f = 0              f = 0              Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*  
E = Strongly Disagree...

A: 12.5%      B: 68.8%      C: 12.5%      D: 6.3%      E:  
f = 2              f = 11              f = 2              f = 1              f = 0              Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 37.5%    B: 56.3%    C: 6.3%    D:    E:  
 f = 6        f = 9        f = 1        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 25.0%    B: 62.5%    C: 12.5%    D:    E:  
 f = 4        f = 10        f = 2        f = 0        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 20.0%    B: 60.0%    C:    D: 20.0%    E:  
 f = 3        f = 9        f = 0        f = 3        f = 0        Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree...

A: 25.0%    B: 68.8%    C:    D: 6.3%    E:  
 f = 4        f = 11        f = 0        f = 1        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree... \*\*\*

A: 12.5%    B: 43.8%    C: 31.3%    D: 6.3%    E: 6.3%  
 f = 2        f = 7        f = 5        f = 1        f = 1        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 12.5%    B: 50.0%    C: 25.0%    D: 12.5%    E:  
 f = 2        f = 8        f = 4        f = 2        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree...

A: 18.8%    B: 62.5%    C: 12.5%    D: 6.3%    E:  
 f = 3        f = 10        f = 2        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

  : Strongly Agree..... \*\*\*\*\*  
 b = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree...

A: 12.5%    B: 37.5%    C: 43.8%    D: 6.3%    E:  
 f = 2        f = 6        f = 7        f = 1        f = 0        Missing = 0



Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69      rt research project      Subgroup Respondents: 19

Subgroup Selection:

Inc. Age      = 6      50-54

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 15.8%      B: 78.9%      C: 5.3%      D:      E:  
f = 3      f = 15      f = 1      f = 0      f = 0      Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 26.3%      B: 57.9%      C: 15.8%      D:      E:  
f = 5      f = 11      f = 3      f = 0      f = 0      Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*  
E = Strongly Disagree...

A: 26.3%      B: 52.6%      C: 15.8%      D: 5.3%      E:  
f = 5      f = 10      f = 3      f = 1      f = 0      Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 21.1%      B: 63.2%      C: 15.8%      D:      E:  
f = 4      f = 12      f = 3      f = 0      f = 0      Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 52.6%    B: 42.1%    C: 5.3%    D:    E:  
 f = 10    f = 8    f = 1    f = 0    f = 0    Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 10.5%    B: 68.4%    C: 21.1%    D:    E:  
 f = 2    f = 13    f = 4    f = 0    f = 0    Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree... \*\*\*

A: 38.9%    B: 38.9%    C: 11.1%    D: 5.6%    E: 5.6%  
 f = 7    f = 7    f = 2    f = 1    f = 1    Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 36.8%    B: 52.6%    C: 10.5%    D:    E:  
 f = 7    f = 10    f = 2    f = 0    f = 0    Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 15.8%    B: 47.4%    C: 26.3%    D: 10.5%    E:  
 f = 3    f = 9    f = 5    f = 2    f = 0    Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 10.5%    B: 52.6%    C: 36.8%    D:            E:  
 f = 2        f = 10        f = 7        f = 0        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree...

A: 26.3%    B: 57.9%    C: 10.5%    D: 5.3%    E:  
 f = 5        f = 11        f = 2        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

Strongly Agree..... \*\*\*\*\*  
 b = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*  
 E = Strongly Disagree...

A: 15.8%    B: 52.6%    C: 26.3%    D: 5.3%    E:  
 f = 3        f = 10        f = 5        f = 1        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69      rt research project      Subgroup Respondents: 53

Subgroup Selection:

Inc. Level of RT Training = 1 *BASIC WEEK*

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*

A: 17.0%    B: 69.8%    C: 3.8%    D: 7.5%    E: 1.9%  
 f = 9      f = 37      f = 2      f = 4      f = 1      Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*\*\*

A: 11.3%    B: 56.6%    C: 18.9%    D: 7.5%    E: 5.7%  
 f = 6      f = 30      f = 10      f = 4      f = 3      Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 11.3%    B: 54.7%    C: 17.0%    D: 13.2%    E: 3.8%  
 f = 6      f = 29      f = 9      f = 7      f = 2      Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*\*

A: 13.2%    B: 62.3%    C: 13.2%    D: 7.5%    E: 3.8%  
 f = 7      f = 33      f = 7      f = 4      f = 2      Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 47.2%    B: 49.1%    C: 3.8%    D:            E:  
 f = 25      f = 26      f = 2      f = 0          f = 0          Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 11.3%    B: 62.3%    C: 15.1%    D: 9.4%    E: 1.9%  
 f = 6      f = 33      f = 8      f = 5      f = 1          Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 17.6%    B: 49.0%    C: 13.7%    D: 15.7%    E: 3.9%  
 f = 9      f = 25      f = 7      f = 8      f = 2          Missing = 2

Item 8 = I am more skilled at thinking about my behaviors than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 18.9%    B: 62.3%    C: 9.4%    D: 7.5%    E: 1.9%  
 f = 10      f = 33      f = 5      f = 4      f = 1          Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*

A: 7.5%    B: 41.5%    C: 32.1%    D: 15.1%    E: 3.8%  
 f = 4      f = 22      f = 17      f = 8      f = 2          Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 1.9%      B: 54.7%      C: 24.5%      D: 17.0%      E: 1.9%  
 f = 1          f = 29          f = 13          f = 9          f = 1          Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 15.1%      B: 58.5%      C: 11.3%      D: 13.2%      E: 1.9%  
 f = 8          f = 31          f = 6          f = 7          f = 1          Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 9.4%      B: 39.6%      C: 32.1%      D: 17.0%      E: 1.9%  
 f = 5          f = 21          f = 17          f = 9          f = 1          Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69

rt research project

Subgroup Respondents: 8

Subgroup Selection:

Inc. Level of RT Training = 2 *ADVANCED WEEK*

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree.....  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: B: 87.5% C: D: 12.5% E:  
f = 0 f = 7 f = 0 f = 1 f = 0 Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree...

A: 25.0% B: 62.5% C: D: 12.5% E:  
f = 2 f = 5 f = 0 f = 1 f = 0 Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 37.5% B: 50.0% C: 12.5% D: E:  
f = 3 f = 4 f = 1 f = 0 f = 0 Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 12.5% B: 87.5% C: D: E:  
f = 1 f = 7 f = 0 f = 0 f = 0 Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 37.5%    B: 62.5%    C:            D:            E:  
 f = 3        f = 5        f = 0        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 37.5%    B: 50.0%    C: 12.5%    D:            E:  
 f = 3        f = 4        f = 1        f = 0        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

  : Strongly Agree..... \*\*\*\*\*  
 b = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 42.9%    B: 42.9%    C:            D: 14.3%    E:  
 f = 3        f = 3        f = 0        f = 1        f = 0        Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 37.5%    B: 62.5%    C:            D:            E:  
 f = 3        f = 5        f = 0        f = 0        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 P = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 12.5%    B: 62.5%    C: 12.5%    D: 12.5%    E:  
 f = 1        f = 5        f = 1        f = 1        f = 0        Missing = 0



Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 12.5%    B: 75.0%    C:            D: 12.5%    E:  
 f = 1        f = 6            f = 0        f = 1        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 50.0%    B: 25.0%    C: 12.5%    D: 12.5%    E:  
 f = 4        f = 2            f = 1        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 12.5%    B: 75.0%    C:            D: 12.5%    E:  
 f = 1        f = 6            f = 0        f = 1        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69      rt research project      Subgroup Respondents: 7

Subgroup Selection:  
Inc. Level of RT Training = 3      CERTIFIED

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 42.9%      B: 57.1%      C:      D:      E:  
f = 3      f = 4      f = 0      f = 0      f = 0      Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 85.7%      B: 14.3%      C:      D:      E:  
f = 6      f = 1      f = 0      f = 0      f = 0      Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 57.1%      B: 42.9%      C:      D:      E:  
f = 4      f = 3      f = 0      f = 0      f = 0      Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 71.4%      B: 28.6%      C:      D:      E:  
f = 5      f = 2      f = 0      f = 0      f = 0      Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*
B = Agree.....
C = Undecided.....
D = Disagree.....
E = Strongly Disagree...

A: 100% B: C: D: E:
f = 7 f = 0 f = 0 f = 0 f = 0 Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*
B = Agree..... \*\*\*\*\*
C = Undecided.....
D = Disagree.....
E = Strongly Disagree...

A: 71.4% B: 28.6% C: D: E:
f = 5 f = 2 f = 0 f = 0 f = 0 Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

A = Strongly Agree..... \*\*\*\*\*
B = Agree.....
C = Undecided.....
D = Disagree.....
E = Strongly Disagree...

A: 100% B: C: D: E:
f = 7 f = 0 f = 0 f = 0 f = 0 Missing = 0

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*
B = Agree..... \*\*\*\*\*
C = Undecided.....
D = Disagree.....
E = Strongly Disagree...

A: 85.7% B: 14.3% C: D: E:
f = 6 f = 1 f = 0 f = 0 f = 0 Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*
P Agree..... \*\*\*\*\*
C Undecided.....
D = Disagree.....
E = Strongly Disagree...

A: 71.4% B: 28.6% C: D: E:
f = 5 f = 2 f = 0 f = 0 f = 0 Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 71.4%    B: 14.3%    C: 14.3%    D:            E:  
 f = 5        f = 1        f = 1        f = 0        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 85.7%    B: 14.3%    C:            D:            E:  
 f = 6        f = 1        f = 0        f = 0        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 71.4%    B: 28.6%    C:            D:            E:  
 f = 5        f = 2        f = 0        f = 0        f = 0        Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69

rt research project

Subgroup Respondents: 46

Subgroup Selection:

Inc. Current Position = 1 TEACHER

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*

A: 15.2%    B: 67.4%    C: 4.3%    D: 10.9%    E: 2.2%  
f = 7        f = 31        f = 2        f = 5        f = 1        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*

A: 13.0%    B: 52.2%    C: 19.6%    D: 10.9%    E: 4.3%  
f = 6        f = 24        f = 9        f = 5        f = 2        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*\*\*  
E = Strongly Disagree... \*\*

A: 10.9%    B: 54.3%    C: 19.6%    D: 10.9%    E: 4.3%  
f = 5        f = 25        f = 9        f = 5        f = 2        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*\*  
D = Disagree..... \*\*\*  
E = Strongly Disagree... \*\*

A: 13.0%    B: 63.0%    C: 13.0%    D: 6.5%    E: 4.3%  
f = 6        f = 29        f = 6        f = 3        f = 2        Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*
B = Agree..... \*\*\*\*\*
C = Undecided..... \*
D = Disagree.....
E = Strongly Disagree...

A: 50.0% B: 47.8% C: 2.2% D: E:
f = 23 f = 22 f = 1 f = 0 f = 0 Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*
B = Agree..... \*\*\*\*\*
C = Undecided..... \*\*\*\*\*
D = Disagree..... \*\*\*\*
E = Strongly Disagree... \*

A: 15.2% B: 56.5% C: 17.4% D: 8.7% E: 2.2%
f = 7 f = 26 f = 8 f = 4 f = 1 Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

= Strongly Agree..... \*\*\*\*\*
b = Agree..... \*\*\*\*\*
C = Undecided..... \*\*\*\*\*
D = Disagree..... \*\*\*\*\*
E = Strongly Disagree... \*

A: 22.2% B: 46.7% C: 15.6% D: 13.3% E: 2.2%
f = 10 f = 21 f = 7 f = 6 f = 1 Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*
B = Agree..... \*\*\*\*\*
C = Undecided..... \*\*\*\*\*
D = Disagree..... \*\*
E = Strongly Disagree... \*

A: 21.7% B: 60.9% C: 10.9% D: 4.3% E: 2.2%
f = 10 f = 28 f = 5 f = 2 f = 1 Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*
P = Agree..... \*\*\*\*\*
\ : Undecided..... \*\*\*\*\*
D = Disagree..... \*\*\*\*\*
E = Strongly Disagree... \*

A: 10.9% B: 37.0% C: 32.6% D: 17.4% E: 2.2%
f = 5 f = 17 f = 15 f = 8 f = 1 Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 8.7%	B: 43.5%	C: 28.3%	D: 17.4%	E: 2.2%	
f = 4	f = 20	f = 13	f = 8	f = 1	Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 15.2%	B: 54.3%	C: 15.2%	D: 13.0%	E: 2.2%	
f = 7	f = 25	f = 7	f = 6	f = 1	Missing = 0

Item 12 = I am better at being in relationship with others since...

a = Strongly Agree..... \*\*\*\*\*  
 b = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*

A: 13.0%	B: 39.1%	C: 28.3%	D: 17.4%	E: 2.2%	
f = 6	f = 18	f = 13	f = 8	f = 1	Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69

rt research project

Subgroup Respondents: 13

Subgroup Selection:

Inc. Current Position = 2 PRINCIPAL

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided.....  
D = Disagree.....  
E = Strongly Disagree...

A: 23.1%    B: 76.9%    C:            D:            E:  
f = 3        f = 10        f = 0        f = 0        f = 0        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*  
D = Disagree.....  
E = Strongly Disagree...

A: 23.1%    B: 69.2%    C: 7.7%        D:            E:  
f = 3        f = 9        f = 1        f = 0        f = 0        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*  
D = Disagree..... \*\*\*\*  
E = Strongly Disagree...

A: 23.1%    B: 61.5%    C: 7.7%        D: 7.7%        E:  
f = 3        f = 8        f = 1        f = 1        f = 0        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
B = Agree..... \*\*\*\*\*  
C = Undecided..... \*\*\*\*  
D = Disagree..... \*\*\*\*  
E = Strongly Disagree...

A: 30.8%    B: 53.8%    C: 7.7%        D: 7.7%        E:  
f = 4        f = 7        f = 1        f = 1        f = 0        Missing = 0



Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 46.2%    B: 46.2%    C: 7.7%    D:    E:  
 f = 6        f = 6        f = 1        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 30.8%    B: 61.5%    C: 7.7%    D:    E:  
 f = 4        f = 8        f = 1        f = 0        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

: Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 41.7%    B: 41.7%    C:    D: 16.7%    E:  
 f = 5        f = 5        f = 0        f = 2        f = 0        Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 30.8%    B: 61.5%    C:    D: 7.7%    E:  
 f = 4        f = 8        f = 0        f = 1        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree... \*\*\*\*

A: 15.4%    B: 53.8%    C: 15.4%    D: 7.7%    E: 7.7%  
 f = 2        f = 7        f = 2        f = 1        f = 1        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

em 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 7.7%      B: 76.9%      C: 7.7%      D: 7.7%      E:  
 f = 1      f = 10      f = 1      f = 1      f = 0      Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 46.2%      B: 46.2%      C:      D: 7.7%      E:  
 f = 6      f = 6      f = 0      f = 1      f = 0      Missing = 0

Item 12 = I am better at being in relationship with others since...

: Strongly Agree..... \*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*  
 E = Strongly Disagree...

A: 7.7%      B: 53.8%      C: 30.8%      D: 7.7%      E:  
 f = 1      f = 7      f = 4      f = 1      f = 0      Missing = 0

Date: 11-14-94

National Computer Systems  
MICROTEST Survey

Release 1.1  
Page: 1

Histogram

Total Respondents: 69

rt research project

Subgroup Respondents: 10

Subgroup Selection:

Inc. Current Position = 3 SUPPORT WORKER

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 1 = I have changed considerably in the past few years.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 30.0%    B: 70.0%    C:            D:            E:  
 f = 3        f = 7        f = 0        f = 0        f = 0        Missing = 0

Item 2 = CT/RT training has influenced how I have changed.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree... \*\*\*\*\*

A: 50.0%    B: 40.0%    C:            D:            E: 10.0%  
 f = 5        f = 4        f = 0        f = 0        f = 1        Missing = 0

Item 3 = CT/RT training has influenced how I perceive change.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 50.0%    B: 30.0%    C: 10.0%    D: 10.0%    E:  
 f = 5        f = 3        f = 1        f = 1        f = 0        Missing = 0

Item 4 = CT/RT training has influenced how I behave.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 30.0%    B: 70.0%    C:            D:            E:  
 f = 3        f = 7        f = 0        f = 0        f = 0        Missing = 0

Date: 11-14-94

Page 2

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 5 = I believe self-evaluation is key to personal & prof. growth.

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree.....  
 E = Strongly Disagree...

A: 60.0%    B: 40.0%    C:            D:            E:  
 f = 6        f = 4        f = 0        f = 0        f = 0        Missing = 0

Item 6 = I use CT and RT techniques with myself to help me work thru

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 30.0%    B: 60.0%    C:            D: 10.0%    E:  
 f = 3        f = 6        f = 0        f = 1        f = 0        Missing = 0

Item 7 = Since I have taken CT/RT training, I understand that my

Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree... \*\*\*\*\*

A: 44.4%    B: 33.3%    C:            D: 11.1%    E: 11.1%  
 f = 4        f = 3        f = 0        f = 1        f = 1        Missing = 1

Item 8 = I am more skilled at thinking about my behaviours than I was

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided.....  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 50.0%    B: 40.0%    C:            D: 10.0%    E:  
 f = 5        f = 4        f = 0        f = 1        f = 0        Missing = 0

Item 9 = I perceive relationships in my personal life have improved

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree.....  
 E = Strongly Disagree...

A: 30.0%    B: 50.0%    C: 20.0%    D:            E:  
 f = 3        f = 5        f = 2        f = 0        f = 0        Missing = 0

Date: 11-14-94

Page 3

Percent in tens: ....1....2....3....4....5....6....7....8....9....10

Item 10 = Relationships at work have improved since I have taken CT/RT

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 20.0%    B: 60.0%    C: 10.0%    D: 10.0%    E:  
 f = 2        f = 6        f = 1        f = 1        f = 0        Missing = 0

Item 11 = How I deal with conflict has changed for the better since...

A = Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 60.0%    B: 30.0%    C:            D: 10.0%    E:  
 f = 6        f = 3        f = 0        f = 1        f = 0        Missing = 0

Item 12 = I am better at being in relationship with others since...

Strongly Agree..... \*\*\*\*\*  
 B = Agree..... \*\*\*\*\*  
 C = Undecided..... \*\*\*\*\*  
 D = Disagree..... \*\*\*\*\*  
 E = Strongly Disagree...

A: 40.0%    B: 40.0%    C: 10.0%    D: 10.0%    E:  
 f = 4        f = 4        f = 1        f = 1        f = 0        Missing = 0