

***2004-2005 Safe and Drug-Free Schools Entitlement  
Grant Program Evaluation: CONNECT!***

*Quantitative Analysis Report: School Year 2004 - 2005*

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## RESEARCH SUMMARY

The study took place within the School District of Palm Beach County, Florida during school year (SY) 2004 – 2005. The study is an evaluation of the *Connect! Character Education (CE) Program*. The *Connect! Program (CP)* is **one component of an overall strategy** of the District to satisfy the State mandate to implement CE in schools, and to provide the education of good citizenship, and moral and ethical practice and behavior among students. This study is two-fold: (1) to evaluate the fidelity of program implementation and (2) to evaluate *Connect!* in its' impact of middle school youth attitude and behavior. There are four samples: **Sample 1:** a middle school student pilot study conducted in SY 2002; **Sample 2:** a teacher/guidance counselor posttest only sample of 66 elementary, middle and high schools; **Sample 3:** a two-group comparison of middle school students and **Sample 4:** a two-group comparison of four middle schools. The overarching complication of the study was that during the identified SY, two major hurricanes hit West Palm Beach. The natural disasters caused wide spread devastation to the community. The District schools reported 45 million dollars in damages and school was cancelled for 12 days. Therefore, the findings may not provide a typical view of how schools implement *Connect!* during a normal school year. However, the study did provide: (A) some evidence of how schools utilized *Connect!*, (B) how to assist schools in future CE programming and (C) the study enhanced the understanding of student perception and behavior of good citizenship, moral, and ethical issues.

The Pilot study found that students *did not* perceive peer behavior had improved over time on four character traits: **Diligence** ( $p=.78$ ), **Integrity** ( $p=.24$ ), **Self-Control**, ( $p=.94$ ), and **Civility** ( $p=.34$ ). Peer bullying is perceived as a problem for both male and female students; female students indicating bullying is more of a problem on variables: **Civility**,  $p<.001$  and **Self-Control**,  $p<.009$ . Male students perceived a lack of **Integrity**,  $p<.02$ , among peers as more of a problem than female students. Of the 79 schools that received *Connect!* materials/training, 66 reported to the study (84%). Of the 66, a total number of  $n=42$  schools implemented Connect in SY 2005; 28 schools targeted CP, 14 schools used *Connect!* school-wide. Therefore, 11,910 elementary, 8,920 middle school and 4,890 high schools students received CP. 68% of elementary, 95% of middle and 66% of high schools used both videos and curriculum; 12% of schools used CP daily, 21% weekly, 38% monthly and 29% unknown; 76% of schools taught CP in the regular classroom. Botvin & Surlak (1998) found that 60% of the program must be taught to succeed in fidelity of the program model. Only 53% of the schools that received *Connect!* were using the program. Of the schools that used the program,  $n=42$ , 31% of schools used the program school wide and 71% used the program monthly; 29% of schools used at least 9 to 13 videos during the SY 2005. It was found the schools were not implementing *Connect!* at the 60% level. 66% of the students that received Connect Programming reported they had never viewed a video. Moreover, 48% of those students reported never receiving Character Education programming.

On eight character traits examined, a significant difference was found between groups on one variable: RESPECT,  $p<.003$ . However, a significant difference was found between two school groups when reduction of negative behavior incidents was evaluated. In the two schools that implemented *Connect!*, negative incidents occurred in 5% of the population at each school. Conversely, 16%, and 19% negative incidents occurred in the total population of the two schools without *Connect!*

## **INTRODUCTION**

### **Connect! Program Overview**

*Connecting with Kids Network, Inc.* (CWKN) offers 26 teaching units that encompass 26 elements of Character. The *Connect!* Program (CP) seeks to positively impact students, schools, parents and the community through unique program strategies. *Connect!* programming includes: teacher resource manuals (grade level appropriate), lesson plans with activities, assessment guidelines, national standards correlations, student handouts and a 1-800 number for teacher support.

The CP aligns curriculum and various program activities with the State of Florida mandated character education requirements for public schools (Section 233.061, Florida Statutes). Moreover, preliminary studies have indicated that *Connect!* Programming improves positive character traits in middle school students (Bulach, 1999).

*Connect!* impacts students and schools via curriculum and companion videos. Parents participate by downloading relevant CE material through a local television channel's website, which partners with the School District. Parents are provided downloadable, printable materials with suggested reading lists, tips to encourage discussion at home and an interactive family quiz.

CWKN provides corporate community outreach via partnering with nationwide television station networks, educational and demographic marketing materials, curriculum donations to schools, and retail tie-ins. The television partners include: ABC, CBS, NBC and FOX. CWKN sponsors include Sprint, CVS, SunTrust, Blue Cross/Blue Shield, and several other national and local corporations.

### **Connect! Program in the School District of Palm Beach County**

As defined in the *Safe and Drug Free Schools Entitlement Grant*, *Connect!* is one program among multiple programs that comprise the overarching strategy of the CE program profile developed by the District. In addition, to fulfill the CE requirements, the District partners with parents, the community and state agencies. The District's overall strategy seeks to satisfy the requirements of Florida law and to teach students successful social skills associated with CE.

In order to enhance community CE education and parental involvement, *Connect!* programming partnered with WPBF channel 25, a local television channel. Through WPBF and CWKN websites, teachers had access to view state standard correlations for each activity within the printed curriculum. In addition, teachers and students were provided with suggested readings through the websites.

*Connect!* was introduced to the District in late March of school year (SY) 2002. At the end of SY 2002, CWKN provided the District with the CP to pilot test at two middle schools: John F. Kennedy and Howell Watkins. The curriculum, videos and all program materials were provided to the pilot schools. The results of the pilot study can be found in the current study.

Beginning in SY 2002 - 2003, the CP was expanded to include grades 3 – 12, at select schools in the District. By the end of SY 2004 – 2005, *Connect!* curriculum and videos had been delivered to 79 schools in the District: 44 elementary, 22 middle and 13 high schools. Staff training had been delivered to at least one staff member at each of the 79 schools. *Connect!* was included in the overall CE profile because the program was found to greatly expand the partnership aspects of the District's CE goals.

### **Theoretical Background**

The CP was developed based on the eleven principles of effective character education (Lickona, Schaps & Lewis, 2000). The eleven principals were written by The *Character Education Partnership* (CEP). CEP is a coalition of researchers and individuals dedicated to teaching America's youth those characteristics of ethical and moral attitude and behavior, which is *connected* to a responsible society (CEP, 2000).

*Connect!* provides a 26-unit video program and curriculum for middle and high schools. The elementary school program includes 25 units for grades 3 – 5. The CP is enhanced by supplementing select national newspapers, journals and reports that are available on-line. *Connect!* uses interactive student activities to engage students by giving them a hands-on opportunity to experience the instructional material.

*Connect!* Programming addresses teaching CE in three ways: 1) Content, 2) process and 3) product. The content of *Connect!* Programming refers to the concepts, principles and skills that teachers want students to learn. Content also refers to the means

teachers use to give students access to skills and knowledge (Tomlinson, 1999). Process refers to the activities that help students make sense of concepts and come to their own ideas about the skills being taught (Tomlinson, 1999). Thirdly, the Product represents projects that allow students to demonstrate and extend what they have learned.

In addition, *Connect!* Programming stresses cooperative learning via lessons and activities. Each CP unit includes opportunities for students to develop social and interpersonal skills. Moreover, research has been found that students who are taught character education in school learn to develop short and long term life skills (Johnson & Johnson, 1994). That said, numerous polls have indicated that 90% of Americans feel that character education should be taught in schools (CWKN, 2002).

### ***Program Adaptation***

It is generally expected that programs will be modified by school staff. Moreover, *SAMHSA* and the *National Model Programs* allow for adaptation (changes and/or departures) from the methodology enlisted in the original implementation of a program. Therefore, it was expected that CP would be adapted by school providers. Understanding that programs will be adapted is critical to evaluating the fidelity of program implementation.

The evaluator generally looks to the program developer to provide specifications of their program. That is, has CWKN found a minimum amount of programming that must be implemented in order for a positive outcome (change in student behavior and/or attitude) to occur? Generally, program developers find this threshold when multiple studies have been conducted and replicated. Although CWKN has provided replicated studies, they have not provided for program specifications.

Therefore, in seeking a guide, the current study has relied on a review of field studies of various prevention programs. Durlak (1998) found that between 23% and 81% of program activities may be omitted during implementation. Similarly, Botvin et al. (1995) found that the *Life Skills Training Program* was effective with 60% of the program being implemented. Therefore, if school providers are utilizing a minimum of 50% of the program, it could be argued that the program would be considered useful to schools and students; that is, following the *SAMHSA* model of allowing for adaptation, modification and deletions of programming. It should be noted that fidelity of program

implementation is somewhat arbitrary; however, arbitrary numbers are strengthened by positive student outcome data (Harding, 2002).

### **Purpose of the Study**

The purpose of the current study is to evaluate the fidelity of program implementation and program effectiveness of the *Connect! Character Education Program*. *Connect!* was introduced to the District via CWK Network, Inc., in January of SY 2002.

The current study is the first formal evaluation of the CP. That stated, by the end of SY 2004, 79 elementary, middle and high schools were identified as using *Connect!* materials. *Connect!* is an integral part of the District's overall CE strategy. The current formal evaluation of *Connect!* is being conducted because it allows Prevention Center staff to continue serving District schools with CE materials that will be utilized and valued by teachers and students.

## **METHODOLOGY**

### **Overview**

The previously identified 79 elementary, middle and high schools that participated in the program, via accepting CP materials, were asked to participate in the current study. Each school was asked to complete a teacher/guidance counselor survey at the end of the SY 2005. The total number of schools that participated in the study was N=66. Some schools that did not complete a survey were contacted by phone. Time constraints did not allow the remaining 13 schools to be contacted.

The research proposal for the current study identified middle school students as the focus of the evaluation. However, the Safe Schools Prevention staff made an effort to understand the total number of schools that participated in the CP. Moreover, to enhance the examination of the current study's fidelity of implementation piece, in addition to the middle schools, those elementary and high schools that received training and programming were asked to participate in the fidelity of implementation study sample.

Therefore, there are three levels to the current study. (1) The first level is fidelity of implementation of the N=66 schools. (2) The second level is the evaluation of the 22

middle schools identified in the research proposal, which includes two samples. (3) The third level includes a pilot study that was completed in SY 2002.

Moreover, with special consideration given to level two (2), the current study sought to isolate the special components of *Connect!*, in order for participants to recognize and respond to those specific CE elements within the District's wide CE programming strategy. The study design was complex in the scope of its examination.

### **Research Design**

The current study is quantitative quasi-experimental and uses multiple methods of sampling technique within the study design. The four samples are purposive, although random sampling technique was employed to minimize sampling bias. The student instrument was a two-group comparison posttest survey. The teacher/guidance counselor instrument was a one-group only posttest survey. School year 2005, end of year behavior incident data and *School Environment Safety Incident Report (SESIR)* data from four middle schools, two control and two experimental, was compared. Additional data was collected at the middle school level via student survey research. Student and teacher data were collected via survey research. Therefore, data has been triangulated in an effort to broaden the scope of the evaluation in order to understand the impact *Connect!* had on students and schools.

In order to manage the multiple samples, the software package SPSS was utilized in the current study. Some school data was collected in an Excel format and uploaded into SPSS.

### **Sample**

The largest sample in the current study was the total school sample, which included N=66 elementary, middle and high school respondents. The total school sample sought to evaluate the fidelity of implementation of *Connect!* The total school sample is identified as level one of the study. Participants were asked to complete the *Connect! Program Teacher Survey (CPTS)*.

The sample was purposive, in that 79 elementary, middle and high schools were identified as using the CP during SY 2005. Sixty-six (N=66) schools, or 84% of the schools participated in the study: 35 elementary, 22 middle and 9 high schools. Of that number, 25 respondents were guidance counselors, 13 were teachers and four were

unknown respondents. There were 32 *A*, 14 *B*, 14 *C* and 6 *D* grade schools that participated in the study.

The second level of the current study included two samples from the middle school population. The first sample included: one hundred and sixteen (n=116) students from three Florida middle schools (n=3290) and five (5) classrooms, who participated in the *Connect! Program Student Survey (CPSS)*. The three *CPSS* participating schools were comprised of two control schools and one experimental school. The schools were selected based on their willingness to participate in the study and similarities on the following variables: school grade, student ratios of race/ethnicity and socio-economic (SES) status.

The *CPSS* sample included two control schools: one was rated a *B* school and one was rated a *C* school. The experimental school was an *A* rated school. The socio-economic status (SES) at the two control schools was 87% and 76% low SES and 19% low SES at the experimental school. The SES was determined by free and reduced lunch qualified students. The control schools were 86% and 83% minority students and 42% minority students at the experimental school. The sample was 60% female and 40% males in both groups; 25% of the control school group students were in seventh grade and 74% were in eighth grade and 98% of the students at the experimental school were in the eighth grade.

It was found that a disproportionate number (n=142) of control group students to experimental group students (n=58), had participated in the survey. The higher number of control group students occurred because a smaller number of middle schools had implemented the program than had been expected, which complicated obtaining the experimental group. Therefore, control students were randomly selected to (n=58), via SPSS software capabilities (n=58, experimental and n=58, control participants).

A second middle school sample included a comparison of end of year and SESIR reports from four school populations: two control schools and two experimental schools. The samples were purposive and schools were selected based on similarities on previously identified variables.

## **Instrumentation**

Two posttest only surveys were conducted during SY 2005: (1) *Connect! Program Teacher Survey (CPTS)* and, (2) *Connect! Program Student Survey (CPSS)*.

The *CPTS* was developed from Wayne Harding's (2002, 2003) *Feasibility Tool* and Harding's (2003) work on establishing criteria on selecting appropriate programs for schools and school districts. The Harding (2003) instrument was modified by District staff in order to enhance knowledge on elements of the CP that would improve future CE school programming. Participants were asked to respond to ten (10) items regarding the CP (Appendix A).

The *CPSS* was developed from the CWKN instrument titled: *The Character Trait Survey* (Bulach, 2001). The modified survey included ten (10) items from the CWKN survey. Bulach's (2001) survey had one hundred items and used a Likert type instrument with a five-point response scale ranging from *Never* to *Always*.

Bulach (2001) had multiple items on the instrument that were reverse coded. The items on the modified survey were taken directly from the Bulach (2001) survey. Six items on the modified survey were reverse coded, which prompted the items to be recoded in order to provide consistent scoring. Bulach's (2001) instrument included up to fifteen items for each of the eleven (11) character traits. The modified instrument included eight (8) character traits and one item was selected from each of the categories, with RESPONSIBILITY having two items. The traits that were included in the modified survey were: RESPECT, COMPASSION/EMPATHY, RESPONSIBILITY, DILIGENCE, INTEGRITY, FORGIVENESS, TOLERANCE/DIVERSITY and HUMILITY.

The Group Interactive Feedback Technology (GIFT) response pad system was used to collect student responses. The internal consistency and validity coefficient is not available for Bulach's (2001) instrument. Bulach (2001), interprets his survey by using mean scores, therefore, a mean score of 4.00 or higher indicates students are strongest in that area and a score of 2.00 would indicate a weak area.

The following section provides the results for the previously mentioned pilot study. The reader will find the study incorporates sections that are inherently important to any study.

## **RESULTS AND FINDINGS OF PILOT STUDY**

### **Overview**

During SY 2001 - 2002, two middle schools in the SDPBC received the *Connect!* videos in order to pilot test the program. CWKN provided programming for the total student population at John F. Kennedy (JFK) and Howell Watkins (HW) middle schools. The CWK program was introduced to the students late in the school year and provided for a total number of 2,375 students from both schools: 1,166 from JFK and 1,209 from HW.

Four hundred students from both identified schools, were randomly selected to participate in the pilot study. The instrument used was *The Eleven Principles of Character Education Effectiveness Survey*, developed by CWKN. The identified instrument included 97 items, however, the instrument was modified by staff and the evaluator for the pilot study to include 36 items (see program instrumentation below). Student responses to 36 Likert type items ranged from 'Never' to 'Always' with five choices. Those items that were reverse coded were recoded. It should also be noted that the items asked students their *perception of how other students behaved*.

In April, a pretest was administered to the participants prior to implementing the program. After receiving four weeks of programming, a posttest was administered to the selected participants. Four hundred and seven (407) students completed the pretest and 277 completed both the pretest and posttest. Therefore, only 68% of the pretest scores could be matched to the posttest scores. The attrition level was beyond the acceptable 15%, however, further testing was not completed at the pilot study level. Another ten (10) student surveys were dropped because they were incomplete. Therefore, the total number of participants in the study was N=266.

### *The Sample*

The sample of students included: 135 females, 131 males; 64 sixth graders, 123 seventh graders, 79 eighth graders; 54 white, 188 black and 24 other racial and ethnic students. The students described themselves in the following manner: 44 students were A grade students; 141 were B; 75 were C; and 6 were D grade students.

### **Program Implementation**

Teachers met with the CWK facilitator in early April. The facilitators provided an overview of the program to the teachers. The identified schools ran CWK for four weeks, beginning in April and ending in May 2002.

The identified schools selected four reality-based character trait videos from 26 videos for students to view: **Diligence, Integrity, Self-Control** and **Civility**. Each trait was highlighted for one day at both schools. That is, a morning public announcement read the word (trait) of the day, gave the definition and an example of the word. After viewing each video, the classroom teacher provided fifteen to twenty minutes for the students to discuss and ask questions about the trait.

The instrument developed by CWKN included sixteen (16) character traits and included 97 items for the 16 behaviors (Bulach, 1998). The pilot study students received programming for four of the sixteen character traits, therefore, the instrument was modified to include only the four traits. The modified instrument included 36 items from which the items were used to create four constructs. Of the 36 items, 22 were reverse coded. The character traits were closely aligned with prior work of CWKN Director, Dr. Clete Bulach. Dr. Bulach has stated, “The best way to improve a character trait is to focus on the behaviors for each character value” (Bulach, 1998). Therefore, Dr. Bulach’s (1998) prior work and studies were closely followed.

### **Findings**

A Cronbach’s Alpha was conducted on the four constructs: Self-Control –  $a > .71$  (4 items); Civility -  $a > .85$  (9 items); Integrity  $a > .62$  (7 items) Diligence -  $a > .58$  (5 items). From the 36 items, it was determined that *Alpha (a)* value would increase if 11 items were deleted from comparisons and analyses of the four constructs. Therefore, 25 of the 36 items were used to build the four constructs.

A paired sample *t* – test was conducted on the four constructs: **Diligence, Integrity, Self-Control** and **Civility**. A significant difference was not found on any of the identified constructs.

**TABLE 1 - Pilot Study**

Variable/Construct	Mean	t -test
Pretest Civility	31.66	p=.34
Posttest Civility	31.11	
Pretest Diligence	13.66	p=.78
Posttest Diligence	13.71	
Pretest Self-Control	13.35	p=.94
Posttest Self-Control	13.30	
Pretest Integrity	17.29	p=.24
Posttest Integrity	17.68	

A significant difference was not found on the four constructs when pretest scores were compared to posttest scores, however, a closer examination was made of the 22 items that made up each construct.

The data was disaggregated by gender and a means procedure was conducted on the four constructs. It was found that overall the means scores were higher on the Civility variable (31.66/9

=3.51). That is, students tended to think that their peers bullied them and/or other students. An ANOVA was conducted to examine differences among males and females on the Civility variable construct. A significant difference was found between males and females, where females scored higher on stating that bullying behavior is prevalent among students ( $p < .001$ ). The other construct that produced a higher mean score was the Self-Control variable ( $13.35/4 = 3.33$ ). Here again females felt Self-Control was more of a problem than males ( $p < .009$ ). The Diligence construct fell into the category of - *it was a little bit of a problem* ( $17.29/7 = 2.52$ ). However, there was a difference between males and females on the Integrity variable, where males were significantly higher on Integrity, or lack there of, being a problem ( $p < .02$ ) among students.

Expecting to find a difference on pretest scores to posttest scores in a four-week period is to be exceedingly hopeful. However, findings via the examination of student scores might be an assist in the direction of CE services to middle schools.

Clearly, the students who participated in the current study feel that bullying behavior is a problem at their schools. Moreover, students tended to indicate that the *ideals* of Diligence and Integrity were not such a problem for them as was violent and aggressive behavior of other students. It makes sense that before one can rise to learn about noble concepts that concern over aggressive behavior needs to be addressed. It is also worth noting that females tended to feel that aggressive behavior was a bigger problem among their peers than males.

**RESULTS AND FINDINGS OF PROGRAM IMPLEMENTATION**

**Overview**

The research proposal for the current study proposed to examine the fidelity of implementation of the CP at middle schools. However, as previously explained data was also collected from elementary and high schools through the *CPTS* and included in the following sample results.

**TABLE 2 – Program Implementation**

Program Implementation			
		Frequency	Percent
Valid	School Wide	14	21.2
	Targeted	28	42.4
	Not Imp	24	36.4
	Total	66	100.0

At the conclusion of the SY 2005, the *Evaluation of the CP Survey* (See Appendix A) was distributed to the Safe Schools Facilitators at 79 schools identified as participating in the program: 44 elementary schools, 22 middle schools

and 13 high schools. A total of 66 schools, or 84% of the schools, returned surveys and/or were directly contacted, to complete survey questions. **Table 1** demonstrates that of the 66 schools contacted nearly 1/3 of the schools had not implemented *Connect!* and 42% of those schools were using the program on targeted students. In order to understand how the program was used across the District, an examination was made of those schools that participated in the program.

**TABLE 3 – District and *Connect!* Schools by School Grade**

**DISTRICT SCHOOLS / *CONNECT!* SCHOOLS**

Grade	No	%	Grade	No	%
A	85	49%	A	32	49%
B	40	23%	B	14	21%
C	28	16%	C	14	21%
D	12	7%	D	6	9%
F (charter only)	8	5%	F	0	
TOTAL	173	100	TOTAL	66	100

Table 2 demonstrates that each school in the District receives an A through F grade, which is based on established criteria. Further, a breakdown by number and percentage is shown, which is compared to how the *Connect!* Program was distributed to schools in the District.

**TABLE 4 - Program Implementation Among Schools**

Characteristics Implemented	Not/Implemented	(X <sup>2</sup> )	p
A School	(n=23)	(n=9)	
B School	(n=11)	(n=3)	<u>(X<sup>2</sup>)</u> <u>p</u>
C School	(n=8)	(n=6)	13.04 .005***
D School	(n=0)	(n=6)	

The current study found that the distribution of A through D grade schools, within the District (173 in SY 2005) and the schools that staff selected

to participate in CP, were highly similar. That is, schools that participated in CP were equally represented across schools in the District. However, it appeared as though higher grade schools had implemented CP more successfully than lower grade schools. The finding was substantiated by a *chi square* (X<sup>2</sup>) with a high value, X<sup>2</sup>=13.04 and a significance level of *p*<.005. That is, when schools were disaggregated by grade, it was found that they did not implement the CP as expected. The A and B grade schools were significantly more successful at implementing the CP than the C and D grade schools.

In the following section, schools are examined on three levels, elementary, middle and high. Then a closer examination is made of the middle schools.

*Elementary Schools*

Of the 44 elementary schools that received CP materials and training, 35 elementary schools participated in the study (78%). From the identified 35 schools, 28 schools reported using the program; therefore, 11,910 elementary school students were identified as receiving the program. In Table 5, frequency = schools.

**TABLE 5 – Participation by Grade Level**

Participation by Grade Levels			
		Frequency	Percent
Valid	All Grades	18	27.3
	K - 2	3	4.5
	3 - 5	15	22.7
	Other	3	4.5
	3rd Grade	3	4.5
	Not Imp	24	36.4
	Total	66	100.0

The total number was derived from schools reporting the targeted number and/or total number of students receiving the program. Of the schools that used *Connect!*, 21 schools used the program as a targeted program. Targeted groups included: grade level, behavior, and social skills in elementary schools. Nearly, 68% of reporting elementary

schools used both the *Connect!* video and the curriculum, 3% of the schools used

curriculum only. Nearly 33% of the elementary schools used the program daily or weekly, 38% used the program monthly. More than 74% of schools taught CP in the classroom and 82% of the schools reported that the Guidance Counselors taught the program. More than 72% of the respondents reported that Guidance Counselors received training and 22% do not remember receiving training for the program.

*Middle Schools*

A total number of n=22 middle schools were provided CP training and materials for use during SY 2004 – 2005. All n=22 middle schools participated in the fidelity of implementation section of the current study. Of the n=22 schools, nine (9) reported they had implemented the CP and 13 schools had not implemented during SY 2005. Five (5) middle schools used the program school wide and four (4) schools targeted students.

**TABLE 6 –Middle School *Connect!* Program Implementation**

Connect Program - SY 2005			
		Frequency	Percent
Valid	Yes	9	40.9
	No	13	59.1
Total		22	100.0

Targeted student groups included: vocational classes, ESOL students and physical education classes.

Therefore, a total number of 8,920 middle school students had the opportunity to receive the CP during SY 2005. As was found in the aggregate school sample (*CPTS* sample of 66 schools), the A grade middle schools were much more likely to implement *Connect!* Of the eight A grade schools, (8) implemented *Connect!* and three (3) did not. The schools that reported using the CP tended to use the program frequently; nearly 78% of the middle schools used the program weekly or monthly. Eight (8) schools used the curriculum among all grade levels and six (6) schools used all the videos or most of the videos. At middle schools, teachers were more likely to teach *Connect!* than guidance counselors; however, another 78% of the respondents reported they were unclear or did not know who had received training for the CP.

*High Schools*

During SY 2005, 13 high schools were provided with the CP and training. A total of nine (9) schools responded to the survey query; of that number, five (5) reported they had implemented the program during SY 2005.

Two high schools implemented CP school wide and three targeted the program. Therefore, 4,890 high school students received CP programming in SY 2005. Three high schools used both the video and curriculum and two schools used only the videos. Three high schools used the CP at least once a month; two schools used CP as needed. One school reported using all 26 lessons from the program.

## **MIDDLE SCHOOLS: RESULTS AND FINDINGS**

### **Connect! Program Student Survey**

Toward the end of SY 2005, students from three schools were asked to respond to 10 items on the modified CPSS. The survey was conducted in regular classrooms. Students were asked to respond via the GIFT Technology Software (*Sample* page 9).

The instrument sought to provide an understanding in the following two areas: (1) degree that students associated and recognized CE lessons and videos as being part of *Connect* Programming; adding to knowledge on fidelity of implementation and (2) findings on improved student self-described attitude and behavior, when compared to a control group, providing outcome data.

Staff at the CP (experimental) school reported showing 9 to 13 videos, in all grade levels, during the school year. Throughout the school year, videos were viewed in the school's media center; however, the school reported the curriculum was not used.

### **GROUP 1 = EXPERIMENTAL (Received Program) GROUP 2 = CONTROL**

- 66% of Group 1 students and 47% of Group 2 students reported they had *never* viewed a *Connect* video.
- 48% of Group 1 students and 43% of Group 2 students reported they had *never* received Character Education lessons.
- 71% of males and 41% of females in Group 1 reported **never** receiving Character Education lessons (from any program).
- 38% of males and 50% of females in Group 2 reported never receiving Character Education lessons.

To explain the results of the items on the survey that asked about character traits, Bulach (2001) used mean scores on each item to indicate the level of competence on the eleven (11) character traits that were explored. The highest score possible is 5.0 and the

lowest score is 1.0. Therefore, Bulach (2001) explained that a trait score below 3.0 should become a focus of discussion, video viewing and lesson planning within the CP programming.

The modified instrument, used in the current study, utilized eight (8) traits with the RESPONSIBILITY trait having two items. Moreover, Bulach (2001) offered up ten items to test the trait and each trait had a mean student score.

Table 7 provides mean scores for the nine items for both experimental and control groups:

**GROUP 1 = EXPERIMENTAL and GROUP 2 = CONTROL (M= MEAN).**

**TABLE – 7 - Mean Scores on Nine Items**

TRAIT	GROUP 1/M	GROUP 2/M	SD	df	t
RESPECT	3.50	2.77	1.24	113	3.08**
COMPASSION	3.28	2.88	1.37	114	1.56
RESPONSIBILITY*	2.75	3.43			
DILIGENCE	3.74	3.44	1.40	112	1.09
RESPONSIBILUTY*	3.49	3.03	1.21	113	1.694
INTEGRITY	3.14	2.98	1.42	111	.589
FORGIVENESS	3.63	3.98	1.20	113	-1.40
TOLERANCE/ DIVERSITY	2.44	2.65			
HUMILITY	2.51	2.74			
<i>p</i> <.003 (M= mean score; SD= standard deviation; df= degree of freedom)					

In addition to providing mean scores, an independent *t* test was conducted on variables that showed a higher mean score for **GROUP 1** over **GROUP 2**. A significant difference was found on the variable, RESPECT,

*p*<.003; however, a significant difference was not found on any other variables.

**Middle Schools and End of Year School Data Reports**

In addition to the CPSS comparison study, a second sample of four schools was conducted using end of year reports, including SESIR. The raw data was collected to provide an overview and comparison of student populations that received CP with those that did not receive the programming. Four middle schools were included in the sample.

**TABLE 8 – Middle School Comparison Using End of Year Reports**

School	School Grade	Student Number	% Low SES	% Minority	Fights	Sexual Harassment	Threat Intimidation	Total # of Referrals	Reported to Law
<b><i>Experimental Schools – Received the Connect Program during SY 2005</i></b>									
Watson B. Duncan (EX)	A	1228	25%	31%	23	7	5	59	57
Okeeheelee (EX)	B	1744	57%	65%	40	10	5	82	53
<b><i>Control Schools – Did Not Receive Connect Programming during SY 2005</i></b>									
Jeaga (CO)	B	1322	75%	80%	153	18	11	249	167
Congress (CO)	B	1282	63%	78%	100	37	10	205	202

The District offers numerous CE programs to schools; therefore, it is important to note that the four participant schools had other programs running during SY 2005. A decreased number of negative behavior incidents may be in part attributed to other programs operating in the school. Therefore, an examination was made of other CE

**TABLE 9– Character Education Programs**

programs, associated with CE lessons, that may influence the findings.

As TABLE 8 demonstrates, the experimental (EX) and control (CO) schools were similarly balanced on the CE programs that they offered.

SCHOOL	Character Education *	Bullying Programming	Conflict Resolution
<b>Watson B. Duncan (EX)</b>	NO**	NO	NO
<b>Okeeheelee (EX)</b>	YES	YES	YES
<b>Jeaga (CO)</b>	NO	NO	NO
<b>Congress (CO)</b>	YES**	YES	NO
<i>* Connect Program Only    ** Other CE Program</i>			

A significant difference was found between the experimental and control schools on negative behavior incidents. The two experimental schools had a significantly lower number of negative behavior incidents (Total # of Referrals) than the two control schools. In the experimental schools, Watson B. Duncan and Okeeheelee, negative incidents

occurred in 5% of the population; however, in Jeaga and Congress negative incidents occurred in 19% and 16%, of the population, respectively.

## **FINDINGS**

### **Discussion of Findings**

The critical piece of this evaluation is the fidelity of implementation of the *Connect!* Program across schools. It stands to reason that if the CP was not used as the developer intended, or only partly utilized, than student outcome would not show an improvement. Therefore, the first step to explaining the results of the current study would be to explore the fidelity piece.

In the past few years, fidelity of program implementation has become an integral part of program evaluation. Program fidelity gained significance when SAMHSA determined to use Model Programs across schools. However, establishing the degree of programming that needs to be provided in order to maintain program effectiveness is not easily defined.

Evaluating the fidelity of implementation requires an examination of the parameters of adaptation (Backer, 2001; Cummins, Goddard, Formica, Cohen, & Harding, 2002). Reasonable program developers and evaluators anticipate providers will adapt, enhance, omit and substitute lessons and activities as a matter of course (Backer, 2001, Durlak, 1998).

It is generally understood that each school functions differently, dependent upon student populations, staff priorities, school neighborhood and other issues that influence a school's environment. Prior studies on program fidelity and adaptation have provided some guidance to assist the evaluator in determining the generic fundamental requirements of program implementation.

Through an examination of similar studies of prevention programs, Durlak (1998) found that between 23% and 81% of activities could be omitted and programs would still be effective. Similarly, Botvin et al. (1995) found that the *Life Skills Training Program* was effective with 60% of the program being implemented.

An attempt will be made in the current study to employ the mathematics of Botvin (1995) and Durlak (1998), as well as make a reasonable assumption on the *quantity* of the *Connect!* Program needed to be delivered in order to maintain program effectiveness.

It was known that 79 schools received CP material and training by SY 2003 – 2004. What was not known was the number of schools that actually used the program. The current study found that 66 schools reported on their use of the CP and of that number, 42 schools reported using the program. That translates to 50% of the schools, thought to be using the program, had not implemented CP by the end of SY 2005. Of those 42 schools, 13 schools used the program school wide and 29 schools targeted the program. Therefore, the program was not well used across schools.

By employing Botvin's (1995) and Durlak's (1998) measurements, 50% to 55% of a program must be used in order to remain effective. The schools would have to use no less than 16 videos and 16 lessons throughout the school year. Thirty schools (30) used both the video and curriculum, or 71% (of the n=42) schools used the program as intended. However, only 22% of the schools used the program every other week, throughout the school year, which would be required in order to gain the benefit of the program.

In the final analysis, *Connect!* was not successfully implemented across schools and did not meet the test of fidelity of implementation across schools. This was true of elementary, middle and high schools. That said, a handful of schools enthusiastically embraced the *Connect!* Program and used all the videos and curriculum.

The pilot study purported to test improved student attitude and behavior on four character trait variables, pre- and post-, after students viewed videos for four weeks. A difference was not found on any of the four variables. What was found is that bullying was seen as a significant problem to middle school youth during SY 2002. To expect that a difference would be found after four weeks of programming is very optimistic. Moreover, a difference was not found on a cohort group that participated in the program three years later and for the entire 2005 school year.

During school year 2005, a modified survey to Bulach's (2001) CWKN survey was administered to 116 middle school youth. Eight character traits were examined: *Respect, Compassion, Responsibility, Diligence, Integrity, Forgiveness,*

*Tolerance/Diversity and Humility.* A difference was not found between students that participated in *Connect!*, and those that did not, except on the variable Respect,  $p < .003$ . The respect variable asked students to respond to the following statement: *I think about the feelings of other students.* It is difficult to analyze why a difference was found on this trait and not on the other seven traits. It may reflect student attitude due to teacher intervention on the subject or any other reasonable assumption. However, in the absence of any of change on the other seven variables it is most likely not due to the *Connect!* Program alone.

The final comparison was conducted on the total school population between two middle schools that received *Connect!*, and two middle schools that did not receive the program. A difference was found between the two groups, where the *Connect!* Program schools had significantly fewer numbers of total incidents during the SY than did the two schools that did not receive the program. It may be that the programming is seen as having more of an impact when looked at from an overarching perspective. Clearly, both experimental schools have decreased negative student behavior even in consideration that similar *other character education* programs that are running in both school sets.

This study had major obstacles to overcome. (1) In the best of circumstances, it is challenging to determine a cause and effect of a program that is one element of a larger strategy. (2) The *Connect!* Program was not established well enough in any of the schools that were willing to participate to obtain reliable student samples. (3) The study was conducted during a year that was profoundly interrupted by community devastation from two major hurricanes. Even in light of the inherent problems with the evaluation, what is clear is that corrective actions can be taken to improve the implementation of the *Connect!* Program. That said, the following recommendations are made.

## **RECOMMENDATIONS**

1) Focus training and support on schools that have a grade of C and lower. Findings were that schools with lower grades did not implement CE as successfully as higher grade schools.

2) Use the school list (Appendix A) to identify those schools that did not get *Connect!* up and running during SY 2005. Assist the schools, and or provide programming to other schools that want the program.

3) The middle schools in particular did not implement *Connect!* Assist middle schools with CE programming they will utilize.

4) Additional training on the *Connect!* Program is needed for those schools that did not implement the program as intended. Almost 32% of the respondents did not know who received training at their school.

5) Use the numbers that this evaluation produced - of total number of students in elementary, middle and high schools that received *Connect!* Programming, and generate a cost per pupil ratio, in order to understand the cost effectiveness of the program.

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**APPENDIX C**

**Elementary Schools:**

<i>Participating Schools</i>	<i>Non-Participating Schools</i>	<i>Unknown</i>
Addison Mizner	Meadow Park	Village Academy
Barton	Palmetto	Westward
Calusa	Pleasant City	Glade View
Lantana	Roosevelt	Melaleuca
Belvedere	U.B. Kinsey/Palmview	Royal Palm Beach
Berkshire	Jerry Thomas	Egret Lake
C.O. Taylor/Kirklane	Washington	North Palm Beach
Palm Beach Public	New Horizons	Northmore
Seminole Trails	Lincoln *	
South Olive		
West Gate		
Acreage Pines		
Belle Glade		
Cholee Lake		
Gove		
K.E. Cunningham/Canal Pt.		
Benoist Farms		
Dr. Mary McLeod Bethune		
Jupiter		
Jupiter Farms		
Lake Park		
Linestone Creek		
Northboro		
Palm Beach Gardens		
Timber Trace		
West Riviera		
Whispering Pines		

**Total = 28**

**Total = 8**

**Total = 9**

**\* Not Counted in Study**

**Middle Schools:**

<i>Participating Schools</i>	<i>Non-Participating Schools</i>	<i>Unknown</i>
Omni	Boca Raton	
Christa McAuliffe	Lantana	
Odyssey	Lake Worth	
Crestwood	Carver	
Okeeheelee	Conniston	
Western Pines	Jefferson Davis	
Bak Middle Schools of Arts	Roosevelt	
Independence	Lake Shore	
Watson B. Duncan	Woodlands	
	Howell L. Watkins	
	Jeaga	
	John F. Kennedy	
	Jupiter	
	Congress *	
<b>Total = 9</b>	<b>Total = 14</b>	<b>* Not counted in Study</b>

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**High Schools:**

<i>Participating Schools</i>	<i>Non-Participating Schools</i>	<i>Unknown</i>
Atlantic	Boynton Beach	A.W. Dreyfoos
Forest Hill	Spanish River	Gold Coast
Royal Palm Beach	John I. Leonard	Roosevelt Full Service
Palm Beach Lakes		Pahokee Middle/Senior
William T. Dwyer		
Jupiter		
<b>Total = 6</b>	<b>Total = 3</b>	<b>Total = 4</b>