

**THE HISTORY, DEVELOPMENT,
AND RESEARCH OF THE
EDUCATIONAL SYSTEMS MODEL:
THE GROW WITH GUIDANCE
SYSTEM**

**TEACHING AND COUNSELING
FOR TODAY'S WORLD
PRE-K-12 & BEYOND**

An innovative approach to education that develops
students' spirit, purpose, and potential

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Dedication

**To all professional educators
for their contributions to our students,
schools, communities,
and the education profession.**

**Special thanks to
those professionals
who contributed to the
Grow With Guidance® System
research and development.**

– PUBLICATIONS BY GROW WITH GUIDANCE –

The following lists the most recent books available through Grow With Guidance®. The first edition of the Grow With Guidance® System was published in 1985, followed by the second edition in 1993 and 1996. *Getting From Here to There . . . Education for the New Millennium*, published in 2000, was the first discussion book that provided an overview of the system framework. In addition, the tested and proven system is discussed in numerous professional publications.

Radd, T. R. (2006). *The Grow With Guidance® System Manual*. Third Edition. Revised. Omaha, Nebraska: Grow With Guidance. isbn: 978-1-878317-53-7 (1-878317-53-9).

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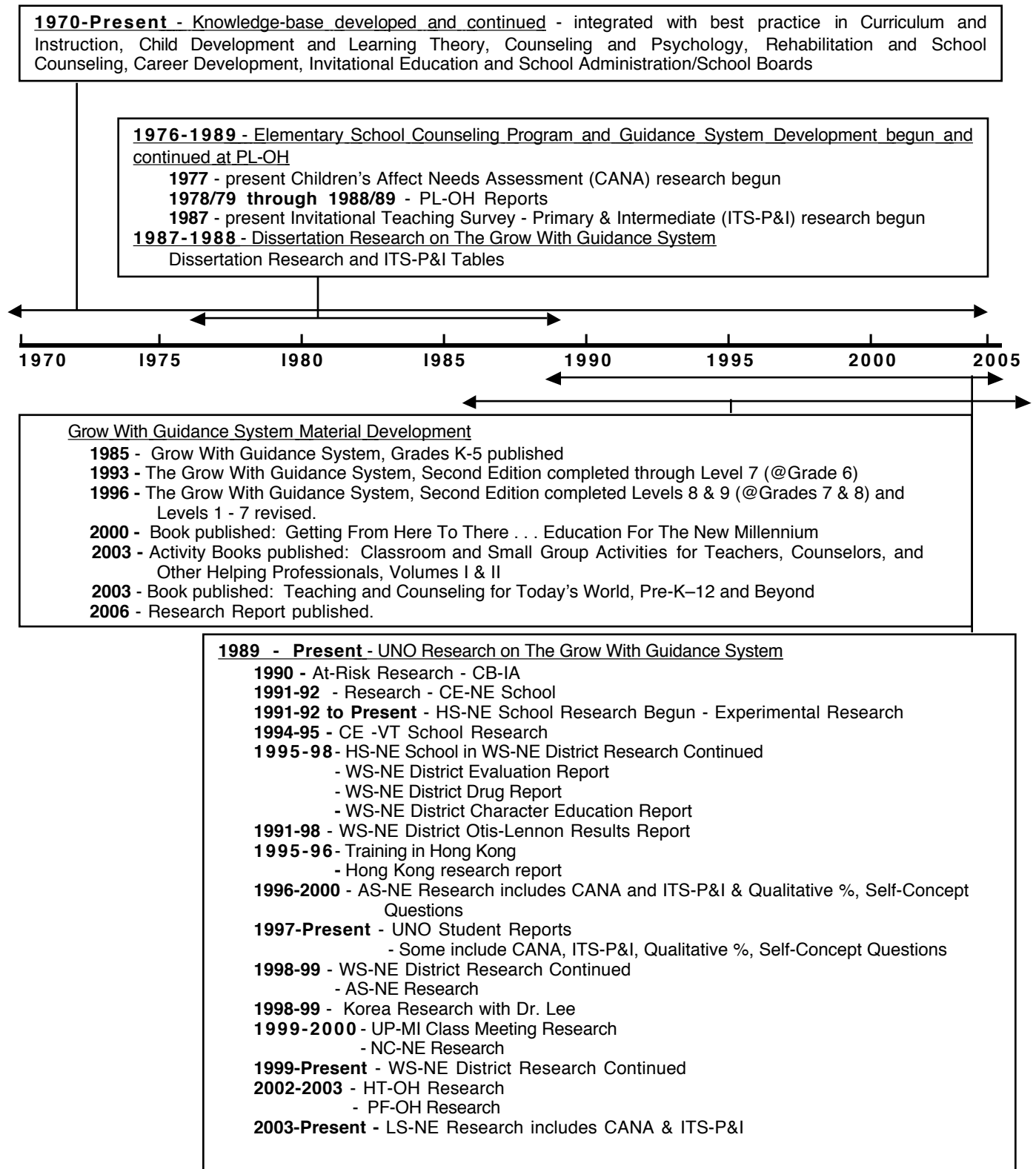
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Grow With Guidance® System Research and Development Timeline





The Grow With Guidance® System

Core Skills for All Components and Essential Learning Domain Standards (ELD)						
System Components						
Behavior Management	Self-Talk/ Self Pictures	Implementation Skills	Family	Personal, Emotional, Behavioral, Social (PEBS) Essential Learning Domain	Curriculum	
Essential Learning Domain	Essential Learning Domain	Essential Learning Domain	Essential Learning Domain	Essential Learning Domain	Academic Essential Learning Domain	
Benchmark: Student - Indicators - Performance Evaluation Benchmark: Staff - Indicators - Performance Evaluation	Benchmark: Student - Indicators - Performance Evaluation Benchmark: Staff - Indicators - Performance Evaluation	Benchmark: Staff - Indicators - Performance Evaluation Use information from other indicators	Benchmark: Family - Indicators - Performance Evaluation Use information from other indicators	Benchmark: Self - Indicators - Performance Evaluation Benchmark: Other Awareness - Indicators - Performance Evaluation Benchmark: Self-Control - Indicators - Performance Evaluation Benchmark: Decision-Making/ Problem-Solving - Indicators - Performance Evaluation Benchmark: Group Cooperation - Indicators - Performance Evaluation	Benchmark: Self - Indicators - Performance Evaluation Benchmark: Other Awareness - Indicators - Performance Evaluation Benchmark: Self-Control - Indicators - Performance Evaluation Benchmark: Decision-Making/ Problem-Solving - Indicators - Performance Evaluation Benchmark: Group Cooperation - Indicators - Performance Evaluation	Benchmark: Career - Indicators - Performance Evaluation Personal, Emotional, Behavioral, Social and Academic Skills needed for career development
Performance Evaluation Strategies						
Checklists General Assessments Specific Assessments based on performance	Checklists General Assessments based on performance	Checklists ITS-P&I General Assessments Specific Assessments based on performance Input about student	Checklists General Assessments Specific Assessments based on performance Input about child	Checklists CANA ITS-P&I General Assessments Specific Assessments based on performance	Checklists CANA ITS-P&I General Assessments Specific Assessments based on performance	Checklists ITS-P&I General Assessments Specific Assessments based on performance

Consultation • Collaboration • Coordination • Facilitation • Communication

Foundation for: Classroom and School Life Lab • Counseling Program School House • ALL Growth and Prevention Formulas
Interactive • Interrelated • Interdependent System

– SECTION ONE –

Beginning History, Development, and Research

Introduction

This document provides a 35-year summary and outlines the history, development, and research of the educational systems model that began in 1970. The Section One History and Development Sections include information regarding how and why the educational systems model was developed. The Section One Research Section summarizes the research design and the primary instruments included. Sections Two through Five include two longitudinal ten-year studies, nine additional studies, graduate student one-year research studies, and two international research studies. A brief summary explanation, including charts when available, is incorporated into each section.

History

I observed many students who had the ability to learn experience learning difficulties because of other factors in their lives. For example, students living in the cycle of self-destructive behavior such as chemical dependency, students living in the cycle of destructive behavior toward others such as child abuse, and students with unresolved issues such as a loss can experience obstacles to long-term growth. Those same factors that created academic obstacles frequently created obstacles for them in other areas. As a result, students were not on course to reach their potential. My question at the time was, “What do we need to do in order for students to develop and realize academic and life success?” This question, key in quality education, is key for sustaining our democratic way of life via healthy, educated citizens. The quest for an answer to this difficult question became the catalyst of my systems development and research for the next 35 years.

Graduate study in rehabilitation and school counseling offered a knowledge base for understanding factors that created obstacles to growth. Research from professional literature identified a lack of skills in the areas of self-concept, other awareness, self-control, decision-making/problem-solving, and group cooperation as missing links needed for growth. The suggested plan was to work with people experiencing challenges and help them build these skills and strategies into their lives. Working in adult and children’s rehabilitation opened my eyes to the realization that significant numbers of people at all ages struggled with challenges

that could have been prevented or managed. People were being taught skills after-the-fact, frequently with limited success, because of the extent of their challenges. These people possessed the ability to learn, but were not able to develop themselves so that they could learn.

Prevention programs and elementary school counseling became known and available in the early 1970's. This approach seemed the wiser and more promising approach. Why not reverse the rehabilitation model and focus on developing skills needed to prevent and manage challenges before people are impacted for a lifetime?

My position as an elementary school counselor began in 1976 with the sole mission of creating an elementary guidance and counseling program that focused on skill development. The state department of education was encouraging such programs. My development of an educational systems model began at that time, supported by documents from the state and a progressive school district and county office. The model was designed from my experience in child development, psychology, education, and counseling, and a significant commitment of my personal time and energy.

My primary focus from 1976 to 1985 was developing, implementing, and adjusting system components. A needs assessment begun by a progressive colleague was researched and modified by both of us and incorporated as an important addition to the system. District research began and continued from 1979 to 1989. Invitational education was introduced and added in 1985. Doctoral research conducted from 1986 to 1988 added the development of a classroom climate survey. From 1988 to the present, educational systems research was conducted at the numerous sites reported in Sections Two through Five. Research continues and is explained in this document.

Development

The focus of developmental guidance and counseling was primary from the beginning. The challenge was finding the most successful way to implement the developmental guidance and counseling program for all students. Everyone needed to be involved because so many factors affect the success of skill building and academics. Involving everyone with limited budgets and time for schoolwide skill development was a difficult hurdle. I drew upon my study in school administration, best curriculum practices, invitational education, and experience as a school board member. This information confirmed the need for a systems model for skill development versus a curriculum skill approach and gave insight into ways to organize the process.

All factors essential to successfully learn, apply, and maintain skills developmentally needed to be considered and included in the system. Also, the environment and skill building needed to work hand-in-hand for success.

The environment has a direct impact on learning and skill development including behavioral approaches we observe and messages and perceptions we internalize. As with academic curriculum, affective curriculum needs to be developed, applied, and practiced. The affective and cognitive integrate for student academic and life success. Positive behavior management and self-talk/self-pictures for the internal and external environment were included as system components. Staff skills, needed to implement positive behavior plans and develop effective relationships, could be introduced during a classroom skill lesson and practiced during follow-up with the students. Staff could learn skills with students and apply the skill during application in the behavior and self-talk/self-picture component. Everything done relates to the academic success of students. A self-concept process, the self-concept series and weave, was incorporated into all components to support self-concept development and self-concept-as-learner. Everything is conscious and intentional. Everyone and everything counts in the learning community.

Grow With Guidance®

The educational systems model did not have a name until 1985 when Grow With Guidance® began as a response to requests for materials from various schools. Many people were referred to my colleague and me to observe our programs and get help beginning their developmental guidance program. We worked as a team to offer materials to these schools. I chose to continue the work and research after my colleague was no longer able to continue.

In 1987 a career enrichment skill strand was added to the self, other awareness, self-control, decision-making/problem-solving, and group cooperation essential learning stands. The Invitational Teaching Survey-Primary & Intermediate was added in 1988. See the chart on page 2 that shows the organization of the educational guidance system, Grow With Guidance®.

Research

Research sites used pre-test/post-test research design with qualitative assessments added as a part of the post-test in many cases. Two sites included experimental and control groups with the remaining sites gathering information from all students, both pre- and post-test.

The primary instruments used were the Children's Affect Needs Assessment (CANA) ($r = .87$ with validity $.76$) and qualitative questions that included a yes or no response section for each question. A few sites included the Invitational Teaching Survey—Primary and Intermediate (ITS-P&I) ($r = .98$ with validity by an expert panel). Two sites used the Florida Key to determine student self-concept-as-learner. Qualitative instruments are based on general and specific questions that are based on identified performance indicators.

The quantitative instruments, CANA and ITS-P&I, have established reliability and validity. The CANA is a forty-two question diagnostic curriculum assessment taken by students that provides student input for classroom guidance curriculum activity selection. This diagnostic assessment is student-centered and creates a sense of student ownership for guidance skill implementation and change. The ITS-P&I is a forty-three question diagnostic class climate assessment, taken by students, which gives students input about their classroom experience and whether they have a feeling of being “invited.” This diagnostic survey involves students and gets their input on ways to improve climate and school relationships.

Both diagnostic instruments are used to determine the activity selection for skill experiences. Both are used as one indicator for evaluation. The CANA was translated into Korean and included as a part of a one-year research project in Korea. The reliability ($r = .86$) and validity was statistically significant and consistent with the reliability and validity documented on the original instrument.

The treatment for all research includes putting a guidance system in place. Portions of each component of the entire system are implemented throughout one to multiple years. System components are behavior management, self-talk/self-pictures, implementation (staff skills), curriculum (student affective skills), and family. All components are interactive, interdependent, interrelated, and congruent with each other and observed and assessed ongoing and annually. Each system component includes the component standard, benchmarks, indicators, and performance observation/evaluation. Academic indicators are included within the system curriculum component and essential learning strand areas. See the Research and Development Timeline on page 1.

Dissertation Research

The Effects of Grow With Guidance® on Self-concept-as-learner and Teacher Self-Concept, the first of two experimental-control research initiatives, was designed and completed in 1988. Two instruments were used to assess students' perceptions, the ITS-P&I and CANA. Self-Report Questionnaires for teachers were also used.

Research Charts and Findings

The results shown in Tables 1, 2, 3, and 4 indicate statistically significant findings. X1 is the intensive experimental group, X2 is the moderate experimental group, and XC is the control group. Primary areas of statistical significance were between post comparison scores between groups on the ITS-P&I. Also the self-concept-as-learner of students and the self-concept of the teacher showed statistically significant gains due to the use of the Grow With Guidance® Systems model.

Table 1
Invitational Teaching Survey-Primary and Intermediate

	df	F	p
Total			
X1, X2, XC	3,212	13.718	.0001*
X1, X2	1,13	3.667	.0577
X1, XC	1,93	19.628	.0001*
X2, XC	1,128	37.825	.0001*
Commitment			
X1, X2, XC	3,332	13.978	.0001*
X1, X2	1,138	4.569	.0343
X1, XC	1,94	17.7	.0001*
X2, XC	1,135	39.123	.0001*
Consideration			
X1, X2, XC	3,221	14.288	.0001*
X1, X2	1,138	3.504	.0633
X1, XC	1,95	21.716	.0001*
X2, XC	1,134	44.053	.0001*
Coordination			
X1, X2, XC	3,221	14.461	.0001*
X1, X2	1,138	4.602	
X1, XC	1,96	22.007	.0001*
X2, XC	1,133	39.827	.0001*
Proficiency			
X1, X2, XC	3,221	15.031	.0001*
X1, 2	1,139	6.044	
X1, XC	1,96	18.249	.0001*
X2, XC	1,134	41.41	.0001*
Expectancy			
X1, X2, XC	3,226	13.109	.001*
X1, X2	1,142	1.854	.1755
X1, XC	1,97	22.09	.0001*

X1 = intensive experimental group, X2 = moderate experimental group, XC = control group

Table 2
Children's Affect Needs Assessment - Self-Control

	df	F	p
Self-Control			
X1,X2,XC	3,224	3.286	.0214*
X1,X2	1,141	0.089	.7661
X1,XC	1,95	6.161	.0148*
X2,XC	1,95	7.898	.0057*

X1 = intensive experimental group, X2 = moderate experimental group, XC = control group

Table 3
Self Report Evaluation - Staff

	df	F	p
Teacher Question 1	Have the Grow With Guidance® activities helped you?		
X1,X2,Xc	1,100	6.97	
X1 vs. X2,Xc	2,100		.1493
Teacher Question 2	Do you feel better about yourself?		
X1,X2,Xc		8.6202	
X1 vs. X2,Xc	2,10		
Teacher Question 3	Do you feel better about your teaching?		
X1,X2,Xc	1,10	8.6202	
X1 vs. X2,Xc	2,10		.0229*
Teacher Question 4	Do get along better with your students?		
X1,X2,Xc	1,100	8.6202	
X1 vs. X2,Xc	2,10		.0229*
Teacher Question 5	Can you handle problems better?		
X1,X2,Xc		2.79	
X1 vs. X2,Xc	2,10		.0716
Teacher Question 6	Have you changed anything in your teaching as a result of this approach?		
X1,X2,Xc	1,10	8.62	
X1 vs. X2,Xc	2,10		.0001*

*(p>.05)

X1 = intensive experimental group, X2 = moderate experimental group, XC = control group

Table 4
Florida Key (Self-Concept-as-Learner)

	df	F	p
Total Key			
X1, X2, XC	3,211	18.98	.0001*
X1, X2	1,135	1.965	.1633
X1, XC	1,87	9.784	.0024*
X2, XC	1,133	34.745	.0001*
Relating			
X1, X2, XC	3,237	20.11	.0001*
X1, X2	1,149	4.871	.0289
X1, XC	1,104	12.691	.0006*
X2, XC	1,144	45.126	.0001*
Asserting			
X1, X2, XC	3,239	16.044	.0001*
X1, X2	1,149	4.363	.0384
X1, XC	1,102	7.7	.0063*
X2, XC	1,144	29.633	.0001*
Coping			
X1, X2, XC	3,232	11.436	.0001*
X1, X2	1,144	.019	.8917
X1, XC	1,101	7.275	.0082*
X2, XC	1,142	11.968	.0007
Investing			
X1, X2, XC	3,219	29.150	.0001*
X1, X2	1,136	2.331	.1291
X1, XC	1,89	13.15	.0005*
X2, XC	1,134	48.829	.0001*

* = Statistically Significant

X1 = intensive experimental group, X2 = moderate experimental group, XC = control group

Student Findings

The Children's Affect Needs Assessment (CANAN) was used to evaluate general affective gains and group comparisons. The statistically significant finding on the CANAN suggested that the Grow With Guidance® System curriculum had a statistically significant effect on self-control with moderate use of system materials.

The Florida Key evaluated self-concept-as-learner, a subsystem of global self-concept. This subsystem had marked effect on the academic performance of students and their school achievement. A major way the global self-concept was altered was through self-concept-as-learner perceptions of the child.

The research findings showed that the Grow With Guidance® System had a statistically significant effect on the self-concept-as-learner of students. Each subscale on the Florida Key was statistically significant. This indicated that students who had interacted with the system

curriculum increased in a statistically significant manner their ability to basically trust in people, trust in their potential, trust in their own value, and trust in their own academic ability.

This statistically significant finding from the results of the Florida Key was further supported by the statistically significant response to the Student Self-Report Evaluation, Question 3, "Do you feel better about your learning?" The research suggested that intensified interaction with the Grow With Guidance® System curriculum produces greater positive feelings about learning for students.

Teacher Findings

The research supported the benefits of the Grow With Guidance® System curriculum for teachers and their self-concepts. The statistically significant findings were reported.

The Invitational Teaching Survey-Primary and Intermediate (ITS-P&I) evaluated the invitational teaching practices within the classroom. Invitational education is a perceptually based self-concept approach to the teaching-learning process anchored on four propositions: (a) that people are able, valuable, and responsible and should be treated accordingly; (b) that education should be a cooperative activity; (c) that people possess untapped potential in all areas of human development; and (d) that potential can best be realized by places, policies, and programs specifically designed to invite development, and by people who are intentionally inviting with themselves and others, personally and professionally. A person who is personally and professionally inviting reflects a positive self-concept.

The students responded as to their perception of their teachers on the ITS-P&I. The statistically significant findings on the ITS-P&I showed that teachers who used the system curriculum were more personally and professionally inviting in their classrooms. Statistically significant findings were found in each of the five subscales of the ITS-P&I.

Students reported statistically significant results in the way their teachers communicated, disclosed more of self, supported students, and invested more of self into the teaching process. Teachers were also perceived to be more considerate of students as a result of using system curriculum.

Students reported statistically significant differences in the way teachers coordinated the learning process. The greater the number of system activities used, the greater the positive coordination of the learning process. The classroom was viewed as more helpful, fair, and

positive. Statistically significant findings in the subscores of proficiency and expectation showed that teachers who used the Grow With Guidance® System curriculum were more proficient with their students and expected positive learning outcomes from students.

The teachers reported statistically significant differences in their feelings toward themselves and their teaching. In addition, they reported statistically significant differences in getting along better with students that resulted in improved teacher-student interaction and have made changes in the way they teach as a result of using the Grow With Guidance® System activities. The intensified use of the system curriculum produced these statistically significant outcomes.

The teachers in the X1 and X2 groups reported the curriculum activities from the Grow With Guidance® System helped them. Since there was a greater positive response from the X1 group than from the X2, this indicated that the greater the use of the curriculum, the greater the gains for the teacher.

Research Results Summary

Research using The Grow With Guidance® System has confirmed several of the many benefits for students and staff. The five main findings are:

1. The system has a proven positive effect on student self-concept-as-learner which is critical to students' academic performance and school behavior.
2. The system has a proven positive effect on the self-control of students.
3. Students using the system feel better about their learning.
4. Teachers who use the system are perceived and reported by students as utilizing greater invitational teaching practices which affect class climate and environment.
- 5 Teachers using the system in an intensified manner report feeling better about themselves and their teaching. They have made changes to their teaching approach and report better teacher-student interaction.

– SECTION TWO –

Longitudinal Research Site One
PL-OH Schools 1979-1989

PL-OH School District implemented the developmental guidance system model in grades kindergarten through five, housed in seven elementary schools, and in grade seven, housed in one middle school. Research occurred from 1976 until 1989 with data available from 1979-1989. Each year between 95% and 99% of the students reported that the system in the district and within each building helped them. Qualitative questionnaires that included a yes or no response with open comments and/or pictures were used to gather this data.

The tables showing the longitudinal CANA results support the student-reported qualitative results. District results include all seven elementary schools and the seventh-grade at the middle school. Longitudinal data for three elementary schools labeled G, K, and W follows. School G is a school with a high rate of transient students and many challenges; School K is a school with a less-transient student base and moderate student challenges; School W is a school with a stable student base and low-to-moderate student challenges.

Based on the percentages reported on CANA Total Scores, trends in Schools G, K, and W indicated student growth over the ten-year period of system implementation. Total scores included the subscales of self, other awareness, self-control, decision-making/problem-solving, and group cooperation. Student trends were consistent in all three types of schools.

District results that included kindergarten through fifth grade and seventh grade middle school students showed trends in student growth as a result of system implementation. Students demonstrated consistency and/or growth over a ten-year period. This occurred at a time when many research reports in the area of self-concept and student attitudes found students disliked school as they got older and demonstrated fewer skills in the personal, social, behavioral, and emotional areas. Consistency and/or growth in the areas of personal, social, behavioral, and emotional skills demonstrated the guidance system's effectiveness and efficiency. This has implications that the guidance system may be integral for prevention of destructive behaviors and the development of important skills needed for academic and life success.

Tables 1 through 19 provide the pre-post score information by district (Table 1), building (Tables 2 through 4), district by grade level (Tables 5 through 16), and building by grade level (Tables 17 through 19). All tables show many incidents of improvement and some areas of plateau or decline at times over the ten-year period. This would be expected due to the longitudinal nature of affective development. The tables that follow indicate that students were stronger after ten years of the developmental system than when they began.

Table 1
PL-OH District by Year

Year	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1979-1980	77	78	81	82	77	74	75	76	82	80	78.4	78.0
1980-1981	76	81	79	81	73	85	74	76	77	77	75.8	80.0
1981-1982	83	INA	81	INA	79	INA	65	INA	78	INA	76.8	INA
1982-1983	86	84	83	83	81	77	79	77	79	77	81.6	79.6
1983-1984	No information available											
1984-1985	88	86	84	86	82	81	80	80	82	81	83.2	82.8
1985-1986	87	84	82	84	82	79	77	79	79	81	81.4	81.4
1986-1987	87	85	82	83	81	80	81	80	81	82	82.4	82.0
1987-1988	83	85	79	83	79	80	75	77	79	81	79.0	81.2
1988-1989	84	84	81	83	82	82	78	80	84	84	81.8	82.6

Table 2
PL-OH CANA Results
Building Score for K School

Year	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	78	74	78	76	80	76	75	64	77	73	77.6	72.6
1979-1980	No information available											
1980-1981	77	80	80	80	70	68	71	73	76	72	74.8	74.6
1981-1982	83	83	79	84	79	81	79	77	76	78	79.2	80.6
1982-1983	85	84	84	85	80	76	76	72	76	77	80.2	78.8
1983-1984	85	87	83	96	81	78	77	79	80	80	81.2	84.0
1984-1985	88	86	82	85	82	80	76	76	74	77	80.4	80.8
1985-1986	83	87	78	82	78	81	71	77	78	82	77.6	81.8
1986-1987	86	88	79	83	78	81	83	89	81	83	81.4	84.8
1987-1988	82	88	79	83	78	81	83	89	81	83	80.6	84.8
1988-1989	83	80	83	80	78	78	73	78	81	84	79.6	80.0

Table 3
PL-OH CANA Results
Building Score for G School

Year	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	78	78	80	85	81	76	76	76	76	82	78.2	79.4
1979-1980	75	76	86	85	74	74	74	82	85	81	78.8	79.6
1980-1981	78	85	85	84	69	75	80	80	86	82	79.6	81.2
1981-1982	83	85	79	85	79	86	76	83	77	81	78.8	84.0
1982-1983	89	88	86	86	85	82	80	80	84	82	84.8	83.6
1983-1984	88	87	83	82	85	82	79	79	80	81	83.0	82.2
1984-1985	88	90	81	86	80	84	76	80	81	83	81.2	84.6
1985-1986	87	85	85	83	85	77	75	72	82	79	82.8	79.2
1986-1987	90	88	86	86	88	84	86	83	85	85	87.0	85.2
1987-1988	84	88	80	87	79	84	72	80	78	86	78.6	85.0
1988-1989	84	84	79	83	83	84	76	82	84	89	81.2	84.4

Table 4
PL-OH CANA Results
Building Score for W School

Year	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	84	85	79	86	82	83	76	77	77	83	79.6	82.8
1979-1980	76	80	79	84	78	78	77	80	78	82	77.6	80.8
1980-1981	84	83	88	85	86	80	83	82	83	80	84.8	82.0
1981-1982	87	82	87	90	73	82	83	84	84	86	82.8	84.8
1982-1983	88	88	84	85	86	78	81	79	81	78	84.0	81.6
1983-1984	89	87	84	84	86	82	81	81	81	81	84.2	83.0
1984-1985	85	87	83	87	81	81	77	80	79	80	81.0	83.0
1985-1986	92	87	81	85	85	80	81	81	82	81	84.2	82.8
1986-1987	89	87	86	83	88	83	83	79	85	91	86.2	84.6
1987-1988	83	86	80	83	83	82	74	76	84	89	80.8	83.2
1988-1989	82	81	82	84	80	85	79	83	84	87	81.4	84.0

Table 5
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	5	79	76	81	82	78	70	78	76	79	79	79.0	76.6
1979-1980	6	No information available											
1980-1981	7	No information available											

Table 6
PL-OH CANA Results
District by Grade

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	1	80	81	78	82	80	81	69	93	78	81	77.0	83.6
1979-1980	2	75	77	76	83	80	81	75	75	81	85	77.4	80.2
1980-1981	3	78	84	80	81	73	78	73	78	76	78	76.0	79.8
1981-1982	4	87	83	86	90	76	78	73	78	76	78	79.6	81.4
1982-1983	5	88	84	86	87	82	76	86	82	85	79	85.4	81.6
1983-1984	6	No information available											
1984-1985	7	88	78	91	85	88	80	86	80	90	80	88.6	80.6

Table 7
PL-OH CANA Results
District by Grade

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	2	79	79	78	84	80	75	70	69	75	78	76.4	77.0
1979-1980	3	75	80	84	83	79	72	76	75	86	82	80.0	78.4
1980-1981	4	76	81	80	83	69	73	75	77	77	77	75.4	78.2
1981-1982	5	82	82	82	88	74	74	81	77	82	79	80.2	80.0
1982-1983	6	No information available											
1983-1984	7	80	79	81	79	78	76	80	82	80	81	79.8	79.4

Table 8
PL-OH CANA Results
District by Grade

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	3	80	78	81	82	80	71	75	76	80	81	79.2	77.6
1979-1980	4	74	75	79	83	84	69	72	78	78	80	77.4	77.0
1980-1981	5	75	77	79	76	67	74	75	78	74	72	74.0	75.4
1981-1982	6	No information available											
1982-1983	7	80	79	79	80	74	75	77	76	77	79	77.4	77.8

Table 9
PL-OH CANA Results
District by Grade

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1979-1980	1	80	82	80	84	81	82	72	80	79	84	78.4	82.4
1980-1981	2	79	85	83	87	77	79	73	76	80	83	78.4	82.0
1981-1982	3	83	80	81	84	80	78	79	82	77	81	80.0	81.0
1982-1983	4	86	86	85	87	82	78	80	77	83	77	83.2	81.0
1983-1984	5	90	89	88	84	83	78	85	79	87	82	86.6	82.4
1984-1985	6	No information available											
1985-1986	7	85	76	85	80	83	74	81	77	85	79	83.8	77.2

Table 10
PL-OH CANA Results
District by Grade

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1979-1980	5	81	78	88	84	74	72	79	78	85	80	81.4	78.4
1980-1981													
1981-1982	7	80	70	80	80	80	65	76	76	78	75	78.8	73.2
1982-1983													
1983-1984													
1984-1985													
1985-1986													

Table 11
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1980-1981	1	83	86	82	86	80	83	73	75	79	83	79.4	82.6
1981-1982	2	84	85	82	84	84	83	76	78	78	83	80.8	82.6
1982-1983	3	85	82	81	83	78	73	75	76	78	78	79.4	78.4
1983-1984	4	86	89	87	84	83	84	79	81	85	87	84.0	85.0
1984-1985	5	88	87	83	87	77	78	82	80	82	81	82.4	82.6
1985-1986	6	No information available											
1986-1987	7	86	83	81	81	78	76	79	75	83	76	81.4	78.2

Table 12
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1981-1982	1	86	85	81	83	85	73	74	77	76	74	80.4	78.4
1982-1983	2	87	87	83	83	85	79	80	79	80	81	83.0	81.8
1983-1984	3	90	85	83	86	85	77	83	82	79	82	84.0	82.4
1984-1985	4	87	86	83	85	79	81	84	80	84	84	83.4	83.2
1985-1986	5	85	85	83	84	81	78	81	80	82	80	82.4	81.4
1986-1987	6	No information available											
1987-1988	7	81	83	79	81	79	76	77	74	78	76	78.8	78.0

Table 13
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1982-1983	1	88	85	81	81	86	78	75	71	72	71	80.4	77.2
1983-1984	2	88	87	81	84	87	85	76	80	77	80	81.8	83.2
1984-1985	3	87	85	80	84	79	74	79	80	78	81	80.6	80.8
1985-1986	4	87	85	85	87	80	77	81	81	85	84	83.6	82.8
1986-1987	5	89	86	86	86	82	79	88	82	83	85	85.6	83.6
1987-1988	6	No information available											
1988-1989	7	80	75	82	79	75	72	78	72	82	76	79.4	74.8

Table 14
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1983-1984	1	87	88	81	82	80	77	72	74	77	72	79.4	78.6
1984-1985	2	91	90	85	90	86	85	80	81	80	82	84.4	85.6
1985-1986	3	90	86	81	86	83	86	80	81	81	80	83.0	83.8
1986-1987	4	89	84	86	83	80	78	86	83	84	79	85.0	81.4
1987-1988	5	84	86	82	86	79	79	78	82	80	85	80.6	83.6
1988-1989	6	No information available											
1989-1990	7	No information available											

Table 15
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1984-1985	1	86	88	80	85	85	85	68	79	75	78	78.8	83.0
1885-1986	2	87	86	81	85	81	83	73	77	74	82	79.2	82.6
1986-1987	3	84	85	79	83	80	81	80	81	80	80	80.6	82.0
1987-1988	4	83	85	79	83	77	79	77	79	84	80	80.0	81.2
1988-1989	5	83	82	85	85	81	82	82	80	87	83	83.6	82.4

Table 16
PL-OH CANA Results
District by Grade Level

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1985-1986	1	87	86	79	82	86	80	72	75	72	80	79.2	80.6
1986-1987	2	87	85	80	82	79	83	74	79	75	86	79.0	83.0
1987-1988	3	84	86	79	84	79	82	75	78	78	80	79.0	82.0
1988-1989	4	85	82	82	83	82	81	80	83	86	84	83.0	82.6

Table 17
PL-OH CANA Results
W School

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	1	83	87	75	87	76	85	72	72	75	89	76.2	84.0
1979-1980	2	74	83	75	84	87	86	77	84	82	92	78.8	85.8
1980-1981	3	86	85	92	86	89	83	85	86	85	83	87.4	84.6
1981-1982	4	87	82	87	90	73	82	83	84	84	86	82.8	84.8
1982-1983	5	No 5 th Grade that Year											
1984-1985	7	No information available											

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	2	86	85	79	88	81	85	77	70	75	81	79.6	81.8
1979-1980	3	78	82	90	87	82	79	80	77	82	76	82.4	80.2
1980-1981	4	82	81	84	84	82	77	81	78	81	76	82.0	79.2

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	3	83	84	76	87	83	81	73	82	76	83	78.2	83.4
1979-1980	4	76	75	73	81	66	70	74	79	71	78	72.0	76.6
1980-1981	5	No information available											

Year	Grade	Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	4	84	82	87	81	88	82	81	74	81	78	84.2	79.4

Table 18
PL-OH CANA Results
K School

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	1	67	71	63	71	70	76	58	54	70	71	65.6	68.6
1979-1980	2	No information available											
1980-1981	3	78	80	73	78	74	69	70	68	65	70	72.0	73.0
1981-1982	4	82	78	77	79	71	73	81	80	73	84	76.8	78.8
1982-1983	5	88	88	85	89	81	80	84	76	89	78	85.4	82.2

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	2	77	74	75	70	80	74	73	70	68	70	74.6	71.6
1979-1980	3	No information available											
1980-1981	4	80	84	86	82	78	72	72	74	78	77	78.8	77.8
1981-1982	5	88	88	84	90	71	73	80	79	86	86	81.8	83.2

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	3	72	69	77	82	78	67	73	76	78	71	75.6	73.0
1979-1980	4	No information available											
1980-1981	5	73	76	80	80	58	64	72	78	86	69	73.8	73.4

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	4	85	86	88	67	85	86	95	44	96	75	89.8	71.6
1979-1980	5	No information available											
1978-1979	5	87	72	88	88	89	76	78	75	73	80	83.0	78.2

Table 19
PL-OH CANA Results
G School

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	1	86	86	83	89	90	81	73	72	88	76	84.0	80.8
1979-1980	2	70	76	79	88	79	87	83	86	87	94	79.6	86.2
1980-1981	3	78	82	86	77	69	71	75	77	88	72	79.2	75.8
1981-1982	4	88	85	87	87	82	84	85	91	87	85	85.8	86.4
1982-1983	5	No information available											

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	2	76	74	77	88	78	77	78	80	80	87	77.8	81.2
1979-1980	3	69	76	85	79	70	64	63	80	81	73	73.6	74.4
1980-1981	4	77	87	81	88	65	77	80	76	84	86	77.4	82.8
1981-1982	5	75	81	72	85	67	77	75	81	74	87	72.6	82.2

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	3	80	74	83	79	90	75	78	77	70	80	80.2	77.0
1979-1980	4	80	73	88	90	71	72	74	85	85	78	79.6	79.6
1980-1981	5	80	87	87	86	73	77	84	88	85	89	81.8	85.4

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	4	76	80	83	90	71	76	77	79	68	86	75.0	82.2
1979-1980	5	82	85	91	84	74	73	75	75	86	79	81.6	79.2

		Self		Other Awareness		Self-Control		DM/PS		Group Cooperation		Total	
Year	Grade	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1978-1979	5	73	78	72	79	74	69	73	74	75	79	73.4	75.8

Longitudinal Research Site Two **WS-NE School District, HS-NE School 1991-1992**

Overview and Results

WS-NE School District conducted research in one elementary school, HS-NE, to determine the effectiveness of their guidance curriculum approach compared to a guidance system. Analysis of the results indicated at least a 5% growth with the experimental groups in all five strands of the CANA. There was a 2% growth in the control group that used the Skills for Growing Program. The overall 5% growth between the pre and the post CANA assessment is a significant finding (Tables 1 and 2).

The qualitative data analysis indicated a 20% increase in positive affective responses in each of the six questions posed to the experimental group as compared to the control group. Students reported significant improvements in their learning and relationships with each other and their teachers. Activity experiences were significantly helpful and indicated improvement in feelings toward self and their ability to solve problems (Table 3).

The results on the ITS-P&I (Tables 4 through 8) showed mixed results at the Primary Level in both personally and professionally inviting teacher behaviors as perceived by the students. The Intermediate ITS-P&I scores indicated a significant difference in the “always” score in both personally and professionally inviting teacher behaviors as perceived by the students.

The results indicated that students and staff experienced increased and improved skills as the guidance system was implemented. Student personal, social, emotional and behavioral skills improved and more intermediate students perceived their teachers as “always” using personally and professionally inviting practices. This suggests that as a guidance system is implemented, the process creates an inviting environment and supports teacher growth. Implications are that the guidance system may be integral for prevention of destructive behaviors, the development of important skills needed for student academic and life success, and staff support and development needed for effective teaching.

Tables 1 through 8 include the data for the research.

Table 1
Children's Affect Needs Assessment (CANA)
HS-NE Summary
1991-1992

	Other Awareness		Self		Self-Control		DM/PS		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental Groups Analysis	75.4	80.5	79.6	84.4	79.0	83.3	72.9	78.3	77.9	81.6
Control Groups Analysis	75.6	77.4	77.1	78.4	76.7	77.3	74.6	75.2	76.3	76.7

Table 2
Children's Affect Needs Assessment (CANA)
HS-NE Grade Level Summary
1991-1992
Grade 2

	Other Awareness		Self		Self-Control		DM/PS		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental	74.1	87.0	75.4	82.5	80.7	76.6	80.7	76.3	80.0	82.1
Control	72.5	83.2	74.9	86.1	67.5	77.1	67.5	77.1	66.3	83.8
Control	68.7	90.2	75.0	91.9	72.2	91.9	69.8	87.8	67.5	93.3

Grade 3

	Other Awareness		Self		Self-Control		DM/PS		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental	67.4	66.9	78.3	69.5	74.1	71.1	72.2	60.8	65.7	70.0
Control	68.9	79.7	75.3	80.1	74.2	78.1	74.2	78.1	74.5	78.9
Control	83.8	73.6	87.1	81.0	83.6	75.1	80.7	73.8	88.4	74.3

Table 2 (Continued)
Grade 4

	Other Awareness		Self		Self-Control		DM/PS		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental	86.1	84.6	94.5	87.3	90.0	90.0	90.8	84.9	97.0	89.5
Control	78.1	69.6	74.5	70.0	69.5	66.1	75.0	71.1	73.0	72.0
Control	83.1	73.5	83.3	77.2	81.1	72.2	79.1	73.3	85.0	73.0

Grade 5

	Other Awareness		Self		Self-Control		DM/PS		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental	83.6	83.4	88.4	87.2	87.1	83.8	80.5	82.7	90.8	77.7
Control	84.6	69.2	86.2	57.8	83.1	80.5	81.3	62.0	81.6	59.2

Grade 6

	Other Awareness		Self		Self-Control		DM/PS		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental	79.3	80.0	82.5	88.9	79.5	84.5	74.6	81.7	80.0	84.0
Control	81.1	84.2	75.6	83.9	80.0	85.6	85.8	80.8	87.0	84.0
Control	79.3	80.0	83.6	87.8	81.9	82.8	70.2	79.2	84.2	82.0

Table 3
HS-NE Grade Level Summary
1991-1992
Qualitative Questions and Responses

Question:	Control	Exp.
the students indicated that the guidance activities helped them.	62%	88%
the students indicated that they feel better about themselves.	63%	85%
the students stated that they feel better about their learning .	63%	81%
the students stated that they get along better.	63%	90%
the students can handle problems better.	60%	85%
the students state that they get along better with their teacher.	68%	90%

Table 4
HS-NE Invitational Teaching Survey
Primary and Intermediate (ITS-P&I)
Combined Summary, 1991-1992

		<u>Personally Inviting</u>					
		Pre / Post		Pre / Post			
<u>Primary</u>							
Experimental		64.1 / 67					
Control		67.2 / 72.8					
		Seldom		Sometimes		Always	
		Pre / Post		Pre / Post		Pre / Post	
<u>Intermediate</u>							
Experimental		16.5 / 14.8		41 / 33.3		43.5 / 52	
Control		21.7 / 19.8		41 / 45.4		37.4 / 34.9	
		<u>Professionally Inviting</u>					
		Pre / Post		Pre / Post			
<u>Primary</u>							
Experimental		73.4 / 72.8					
Control		77.3 / 80.7					
		Seldom		Sometimes		Always	
		Pre / Post		Pre / Post		Pre / Post	
<u>Intermediate</u>							
Experimental		5.6 / 8.6		39.3 / 32.3		55.1 / 62.4	
Control		13.1 / 8.3		37.1 / 40.6		49.8 / 51	

Table 5
ITS-P&I Results for HS-NE- Primary
1991-1992

	Commitment		Consideration		Coordination		Proficiency		Expectation		Personally Inviting		Professionally Inviting	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Grade 2														
Exp.	72.7	72.7	64.6	64.6	78.9	81.1	68.9	69.5	68.9	69.5	68.7	68.7	75.6	80.0
Control	73.3	70.9	64.2	61.2	86.0	79.3	72.0	70.0	72.0	70.0	68.8	66.0	81.6	74.2
Control	68.7	70.4	64.8	74.4	75.6	88.1	70.6	79.4	70.6	79.4	66.8	72.4	71.7	82.9
Grade 3														
Exp.	64.5	73.6	55.0	57.3	69.5	77.5	64.5	65.5	70.0	65.0	59.8	65.5	68.0	69.3
Control	67.0	83.3	57.9	69.8	74.7	87.9	63.7	73.2	73.7	89.5	62.5	76.6	70.7	83.5
Control	77.9	82.2	63.6	66.6	85.7	80.5	77.1	77.1	90.5	85.7	70.8	74.4	84.4	81.1

Table 5 (Continued)
ITS-P&I Subscales HS-NE- Primary
1991-1992
Grade 2

	Disclosing		Supporting		Investing	
	Pre	Post	Pre	Post	Pre	Post
Commitment						
Experimental	35.1	56.1	87.4	80.0	86.0	77.2
Control	37.8	44.4	37.8	44.4	89.3	80.0
Control	45.8	45.8	75.0	83.8	81.3	72.9
	Attending		Affirming		Cheering	
	Pre	Post	Pre	Post	Pre	Post
Consideration						
Experimental	81.6	81.6	54.0	53.9	56.1	56.1
Control	83.3	81.7	53.3	63.3	53.3	66.7
Control	84.4	84.4	54.7	75.0	52.1	60.4
	Clarifying		Informing			
	Pre	Post	Pre	Post		
Coordination						
Experimental	80.3	82.9	78.1	79.8		
Control	85.0	76.7	86.7	81.1		
Control	71.9	92.2	78.1	85.4		
	Managing		Relying			
	Pre	Post	Pre	Post		
Proficiency						
Experimental	72.6	76.8	65.3	62.1		
Control	72.0	66.7	72.0	73.3		
Control	71.3	76.3	70.0	82.5		

Table 5 (Continued)
ITS-P&I Subscales HS-NE- Primary
1991-1992
Grade 3

	Disclosing		Supporting		Investing	
	Pre	Post	Pre	Post	Pre	Post
Commitment						
Experimental	5.0	63.3	75.0	72.0	76.7	86.7
Control	36.8	66.7	76.8	89.5	80.7	89.5
Control	54.0	66.7	86.7	89.5	87.3	85.7
	Attending		Affirming		Cheering	
	Pre	Post	Pre	Post	Pre	Post
Consideration						
Experimental	73.8	71.3	48.8	55.0	38.3	41.7
Control	73.7	85.5	59.2	67.1	35.1	55.6
Control	78.6	75.0	64.3	66.7	42.8	55.6
	Clarifying		Informing			
	Pre	Post	Pre	Post		
Coordination						
Experimental	68.8	68.8	70.0	83.3		
Control	68.7	81.6	78.1	92.1		
Control	83.3	81.0	87.3	80.1		
	Managing		Relying			
	Pre	Post	Pre	Post		
Proficiency						
Experimental	67.0	72.0	62.0	59.0		
Control	61.1	76.8	66.3	69.5		
Control	79.0	79.0	75.2	75.2		

Table 6
ITS-P&I Results for HS-NE - Intermediate (Grade 4-6)
1991-1992

	Seldom		Sometimes		Always	
	Pre	Post	Pre	Post	Pre	Post
Commitment						
Experimental	9.1	7.9	48.8	34.9	42.1	57.3
Control	16.6	16.4	43.9	47.4	39.5	36.3
Consideration						
Experimental	22.1	21.6	33.1	31.8	44.8	46.7
Control	26.7	23.3	38.2	43.4	35.2	33.4
Coordination						
Experimental	6.1	7.9	46.7	36.4	47.2	55.7
Control	13.4	11.0	42.3	44.5	44.2	44.2
Proficiency						
Experimental	9.3	7.9	44.3	39.6	46.4	52.5
Control	13.4	11.0	48.1	51.5	38.5	37.5
Expectations						
Experimental	1.5	10.0	26.9	20.9	71.6	79.1
Control	12.4	2.9	21.0	25.7	66.7	71.4
Personally Inviting						
Experimental	15.6	14.8	41.0	33.3	43.5	52.0
Control	21.7	19.8	41.0	45.4	37.4	34.9
Professionally Inviting						
Experimental	5.6	8.6	39.3	32.3	55.1	62.4
Control	13.1	8.3	37.1	40.6	49.8	51.0

Experimental Group = 67 Students
Control Group = 105 Students

Table 6 (Continued)
ITS-P&I Sub-scales - Intermediate (Grade 4-6)

	Disclosing			Supporting			Investing		
	Seldom	Some-times	Always	Seldom	Some-times	Always	Seldom	Some-times	Always
	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post
Commitment									
Experimental	19.0/17.4	54.7/40.3	25.9/42.3	5.7/5.9	46.0/32.8	48.4/61.2	4.5/1.5	47.8/32.8	47.8/65.7
Control	21.9/23.5	54.9/55.6	23.2/20.9	16.2/15.6	39.2/44.9	46.6/39.4	12.1/10.5	40.6/43.2	47.3/46.3
	Attending			Affirming			Cheering		
	Seldom	Some-times	Always	Seldom	Some-times	Always	Seldom	Some-times	Always
	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post
Consideration									
Experimental	14.2/13.4	33.2/31.0	52.6/55.6	29.5/25.7	37.3/37.7	33.2/36.6	22.9/26.8	27.4/24.9	49.8/48.3
Control	18.8/5.0	37.9/42.6	43.3/42.4	34.5/26.7	40.2/45.2	25.2/28.1	26.7/29.5	35.9/41.9	37.5/28.6
	Clarifying			Informing					
	Seldom	Some-times	Always	Seldom	Some-times	Always			
	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post			
Coordination									
Experimental	7.1/10.4	52.6/42.5	40.3/47.0	5.5/6.2	42.8/32.3	51.7/61.4			
Control	15.7/13/6	47.1/50.5	37.1/36.0	12.1/9.8	9.0/40.5	48.9/49.7			
	Managing			Relying					
	Seldom	Some-times	Always	Seldom	Some-times	Always			
	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post	Pre/Post			
Proficiency									
Experimental	13.7/13.4	44.2/40.9	42.1/45.7	4.8/2.4	44.5/38.2	50.7/59.4			
Control	14.4/13.9	48.0/50.3	37.9/35.8	12.8/8.0	48.2/52.8	39.0/39.2			

Table 7
ITS-P&I Results for HS-NE - Primary
1991-1992 Summary

	Commitment		Consideration		Coordination		Proficiency		Expectation		Personally Inviting		Professionally Inviting	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Grades 2 and 3														
Experimental	68.5	73.2	59.7	60.8	74.1	79.2	66.7	67.4	79.5	71.8	64.1	67.0	73.4	72.8
Control	71.9	77.5	62.5	68.1	80.6	83.9	71.0	75.1	80.3	83.1	67.2	72.8	77.3	80.7

Table 8
ITS-P&I Results for HS-NE - Intermediate
1992-1993 Summary

	Seldom		Sometimes		Always	
	Pre	Post	Pre	Post	Pre	Post
Commitment						
Experimental	9.1	7.9	48.8	34.9	42.1	57.3
Control	16.6	16.4	43.9	47.4	39.5	36.3
Consideration						
Experimental	22.1	21.6	33.1	31.8	44.8	46.7
Control	26.7	23.2	38.2	43.7	35.2	33.4
Coordination						
Experimental	6.1	7.9	46.7	36.4	47.2	55.7
Control	13.4	1.0	42.3	44.5	44.2	44.2
Proficiency						
Experimental	9.3	7.9	44.3	39.6	46.4	52.5
Control	13.4	11.0	48.1	51.5	38.5	37.5
Expectations						
Experimental	1.5	10.0	26.9	20.9	71.6	79.1
Control	12.4	29.0	21.0	25.7	66.7	71.4
Personally Inviting						
Experimental	15.6	14.8	41.0	33.3	43.5	52.0
Control	21.7	19.8	41.0	45.4	37.4	34.9
Professionally Inviting						
Experimental	5.6	8.6	39.3	32.3	55.1	62.4
Control	13.1	8.3	37.1	40.6	49.8	51.0

WS-NE School District - Nebraska 1998

School-Based Research

WS-NE School District moved from a guidance curriculum approach to the guidance system in the ten district elementary schools as a result of the significant research findings of the 1991-1992 research. WS-NE Schools completed a study on how their classroom guidance system improved academic achievement from 1995-1998. They used the Grow With Guidance® Systems model in all the elementary schools beginning in 1994. Positive results have been found on the Otis-Lennon Assessment (Table 9) and The Children's Affect Needs Assessment (Table Ten 10), as well as on qualitative questions that support Invitational Teaching Survey-Primary & Intermediate results from 1991-1992.

To measure academic success they used the Achievement/Ability Comparison Score (AAC) for the Otis-Lennon. The results demonstrated achievement levels that were higher than the national expected on the AAC. The national expected average percentages on the AAC are low (23) /middle (54) / high (23) scores. As summarized on Table 9, WS-NE School District scores were 8.8 / 59.9 / 31.2. Although WS-NE is a relatively small district, the student population changed over five years from 1994-1998. The local newspaper, the Omaha World Herald, reported that WS-NE School District moved from a rank of first to a rank of fifth in socio-economic factors in the Omaha area. School district professionals anticipated a possible decline in their outstanding history of academic achievement. The guidance systems model begun in 1994 was the only systematic change in the district that impacted all classrooms. The AAC scores indicate that the guidance systems model begun in 1994 as the core of the district's classrooms resulted in increased academic achievement for students.

The CANA results demonstrated continued consistency with student skill development or growth. Table 10 provides CANA information for the combined elementary school total and each of the ten elementary schools.

The ITS-P&I results reported on Tables 4 through 8 continued to remain consistent based on qualitative assessments. Student, staff, and family feedback indicated the teachers' inviting behaviors at HS-NE School remained consistent or improved since the instrument was given in 1991-1992.

Table 9
WS-NE Schools
The Achievement/Ability Comparison Score (AAC)

Students receive an AAC of High, Middle or Low based upon their scores on the Stanford Achievement Test as *compared to* students who scored similarly on the Otis-Lennon School Ability Test:

The student scoring in the upper 10% nationally (the upper decile) on the Otis-Lennon is divided into Low, Middle and High based upon Stanford Achievement scores...this procedure is repeated with each decile as follows:	<u>Otis-Lennon</u>	-	<u>Stanford</u>	=	<u>AAC</u>
			Highest 23%	=	High
	90-99%ile		Middle 54%	=	Middle
			Low 23%	=	Low
			Highest 23%	=	High
	80-90%ile		Middle 54%	=	Middle
			Low 23%	=	Low
			Highest 23%	=	High
	01-09%ile		Middle 54%	=	Middle
		Low 23%	=	Low	

AAC Scores 1991-1998

As AAC scores are always distributed nationally in the same percentages (23/54/23), both the percent and the number of students “expected” in any group is easily computed. The following table gives the number and percent of students receiving Low, Middle and High AAC scores by school and district for 1991-98.

	Low <u>N%</u>	Middle <u>N%</u>	High <u>N%</u>	Total <u>N%</u>
HS	124/14	552/62	212/24	888/100
LL	35/6	329/58	199/35	563/100
OD	28/5	292/54	217/40	537/100
PR	53/9	336/59	178/31	567/100
PL	25/6	222/57	140/36	387/100
RB	32/6	344/63	170/31	546/100
SH	19/7	153/55	106/38	278/100
SN	45/7	359/60	199/33	603/100
UH	49/11	252/57	145/33	446/100
WG	66/11	396/68	122/21	584/100
District	476/8.8	3235/59.9	1688/31.2	5399/100
National Expected	1242/23	2915/54	1242/24	

The “overachievement” as measured by the AAC shows:

- 1) 766 fewer students received a Low AAC than would be expected, and
- 2) 446 more students received a High AAX than would be expected.

Table 9 (Continued)

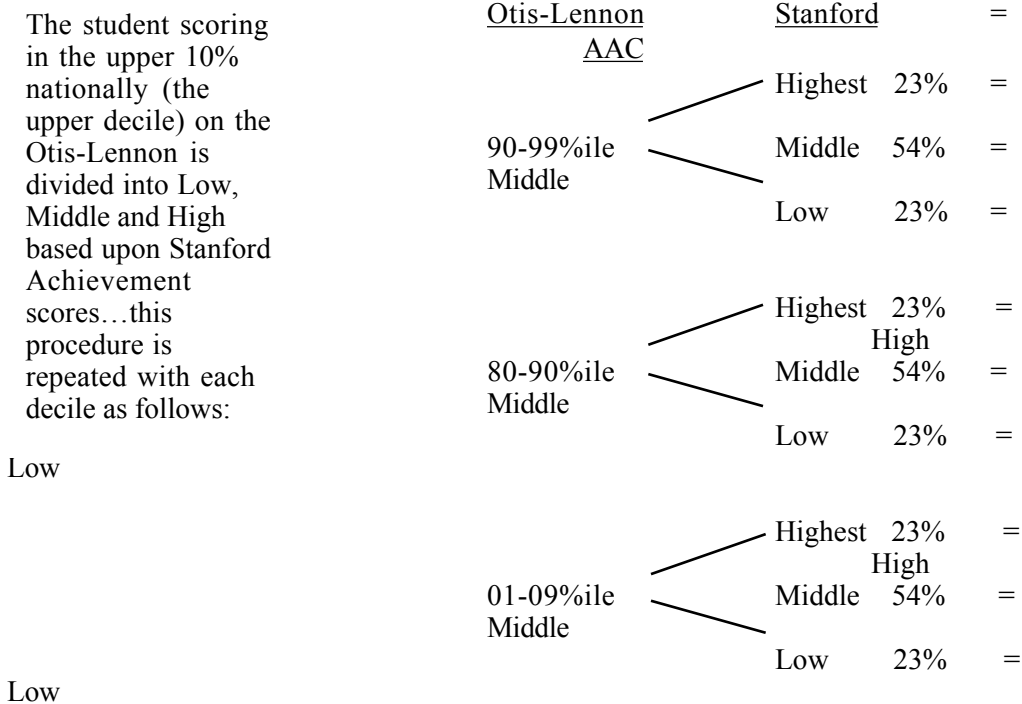
1996-1998 District AAC Scores

		Low N%	Middle N%	High N%
1996-7	4 th Grade	21/6	224/62	116/32
	6 th Grade	22/6	256/70	88/24
	Totals	43/6	480/966	204/28
1997-8	4 th Grade	13/4	205/63	104/32
	6 th Grade	21/6	248/70	85/24
	Totals	35/5	453/67	189/28

WS-NE Schools Otis-Lennon Report

The Achievement/Ability Comparison Score (AAC)

Students receive an AAC of High, Middle or Low based upon their scores on the Stanford Achievement Test as *compared to* students who scored similarly on the Otis-Lennon School Ability Test:



WS-NE School District continues to administer the CANA and qualitative assessments annually (Tables 11 through 17). Pre-test results are used to determine curriculum experiences for students and post-test results factored in as one indicator of progress and future priorities. School district reports document that the Grow With Guidance® System is the foundation of the



district initiatives for Academic Achievement, Discipline, Character Education, Safe and Drug Free Schools, and their award-winning School to Career program. HS-NE Elementary School, the site of the 1991-1992 research, received the International Alliance for Invitational Education Inviting School Award in 2004. District annual evaluation reports document the significant role the Grow With Guidance® System and the counseling program plays in WS-NE Schools.

Table 10
CANA Results for WS-NE Schools 1995-1998

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
1995-1996 Total Elementary Schools												
	90	98	8	89	99	10	88	98*	10	89	99*	10
	85	94	9	89	98	9						
1996-1997 Total Elementary Schools												
	82	83	1	84	86*	2	81	82*	1	82	83*	1
	78	80*	2	79	81*	2						
1997-1998 Total Elementary Schools												
Building 01	77	83*	6	83	88*	5	80	85*	5	79	84*	5
	75	82*	7	73	78*	5						
Building 02	88	89	1	90	90	0	90	87	-1	89	88	-1
	85	83	-2	87	88	1						
Building 03	89	89	0	91	93*	2	92	92	0	91	92	1
	89	90	1	92	94	2						
Building 04	86	88	2	84	88*	4	84	85	1	84	87*	3
	79	83*	4	84	87	3						
Building 05	89	91	2	80	87*	7	84	90*	6	84	89*	5
	84	88*	4	84	87	3						
Building 06	87	86	-1	87	88	1	85	85	0	86	86	0
	83	81	-2	84	85	1						
Building 07	92	91	-1	93	94	1	93	94	1	92	93	1
	89	90	1	94	94	0						
Building 08	85	85	0	86	87	1	88	87	-1	86	86	0
	85	85	0	87	84	-3						
Building 09	89	91	2	89	94*	5	86	91*	5	88	91*	3
	85	89*	4	89	91	2						
Building 10	88	88	0	91	91	0	89	88	-1	89	89	0
	86	85	-1	89	90	1						
Total District	86	88*	2	88	90*	2	87	89*	2	86	88*	2
	84	85*	1	85	87*	2						

Table 11
CANA Results for WS-NE Schools 1998-1999

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 01	83	84	1	86	88	2	83	87	4	84	85	1
	82	83	1	85	78	-7*						
Building 02	90	89	-1	87	92	5*	89	90	1	88	90	2*
	86	87	1	90	89	-1						
Building 03	89	88	-1	90	90	0	90	90	0	89	89	0
	85	86	1	91	88	-3*						
Building 04	90	88	-2*	88	82	-6*	89	87	-2	88	84	-4*
	84	82	-2	86	80	-6*						
Building 05	93	93	0	86	86	0	90	92	2*	88	89	1
	85	87	2	89	87	-2						
Building 06	90	88	-2	91	93	2*	89	90	1	89	90	1
	86	86	0	89	88	-1						
Building 07	87	87	0	89	89	0	87	84	-3	87	86	-1
	83	82	-1	90	87	-3						
Building 08	93	92	-1	92	92	0	94	91	-3*	92	91	-1
	87	86	-1	93	93	0						
Building 09	90	94	4*	91	94	3*	92	94	2	91	93	2*
	86	90	4*	93	91	-2						
Building 10	No Information Available											
Total District	89	89	0	89	90	1*	89	90	1*	88	89	1
	85	86	1	78	76	-2*						

Table 12
CANA Results WS-NE Schools 1999-2000

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 01	78	81	3*	83	87	4*	80	85	5*	80	83	3*
	78	81	3*	76	77	1						
Level 2	78	83	5	85	89	4*	86	91	5	82	86	4*
	78	84	6*	82	78	-4						
Level 3	73	82	9*	75	85	10*	77	84	7	75	83	8*
	73	77	4	78	83	5						
Level 4	81	88	7*	83	88	5*	83	90	7*	81	87	6*
	80	84	4	72	77	5						
Level 5	77	72	-5	84	84	0	79	77	-2	80	78	-2
	80	77	-3	75	72	-3						
Level 6	82	83	1	88	89	1	78	83	5*	82	83	1
	79	81	2	74	74	0						
Building 02	84	85	1	81	79	-2	85	83	-2	81	81	0
	80	80	0	74	76	2						
Level 2	82	86	4	75	75	0	77	79	2	76	80	4
	75	81	6	69	80	11						
Level 3	75	76	1	71	70	-1	76	76	0	72	72	0
	71	66	-5	67	67	0						
Level 4	86	85	-1	84	75	-9*	82	80	-2	83	77	-6*
	84	71	-11*	72	68	-4						
Level 5	88	91	3	84	85	1	83	89	6	83	87	4
	82	90	8*	75	79	4						
Level 6	88	88	0	87	89	2	86	89	3	86	89	3
	86	90	4	83	89	6						
Building 03	86	91	5*	86	92	6*	89	94	5*	86	92	6*
	83	88	5*	88	93	5*						
Level 2	90	88	-2	82	94	12*	91	94	3	86	91	5*
	81	86	5	88	88	0						
Level 3	87	92	5*	90	92	2	93	95	2	90	93	3*
	86	90	4	94	97	3*						
Level 4	81	93	12*	84	97	13*	82	97	15*	82	96	14*
	79	94	15*	83	98	15*						
Level 5	80	87	7	80	84	4	84	87	3	81	85	4
	78	77	-1	83	87	4						
Level 6	91	93	2	91	93	2	95	95	0	92	94	2
	92	91	-1	93	95							

Table 12 (Continued)
CANA Results WS-NE Schools 1999-2000

				Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 04	90	83	-7*	89	84	-5*	88	83	-5*	89	83	-6*
	86	79	-7*	88	85	-3						
Level 2	88	79	-9	88	84	-4	90	82	-8	87	81	-6
	81	76	-5	82	84	2						
Level 3	95	92	-3	89	87	-2	90	93	3	91	89	-2
	90	83	-7	94	89	-5						
Level 4	80	71	-9	82	75	-7	78	69	-9	80	72	-8
	80	68	-12*	82	74	-8						
Level 5	94	93	-1	94	92	-2	92	93	1	93	92	-1
	92	91	-1	93	92	-1						
Level 6	94	85	-9*	94	88	-6	93	83	-10	92	85	-7
	85	79	-6	92	91	-1						
Building 05	90	88	-2	91	89	-2	91	88	-3	91	88	-3
	87	86	-1	93	91	-2						
Level 2	78	79	1	79	84	5	81	80	-1	78	81	3
	75	76	1	78	87	9						
Level 3	87	93	6*	87	89	2	90	93	3	87	91	4
	83	90	7*	91	93	2						
Level 4	87	86	-1	94	95	1	96	94	-2	93	92	-1
	88	87	-1	99	96	-3						
Level 5	No Information Available											
Level 6	97	85	-12*	96	85	-11*	93	85	-8	95	85	-10*
	93	85	-8	96	85	-11*						
Building 06	88	88	0	88	89	1	87	89	2	87	88	1
	83	86	3	86	86	0						
Level 3	86	89	3	82	90	8*	83	87	4	83	89	6*
	78	86	8	90	90	0						
Level 4	83	79	-4	86	82	-4	81	78	-3	82	80	-2
	77	78	1	74	77	3						
Level 5	90	90	0	89	90	1	89	93	4	88	90	2
	83	88	5	84	83	-1						
Level 6	88	91	3	91	90	-1	90	91	1	89	89	0
	85	85	0	88	88	0						
Level 7	90	93	3	94	93	-1	91	94	3	92	93	1
	91	91	0	95	93	-2						
Building 07	81	89	8*	86	92	6*	82	88	6*	83	89	6*
	82	83	1	82	86	4						

Table 12 (Continued)
CANA Results WS-NE Schools 1999-2000

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 08	95	95	0	94	95	1	94	95	-1	94	94	0
	90	90	0	93	93	0						
Level 3	93	94	1	94	93	-1	90	94	4	91	93	2
	85	88	3	94	94	0						
Level 4	95	95	0	95	95	0	95	95	0	94	93	-1
	91	90	-1	91	89	-2						
Level 5	94	95	1	93	95	2	96	96	0	94	94	0
	91	88	-3	96	94	-2						
Level 6	97	96	-1	95	94	-1	95	93	-2	94	94	0
	89	92	3	92	96	4*						
Level 7	96	96	0	95	95	0	97	98	1	95	96	1
	91	93	2	95	95	0						
Building 09	89	91	2	90	92	2*	90	92	2	89	91	2*
	87	88	1	85	89	4*						
Level 3	89	85	-4	89	91	2	87	89	2	87	88	1
	83	85	2	83	85	2						
Level 4	93	89	-4	88	93	5*	91	90	-1	88	90	2
	84	84	0	85	89	4						
Level 5	92	94	2	93	94	1	94	96	2	92	94	2
	93	94	1	88	91	3						
Level 6	84	90	6	86	85	-1	88	90	2	84	87	3
	84	83	-1	78	84	6						
Level 7	88	96	8*	94	97	3	91	96	5*	91	96	5*
	91	93	2	90	95	5						
Building 10	78	73	-5*	81	72	-9*	80	70	-10*	79	71	-8*
	74	68	-6*	82	74	-8*						
Level 2	75	69	-6	73	71	-2	75	65	-10*	73	69	-4
	63	68	5	77	71	-6						
Level 3	74	70	-4	81	69	-12*	80	67	-13*	79	69	-10*
	77	67	-10	83	70	-13						
Level 4	78	80	2	83	75	-8*	81	77	-4	80	77	-3
	77	74	-3	79	80	1						
Level 5	78	57	-21*	86	67	-19*	86	61	-25*	83	62	-21*
	75	60	-15	89	62	-27*						
Level 6	87	79	-8	86	78	-8*	80	74	-6	84	76	-8*
	80	66	-14*	86	79	-7						
Total District	85	86	1	86	87	1	86	86	0	85	86	1
	82	82	0	84	84	0						

Table 13
CANA Results WS-NE Schools
2000 - 2001

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	88	87	-1	88	88	0	89	88	-1	87	87	0
Level 3	87	87	0	87	90	3	87	88	1	86	87	1
	82	83	1	85	87	2						
Level 4	87	84	-3	88	85	-3	89	87	-2	88	85	-3
	85	81	-4	87	85	-2						
Level 5	85	85	0	88	88	0	88	87	-1	86	86	0
	82	82	0	85	88	3						
Level 6	88	85	-3	87	87	0	87	87	0	86	85	-1
	80	80	0	85	85	0						
Level 7	91	90	-1	90	91	1	92	91	-1	90	90	0
	85	85	0	90	90	0						
Building 01	83	81	-2	87	87	0	85	86	1	84	84	0
	78	81	3	83	82	-1						
Level 3	83	81	-2	84	91	7	83	86	3	83	87	4
	80	86	6	80	89	9						
Level 4	75	77	2	80	85	5	80	80	0	78	81	3
	80	82	2	75	79	4						
Level 5	75	83	8	84	88	4	84	86	2	80	85	5
	77	79	2	75	82	7						
Level 6	80	84	4	86	90	4	83	88	5	82	85	3
	78	81	3	74	79	5						
Level 7	78	84	6	86	88	2	79	81	2	81	84	3
	78	81	3	78	83	5						
Building 02	89	87	-2	82	82	0	84	83	-1	85	84	-1
	80	75	-5	91	94	3						
Level 3	83	91	8	75	80	5	77	83	6	77	84	7
	71	75	4	80	96	16						
Level 4	89	85	-4	84	84	0	84	81	-3	86	83	-3
	83	77	-6	93	88	-5						
Level 5	81	77	-4	77	78	1	78	81	3	79	78	-1
	71	68	-3	91	91	0						
Level 6	No Information Available											
Level 7	96	88	-8	90	85	-5	91	82	-9	91	85	-6
	83	75	-8	96	94	-2						

Table 13 (Continued)
CANA Results WS-NE Schools
2000 - 2001

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 03	91	92	1	93	94	1	94	93	-1	92	92	0
	88	88	0	93	92	-1						
Level 3	88	92	4	92	93	1	94	92	-2	90	91	1
	85	84	-1	89	92	3						
Level 4	91	88	-3	94	91	-3	93	89	-4	92	88	-4
	87	85	-2	89	85	-4						
Level 5	95	95	0	93	96	3	96	96	0	95	96	1
	92	95	3	99	97	-2						
Level 6	92	97	5	95	95	0	96	97	1	95	96	1
	93	93	0	99	97	-2						
Level 7	90	90	0	88	93	5	89	91	2	89	91	2
	85	86	1	93	90	-3						
Building 04	89	90	1	90	92	2	88	89	1	89	90	1
	84	86	2	89	92	3						
Level 3	89	89	0	88	92	4	88	92	4	81	91	10
	87	84	-3	86	96	10						
Level 4	83	86	3	91	95	4	88	87	-1	88	89	1
	88	84	-4	91	90	-1						
Level 5	90	93	3	89	90	1	86	88	2	86	90	4
	79	85	6	80	89	9						
Level 6	88	90	2	89	90	1	86	88	2	87	89	2
	77	84	7	91	93	2						
Level 7	93	90	-3	95	93	-2	91	90	-1	93	91	-2
	90	88	-2	96	93	-3						
Building 05	85	90	5	87	92	5	86	91	5	87	91	4
	85	89	4	91	95	4						
Level 3	84	84	0	87	81	-6	92	89	-3	88	86	-2
	88	90	2	89	95	6						
Level 4	71	86	15	83	92	9	78	86	8	80	88	8
	79	81	2	92	90	-2						
Level 5	91	94	3	88	92	4	91	97	6	89	93	4
	85	89	4	91	94	3						
Level 6	89	90	1	85	96	9	83	91	8	87	94	7
	88	94	6	92	99	7						
Level 7	94	97	3	96	96	0	94	97	3	94	97	3
	90	97	7	96	100	4						

Table 13 (Continued)
CANA Results WS-NE Schools
2000 - 2001

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 06	88	86	-2	87	86	-1	88	85	-3	86	85	-1
	80	80	0	86	85	-1						
Level 3	85	77	-7	84	85	1	82	79	-3	82	80	-2
	74	72	-2	84	80	-4						
Level 4	87	86	-1	82	85	3	86	85	-1	84	84	0
	80	80	0	81	82	1						
Level 5	87	89	2	88	87	-1	87	83	-4	87	85	-2
	85	81	-4	87	85	-2						
Level 6	90	89	-1	90	86	-4	95	93	-2	90	88	-2
	85	85	0	88	88	0						
Level 7	90	88	-2	92	91	-1	88	88	0	88	89	1
	79	83	4	88	92	4						
Building 07	86	84	-2	87	89	2	83	85	2	85	86	1
	80	83	3	87	84	-3						
Level 3	92	87	-5	86	87	1	87	84	-3	86	87	1
	72	89	11	87	88	1						
Level 4	83	87	4	90	94	4	85	92	7	85	90	5
	83	87	4	78	85	7						
Level 5	75	73	-2	81	84	3	73	78	5	78	77	-1
	74	72	-2	88	75	7						
Level 6	89	76	7	82	79	-3	81	78	-3	85	77	8
	85	75	-10	90	77	-3						
Level 7	93	92	-1	90	95	5	87	86	-1	90	91	1
	86	85	-1	95	93	-2						
Building 08	94	94	0	93	94	1	93	94	1	93	93	0
	90	89	-1	92	92	0						
Level 3	94	90	-4	94	91	-3	92	90	-2	92	89	-3
	86	84	-2	93	89	-4						
Level 4	88	93	5	91	94	3	91	96	5	89	93	4
	84	90	6	89	94	5						
Level 5	93	95	2	93	95	2	95	97	2	93	95	2
	94	91	-3	90	93	3						
Level 6	95	96	1	93	96	3	96	96	0	94	95	1
	94	92	-2	94	96	2						
Level 7	98	97	-1	96	93	-3	95	93	-2	95	92	-3
	91	87	-4	94	89	-5						

Table 13 (Continued)
CANA Results WS-NE Schools
2000 - 2001

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 09	91	84	-7	90	87	-3	89	85	-4	88	85	-3
	84	80	-4	85	83	-2						
Level 3	86	83	-3	85	91	6	87	87	0	85	86	1
	85	80	-5	75	85	10						
Level 4	No Information Available											
Level 5	89	81	-8	89	85	-4	84	82	-2	86	82	-4
	76	73	-3	87	85	-2						
Level 6	96	90	-6	94	86	-8	96	88	-8	95	87	-8
	94	87	-7	91	80							
Level 7	No Information Available											
Building 10	91	88	-3	91	88	-3	88	87	-1	89	87	-2
	84	82	-2	87	84	-3						
Level 3	92	91	-1	96	93	-3	91	89	-2	93	91	-2
	91	91	0	92	90	-2						
Level 4	86	86	0	87	85	-2	77	82	5	83	83	0
	79	74	-5	79	84	-5						
Level 5	91	86	-5	91	83	-8	89	88	-1	89	83	-6
	86	81	-5	87	75	-12						
Level 6	94	86	-8	92	89	-3	93	90	-3	92	87	-5
	83	81	-2	94	85	-9						
Level 7	No Information Available											

Table 14
CANA Results WS-NE Schools
2001 - 2002

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	88	87	-1	88	88	0	89	88	-1	87	87	0
Level 3	87	87	0	87	90	3	87	88	1	86	87	1
Level 4	82	83	1	85	87	2						
Level 5	87	84	-3	88	85	-3	89	87	-2	88	85	-3
Level 6	85	81	-4	87	85	-2						
Level 7	85	85	0	88	88	0	88	87	-1	86	86	0
	82	82	0	85	88	3						
Level 3	88	85	-3	87	87	0	87	87	0	86	85	-1
Level 4	80	80	0	85	85	0						
Level 5	91	90	-1	90	91	1	92	91	-1	90	90	0
Level 6	85	85	0	90	90	0						
Building 01	83	81	-2	87	87	0	85	86	1	84	84	0
Level 3	78	81	3	83	82	-1						
Level 4	83	81	-2	84	91*	7	83	86	3	83	87	4
Level 5	80	86	6	80	89*	9						
Level 6	83	82	-1	90	89	-1	87	88	1	86	85	-1
Level 7	81	81	0	87	79*	-8						
	79	75	-4	87	80*	-7	83	79	-4	82	77	-5
	78	74	-4	74	77	3						
Level 3	80	80	0	83	85	2	82	83	1	80	82	2
Level 4	69	77*	8	80	79	-1						
Level 5	90	84	-6	90	92	2	90	91	1	89	88	-1
Level 6	83	85	2	89	85	-4						
Building 02	88	88	0	81	81	0	86	85	-1	83	83	0
Level 3	79	76	-3	78*	88	10						
Level 4	86	84	-2	78	85	7	83	82	-1	81	82	1
Level 5	80	73*	-7	74*	83	9						
Level 6	91	88	-3	77	71*	-6	86	83	-3	83	80	-3
Level 7	82	76*	-6	79	84	5						
	84	86	2	81	86*	5	86	85	-1	82	85	3
	79	76	-3	79	95*	16						
Level 3	86	89	3	81	79	-2	84	85	1	82	82	0
Level 4	75	76	1	78	81	3						
Level 5	92	91	-1	90	87	-3	89	87	-2	87	88	1
Level 6	81	80	-1	78	95*	17						

Table 14 (Continued)
CANA Results WS-NE Schools
2001 - 2002

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 03	94	93	-1	93	94	1	95	95	0	93	94	1
	90	94	4	93	95	2						
Level 3	93	94	1	94	95	1	97	94	-3	94	94	0
	90	94	4	91	95	4						
Level 4	90	90	0	88	93	5	93	94	1	90	93	3
	87	95	8	89	91	2						
Level 5	96	93	-3	99	97	-2	98	97	-1	97	96	-1
	95	94	-1	97	100	3						
Level 6	96	94	-2	93	91	-2	95	98	3	94	94	0
	93	94	1	93	97	4						
Level 7	97	100	3	98	100	2	97	99	2	97	99	2
	95	100	5	98	98	0						
Building 04	89	89	0	91	91	0	89	89	0	89	89	0
	85	85	0	90	91	1						
Level 3	87	87	0	90	90	0	92	90	-2	88	88	0
	83	85	2	90	87	-3						
Level 4	90	90	0	95	91	-4	92	92	0	92	90	-2
	90*	81	-9	94	92	-2						
Level 5	78	83	5	90	93	3	88	88	0	86	89	3
	82	87	5	89	93	4						
Level 6	92	89	-3	91	90	-1	91	89	-2	90	89	-1
	83	85	2	91	92	1						
Level 7	92	89	-3	93	91	-2	90	88	-2	91	89	-2
	86	85	-1	94	89	-5						
Building 05	89	87	-2	89	92	3	90	90	0	89	89	0
	87	86	-1	89	87	-2						
Level 3	88	90	2	86	92	6	88	91	3	86	88	2
	78	78	0	91	84	-7						
Level 4	83	77	-6	83	85	2	93	85	-8	86	81	-5
	88*	80	-8	87	75*	-12						
Level 5	97	93	-4	92	95	3	94	92	-2	92	94	2
	88	95	7	88	94	6						
Level 6	87	90	3	88	93	5	84*	95	11	87	93	6
	92	93	1	80*	95	15						
Level 7	92	88	-4	94	95	1	91	89	-2	93	91	-2
	94	89	-5	98	93	-5						

Table 14 (Continued)
CANA Results WS-NE Schools
2001 - 2002

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 06	86	83	-3	86	84	-2	86	84	-2	86	82	-4
	81	76*	-5	87	83	-4						
Level 3	82	82	0	81	78	-3	74	77	3	78	78	0
	67	73	6	83	77	-6						
Level 4	83	74*	-9	88	81*	-7	87	81	-6	85	78	-7
	80	70*	-10	84	79	-5						
Level 5	87	87	0	85	90	5	87	91	4	86	87	1
	81	78	-3	85	83	-2						
Level 6	91	83	-8	90	85	-5	89	83	-6	89	83	-6
	85	79	-6	90	84	-6						
Level 7	89	88	-1	87	86	-1	93	87	-6	90	86	-4
	88	80*	-8	93	89	-4						
Building 07	85	85	0	86	87	1	81	85	4	84	86	2
	81	85	4	84	88	4						
Level 3	85	84	-1	85	89	4	75	80	5	82	84	2
	86	85	-1	79	81	2						
Level 4	89	83	-6	89	84	-5	86	84	-2	88	84	-4
	88	84	-4	91	88	-3						
Level 5	92	92	0	89	92	3	92	94	2	91	92	1
	86	91	5	94	94	0						
Level 6	73	72	-1	80	85	5	71	79	8	75	80	5
	65	76	11	80	88	8						
Level 7	85	91	6	83	83	0	80	86	6	81	87	6
	75	87*	12	78	92*	14						
Building 08	93	91	-2	92	92	0	93	92	-1	92	91	-1
	86	86	0	92	90	-2						
Level 3	93	92	-1	89	91	2	92	90	-2	90	90	0
	86	85	-1	91	90	-1						
Level 4	91	87	-4	95	92	-3	93	91	-2	92	89	-3
	88	85	-3	90	89	-1						
Level 5	91	92	1	93	90	-3	94	94	0	91	91	0
	85	87	2	90	90	0						
Level 6	95	90	-5	92	92	0	93	89	-4	92	90	-2
	87	86	-1	91	89	-2						
Level 7	95	93	-2	96	95	-1	97	96	-1	95	93	-2
	87	89	2	97	92*	-5						

Table 14 (Continued)
CANA Results WS-NE Schools
2001 - 2002

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 09	86	85	-1	87	90	3	87	86	-1	85	86	1
	78	78	0	86	86	0						
Level 3	89	91	2	89*	96	7	89	92	3	88	92	4
	83	86	3	84	89	5						
Level 4	88	83	-5	88	84	-4	85	79	-6	85	82	-3
	71	75	4	84	86	2						
Level 5	76	80	4	83	88	5	83	81	-2	80	82	2
	71	75	4	87	84	-3						
Level 6	85	79	-6	85	86	1	83	83	0	84	81	-3
	76	68	-8	88	81	-7						
Level 7	94	92	-2	88	92	4	94	93	-1	90	91	1
	83	86	3	89	90	1						
Building 10	86	85	-1	87	87	0	88	87	-1	86	85	-1
	83	80	-3	85	84	-1						
Level 3	86	85	-1	87	87	0	88	87	-1	86	85	-1
	83	80	-3	85	84	-1						
Level 4	87	81	-6	89	86	-3	92	89	-3	90	85	-5
	92	84	-8	93	86	-7						
Level 5	89	84	-5	85	83	-2	83	79	-4	85	82	-3
	82	82	0	82	84	2						
Level 6	86	82	-4	82	82	0	83	87	4	81	81	0
	75	73	-2	76	79	3						
Level 7	82	90*	8	86	88	2	91	91	0	85	88	3
	81	82	1	87	88	1						

Table 15
CANA Results WS-NE Schools
2002-2003

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	86	85*	-1	88	89	1	88	88	0	87	86	-1
	83	82	-1	86	85	-1						
Level 3	85	84	-1	85	88	3	88	87	-1	85	86	1
	81	83	2	85	84	-1						
Level 4	84	84	0	88	89	1	85	87	2	85	86	1
	81	80	-1	86	85	-1						
Level 5	88	89	1	90	91	1	91	92	1	89	90	1
	88	87	-1	87	88	1						
Level 6	87	84*	-3	89	89	0	88	88	0	88	86*	-2
	83	81*	-2	87	85*	-2						
Level 7	86	86	0	88	88	0	87	86	-1	86	85	-1
	79	79	0	84	84	0						
Building 01	87	86	-1	88	88	0	88	88	0	87	87	0
	82	83	1	88	86	-2						
Level 3	81	82	1	81	83	2	87	87	0	81	83	2
	76	80	4	74	80*	6						
Level 4	85	89	4	88	90	2	90	91	1	86	89	3
	76	82	6	90	89	-1						
Level 5	94	93	-1	93	91	-2	93	94	1	93	92	-1
	90	88	-2	95	92	-3						
Level 6	88	84	-4	92	90	-2	87	87	0	90	87	-3
	90	87	-3	93	87	-6						
Level 7	85	85	0	88	87	-1	86	84	-2	85	84	-1
	78	77	-1	84	84	0						
Building 02	85	80*	-5	88	88	0	81	82	1	84	82	-2
	78	74*	-4	83	83	0						
Level 4	84	82	-2	86	89	3	81	82	1	83	84	1
	79	78	-1	79	81	2						
Level 6	86	77*	-9	89	87	-2	81	82	1	85	81*	-4
	77	69*	-8	89	85	-4						

Table 15 (Continued)
CANA Results WS-NE Schools
2002-2003

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 03	88	86	-2	90	88	-2	90	88	-2	88	87	-1
	81	85*	4	90	87	-3						
Level 3	85	84	-1	87	87	0	89	89	0	86	87	1
	81	83	2	88	90	2						
Level 4	85	82	-3	88	87	-1	88	85	-3	87	84	-3
	81	83	2	92	79*	-13						
Level 5	87	80	-7	86	86	0	91	85	-6	87	84	-3
	84	82	-2	90	89	-1						
Level 6	87	86	-1	91	87	-4	89	87	-2	87	87	0
	78	87*	9	88	90	2						
Level 7	94	94	0	95	93	-2	91	92	1	91	92	1
	80	88*	8	90	88	-2						
Building 04	86	86	0	86	87	1	87	85	-2	86	84*	-2
	77	75	-2	96	81*	-15						
Level 4	85	85	0	89	88	-1	84	84	0	86	84	-2
	77	75*	-2	95	81*	-14						
Level 6	87	87	0	82	85	3	89	87	-2	86	84	-2
	78	75*	-3	97	80*	-17						
Building 05	91	89	-2	93	92	-1	92	93	1	92	91	-1
	88	88	0	92	91	-1						
Level 4	91	88	-3	93	92	-1	92	92	0	92	90	-2
	90	86	-4	94	90	-4						
Level 6	91	90	-1	93	93	0	92	93	1	91	92	1
	86	91*	5	90	93	3						
Building 06	83	85	2	85	89*	4	83	90*	7	82	87*	5
	77	79	2	79	88*	9						
Level 4	79	84	5	79	85*	6	78	88*	10	77	85*	8
	70	80*	10	73	88*	15						
Level 6	88	88	0	92	94	2	89	94	5	88	89	1
	83	78	-5	85	87	2						

Table 15 (Continued)
CANA Results WS-NE Schools
2002-2003

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 07	81	81	0	85	88*	3	84	85	1	83	84	1
	80	79	-1	80	81	1						
Level 3	83	82	-1	82	86	4	87	85	-2	83	84	1
	78	82	4	86	78*	-8						
Level 4	79	82	3	86	91	5	81	85	4	83	86	3
	83	82	-1	83	85	2						
Level 5	82	85	3	86	89	3	83	88*	5	83	86	3
	81	82	1	76	80	4						
Level 6	78	71*	-7	88	83*	-5	84	80	-4	82	77*	-5
	79	71*	-8	76	77	1						
Level 7	83	84	1	85	90	5	84	86	2	83	86	3
	78	77	-1	82	89	7						
Building 08	90	88	-2	88	88	0	86	87	1	87	87	0
	85	79	-6	82	89*	7						
Level 4	83	81	-2	86	85	-1	79	82	3	82	82	0
	82	73*	-9	73	84*	11						
Level 6	99	97	-2	90	92	2	96	94	-2	94	93	-1
	90	86	-4	93	95	2						
Building 09	88	85*	-3	88	88	0	92	87*	-5	88	85*	-3
	87	81*	-6	84	81	-3						
Level 4	86	74*	-12	90	88	-2	94	86	-8	89	82*	-7
	85	75*	-10	90	85	-5						
Level 5	89	90	1	91	93	2	95	92	-3	91	91	0
	92	89	-3	87	89	2						
Level 6	88	86	-2	87	90	3	90	86	-4	87	86	-1
	88	83	-5	83	79	-4						
Level 7	87	83	-4	87	82	-5	89	84	-5	86	81	-5
	81	75	-6	79	72*	-7						
Building 10	91	92	1	93	94	1	92	94	2	92	93	1
	91	88	-3	92	94	2						
Level 3	90	88	-2	92	94	2	89	90	1	91	90	-1
	92	85*	-7	91	92	1						
Level 5	93	95	2	94	94	0	95	97	2	94	95	1
	93	91	-2	94	96	2						

* = Statistically significant

Table 16
CANA Results WS-NE Schools
2003-2004

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	85	85	0	88	88	0	87	87	0	86	86	0
	81	81	0	89	86*	-3						
Level 3	No Information Available											
Level 4	84	84	0	88	87	-1	86	85	-1	86	84	-2
	81	79	-2	89	84*	-5						
Level 5	No Information Available											
Level 6	86	84	-2	87	88	1	87	87	0	86	86	0
	81	81	0	88	88	0						
Level 7	No Information Available											
Building 01	86	81*	-5	90	87	-3	88	86	-2	88	85	-3
	83	84	1	89	87	-2						
Level 3	No Information Available											
Level 4	No Information Available											
Level 5	93	85*	-8	90	88	-2	89	87	-2	89	87	-2
	85	86	1	87	90	3						
Level 6	93	85*	-8	90	88	-2	89	87	-2	89	87	-2
	85	86	1	87	90	3						
Level 7	No Information Available											
Building 02	84	84	0	88	89	1	86	84	-2	85	84	-1
	78	76	-2	89	83*	-6						
Level 4	87	85	-2	88	86	-2	85	83	-2	86	83	-3
	77	77	0	88	79*	-9						
Level 6	81	83	2	88	92	4	86	86	0	85	86	1
	79	74*	-5	90	87	-3						
Building 03	80	78	-2	87	84	-3	86	85	-1	84	82	-2
	82	79	-3	86	86	0						
Level 3	No Information Available											
Level 4	81	76	-5	90	84	-6	86	82	-4	86	81	-5
	85	78	-7	90	86	-4						
Level 5	78	83	5	81	85	4	85	90	5	81	85	4
	77	81	4	79	86	7						
Level 6	78	83	5	81	85	4	85	90	5	81	85	4
	77	81	4	79	86	7						
Level 7	78	83	5	81	85	4	85	90	5	81	85	4
	77	81	4	79	86	7						

Table 16 (Continued)
CANA Results WS-NE Schools
2003-2004

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 04	88	87	-1	77	82*	5	84	85	1	83	84	1
	77	78	1	94	89*	-5						
Level 4	85	86	1	81	85*	4	84	82	-2	83	83	0
	77	76	-1	93	85*	-8						
Level 6	90	87	-3	75	79*	4	84	87	3	83	84	1
	77	80	3	95	92	-3						
Building 05	90	90	0	92	94	2	91	93	2	90	92	2
	84	86	2	92	93	1						
Level 4	92	93	1	92	95	3	91	96	5	91	94	3
	86	87	1	95	96	1						
Level 6	89	87	-2	92	93	1	92	91	-1	90	90	0
	82	86	4	89	91	2						
Building 06	80	82	2	88	86	-2	85	85	0	83	83	0
	74	79*	5	83	82	-1						
Level 4	79	78	-1	85	78	-7	85	83	-2	80	78	-2
	67	76*	9	80	71*	-9						
Level 6	77	81	4	89	87	-2	86	85	-1	83	84	1
	79	79	0	81	87	6						
Building 07	82	83	1	89	89	0	85	86	1	85	85	0
	82	79	-3	84	79	-5						
Level 3	No Information Available											
Level 4	81	84	3	86	86	0	86	86	0	84	84	0
	82	77	-5	83	80	-3						
Level 5	No Information Available											
Level 6	83	82	-1	93	92	-1	85	86	1	87	85	-2
	83	80	-3	87	79*	-8						
Level 7	No Information Available											
Building 08	Nor Information Available											
Building 09	Nor Information Available											
Building 10	Nor Information Available											

* = Statistically Significant

Table 17
CANA Results WS-NE Schools
2004-2005

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	84	83	-1	86	87	1	85	86	1	84	85	1
	79	81	2	86	85	-1						
Level 3	No Information Available											
Level 4	84	82	-2	85	85	0	83	84	1	84	83	-1
	79	80	1	85	83	-2						
Level 5	No Information Available											
Level 6	83	84	1	87	88	1	84	87*	3	84	85	1
	79	80	1	85	86	1						
Level 7	No Information Available											
Building 01	80	83	3	86	86	0	84	87	3	83	85	2
	75	79	4	85	85	0						
Level 3	77	79	2	86	88	2	83	86	3	82	84	2
	76	79	3	85	85	0						
Level 4	77	79	2	86	88	2	83	86	3	82	84	2
	76	79	3	85	85	0						
Level 5	85	90	5	88	87	-1	86	88	2	85	87	2
	74	81	7	87	86	-1						
Level 6	85	90	5	88	87	-1	86	88	2	85	87	2
	74	81	7	87	86	-1						
Level 7	No Information Available											
Building 02	81	80	-1	85	86	1	79	80	1	81	83	2
	75	80	5	83	85	2						
Level 4	84	83	-1	83	85	2	80	80	0	81	82	1
	73	78	5	79	79	0						
Level 6	78	77	-1	86	89	3	78	81	3	81	84	3
	77	83	6	87	92	5						

Table 17 (Continued)
CANA Results WS-NE Schools
2004-2005

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 03	85	82	-3	89	86	-3	88	83*	-5	87	83*	-4
	81	80	-1	90	84*	-6						
Level 3	No Information Available											
Level 4	No Information Available											
Level 5	80	78	-2	89	86	-3	87	84	-3	86	83	-3
	82	80	-2	90	83	-7						
Level 6	80	78	-2	89	86	-3	87	84	-3	86	83	-3
	82	80	-2	90	83	-7						
Level 7	80	78	-2	89	86	-3	87	84	-3	86	83	-3
	82	80	-2	90	83	-7						
	85	85	0	85	82	-3						
Level 6	82	86	4	88	93	5	80	91*	11	82	88	6
	76	80	4	80	85	5						
Building 04	87	84	-3	81	77*	-4	83	83	0	83	80	-3
	75	76	1	90	78*	-12						
Level 4	87	79*	-8	76	73	-3	79	79	0	80	76	-4
	70	74	4	90	74*	-16						
Level 6	88	90	2	87	83*	-4	87	88	1	87	85	-2
	80	79	-1	90	81*	-9						
Building 05	90	89	-1	89	91	2	88	92*	4	89	90	1
	82	82	0	92	93	1						
Level 4	89	86	-3	89	91	2	89	89	0	88	89	1
	82	83	1	92	94	2						
Level 6	No Information Available											
Building 06	80	85*	5	87	90	3	82	89*	7	82	88*	6
	78	86*	8	79	87*	8						
Level 4	82	87	5	85	88	3	80	89*	9	81	87*	6
	77	84	7	80	86	6						
Level 6	79	83	4	89	92	3	85	88	3	83	88	5
	79	88*	9	77	86	9						
Building 07	83	83	0	87	90*	3	85	89*	4	84	87	3
	81	82	1	83	84	1						
Level 4	84	80	-4	87	87	0	89	88	-1	86	85	-1
	85	85	0	85	82	-3						
Level 6	82	86	4	88	93	5	80	91*	11	82	88	6
	76	80	4	80	85	5						

Table 17 (Continued)
CANA Results WS-NE Schools
2004-2005

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Building 08	84	87	3	80	88*	8	81	84	3	81	86	5
	77	80	3	82	92*	10						
Level 4	86	85	-1	80	88	8	80	85	5	82	87	5
	82	85	3	80	92*	12						
Level 6	84	90	6	80	89	9	84	83	-1	82	87	5
	73	75	2	90	94	4						
Building 09	80	72*	-8	85	82	-3	83	76*	-7	83	77*	-6
	84	74	-10	79	76	-3						
Level 4	87	79	-8	89	84	-5	83	74	-9	87	79*	-8
	86	74*	-12	85	79	-6						
Level 6	73	65	-8	81	80	-1	81	76	-5	79	74	-5
	81	73	-8	74	75	1						
Building 10	87	87	0	88	88	0	90	92	2	87	88	1
	82	85	3	89	90	1						

* = Statistically Significance

– SECTION THREE –

**Additional Research Sites
1990 through 2004**

Nine documented research sites implemented the Grow With Guidance[®] System from 1990 through 2004. Schools conducted the research for one to three years in five different states: Ohio, Vermont, Iowa, Michigan, and Nebraska.

In this section, a brief summary explains the highlights of each research site. Tables are provided in the report for seven of the nine research sites. Eight of the nine sites documented very positive and significant results. One site had incomplete data with information available on one of the four instruments administered. The findings available from the one instrument were mixed. Research summaries follow:

1. Tables 1 through 3 give information about CB-IA research instruments including the CANA, Florida Key, and the ITS-P&I. The CANA assesses student growth in the areas of self, other awareness, self-control, decision-making/problem-solving, and group cooperation. The Florida Key assesses self-concept-as-learner, and the ITS-P&I assesses teacher inviting practices. All results demonstrated significant and statistically significant findings on all three instruments.
2. CE-NE research was inconclusive because all data was not available. The findings available from one instrument were mixed.
3. Table 4 gives information about CE-VT research results on the CANA. School professionals submitted a report that discussed research objectives and gains. CANA results were significant and statistically significant in all subscales and total scores.
4. Tables 5 through 10 give information about AS-NE research instruments that include the CANA and ITS-P&I. The CANA results demonstrated growth over the two years of the research. Gains on district totals and all but two grade level totals were reported. The ITS-P&I results demonstrated growth over the two years and mixed gains on the grade level and district totals. Qualitative results of student responses

reported in the areas of self-concept and identified indicators demonstrated consistent student growth from 1996 to 2001. The school district provided qualitative information that is not included in a table.

5. Tables 11 through 13 show NC-NE results on the CANA for three elementary schools. The reports for all three schools showed growth in all areas and statistically significant gains in two of the three schools.
6. UP-MI conducted research to determine the impact of class meetings on student growth. Class meetings are one of the recommended approaches included in the Behavior Management Component of the Grow With Guidance® System. Class meetings were combined with activity experiences with positive results reported. The CANA was administered with significant gains. The professionals who conducted the research for a graduate thesis provided these results. Research results are not included in a table.
7. Table 14 shows HT-OH results on the CANA. Gains were made in three of the five subscales and the assessment total in this one-year research project.
8. Table 15 shows PM-OH results on the CANA. Gains were made in two of the five subscales and the assessment total. This school has worked with the developmental system for many years which may be one reason for the high student scores in both the pre- and post-test information. This is one school that continued a developmental system since 1982-1983 when they were one of the schools in the PL-OH longitudinal ten-year research. Building total scores showed a 15% difference from the scores 20 years before.
9. Tables 16 and 17 show LS-NE results on the CANA and ITS-P&I. The CANA was administered to grade 2, grade 4, and grade 5 students. Gains were made in both years at all grade levels. The CANA reported student growth in the areas of self, other awareness, self-control, and group cooperation. The ITS-P&I was given in 2004-2005 to all fifth and sixth grade students. Students in the four classrooms reported growth on the building scores in the personally inviting subtotal and the total. One classroom of fifth graders reported small decreases in the subtotal of professionally inviting and total scores, but scores on the pre- and post- were high and well within positive limits.

Table 1
CANA Results for CB-IA
January – May 1990

	Self		Other Awareness		Self-Control		Decision Making		Group Cooperation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Grade 1			77.15	77.61	75	88.6	75	88.6		
Grade 2	78.6	81.97	76.86	84.05*	72	87.5*	70	84.24*	79.85	91.85*
Grade 3			81.78	89.25	78.92	83.67	80.34	89.39	83.5	85.98
Grade 4	73.3	73.9	73.2	86.87*			81.75	83.21	79.83	84.96
Grade 5	86.5	87.8	86.86	88.03	83.5	90.2				
Grade 6	67.5	70.2								

* = Statistically Significant

Table 2
Florida Key Results for CB-IA

	Relate		Assert		Invest		Cope	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Grade 1	86.43	92.86*	79.5	85*	75.7	84.5*	86	90*
Grade 2	80	90*	62	80*	57	75*	79.7	87.6*
Grade 3							56.4	57.4
Grade 4							79.5	81.1
Grade 5	74*	82.7	48	60.2*	47	60*	71	79*
Grade 6	80.76	85.3	64.2	64.5	65.3	69.9		

Percentage gains are indicated by grade and category above.

* = Statistically Significant

Table 3
ITS-P&I Results for CB-IA

	Commitment		Consideration		Coordination		Proficiency		Expectation		Personally Inviting		Professionally Inviting		
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
Grade 1	89	96*	81	98*	88	97*	77	94	95	100*	85	97*	82	96*	
Grade 2	83	85									87	88	85	87	
Grade 3	93	97*	91	93*	95.6	89	85.7	89.7			92	94.6	86	90*	
Grade 4					67.8	71.7							69.2	70.6	
Grade 5	No information available														
Grade 6														71.7	74

Percentage gains are indicated by grade and category above.

* = Statistically Significant

Final Report for CE-VT 1994-1995

Goal:

Our goal is to improve the ability of our students, their families and our staff to feel better about themselves and their capabilities and to increase use of appropriate problem-solving, decision-making, coping and group cooperation skills. Students will increase their capacity to be responsible, contributing members of society.

Objectives:

1. The students at CE-VT will demonstrate an improvement in self-concept by the end of the 1994-95 school year.
2. Students will use appropriate social skills such as assertiveness, friendship-making and effective communication in order to get along with and understand others.
3. Students will demonstrate improved ability to solve problems, make good decisions, generate coping skills, take responsibility for their behaviors and resultant outcomes.

The post test of the Children's Affect Needs Assessment (CANA) was administered in all classrooms, grades 1 through 5. Teachers have received a report of the results as well as a report of the statistically significant changes which resulted according to the CANA. Those results indicated that of the five curriculum areas addressed through the program, self awareness, decision-making/problem-solving, awareness of others, group cooperation and self control, there was, overall, positive growth experienced by our student population. Also, there was significant positive growth in the areas of decision-making/problem-solving, other awareness and group cooperation.

The Grow with Guidance[®] System was, as we had hoped, a successful "next step" in our restructuring efforts. It was well suited for our needs and provided us with a method of evaluating the changes, thereby supporting our efforts. We look forward to using the GWG system next school year and encourage other schools to consider it as well.

Table 4
CANA Results for CE-VT
1994-1995

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Class Average												
Grades 1-5	99	100	1	92	96*	4	95	98	3	93	98*	5
	89	96*	7	90	95*	5						

* = Statistically Significant

Table 5
CANA Results for AS-NE
1996-1997

	Self		Other Awareness		Self-Control		Decision Making/ Problem Solving		Group Cooperation		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Class 11	75	70	80	81	72	80	74	65	75	84	76	77
Class 12	87	79	85	84	84	78	80	75	77	89*	83	81
Class 13	90	82	85	87	80	86	81	78	92	93	85	85
Class 14	84	77	78	80	86	79	76	73	82	83	81	79
Class 21	85	83	85	92*	77	89*	68	84*	81	86	80	88*
Class 22	89	81	90	91	85	87	82	79	88	95	87	87
Class 23	88	76	87	83	84	75	79	65	82	89	85	78
Class 24	77	81	71	82*	79	85*	69	81	60	79*	72	82*
Class 31	90	90	74	81	81	86	74	76	81	85	80	84
Class 32	81	88*	82	83	77	77	76	87*	88	87	81	84
Class 33	70	86*	78	86*	80	86	76	75	78	79	76	84
Class 34	90	90	90	95	87	89	82	93*	90	92	88	92*
Class 41	93	92	83	84	88	92	85	78	93	85	88	87
Class42	96	92	89	95	97	93	91	89	93	94	93	93
Class 44	83	85	84	96*	89	94*	75	86	96	91	85	91*
Class 51	86	83	78	91*	83	79	70	81	81	87	80	85
Class 52	99	95	99	94	97	91	96	89	95	98	98	93
Class 53	90	88	82	87*	85	81	75	74	81	82	83	83
Class 54	85	86	79	86	83	82	69	73	80	90*	80	84

* = Statistically Significant

Table 6
CANA Results for AS-NE
1997-1998

	Self		Other Awareness		Self-Control		Decision Making/ Problem Solving		Group Cooperation		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Class 21	85	74	85	85	88	83	79	80	82	83	84	81
Class 22	90	95	93	84	89	85	78	98	83	90	85	85
Class 23	79	80	78	91*	76	83	72	64	89	89	78	83
Class 24	76	78	82	86	89	78	75	71	85	77	82	79
Class 31	82	87	85	91*	87	86	79	83	91	87	85	87
Class 32	91	88	90	92	82	90*	85	82	89	95*	88	90
Class 33	91	85	84*	91	90	86	87	82	91	93	88	88
Class 34	68	76	82	85	74	77	73	70	75	84	75	79
Class 41	94	92	94	93	94	94	91	87	97	96	94	92
Class 42	60	70	59	70	74	78	56	65	73	76	64	72*
Class 43	84	79	87	87	88	88	88	84	94	82	88	85
Class 44	93	86	89	81	93	87	90	83	89	81	91	84
Class 51	95	95	94	94	91	96	92	90	87	92	92	94
Class 52	96	96	95	100	100	99	98	98	96	94	97	98
Class 53	89	95	94	95	93	95	95	86	93	95	93	94
Class 54	88	85	92	95	85	88	83	84	93	97	88	90

* = Statistically Significant

Table 7
CANA Total Scores for AS-NE

	1996-1997		1997-1998	
	Pre	Post	Pre	Post
Total District	83	85	86	86
Grade 1	81	81	NA	NA
Grade 2	81	84	82	82
Grade 3	81	86	84	86
Grade 4	88	88	84	83
Grade 5	85	86	92	94

Table 8
ITS-P&I Results for AS-NE - Primary & Intermediate
1996-1997

	Consideration		Commitment		Personally Inviting		Coordination		Proficiency		Expectation		Professionally Inviting		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Class 31	87	94	72	92*	80	93*	78	93*	86	88	90	90	82	91*	81	92*
Class 32	85	92*	78	87*	81	90*	81	90*	78	87*	91	91	80	89*	81	89*
Class 33	75	91*	71	96*	73	94*	82	86	70*	81	84	100*	76	84*	75	89*
Class 34	88	86	79	83	83	84	82	90	79	80	100	82	82	85	83	84
Class 41	66	65	73	69	69	67	73	79	74	75	83	92	74	78	72	72
Class 42	77	78	86	83	81	81	81	80	81	80	90	97	81	81	81	81
Class 44	69	60	71	58	70	59	74	62	73	69	84	95	74	67	72	63
Class 51	77	74	82	82	79	78	84	82	78	80	100	95	82	82	81	80
Class 52	72	75	87	88	80	81	87	82	82	83	100	100	85	83	82	82
Class 53	63	63	60	61	62	62	73	71	60	57	78	73	67	64	64	63
Class 54	73	72	78	78	75	75	75	78	73	79*	88	88	75	79*	75	77

* = Statistically Significant

Table 9
ITS-P&I Results for AS-NE - Primary & Intermediate
1997-1998

	Consideration		Commitment		Personally Inviting		Coordination		Proficiency		Expectation		Professionally Inviting		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Class 31	90	90*	90	100*	90	95*	90	100*	100	100	100	100	95	100*	93	97*
Class 32	96	93	87	88	91	91	89	89	87	81	94	94	88	85	90	88
Class 33	90	95	85	89	88	92	85	94	84	84	86	94	85	90	86	91
Class 41	76	71	80	77	78	74	83	79	81	75	92	95	82	78	80	76
Class 42	62	60	66	60	64	60	68	63	69	64	78	67	69	64	67	62
Class 43	67	64	74	66	70	65	73	73	70	67	94	97	72	72	71	68
Class 44	75	61	71	59	73	60	78	67	81	63	91	91	80	66	77	63
Class 51	76	70	82	74	79	72	80	76	78	70	94	97	80	74	80	73
Class 52	74	73	79	79	76	76	87	89	73	76	90	95	80	83	78	79
Class 53	74	75	84	86	79	81	77	81	80	80	91	97	79	81	79	81
Class 54	72	61	76	64	74	63	83	68	74	56	94	94	79	63	76	63

Table 10
ITS-P&I Total Scores for AS-NE

	1996-1997				1997-1998			
	Personally Inviting		Professionally Inviting		Personally Inviting		Professionally Inviting	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Total District	76	79	78	80	81	78	80	77
Grade 3	79	90	80	87	90	93	89	92
Grade 4	73	69	76	75	76	70	74	67
Grade 5	74	74	77	77	80	75	78	74

Table 11
CANA Results for NC-NE – School 1
1999-2000

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Class Averages												
Class 2030	73	86	13	70	80	10	73	84	11	70	83	13*
	60	83	23*	69	86	17						
Class 2040	70	88	18*	71	83	12	73	90	17	70	85	15*
	58	73	15*	80	89	9						
Class 2050	90	94	4	81	78	-3	87	90	3	83	86	3
	75	81	6	76	90	14*						
Class 2060	82	86	4	88	87	-1	80	87	7*	84	87	3
	75	79	4	93	95	2						
Class 2070	85	93	8	77	82	5	77	90	13*	79	87	8*
	69	82	13*	88	91	3						
Class 2080	92	90	-2	86	77	-9*	92	84	-8	88	84	-4
	79	84	5	91	90	-1						
Class 2090	82	81	-1	70	79	9*	78	78	0	76	79	3
	70	70	0	84	89	5						
Class 2100	86	90	4*	82	84	2	78	79	1	83	84	1
	81	75	-6	91	90	-1						
Class 2110	79	88	9*	77	84	7	85	87	2	80	87	7*
	76	87	11*	87	94	7						

Table 11 (Continued)
CANA Results for NC-NE – School 1
1999-2000

Level Averages												
Level 2	78	90	12*	74	81	7	78	88	10*	74	85	11*
	63	80	17*	65	89	14*						
Level 3	83	90	7*	82	85	3	79	89	10*	81	87	6*
	72	80	8*	90	93	3						
Level 4	89	87	-2	80	78	-2	86	84	-2	84	83	-1
	77	78	1	89	92	3						
Level 5	83	89	6*	80	84	4	81	82	1	82	85	3
	79	80	1	89	92	3						
Building 1	83	88	5*	79	82	3*	81	85	4*	80	85	5*
	72	79	7*	85	91	6*						

* = Statistically Significant

Table 12
CANA Results for NC-NE – School 2
1999-2000

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Class Averages												
Class 1100	74	74	0	77	86	9*	71	80	9*	74	81	7
	67	79	12*	82	82	0						
Class 1110	79	85	6	84	87	3	72	80	8	79	85	6
	78	84	6	82	87	5						
Class 1120	89	93	4	81	85	4	86	91	5	85	89	4
	83	87	4	91	91	0						
Class 1130	79	91	12	65	77	12*	72	87	15*	72	85	13*
	68	86	18*	81	91	10						
Class 1140	87	88	1	77	76	-1	81	80	-1	81	80	-1
	73	78	5	88	81	-7						
Building 2	81	85	4*	77	83	6*	76	83	7*	78	84	6*
	74	83	9*	84	86	2						

* = Statistically Significant

Table 13
CANA Results for NC-NE - School 3
1999-2000

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Class Averages												
Class 1040	86	76	-10	80	70	-10	86	76	-10	81	73	-8
	71	69	-2	81	72	-9						
Class 1050	91	82	-9*	88	87	-1	92	88	-4	87	86	-1
	67	76	9	91	95	4						
Class 1060	84	85	1	79	81	2	85	88	3	81	83	2
	67	72	5	89	85	-4						
Class 1070	78	81	3	84	88	4	71	86	15*	78	85	7
	69	77	8	86	94	8						
Class 1080	73	90	17*	70	88	18*	71	88	17*	70	88	18*
	61	83	22*	75	88	13						
Class 1090	88	78	-10	90	79	-11*	89	78	-11*	88	78	-10*
	76	79	3	93	76	-17*						
Building 3	83	82	-1	82	82	0	83	84	1	81	82	1
	68	76	8*	86	85	-1						

* = Statistically Significant

Table 14
CANA Results – HT-OH
2002-2003

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	89	81	-8	68	78	10	72	75	3	74	78	4
	70	80	10	76	75	-1						

Table 15
CANA Results – PF-OH
2002 – 2003

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	93	91*	-2	94	95	1	94	92*	-2	92	92	-1
	87	88	1	97	95	-2						

Table 16
CANA Results – LS-NE
2003-2004

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	90	91	1	84	90*	6	83	87	4	83	88*	5
	71	83*	12	79	89*	10						
Level 5	90	90	0	84	89*	5	83	88	5	82	90*	8
	70	90*	20	74	95*	21						
Level 6	88	93	5	85	90*	5	83	87	4	84	87	3
	72	76	4	87	84	-3						

2004-2005

	Self Decision Making/ Problem Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
Total District	85	89	4	89	92	3	87	90	3	86	88	2
	81	77	-4	85	89	4						
Level 5	82	84	2	89	93	4	85	88	3	85	88	3
	76	81	5	90	89	-1						
Level 6	89	93	4	90	91	1	89	91	2	88	89	1
	86	73*	-13	82	89	7						

Table 17
ITS-P&I Results – LS-NE
2004-2005

	Commitment		Consideration		Coordination		Proficiency		Expectation		Personally Inviting		Professionally Inviting	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Total District	81	84	86	88	90	88	72	80	88	89	83	86	86	84
Level 5	83	87	81	89	88	89	80	76	88	88	82	88	84	83
Level 6	80	82	89	87	91	88	84	82	87	90	84	84	87	85

– SECTION FOUR –

**Graduate Student Research
The University of Nebraska Omaha**

Graduate students in elementary school counseling at the University of Nebraska Omaha implement a guidance system in one or two classrooms as a portion of their graduate preparation in elementary school counseling. The classrooms selected need to be in both a primary and intermediate level classroom. Types of practicum placement sites vary widely in order to accommodate graduate student needs. Many students are hired as elementary school counselors prior to or during their practicum experience. The majority of the remaining students are teaching in elementary schools. A current teaching certification and two years of teaching experience are required to become an elementary school counselor in Nebraska. Some students implement the system in more classes upon request.

Students administer the pre- and post-CANA and qualitative instruments at all grade levels except kindergarten. Computer scoring of the CANA and specially developed scan sheets are provided. The CANA is administered four-to-six weeks after the beginning of the school year. Most post-testing is done in mid- to late March due to university graduation scheduled for the first week of May. Activity experiences are to be provided weekly and portions of the other components of the educational guidance system implemented. Students may use performance-based activities from their local school district guidance and counseling program or use materials from the Grow With Guidance® System.

Qualitative instruments are provided and recommended, but administering of the instruments varies between students and years. The majority of the available performance observation/evaluation and student comments are extremely positive. Elementary students report the need for and positive effects of the implementation experience in the majority of classes.

The CANA results gathered to date demonstrate the effectiveness of the application of a student-centered educational guidance systems model. To present, eighty-three classrooms have been used for elementary system implementation. Of those classrooms, 79 classrooms have shown improvement in one to all essential learning strands; four classrooms have no

improvements indicated. Gains were made in 95% of all classrooms that received an educational guidance system from the 39 graduate practicum students.

Of those 95% of all classrooms that made gains, 66% indicated statistically significant positive gains. Graduate student performance observation/evaluation for their fall-to-spring, yearlong research is available for most students from 1998-1999 to 2004-2005. Table 1 is provided to show the number of students per year, the number of total classrooms for the year, the number of positive statistically significant changes, and the number of negative statistically significant changes on the essential learning strands and total CANA. Tables 2 through 8 provide available CANA results for each year.

Table 1
Graduate Student Distribution Information

Year	Number of Graduate Students	Number of Classes	+ Statistical CANA Indicators	- Statistical CANA Indicators	% + Statistical CANA Indicators
1998-1999	5	9	21	7	67
1999-2000	2	2	4	0	100
2000-2001	5	24	26	21	20
2001-2002	6	14	18	2	89
2002-2003	11	20	18	1	94
2003-2004	3	6	8	4	50
2004-2005	7	8	19	4	79
Total	39	83	114	39	66

Table 2
CANA Results - UNO Students
1998-1999

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
O - 0046	93	95	2	88	90	2	88	93*	5	89	91	2
	89	91	2	85	87	2						
O - 0056	88	97*	9	71	82*	11	81	88*	7	80	87*	7
	78	91*	13	88	74*	-14						
MG - 0942	85	90	5	85	96*	11	90	90	0	89	93	4
	94	95	1	96	96	0						
MG - 0903	91	93	2	80	90*	10	88	95*	7	86	92*	6
	87	90	3	86	90	4						
SE - 0500	89	87	-2	89	91	2	87	81	-6	87	86	-1
	78	83	5	93	84*	-9						
SE - 0100	86	93*	7	79	89*	10	86	97*	11	81	92*	11
	75	85*	10	81	97*	16						
DP - 0400	96	88*	-8	88	79*	-9	92	78*	-14	91	82*	-9
	88	85	-3	90	82*	-8						
V - 0505	90	94	4	92	97*	5	83	95*	12	88	95*	7
	73	88*	15	98	100	2						
V - 0209	93	92	-1	89	89	0	88	93	5	88	92	4
	75	90*	15	93	98	5						

Table 3
CANA Results - UNO Students
1999-2000

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
JA - 3003	93	96	3	85	94	9	81	96*	15	84	94	10
	75	89*	14	87	95	8						
KD - 0415	94	98	4	94	95	1	89	98*	9	92	96*	4
	93	94	1	89	96	7						

Table 4
CANA Results - UNO Students
2000 – 2001

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
BK - 1111	93	71*	-22	87	78*	-9	85	88	3	86	79*	-7
	82	75	-7	75	82	7						
BK - 2222	78	76	-2	88	89	1	87	87	0	83	84	1
	71	81	10	88	87	-1						
BK	88	77*	-11	91	87	-4	90	89	-1	88	85	-3
	80	82	2	85	89	4						
DC - 0501	72	76	4	82	89	7	66	74*	8	73	80*	7
	62	75*	13	77	82	5						
DC - 0502	79	78	-1	82	86	4	69	82*	13	78	80	2
	78	72	-6	83	72*	-11						
DC - 0301	79	57*	-22	79	74	-5	74	56*	-18	79	65*	-14
	82	67*	-15	87	73*	-14						
DC - 0201	78	86*	8	75	87*	12	76	82	6	77	85*	8
	74	83*	9	84	89	5						
DC - 0202	81	82	1	80	90*	10	73	80*	7	79	86*	7
	71	86*	15	91	90	-1						
DC - 0302	83	73*	-10	85	86	1	79	77	-2	82	79	-3
	75	71	-4	86	83	-3						
DC - 0401	78	79	1	86	92*	6	70	70	0	78	80	2
	69	73	4	83	80	-3						
DC - 0402	80	83	3	90	93	3	75	75	0	83	84	1
	78	82	4	87	83	-4						
DC - 0601	86	83	-3	93	94	1	75	87*	12	84	87	3
	68	73	5	98	94*	-4						
DC - 0602	84	81	-3	90	91	1	78	88*	10	85	87	2
	76	86	10	95	84*	-11						
DC - 0701	81	82	1	90	91	1	75	74	-1	84	83	-1
	88	87	-1	87	74*	-13						
DC - 0702	83	87	4	94	93	-1	74	74	0	84	84	0
	82	86	4	80	74	-6						
DC - 0801	78	74	-4	86	89*	3	75	74	1	80	80	0
	83	83	0	75	73	-2						
DC - 0802	70	74	4	86	89	3	63	66	3	76	78	2
	81	82	1	83	74*	-9						

Table 4
CANA Results - UNO Students
2000 – 2001

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
MR - 9999	89	81	-8	90	85	-5	93	83*	-10	88	84	-4
	82	83	1	83	92	9						
MR - 1015	85	90	5	92	93	1	82	90*	8	88	92	4
	88	90	2	89	95	6						
JM - 0004	74	84*	10	72	77	5	66	80*	14	65	77*	12
	43	66*	23	54	73*	19						
JM - 0002	79	90*	11	74	84*	10	78	87	9	75	87*	12
	65	90*	25	79	84	5						
JM - 0003	70	69	-1	70	64	-6	65	64	-1	69	65	-4
	72	65	-7	67	63	-4						
KS - 0225	102	86	-16	99	91	-8	94	96	2	98	90	-8
	96	81	-15	100	93	-7						
KS - 0217	72	74	2	74	74	0	81	67*	-14	77	72	-5
	76	74	-5	87	72*	-15						

Table 5
CANA Results - UNO Students
2001-2002

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
AC - 0521	86	95*	9	88	93	5	78	93*	15	83	93*	10
	74	89*	15	89	97*	8						
AC - 7858	84	99*	15	85	96*	11	80	93*	13	79	96*	17
	62	96*	34	72	99*	27						
JD - 0002	94	93	-1	91	92	1	98	96	-2	92	93	1
	88	91	3	89	96	7						
JD - 0005	91	95	4	88	96*	8	90	88	-2	86	93*	7
	69	87*	18	87	96*	9						
CF - 0006	69	89	20	73	77	4	67	69	2	69	75	6
	71	63	-8	60	70	10						
CF - 0001	77	89	12	76	82	6	77	88	11	73	85*	12
	63	80	17	64	84	20						
DB - 0003	90	94	4	83	86	3	90	90	0	86	90	4
	83	87	4	83	94	11						
DB - 0004	88	86	-2	87	88	1	86	84	-2	84	84	0
	73	80	7	78	76	-2						
BH - 0001	93	91	-2	88	89	1	90	90	0	90	91	1
	89	93	4	92	91	-1						
BH - 0002	83	88	5	87	88	1	81	81	0	86	85	-1
	87	78	-9	92	83	-9						
BH - 0005	69	79	10	84	85	1	72	73	1	75	79	4
	74	78	4	68	72	4						
BH - 9993	87	94	7	91	96*	5	84	92	8	87	94*	7
	81	90	9	89	94	5						
AW - 0002	78	76	-2	83	77	-6	81	64*	-17	80	70	-10
	74	70	-4	79	49*	-30						
AW - 0004	78	79	1	89	85	-4	87	88	1	83	84	1
	72	78	6	83	88	5						

Table 6
CANA Results - UNO Students
2002 - 2003

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
LS - 0004	86	79	-7	87	84	-3	74	84	10	79	81	2
	63	77*	14	75	83	8						
LS - 0002	85	95	10	85	96*	11	91	96*	5	84	93*	9
	76	82	6	78	92*	14						
CW - 0001	76	92*	16	79	89	10	83	86	3	78	87*	9
	75	78	3	70	84	14						
CW - 0003	85	88	3	87	91	4	93	91	-2	87	90	3
	78	90	12	89	91	2						
JF - 0004	73*	84	11	75	85*	10	78	81	3	76	83*	7
	75	78	3	81	85	4						
CT - 2111	88	90	2	80	89*	9	87	92	5	84	89	5
	79	85	6	85	83	-2						
CT - 4111	86	83	-3	81	87	6	84	84	0	82	84	2
	78	83	5	80	82	2						
LK - 4444	89	98*	9	91	96*	5	88	96*	8	90	96*	6
	88	94	6	90	92	2						
LK - 2222	84	91*	7	75	84*	9	89	92	3	80	88*	8
	76	85	9	80	85	5						
SC - 1300	70	74	4	74	85*	11	77	74	-3	73	76	3
	65	70	5	80	69*	-11						
SC - 1500	87	91	4	83	83	0	88	88	0	84	85	1
	80	76	-4	84	89	5						
JB - 0003	84	86	2	85	87	2	84	86	2	84	85	1
	77	78	1	92	87	-5						
TD - 4000	82	79	-3	86	93	7	84	84	0	83	85	2
	74	68	-6	88	96	8						
TD - 1000	80	73	-7	83	83	0	83	82	-1	81	79	-2
	76	69	-7	83	84	1						

Table 7
CANA Results - UNO Students
2003 - 2004

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
LL - 0003	72	68	-4	71	71	0	78	68*	-10	72	70	-2
	64	69	5	71	73	2						
LL - 0006	90	87	-3	95	85*	-10	84	87	3	88	85	-3
	96	90	-5	79	84	5						
SL - 0001	95	98	3	98	99	1	92	100	8	94	98	4
	86	99*	13	93	94	1						
SL - 0004	72	82	10	89	83	-6	71	68	-3	79	76	-3
	81	68*	-13	81	69*	-12						
RJ - 1206	94	98	4	94	96	2	91	94	3	92	96*	4
	89	94	5	92	94	2						
RJ - 1106	89	96*	7	82	91*	9	88	94*	6	83	93*	10
	74	94*	20	78	89*	11						

Table 8
CANA Results - UNO Students
2004 – 2005

Student	Self Decision-Making/ Problem-Solving			Other Awareness Group Cooperation			Self-Control			Total		
	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -	Pre	Post	+ -
NB	86	79	-7	85	87	2	84	84	0	85	83	-2
	83	78	-5	85	87	2						
KM - 0006	80	88*	8	79	89*	10	78	85	7	79	85*	6
	71	75	4	83	79	-4						
KM - 0001	84	72*	-12	86	87	1	78	83	5	81	83	2
	66	81*	15	85	94	9						
JZ	76	85*	9	69	84*	15	77	86*	9	73	83*	10
	71	80*	9	70	80*	10						
TN	88	89	1	78	85*	7	86	90	4	81	87*	6
	76	77	1	75	91*	16						
BL	75	82	7	78	87	9	81	79	-2	78	84	6
	72	82	10	87	89	2						
MS	79	94*	15	88	96*	8	82	95*	13	82	94*	12
	76	90*	14	81	97*	16						
TG	88	76*	-12	80	75	-5	84	85	1	83	78*	-5
	86	73*	-13	78	77	-1						

– SECTION FIVE –

International Research

International research reports are included from sites in Hong Kong (1995-1997) and Korea (2000). The entire report from both sites is included because each site followed different protocols and conducted the research independently.

The findings from both countries demonstrated positive application and results of the Grow With Guidance® System in each culture. This supports the possibility that core learning in the affective domain is basic for all people and a necessary component for success and growth in all domains. Personal, emotional, behavioral, and social skills were implemented with an educational systems model that resulted in improved relationships and student achievement. Dr. Myung Sook Lee conducted the research and authored her research report. Dr. Peter Wong provided leadership, coordination, and training for the Hong Kong project. He authored the research report from Hong Kong.

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Korea 2000

I. Introduction

The purpose of this study was to implement and to investigate the impact of the developmental guidance program developed by Dr. Radd for Korean elementary school students. See Charts 1, 2, 3, 4, and 5. (Radd 2000 & 1998). In this study, a total of 2,142 students and 60 teachers from five elementary schools participated. The program was implemented for two academic semesters--one for lower grades (1-3), another for higher grades (4-6). Data from the entire population showed that program mediation groups showed higher scores on CANA and Self-concept measures than comparison groups.

Program Description

In this study, Dr. Radd's programs of Level 2 and Level 5 were translated into Korean. Among them, five areas of student behavior management--self, other awareness, self-control, decision-making and problem-solving, and group cooperation--were chosen.

Although Dr. Radd provides all levels of program, Level 2 and Level 5 were utilized and adjusted for the grade levels for Korean elementary school students. Adjusted Level 2 was implemented on first through third grade students, and adjusted Level 5 was implemented for fourth through sixth grade students. Adjusted means that each area deals with the same activities with different wording and numbers of performance.

SELF area included 50 activities for the Level 2 and 51 activities for the Level 5; OTHER AWARENESS included 25 activities for the Level 2 and 28 activities for the Level 5; SELF-CONTROL included 28 activities for the Level 2 and 26 activities for the Level 5; DECISION-MAKING AND PROBLEM-SOLVING included 24 activities for the Level 2 and 30 activities for the Level 5; and GROUP COOPERATION included 24 activities for the Level 2 and 26 activities for the Level 5.

II. Program Implementation

1. Sample

In this study, a total of 2,142 students from five elementary schools (TK, SA, MD, DW, DS) located in Taegu, Korea participated—1st grade (N=367); 2nd grade (N=377); 3rd grade (N=405); 4th grade (N=324); 5th grade (N=334); 6th grade (N=335). The school SA and MD are located in suburban areas and these schools had more children from low income families and have poor living environmental circumstance compared to other schools of TK, DW and DS. Program intervention group students were 1,073 and control groups were 1,069. Sixty elementary school teachers participated (30 for experimental group, 30 for control group).

2. Procedure

Before the start of the program implementation, the developmental guidance program, the Children's Affect Needs Assessment, and evaluation tools were translated into Korean. Actually, long-term based implementations were needed and lots of activities were included in each area; however, in this study, each teacher had chosen ten activities in one area, so it became that teachers from five schools covered almost all activities in each area. However this could be the limit in terms of program implementation. Each teacher taught those activities either in regular class or special class hours. Students showed much interest in their activities.

The experimental design was A-B-A. Pre and post scores of the Children's Affect Needs Assessment were compared between treatment group and comparison group. Also, self-concept measures of 4th, 5th, and 6th grade students dealt with developmental guidance programs of self, other awareness, and self-control area were compared between those groups.

3. Instrument

The Children's Affect Needs Assessment: This instrument consists of a total of 42 items. In this study, the reliability of this instrument of total sample from pre- and post-test showed Cronbach Alpha .86 which is similar to that reported by Dr. Radd (1993) .87.

Self-concept measure: Self-concept measure by Jung (1989) was used. Especially this measure was used to examine the relationships with Self, Other Awareness, and Self-control in developmental guidance program only in those groups of students. This measure consists of 80 items and 4-point Likert scale. Pre and post tests were executed. This instrument includes 4 factors, academic self; social self; physical self; and emotional self. The result of this study showed high reliability (Cronbach Alpha .94).

Evaluation tool: Student observation, teacher observation and family observation instruments (Dr. Radd's) for the area of five were translated and used.

III. Data Analysis

The data analyses are as follows:

- Reliability test and factor analyses on the Children's Affect Needs Assessment were executed.
- Group mean differences on CANA between experimental and control groups, and ANOVAs by grade levels were examined.
- ANOVAs on Self, Other Awareness, Self-control, Decision-making and Problem-solving, and Group Cooperation by grade level were examined. And pre and post scores student evaluation of these area were compared, and the relationship between student and parent scores of these were examined.

- The relationship between student scores on Self, Other Awareness, and Self-control in developmental guidance program and Self-concept measure were examined.

IV. Result

First, the results of the reliability of the instruments are shown in Table 1. Factors' reliabilities on CANA are ranged from .80 to .83. It shows relatively high Cronbach Alpha. But Self, Other Awareness, Self-control, Decision-making and Problem-solving, and Group Cooperation showed less than .60.

Self-concept measure on pre-test and post-test showed high Cronbach Alpha as .94 and .95. And subfactors—academic self, social self, physical self, and emotional self—showed greater than .60.

In order to test construct validity, principal factor analysis was executed using varimax rotation based on 42 item correlations. Factorization followed by Radd's study was suggested as 5.

The relevance of factor solution also was evaluated by another criterion. The examination of the residuals showed that five-factor solution being not over factorizing. The eigen value on screen test based on Kaiser's rule showed five factorization as relevant.

The results of the factor analysis showed the 28% and 25.8% of the variances. However, items on each factor are not consistent with Radd's. But this matter remains to be studied in future.

Table 1. Reliabilities on CANA and Self-Concept Measure

Contents	Item No	N	Alpha	Contents	Item No	N	Alpha
CANA pre	42	2085	.802	DM/PS post	6	2073	.404
CANA post	42	2039	.831	Group coop pre	5	2110	.419
Self-concept pre	42	232	.943	Group coop post	5	2074	.424
Self-concept post	42	250	.953	Social self pre	20	266	.886
Self pre	9	2109	.477	Social self post	20	289	.890
Self post	9	2065	.555	Physical self pre	20	263	.728
Other Aware pre	13	2110	.555	Physical self post	20	291	.744
Other Aware post	13	2068	.603	Emotional self pre	20	262	.873
Self-control pre	9	2113	.533	Emotional self post	20	271	.889
Self-control post	9	2071	.572	Academic self pre	20	258	.928
DM/PS pre	6	2115	.390	Academic self post	20	295	.939

Second, as shown in Table 2, there are significant mean differences between experimental group and control group. The scores on CANA pre-test showed that experimental group (M=20.79) were higher than the control group (M=20.11). Also, the scores on CANA post-test showed the significant mean difference at .01 level. The scores on experimental group (M=22.10) was higher than the control group (M=20.85).

Table 2. T-Test on CANA

Variables		Mean	SD	N	t-value
Dependent	Independent				
CANA Pre	Exp. Group	20.797	4.515	1043	3.380***
	Control Group	20.115	4.69	1042	
CANA Post	Exp. Group	22.101	4.599	1028	5.944***
	Control Group	20.858	4.845	1011	

*** $p < .001$

Table 3 shows the results of t-test on CANA of between pre-test and post-test. The scores on five areas: Self, Other Awareness, Self-control, Decision-making and Problem-solving, and Group Cooperation—of post-test showed significantly higher mean than pre-test at .001 level.

Table 3 also shows the results of t-test on student evaluation between pre-test and post-test. Student evaluation on the areas of Other Awareness and Group Cooperation appeared as statistically significant at .001 level. However, the areas of Self, Decision-making and Problem-solving, and Self-control showed no significant mean differences. And also, t-test on Self-concept and CANA between pre-test and post-test showed significant mean differences.

Table 3. T-Test on CANA, Student Evaluation, and Self-Concept

Variables		Mean	SD	N	t-value
Self	Pre	4.352	1.144	2040	8.608***
	Post	4.584	1.172	2040	
OA	Pre	4.172	1.067	2041	8.700***
	Post	4.377	1.085	2041	
SC	Pre	4.006	1.244	2047	8.048***
	Post	4.222	1.242	2047	
DM/ PS	Pre	4.003	1.384	2051	6.404***
	Post	4.230	1.359	2051	
GC	Pre	3.916	1.526	2048	3.873***
	Post	4.058	1.516	2048	
St. Eval. Self	Pre	11.363	3.063	102	1.094
	Post	11.618	3.169	102	
St. Eval. OA	Pre	4.682	2.090	107	7.861***
	Post	6.196	2.030	107	
St. Eval. GC	Pre	3.759	1.478	108	17.708***
	Post	8.093	1.495	108	
Self-concept	Pre	55.069	7.566	170	3.094***
	Post	56.125	7.725	170	
CANA	Pre	20.464	4.606	1995	11.868***
	Post	21.508	4.765	1995	

*** $p < .001$

Third, in order to examine the trend of the student evaluations by grade level on five areas of the developmental guidance program—Self, Other Awareness, Self-control, Decision-making and Problem-solving, and Group Cooperation—ANOVAs were executed and the results are shown in Table 4 and Table 5.

Table 4. Descriptive Statistics on Post- Student Evaluation

			N	Mean	SD
Student Evaluation Self	Grade	1	32	11.906	3.373
		2	30	9.533	2.837
		3	40	12.950	2.396
		4	72	10.639	3.264
		5	73	9.014	2.786
		6	76	10.908	3.746
		Total	323	10.644	3.380
Student Evaluation Other Awareness	Grade	1	38	7.184	1.205
		2	35	7.171	1.071
		3	37	4.135	1.946
		4	60	4.783	1.668
		5	80	5.200	1.709
		6	87	5.069	1.461
		Total	337	5.404	1.836
Student Evaluation Self-control	Grade	1	38	3.605	.790
		2	42	2.762	.983
		3	40	2.225	1.074
		4	76	1.816	1.067
		5	0	.	.
		6	42	1.881	1.087
		Total	238	2.349	1.198
Student Evaluation Decision Making/ Problem Solving	Grade	1	36	4.861	1.515
		2	36	5.028	1.647
		3	40	3.825	1.500
		4	75	4.320	1.660
		5	77	4.883	1.367
		6	0	.	.
		Total	264	4.546	1.584
Student Evaluation Group Cooperation	Grade	1	32	7.813	1.615
		2	38	8.000	1.208
		3	39	8.410	1.601
		4	0	.	.
		5	87	8.402	1.610
		6	79	7.481	1.395
		Total	275	8.015	1.540

As shown in Table 5, post student evaluation on Self area showed significant grade level differences $F(5, 317) = 9.975, p < .001$. Post student evaluations on Other Awareness, Self-control, Decision-making and Problem-solving, and Group Cooperation area showed the significant grade level mean differences-- $F(5, 331) = 26.686, p < .001$; $F(4, 233) = 23.772, p < .001$; $F(4, 259) = 5.364, p < .001$; $F(4, 270) = 4.781, p < .001$ in order.

Table 5. ANOVAs on Student Evaluation by Grade

Test	Source	Ss	df	Ms	F
Student Evaluation Self	Between	500.018	5	100.004	9.975***
	Within	3178.038	317	10.025	
	Total	3678.056	322		
Student Evaluation Other Awareness	Between	325.540	5	65.108	26.686***
	Within	807.576	331	2.440	
	Total	1133.116	336		
Student Evaluation Self-Control	Between	98.556	4	24.639	23.772***
	Within	241.499	233	1.036	
	Total	340.055	237		
Student Evaluation Decision Making Problem Solving-	Between	50.454	4	12.613	5.364***
	Within	609.001	259	2.351	
	Total	659.455	263		
Student Evaluation Group Cooperation	Between	42.990	4	10.747	4.781***
	Within	606.952	270	2.248	
	Total	649.942	274		

*** $p < .001$

In order to examine the grade level mean differences Scheffe Post-hoc comparisons were made and the results showed on Table 6. Examining the Table 6, there appeared group mean differences on post student evaluation on Self area between 1st and 5th grade, 2nd and 3rd grade, 3rd and 4th grade, 3rd and 5th grade, and 5th and 6th grade at .05 level.

Post student evaluation on Other Awareness area between 1st and 3rd grade, 1st and 4th grade, 1st and 5th grade, 1st and 6th grade, 2nd and 3rd grade, 2nd and 4th grade, 2nd and 5th grade, 2nd and 6th grade, and 3rd and 5th grade showed significant group mean differences at .05 level.

Post student evaluation on Decision-making and Problem-solving area showed significant group mean differences between 2nd and 3rd grade and 3rd and 5th grade at .05 level. Post student evaluation on Group Cooperation also showed group mean differences between 3rd and 6th grade and 5th and 6th grade at .05 level.

Table 6. Scheffe test on Student Evaluation Post-test

	Grade	Mean	1	2	3	4	5	6
Student Evaluation Self	1	11.91	-					
	2	9.53	2.373	-				
	3	12.95	1.044	3.417	-			
	4	10.64	1.267	1.106	2.311*	-		
	5	9.01	2.893*	.520	3.936*	1.625	-	
	6	10.91		1.375	2.042	.269	1.894*	-
Student Evaluation Other Awareness	1	7.18	-					
	2	7.17	1.278	-				
	3	4.14	3.049*	3.036*	-			
	4	4.78	2.401*	2.388*	.648	-		
	5	5.20	1.984*	1.971*	1.065*	.417	-	
	6	5.07	2.115*	2.103*	.934	.286	.310	-
Student Evaluation Self-Control	1	3.61	-					
	2	2.76	.844*	-				
	3	2.23	1.380*	.537	-			
	4	1.82	1.790*	.946*	.409	-		
	5	.	.	.	.	.
	6	1.88	1.724*	.881*	.344			-
Student Evaluation Decision Making/ Problem Solving	1	4.86	-					
	2	5.03	.167	-				
	3	3.83	1.036	1.203*	-			
	4	4.20	.661	.828	.375	-		
	5	4.88	2.200	.145	1.058*	.683	-	
	6	1	.	.	.	.	.
Student Evaluation Group Cooperation	1	7.81	-					
	2	8.00	.188	-				
	3	8.41	.598	.410	-			
	4	.	.	.	.
	5	8.40	.590	.402	7.958	-		
	6	7.48	.332	.519	.929*		.921	-

* p < .05

Fourth, the relationships among student evaluation, parent evaluation, Self-concept measure, and CANA for the group of implementing Self, Self-Control, and Other Awareness area of developmental guidance program. The results are shown in Table 7.

As shown in Table 7, the correlation coefficients were ranged from .20 to .66. The correlation between student evaluation on Self and CANA ($r = .657$), between student evaluation on Decision-making and Problem-solving and CANA ($r = .601$), between student evaluation on self-control and Self-concept measure ($r = .570$), between CANA and Self-concept measure ($r = .547$), between student evaluation on Self-control and CANA ($r = .535$), between student evaluation on Other Awareness of pre-test and student evaluation on Other Awareness of post-test ($r = .533$), between student evaluation on Other Awareness of post-test and CANA ($r = .495$), between family evaluation on Group Cooperation and student evaluation on this ($r = -.374$), between student evaluation on Group Cooperation and CANA ($r = .366$), between family evaluation on Decision-making and Problem-solving and CANA ($r = .360$), between family evaluation on Group Cooperation and CANA ($r = .348$), between family evaluation on Self and student evaluation on this ($r = .340$), between family

evaluation on Self-control and CANA ($r = .336$), between family evaluation on Self and student CANA ($r = .328$), between student evaluation on Other Awareness of pre-test and CANA ($r = .326$), between family evaluation on Decision-making and Problem-solving and student evaluation of post-test on this ($r = .277$), and between family evaluation on Self and students' Self-concept measure ($r = .204$) were appeared as statistically significant.

In an effort to enhance the character development and to provide the developmental guidance for elementary school students, many research results have emphasized the necessity of a formal guidance education program. One of the approaches is a psychoeducational program, comprehensive guidance program. Dr. Radd's Developmental Guidance Program provides well-designed frames for students' self-concept development as well as cognitive, emotional, and social behavior enhancement.

This study aimed to (1) discuss the impact of developmental guidance on students in different cultures and countries, (2) explain the results of the same developmental guidance model implemented in two cultures and countries, and (3) discuss global implications of developmental guidance program collaboration between cultures and countries.

The results of the study support the positive effects of a comprehensive developmental guidance program in multicultural perspectives.

Table 7. Correlations among Family Evaluation, Student Evaluation, CANA, and Self-Concept Measures

Contents	CANA Post	Self-Concept Post
Mean	21.49	227.16
SD	4.76	32.98
N	2,039	250
Family Evaluation- Self	.33**	.20*
Family Evaluation- Self-Control	.34*	.23
Student Evaluation- Other Awareness (Pre-test)	.33**	
Family Evaluation- Decision Making/Problem Solving	.36**	
Family Evaluation- Group Cooperation	.35**	
Student Evaluation- Self (Post-test)	.66**	.46**
Student Evaluation- Self-Control (Post-test)	.54**	.57**
Student Evaluation- Other Awareness (Post-test)	.50**	
Student Evaluation- Decision Making/Problem Solving (Post-test)	.60**	
Student Evaluation- Group Cooperation (Post-test)	-.37**	
CANA (Post-test)	-	.55**
Self-concept (Post-test)	.55**	-

* $p < .05$

** $p < .01$

In Summary

1. The results of the reliabilities of the instruments are shown as relatively high Cronbach Alpha (CANA .86 and Self-concept .94).
2. There were significant mean differences between experimental group and control group on the scores on CANA at .01 level. The scores on experimental groups were higher than the control group. The results of t-tests on five areas: Self, Other Awareness, Self-control, Decision-making and Problem-solving, and Group Cooperation— showed significant mean differences at .001 level.
10. Examining the results of the correlation matrix among the variables showed the positive correlation among student scores on Self, Other Awareness, and Self-control in the developmental guidance program and Self-concept measure among student evaluation, parent evaluation, self-concept measure, and CANA for the group of implementing Self, Self-Control, and Other Awareness areas of the developmental guidance program.

The results of the study support the positive effects of a comprehensive developmental guidance program in multicultural perspectives.

V. Conclusion

The results of the study support the positive effects of a comprehensive developmental guidance program in multicultural perspectives. Comprehensive approach is developmental, sequential, and integral. It assists students in acquiring and using life-long learning skills. Among the various programs provided, Dr. Radd's program is well designed and includes the core for the student development based on self-concept development which facilitates students' development guidance and character education.

Dr. Radd's program implementation on Korean elementary school students provides the data that implies the importance of the role of program and educational services to students through collaborative work. It showed the significant impact on enhancing students' self-concept, behavior management including cognitive, social, physical and emotional growth. It also indicates that collaborative work with teacher, parent, and student does strengthen all aspects of students' development as well as character development.

Especially, Dr. Radd's program offers the importance of integrating the guidance program within the elementary school program throughout the grades, which helps teach and cultivate character traits, disposition or attitudes in students.

In future study, the longitudinal comparisons might be needed in order to examine the long-term based program impact.

Hong Kong 1995-1997
Inspiring Education – the Implementation of Grow With Guidance®
As a Means to Enhance Whole School Approach to Guidance in Hong Kong

Background

Starting in September 1992, Hong Kong schools followed the recommendation of the Education Commission Report No. 4 to adopt a Whole School Approach to Guidance as a major strategy to improve the quality of education. The goal of the Whole School Approach to Guidance is to create a positive, inviting, and caring school environment, where students can grow and realize their potentials and where their problems are responded to in a constructive manner. As an initial implementation trial, schools are using Whole School programs to cultivate the positive behaviors of students which turned out to be very successful and teachers' involvement are very high. However after a few years of implementation, schools began to seek and ask what is/are the long-term direction(s) of the Whole School Approach to Guidance. Organizing behavior improvement programs seemed not to be a satisfied long-term goal. Schools found the approach has its initial impact but it began to lose its continual momentum on the students and schools are not seeking just means to change the behaviors of the students alone.

Adoption of The Grow With Guidance® System (GWG) as a Pilot Project

In 1996, with input and training from Dr. Tommie Radd, Grow With Guidance® System Developer, the concepts of Grow With Guidance® was introduced to Hong Kong and many schools are very interested in its possible adaptation into the school system. The Education Department is taking the lead by introducing the system concepts as a pilot in eight primary schools and five secondary schools.

Its major emphasis is to work on the school system as a whole. It includes:

- i) staff development in the form of teacher skills training
- ii) student skills training (guidance less / curriculum)

For Hong Kong schools, we see this system has indeed widened our perspectives in the development of Whole School Approach to Guidance in the school systems. The Grow With Guidance® System also serves as one of the effective means that we could consider to adopt in helping the development of students as whole persons. In fact, quite a number of Hong Kong schools had indicated interest in considering the adoption of a similar System model into the school. And the Education Department

in Hong Kong is also giving every support (for example, school-based training and teachers' development) in helping schools to adopt the guidance concepts in light of the Whole School Approach to Guidance. In the process of development, it is hoped that a positive environment that facilitates the development of potentials of every students will be resulted.

Summary of comments (about 200 questionnaires including school heads and teachers) from the pilot schools that had joined the System pilot for one year (1996-1997).

1. Comment of the pupils participating in the Grow With Guidance® Scheme

- a. They liked to attend the class for GWG and always ask when will they have class again.
- b. Pupils are very involved and participated actively in the activities, they would think diligently in the class and this performance of pupils can be seen in other classes as well during this period.
- c. There are increase communication between teachers and pupils. Teachers found they know more about their pupils and pupils found themselves much easier to talk to their teachers.
- d. Pupils are more able to control themselves and through the learning of the declaration of self they learn responsibilities and with the slight help from the teachers they could keep the discipline in the school.
- e. Individual pupils who are not so bright academically could express their opinions freely and get recognition from the teachers which has help to establish their self-esteem and this has help them to improve academically.

2. Comments from teachers participating in the Grow With Guidance® Scheme

- a. Teachers have a more positive belief towards teaching their pupils such as seeing those pupils whom are less bright are more willing to participate in the GWG class which has positive message sent back to the teachers concerned.
- b. Teachers are more willing and active to learn ways to communicate with their pupils such as the I-message, etc.
- c. Teachers are able to put in to practice the concept they teach in class and apply them to daily interactions among their peers.

3. Change in the school atmosphere as a result of the Grow With Guidance® Scheme

- a. More group cooperation is seen and less complaints from pupils.
- b. Pupils are more able to respect others such as more polite, greet each other and more attentive in class, etc.
- c. Teachers are more receptive to pupils especially about their differences.
- d. Pupils are not just rated by their grades alone.

4. Change in school policies as a result of the Grow With Guidance® Scheme

- a. Schools are more able to have a clear objective towards guidance and counseling.
- b. Schools are more able to integrate different subjects across the curriculum such as moral civic education etc. to formulate the class for the GWG.
- c. Schools are more able to mobilize resources in the community in the development of guidance work in the school.

Some of the limitations that are collected for the pilot schools:

1. Time

The guidance lesson has to compete with the time of other classes.

2. Teaching materials

Additional materials need to be developed to meet the desired outcomes for students

3. Professional Support

The support was adequate for the first year of the pilot. It has been difficult to maintain the needed level of support.

Teacher Education and Support

In order to implement a Whole School Approach and expand on the positive feedback from the pilot program using the concepts of the Grow With Guidance® System, teachers need preparation and support. The Hong Kong Institute of Education is working with the Hong Kong Department of Education to provide experiences and courses in teacher education and for practicing teachers. These courses and experiences will better prepare educators to implement the Whole School Approach.

Closing Comments

This document reports the history, development, and research behind the developmental, educational guidance system, Grow With Guidance®. Thirty-five years of the journey cover results from two longitudinal research sites, nine additional research sites, graduate student research, and two international research sites.

All schools and school districts are invited to use these results to support their program improvements and grant writing and for other professional educational purposes. I began the quest for the answer to the question “What do we need to do in order for students to develop and realize academic and life success?” I believe, after 35 years, I am much closer to an answer.

This is the age of accountability and student performance. The Grow With Guidance® System is about putting students and their total development first in our school priorities and in our world. Students count on us—families, the entire educational community, local communities, and national initiatives—to put them first. Students deserve to develop their possibilities and potential. They can with our commitment.

We welcome and invite your feedback about this document. Notify us if there are ways you may want to network and collaborate. We want to support you in any way possible—with information, feedback, or materials for your program. Our goal is to support your success. Everyone and everything counts.

Sincerely,

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