The Effects Of A Responsibility-based Character Education Program On Middle School Academic Achievement And School Climate At An International School In East Africa

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THE EFFECTS OF A RESPONSIBILITY-BASED CHARACTER EDUCATION PROGRAM ON MIDDLE SCHOOL ACADEMIC ACHIEVEMENT AND SCHOOL CLIMATE AT AN INTERNATIONAL SCHOOL IN EAST AFRICA

by

TERRY A. HOWARD
B.A. Bethel College, 1981
M.A. Indiana University, 1988
Ed.S. University of South Carolina, 1999

A dissertation submitted in partial fulfillment of the requirements for the Degree of Doctor of Education in the Department of Educational Foundations in the College of Education at the University of Central Florida Orlando, Florida

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Major Professor: Edward H. Robinson III
ABSTRACT

The purpose of this research was to determine the effectiveness of a character education program on middle school student academic performance, effort and attitude about their school located in an international setting. Middle school students at the participating international school were assigned to either an experimental or control group. Those students in the experimental group classes received a series of 12 lessons focusing on the character trait of responsibility. Those students in the control group classes did not receive these lessons.

Twelve responsibility-based lessons were presented to students in the experimental group. Student academic grades in six different academic subjects, effort scores in six different academic courses, and student attitude concerning school climate constituted the dependent variable.

The literature review and the general results of this study indicate that there are many factors that may influence student academic performance, effort or attitude. Various character education programs which have been designed to be integrated into school curricula as part of pre-existing courses or as stand alone programs have had varying levels of success. There is limited quantitative data available to support the claims that many existing programs make related to their effectiveness. The data collected from this study were also inconclusive making it difficult to generalize the findings beyond the scope of this study.

While certain middle school grade levels showed statistically significant improvement in some academic disciplines or effort improvement in some
subjects it would not be appropriate to generalize the findings based on this investigation.

Implications of this study and suggestions for future investigations are discussed.
This dissertation is dedicated to my family, friends and professors who have been so supportive and patient throughout the journey of reaching this point. They have inspired, encouraged and cajoled me. Any successes I’ve experienced over the years can somehow be linked back to the love and support they have given to me.
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CHAPTER ONE - INTRODUCTION

What is the impact of a responsibility-based character education program on middle school academic achievement and school climate at an international school in East Africa?

Introduction and Statement of Problem

Incorporating ‘character education’ into the general curriculum for elementary, middle and high schools has become the fastest growing reform movement in the realm of education in the United States today. (Williams, 2000). In the past 25 years, there have been dramatic increases in crime rates, drug use, death by homicide, suicide rates, out-of-wedlock births, in addition to rising suicide rates and mediocre performance on standardized achievement tests. (Leming, 1997) Also, dishonesty in youth, cheating behavior, poor work ethic and lack of diligence have been cause for concern to character educators. (Leming, 1996; Lickona, 1997). Felber (2003) states that there are ten indicators that society is failing to address in terms of moral development. These include violence/vandalism, stealing, cheating, disrespect for authority, peer cruelty, bigotry, bad language, sexual precocity and abuse, self-centeredness, and self-destructive behavior. The belief exists that infusing character education back into the general curriculum in the nation’s schools would help address and alleviate some of these issues. During the 1990’s, the goal of fostering character education has once again become an important focus in schools. (Leming, 2001).
In the early days of formal education in the United States character education was part of nearly all lessons. To support the values presented in schools, the home, community and church environments tended to work hand in hand to continuously reinforce aspects of character education in young people. (Greenawalt, 1996).

As funding for education was reduced and programs were cut from the school’s curricula, character education tended to get pushed to the wayside leaving more time for learning the basics in math, science, English and social studies. As the social structure of society continued to change, with less reinforcement of social norms and values in the school setting, various problems related to the nation’s youth tended to grow.

To address these concerns, the pendulum seems to be swinging back toward the concept of including character education back into the schools with the hope that the social concerns will diminish. (Field, 1996).

There has been limited research done in the area of how character education programs in the schools impact students socially and academically. The field of character education is woefully deficient in producing systematic outcome research. There is simply very little known about the effects of character education. Opinions abound and intuitions are plentiful, but scientific data are scarce. (Leming, 1993). Berkowitz (1998) states that there is very little empirical data guiding the training of teacher educators in the realm of character education. Additional research is needed in many areas in an attempt to determine how
students and society at large would benefit by having character education programs reincorporated into the nation’s schools.

Research in the United States with student populations has been limited in the area of the impact of character education on student academic performance. Studies include The Monk Study (Brooks, 2001), The Pygmalian Study (Brooks, 2001), The Wulf Study (Brooks, 2001) and a dissertation study focusing on the impact of infusing character education into the curriculum. (Raymond, 2001). No studies were found that focused on research done with student groups outside of the United States or in settings other than the US school system.

**Research Question / Hypothesis**

There is no recorded research that has integrated international schools in the area of character education’s impact on student academic achievement, effort and attitude. Therefore the purpose of this study is to look at the effect that a responsibility-based character education program will have on achievement, effort and attitude using middle school students attending an international school in East Africa.

With this purpose in mind, the primary research question was ‘What effect does a responsibility-based character education program have on middle school student academic performance at an international school in East Africa?’

Hypothesis 1 – The null hypothesis for the primary research question would be that the implementation of a responsibility-based character education intervention will have no statistically significant impact on 6th, 7th and 8th grade
student academic achievement”? This question would have six sub-hypotheses related to the various subject areas included in the study.

Hypothesis 1a - The first null hypothesis for this question would be that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Mathematics using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 1b - The second null hypothesis for this question would be that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Science using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 1c - The third null hypothesis for this question would be that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for English using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 1d - The fourth null hypothesis for this question would be that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Social Studies using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.
Hypothesis 1e - The fifth null hypothesis for this question would be that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Physical Education using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 1f - The sixth null hypothesis for this question would be that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Foreign Language using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

With the original purpose in mind, the second research question was ‘What effect does a responsibility-based character education program have on middle school student effort at an international school in East Africa?’.

Hypothesis 2 – The null hypothesis for the second research question would be that the implementation of a responsibility-based second education intervention will have no statistically significant impact on 6th, 7th and 8th grade student effort? This question would have six sub-hypotheses related to the various subject areas included in the study.

Hypothesis 2a - The first null hypothesis for this question would be that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for Mathematics using 3rd
quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 2b - The second null hypothesis for this question would be that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textit{Science} using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 2c - The third null hypothesis for this question would be that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textit{English} using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 2d - The fourth null hypothesis for this question would be that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textit{Social Studies} using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 2e - The fifth null hypothesis for this question would be that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textit{Physical Education} using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.
Hypothesis 2f - The sixth null hypothesis for this question would be that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for Foreign Language using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

Hypothesis 3 - The third research question was … ‘What is the impact of a responsibility-based character education program on middle school students’ attitudes about their school and the school environment at an international school in East Africa’?

The null hypothesis for this question would be that there is no statistically significant difference in student responses on the CHARACTERplus survey after the implementation of the responsibility-based intervention.

**Study Rationale**

This study investigated the impact of a brief responsibility-based character education curriculum on student academic achievement and student attitude about their school. It was designed to determine if, at the end of a structured instructional intervention focusing on responsibility, student grades would improve significantly in the various subjects they take at the middle school level. A few studies have been done to determine the effect of character-based interventions on academic performance. These include The Monk Study (Brooks, 2001), The Pygmalian Study (Brooks, 2001), The Wulf Study (Brooks, 2001) and a dissertation study focusing on the impact of infusing character education into
the curriculum. (Raymond, 2001). As best as can be determined, there have been no studies conducted in this area outside of the United States. With this, the information gathered using an international group of students in an international setting, would provide a basis for comparison of student improvement in a US-based school with that of student improvement in the international setting.

Methodology

The population involved in this study included all 6th, 7th and 8th grade students at an international school in East Africa. The study included 141 students.

The study used a series of 12 responsibility-based lessons prepared by the researcher for the study. Lessons were implemented at the rate of two lessons per week for six weeks. In order to fit into the instructional time frame of the school’s advisory program, lessons were designed to last 15-20 minutes each. All lessons were written with clear directions that made them easy to teach. The teachers were able to present the lessons in a consistent way to make sure that all of the students in the experimental group received the same information in the same way.

The CHARACTERplus survey, designed by the University of Central Florida as part of its Partner in Education Program, was administered to all students. This survey was designed to assess the basic climate of the school and student attitudes toward various aspects of the school. The survey was administered as a pre-test at the beginning of the school year and it was
administered again as a post-test after the responsibility-based lessons were implemented.

Once the data was collected, a 2 X 2 MANOVA was run to analyze the data in an attempt to determine if there is a statistically significant difference between the grades that students earned in one academic quarter and the subsequent quarter after the intervention took place. A 2 X 2 MANOVA was also run to analyze the data in an attempt to determine if there is a statistically significant difference between the effort scores that students earned in one academic quarter and the subsequent quarter after the intervention took place. A dependent t-test was run on the CHARACTERplus responses to determine if there was a statistically significant difference in student attitudes before the survey and after the intervention took place.

Participants

All of the Middle School students in grades 6, 7 and 8 at the International School of Kenya were involved as subjects for this study. There were 141 students in grades 6 through 8 and their ages ranged from 10 to 14.

The school involved is categorized as an international school that was established 30 years ago to meet the educational needs of expatriate children living in Kenya. The school has a total enrollment of approximately 600 students each year for grades K-12. The middle school enrolls between 130 and 145 students each year on average.

The criteria for enrollment at the school are relatively broad. All students attending the school must take entrance examinations to assess their basic
learning capabilities. Previous school records are examined in order to place students in the appropriate grade level. Students with mild to moderate learning differences can be accommodated with assistance from the school’s learning resource center. The school does not have the resources to accommodate students with learning needs that would be labeled as greater than ‘moderate’.

Enrollment limits are placed on each grade level depending on available classroom space. At present classroom size is limited to 25 students per room but the average class size is 17.

Teachers and administrators at the school are hired predominantly from America and Canada. The remaining teachers are Kenyan, European or Indian. Any professionally qualified teacher with experience teaching using a North American curriculum would be eligible for hire depending on the school’s needs. The school uses a North American curriculum for instruction and focuses heavily on academic achievement in order to prepare its students to attend universities located primarily in America, Europe, India and South Africa. Each year more than 95 percent of the graduating students matriculate to university. Approximately fifty percent of the students are American and eight percent of the students are Kenyan citizens. The remainder of the study population consists primarily of Europeans, Asians and other African nationals.

Procedures

Students at each grade level were randomly placed into ‘advisory’ groups at the onset of the academic year. Each advisory group included 10 – 14 students made up of both boys and girls. One teacher was assigned to be the ‘advisor’ for
each advisory group. Each grade level had four advisory groups, each with a different advisor to supervise and instruct it.

Three of the four advisory groups at each grade level received the character education intervention focusing on responsibility and one of the four advisory groups at each grade level did not receive the intervention. This meant that there were three 6th grade, three 7th grade and three 8th grade advisory groups in the experimental group and one 6th grade, one 7th grade and one 8th grade advisory group in the control group.

All students in the school were involved in the study as part of the experimental group or the control group. All advisory teachers were offered the opportunity to have their advisory group involved. Ultimately 9 of the 12 teachers had their groups take part and 3 of the 12 did not have their groups take part.

A secondary part of the study involved the CHARACTERplus survey as part of the University of Central Florida’s Partner in Education Program. This survey consisted of a series of 29 questions which focused on school climate and student attitudes toward the school. The CHARACTERplus Survey was administered as a pre-test to all middle students at the onset of the academic year to collect baseline data for comparison purposes later. A coding system that used student ID numbers was devised to maintain anonymity. This same CHARACTERplus Survey was then used as a post-test at the end of the intervention to determine if there has been a statistically significant shift in student attitude toward the school.
The results from the CHARACTERPlus Survey were analyzed using a dependent t-test. This was the most appropriate test to use since the same subjects are involved in both the pre-test and the post-test.

Informed consent was obtained from the superintendent of the school and the middle school principal to conduct this research study.

The character education intervention focusing on responsibility consisted of 12 lessons presented over a six week period. Two lessons per week were covered with each lesson lasting approximately 15-20 minutes. Advisors facilitating the ‘experimental’ advisory groups taught the prescribed lessons to the students in their advisory class. All of the lessons in the intervention focused on the character trait of responsibility.

The responsibility-based lessons were written with very clear directions for advisory teachers to follow. All teachers involved in the presentation of the lessons had the opportunity to meet with the researcher as needed to go over the lessons and to ask questions for clarification regarding instruction. While lessons were being conducted the researcher visited the classrooms to observe how the instructional process was being carried out to monitor and maintain a level of consistency in the presentation. To standardize the instructional delivery process, the researcher observed the teachers presenting the lessons at least twice in the course of the project time.

Advisory teachers were given a limited amount of flexibility to augment the instruction to meet the specific needs of the students at their levels. For example, 6th grade students may have needed a slightly different approach in the
instructional methodology than students in the 8th grade would. The teachers would be allowed to alter their instructional approach to allow for these specific developmental level needs provided the content was consistent at each of the three grade levels.

**Instrumentation**

The researcher designed the character education lessons on responsibility. All 12 lessons were designed in such a way as to allow for them to be completed within the 15-20 minute advisory time each day.

The survey instrument that was used in this study to assess student attitude and school climate was obtained from the Show Me CHARACTERplus Evaluation Project that was conducted at participating schools in St. Louis, Missouri. The Florida Partnership in Character Education (FPCE) and the researcher obtained permission to use this instrument. The FPCE and the researcher modified the CHARACTERplus surveys slightly in order to meet the specific goals of this project, to make the surveys easier for the respondents to complete, and to enable the data to be entered via scanning software. However, the individual statements in each survey generally remained intact.

**Research Design**

To analyze the student academic data a 2 X 2 MANOVA was used. Since there are multiple dependent variables the MANOVA looked at each of the multiple dependent variables as compared to the others. This meant that student grades in 3rd quarter were compared with their grades in the 4th quarter in each of the subjects for which grade data were collected. The MANOVA also took into
consideration repeated measures of the different variables for the experimental and control groups that took part in the intervention.

A MANOVA was the most appropriate test to use due to the following assumptions: there was an equal number of people per group; there was equal variance across the groups; the variables, when combined, showed a distribution that follows the normal bell curve; and, there was multivariate-normal distribution.

To analyze the data on the CHARACTERplus survey, a dependent t-test was used to compare the pre-test and post-test data. The dependent t-test design was the most appropriate to use due to the following assumptions: there were two independent population means with the same variance involved; the data was not skewed; and there was equal sample size.

Limitations

This study took into consideration the grade level of the students when it comes to improvement from quarter to quarter. It also considered grade level of the students with respect to student attitudes about the school. The study did not consider gender differences, age differences, ethnicity or nationality of the participants.

Results

The study employed an experimental design incorporating quantitative data collection techniques, including student surveys and grades obtained in specific academic courses. A MANOVA and t-test were used to analyze the data.
CHAPTER TWO - LITERATURE REVIEW

An obvious tenet of education in the United States is the mastery of basic academic skills and ultimately the acquisition of wealth. (Williams, 2000). Another goal of education, that may be even more valuable, is the development of caring and responsible citizens. (Williams, 2000).

At the inception of a public education system in the United States, the teaching of morals and values went hand-in-hand with the instruction of reading, writing and arithmetic. Religious instruction was part of the every day instruction and all children attending school, regardless of their age, were expected to learn the importance of being a good citizen. For much of history, education has been first about character and only second about academic competence. (Williams, 2000).

One widely used book in the early days of education in America was the McGuffey Reader. (Mosier, 1965). It was infused throughout with stories that built upon Christian themes and Christian values. As students read the stories the morals and values that were presented became ingrained in the minds of the youngsters. (Greenawalt, 1996). Thus, with the input from family, community members, church influences and schools, children were thought to have had ample opportunity to learn the socially acceptable morals and values that one needed to be a productive citizen.

As the educational system evolved over the decades, religious instruction came under question with respect to the constitutional guidelines of ‘separation of
church and state’ but it wasn’t until the 20th century that the incorporation of morals and values instruction began to change. (Leming, 1997).

According to Leming (1997), moral instruction in 20th century America has gone through three significant periods. In the 1920’s and 1930’s, society saw the reemergence of character education. A variety of social changes were underway and questions about the future of America were raised. Some of the social changes that began permeating society included: increased break ups in the home; focus on individual concerns rather than the collective good; political corruption; negative and biased values in the media (propaganda); increased crime; and the decline of religion. (McKown, 1935).

In the first three decades of the 20th century, character education tended to focus on sophisticated codes of conduct and group activities in school clubs and sports to teach character. (McClellan, 1992; McKown, 1935). Schools infused what was known as the “Children’s Morality Code” into all aspects of school life from clubs and activities to sports and classroom instruction. This code focused on the ‘ten laws of right living’ including: self control, good health, kindness, sportsmanship, self-reliance, duty, reliability, truth, good workmanship and teamwork. (Hutchins, 1917.)

As the years of these decades wore on, there was a decline in the character education movement with no clear indication as to what led to the decline. It is speculated that the lack of research to support the effectiveness and social benefits of the movement led to its demise. A major study in the 1920’s, the Studies in the Nature of Character Inquiry (Hartshorn & May, 1928-1930) found that character
education programs had little impact on children and that stable character traits
did not seem to exist. Nickell and Field (2001) stated that the lack of systematic
program assessment of character education programs in the 1920’s and 1930’s led
to its decline.

In the ensuing years it is speculated that character education did not
actually disappear but just rather changed forms from a specific program of
careracter instruction to a more subtle form of instruction that included discussing
character-related issues in homeroom settings, issuing grades on report cards
linked to conduct and/or citizenship, and having student clubs in schools.
(McClellan, 1992).

Kirschenbaum (1995) attributes the decline in character education during
the 1940’s, 1950’s and 1960’s to the Great Depression and World War II. With
these issues dominating the social consciousness during these decades, instruction
in morals and values declined as the focus shifted more toward trying to ensure
that the young people were able to keep up with foreign threats in the areas of
science and technology.

This does not mean that there was no form of instruction of morals or
values during this time period. Modeling desired character traits became the
accepted norm. Teachers, in an informal manner, were expected to represent the
socially acceptable virtues so that students could exemplify them in their daily
lives. (Kirchenbaum, 1995).

It was not until the 1970’s and 1980’s that there was a resurgence of
values and morals education. (Leming, 1997). These decades saw the introduction
of values education and moral reasoning. A handbook that included strategies on
teaching values clarification in the school setting sold hundreds of thousands of
copies and was very popular with teachers.

Both values education and moral reasoning tended to provide students
with the opportunity to discuss their views on values and morals in society to help
them come to a conclusion as to what effect these had on their daily lives.
Teachers did not teach the morals and values per se but rather facilitated
discussions on the topics to help young people develop a more formal view on the
concepts for themselves. (Leming, 1997).

Over the years both of these approaches declined in use for a variety of
reasons. In the 1990’s with the increased media coverage of violence and issues of
social decline in teenagers, there has been yet another resurgence of character
education. (Leming, 1997). Today, schooling must be about both character and
academic competence, focusing on achieving a balance between the cognitive,
affective, and behavioral domains at the different stages of child development.
(Williams, 2000).

Character education has gained much emphasis in public schools in the
last several years. In a broad sense, character education includes any program or
activity that schools engage in to help children become good people. A narrow
focus defines character education as indoctrinating students with specific values,
typically conservative ones. (Robinson, Jones. & Hayes, 2000).

The definition of character has also changed a bit with the time to reflect
the more broadly accepted views that exist in society today. Character is very
simply the sum of our intellectual and moral habits. It is the composite of our virtues and our vices, the combination of which makes us the kind of person we are. (Ryan and Bolan, 1999).

Increased access to media coverage of world events in ‘real time’, increased television programming with the introduction of satellite television stations, and increased access to the internet and other computer-based resources have had a major impact on the formation of value and morals in today’s population. By virtue of its ubiquity, interactive nature, and arousing content, the media are influencing our values and expectations of reality, regardless of our willingness to be influenced. (Kane, Taub & Hayes, 2000).

In many countries around the world, educational systems are being turned to for assistance with the increasing levels of moral illiteracy among their youth. (Greenawalt, 1996). In Asia, character education is not new. It can be dated back beyond the time of Confucious. (Greenawalt, 1996). Students in Hong Kong, South Korea, Taiwan and Singapore all receive schooling in moral education. (Greenawalt, 1996). In other nations, religious instruction still plays a major role in the school setting. In the United States and most of Western Europe, where religion has primarily been removed from the curriculum, in many developing nations it still plays a major role.

Character education is the fastest growing reform movement in K-12 education today. The priority status for character education is a result of pressure for research on student learning and child development that has also resulted in other topics such as self-esteem, higher order thinking, cooperative learning, and
multicultural education. (Williams, 2000). With the latest onset of character 
education programs in the past decade and a half, numerous programs have been 
devised or modified to address social concerns that have been on the rise. Divorce 
rates have increased, teenage pregnancies have increased, drug use and abuse 
have risen dramatically, and violent crimes involving school aged children have 
increased. (Likona, 1997). Teachers in the public school settings have commented 
on the decline in student discipline, the decrease in attendance, the apparent lack 
of motivation and a general lack of respect for the educational opportunities 
provided to students.(Likona, 1997).

The programs available for use in schools vary greatly in their approach.
The majority of character education programs have been implemented in 
elementary schools. (Nickel & Field, 2001). A number of programs have been 
introduced into middle school settings and there are relatively few in high 
schools. A few of the programs in use today include: the Child Development 
Project; the Responsive Classroom; Lion’s Quest Program; Project Essential; 
Community of Caring and, A.E.G.I.S.

Each program has its own objectives and its own suggestions for 
instructing students in the realm of character education. Some of the programs 
tout research findings to support the program’s effectiveness but, often, the 
‘research’ filters down to anecdotal statements made by teachers or administrators 
claiming to have noticed a change. There is very little empirical research evidence 
to support the effectiveness of character education programs when it comes to 
student academic performance. With this study focusing on improved academic
performance, it was difficult to find any real compelling research data to support the hypothesis the character education programs in general enhance and improve student academic performance.

On the other hand, some research data is available to support the concept that student behavior is positively affected by character education programs in schools. Each of the character education programs listed above will be described briefly with an overview of any research findings related to each.

The Child Development Project

The Child Development Project (CDP) is a K-6 character education program designed to help schools become caring communities of learners where all children learn and feel nurtured, and where children's ethical, social, and intellectual development are woven throughout the child's total experience in school. The CDP curriculum focuses on four core values: fairness, concern and respect for others, helpfulness, and responsibility. (Developmental Studies Center, 1996).

Instructional methodology incorporated by the CDP classroom consists of five components: (1) teacher highlighting and exposing students to pro-social examples; (2) incorporating cooperative learning activities; (3) using children's literature and classroom incidents to develop respect, sensitivity, and understanding for others; (4) involving children in helping relationships; and, (5) fostering student’s academic performance and self-control through the use of student-centered developmental discipline. Developmental discipline regards the child as intrinsically motivated to construct a personal character system and
attempts to develop character behavior within a caring classroom community. The CDP program uses low levels of extrinsic control over student behavior. (Developmental Studies Center, 1996).

The project also contains a school-wide program focused on a sense of membership in a caring community and a home program that fosters communication and sharing of values within the family.

The Child Development Project curriculum has been extensively researched for 20 years. (Battistich, Solomon, Watson, & Schaps, 1989; Benninga et al., 1991; Solomon, Watson, Battistich, Schaps, & Delucchi, 1992; Solomon, Watson, Delucchi, Schaps, & Battistich, 1988; Watson, Solomon, Battistich, Schaps, & Solomon, 1989). The research utilized various research designs incorporating questionnaires, interviews, and observational data collection techniques. The results showed, in schools where the program was widely implemented, students exhibited significant benefits in areas including: increased achievement, motivation and performance; improved attitude toward school and teachers; improved social/ethical attitudes and interpersonal behaviors; reduced drug use and other problem behaviors. (Developmental Studies Center, 2005).

The Responsive Classroom

The Responsive Classroom is a social curriculum developed by the Northeast Foundation for Children with the intention to teach children to care. The essence of the curriculum can be found in the book, “Teaching Children to Care: Management in the Responsive Classroom” (Charney, 1991).
The primary focus of this curriculum is classroom management that tends to blend behavioral and child-centered approaches. Charney (1991) claims that the role of the teacher is the most critical the first six weeks of the school year, during which time, the teacher closely observes and monitors students, commenting on behavior while "reinforcing, reminding, and redirecting." As children internalize positive expectations, they then are free to learn in an atmosphere that fosters independence and responsibility.

The social curriculum of the Responsive Classroom is built around six central components integrating teaching, learning, and caring into the classroom on a daily basis. These components are: classroom organization featuring active interest areas and a mix of instructional methods; morning meeting where social skills are practiced; rules and logical consequences that are generated, modeled, and role-played; choice time where children take control of their own learning in some meaningful way; guided discovery of learning materials; and assessment and reporting to parents. Intended outcomes for the curriculum are not discussed in a focused manner. The components of the social curriculum are set in the context of commonly shared values such as honesty, fairness, and respect, and are implemented through the development and strengthening of social skills, such as cooperation, assertion, responsibility, empathy, and self-control. (ResponsiveClassroom.org, 2005).

Evaluation of the Responsive Classroom program has been minimal. One study, which compared program school students with similar students in nearby schools without the program, a small increase in program students' social skills
was detected. Additionally, a small negative relationship was detected between problem behaviors and the use of the curriculum. (Leming, 1997). Rimm-Kaufman (2004) states that even though more than 40,000 teachers have been trained in the Responsive Classroom approach, there is very little research that examines the effectiveness of the approach. The findings that Rimm-Kaufman noted were fairly general in nature related to teacher attitudes and student behavior. Teachers using the Responsive Classroom approach developed a more positive attitude about their teaching, felt more effective in their approach to discipline, and were more effective in their ability to affect the school climate than teachers who did not focus on the approach. (Rimm-Kaufman, 2004).

**The Lion’s Quest Program**

The Lions-Quest program incorporates curricula designed for three different school levels. The elementary program, Skills for Growing, was designed for grades K-5. Skills for Adolescents was designed for Grades 6-8 and Skills for Action was designed for high school grades 9-12. There are also specialized programs focusing on Drugs/Alcohol and Violence for the high school grades. The programs at all levels attempt to bring parents, members of the community, and educators together to teach children important life and citizenship skills within a caring and consistent environment (Quest International, 1990). The program focuses on skills in four main areas: self-discipline, responsibility, good judgment, and getting along with others.

The rationale for the program is based on the observation that children today are at a much higher risk of becoming alienated and of developing problem
behaviors. Knowledge about drug and alcohol use is an important focus of the program. The program is based on an explicit conceptual model derived from research on youth development from several social science disciplines. The rationale contends that if certain internal and external conditions are met, young people will be more likely to exhibit positive social behaviors and to develop positive commitments in key areas of their lives. (Lions-Quest Programs, 2005).

One study compared the responses of more than 5,700 program students with more than 2,800 comparison students. The study involved tests designed to assess the extent to which the goals for individual units were achieved. For example, students responded to statements such as "Experimenting with drugs is always a dangerous thing to do"; "Sometimes making the right decision may make you feel different from others" (Quest International, 1990). Statistically significant differences were detected in favor of the Lions-Quest students on at least one of the tests at each grade level and for at least one grade level across all five units for the curriculum.

**Project Essential**

Developed by The Teel Institute for the Development of Integrity and Ethical Behavior, Project ESSENTIAL is a K-12 curriculum (Teel, 1996). The purpose of the curriculum is to teach young people key concepts, skills, and behaviors that will allow them to earn their own sense of self-worth. The program is built on the idea that self-concept is at the basis of the development of capable and ethical people. From the perspective of Project ESSENTIAL, self-esteem is earned; it cannot be given to one by others. It is proposed that through the
enhancement of self-esteem, the social problems of teen suicide, teen pregnancy, poor academic performance, substance abuse, and school dropout can be addressed successfully. (Project Essential, 2005).

The curriculum is organized around development of character traits, life skills, and values such as: goal setting, empathy, personal and social responsibility, cooperation, tolerance for diversity, respect for the rights of all people, productive interpersonal relationships, self-discipline, and self-respect. The program is essentially a standalone program that is used most often in conjunction with a teacher's classroom management program. (Leming, 1999).

A four-year evaluation of the Project Essential curriculum in the Kansas City area found statistically significant changes, when compared to control school students, in favor of ESSENTIAL classroom students on ‘teacher ratings’ of learning from errors, of exhibiting self-control, of accepting responsibility, and of respecting the rights of others (Reed & Wilson, 1995). In its own web site, Project ESSENTIAL states that the program is effective due to the fact that the out of school suspension rate was reduced by 83%; teachers reported that elementary school students were more empathic, more self-controlled and less likely to act out in class; 96% of teachers report a high degree of satisfaction with the program; 87% of teachers state that the program is effective in helping them to manage their classrooms; 73% of parents reported improvement in their relationships with their children; students showed significantly better self-esteem; and that a highly positive correlation exited in high school students who took the
program and their understanding of the program’s key ideas and values and the grade point average of the students. (Project Essential, 2005).

None of the claims stated by Project ESSENTIAL are based on empirical research. Many of the claims are based on teacher comments with no data to back up the claims. The final claim linking grade point average and an understanding of the key concepts says nothing about how students may have improved academically or socially. In essence, it states that the more intelligent students understood the key concepts more.

Community of Caring

The primary focus of the Community of Caring program is to strengthen decision-making skills that young people need to avoid destructive behaviors such as early sexual involvement, teen pregnancy, substance abuse, delinquent behavior, and dropping out of school. (Community of Caring, 1996).

The program proposes that the American people hold five values in common: caring, respect, trust, responsibility, and family. These values are woven into a school’s existing curriculum. The program was initially developed as a middle school program, but quickly was expanded into high schools. An elementary program has also been developed.

The proposed instructional strategy of the program has two major foci: character literacy and character ecology. By character literacy, it is meant that students will come to understand the importance of the five core values in their lives. The program uses real life, sometimes tough, dilemmas where students find themselves without sound guideposts. Some recommended lessons are provided,
but for the program to be effective teachers are expected to adapt their teaching to include discussions on values. Student forums, led by students, teachers, and community members, are structured opportunities for discussions of issues of the day and their effect on young people. Adults are encouraged to act as guides and mentors as students put their concerns in the context of the larger community. (Leming, 1997).

Character ecology refers to the expectation that school personnel serve as character models. Teachers are expected to model the behaviors that they are asking students to examine. To achieve this end, the school community must conduct an ongoing assessment regarding the school's character ecology. Additionally, family involvement and community service are integral components of the "whole school/whole community" approach.

Based on preliminary data and ongoing studies conducted in 47 schools across the US, it has been found that students have improved significantly in a variety of areas including: character, attendance, perspective taking and autonomy. Teachers have assessed students as being more trusting, helpful, friendly and responsible. Teachers have also noted improved homework, attendance and decreased dropouts. Teachers also commented on improvements in students when it comes to listening to others, considering alternate viewpoints, and thinking before speaking or acting. (Community of Caring, 2005).

A.E.G.I.S.

AEGIS, Acquiring Ethical Guidelines for Individual Self-Governance, is a K-6 character education program developed by the Institute for Research and
Evaluation in Salt Lake City, Utah (Weed & Skanchy, 1996). The program focuses on seven foundation concepts: worth and potential, social responsibility, fairness and justice, effort and excellence, care and consideration, rights and responsibilities and personal integrity. (AEGIS International, 2005). Its goal is to help children learn the basic principles and ethical standards that they need to become responsible, caring, productive citizens.

A five-step teaching model (SMILE) is utilized consistently throughout the curriculum. The steps include Stimulating interest, Modeling the concept, Integrating the concept, Learning link with parents, and Extending to real life. Typically, each step of the teaching model involves a different subject matter area in the school curriculum. (AEGIS International, 2005).

A two-year longitudinal study was conducted by the Institute for Research and Evaluation. In this data was collected from program and control students using questionnaire data that measured student responses to ethically based scenarios (Weed, 1995). On four character-related constructs (student attitude, ethical behavior, respect for property, and care and consideration), a statistically significant effect was detected in favor of the program students in 5th and 6th grade students. Results were largely inconclusive for lower elementary students. Results were also inconclusive for five other character-related constructs identified: academic achievement, retaliation, responsibility for personal belongings, responsibility for personal behavior, and peer pressure resistance.

Some anecdotal observations made by teachers include a two-and-one-half times reduction in problem behavior and a significantly better attitude against
substance abuse and attitude regarding positive school conduct in the program (experimental) students. (AEGIS International, 2005)

The Florida’s Partners in Character Education (FPCE)

The Florida’s Partnership in Character Education (FPCE) was awarded a four-year grant by the Florida Department of Education (FDOE) to build upon the foundation set by the Florida Character Advisory Committee and the FPCE to develop a state-wide model partnership. This partnership is aimed at linking both established and new K-12 district character education programs, and programs in law-related education, service learning, and conflict resolution. Ultimately, through this statewide, model partnership, the mission of the FPCE is to develop or enhance programs that foster the development of positive character attributes within Florida’s K-12 schools. These attributes include traits such as kindness and caring, civic virtue and citizenship, respect, responsibility, and other traits that have been identified by the partners as important for Florida’s youth. (Florida’s Partnership in Character Education, 2003).

A first step in conducting this grant was to assess the existing character education program impact in the participating schools of the five partner districts. Thus, the FPCE is conducting a longitudinal evaluation of the participating schools’ character education programs in order to provide formative feedback about program implementation and progress, and to ascertain improvements in specified character education perceptions and behavioral outcomes. The initial step in this evaluation process was to collect baseline information, consisting of character education surveys completed by students, staff, and parents of
participating schools, and a character education standards instrument (10 Essentials of CHARACTERplus Process) completed at each school by a committee composed of staff from the school. (Florida’s Partnership in Character Education, 2003).

The intent of the 10 Essentials of CHARACTERplus Process instrument is to provide another indicator of the status of the character education program(s) at the schools. The goal is that the committee will track areas initially identified as needs and help design the plan to maintain or improve their character education program(s) over the course of the project. (Florida’s Partnership in Character Education, 2003).

In time, the student outcomes that are anticipated as a result of the implementation of character education programs in the participating school districts include a reduction in violent and disruptive behaviors, an increased sense of social responsibility and civic virtue, an increase in positive behaviors associated with being a person of character, and increased student achievement. Thus, these programs will target a reduction in the number of disciplinary referrals, improvement in student attendance and grades, improvement on standardized assessments (FCAT for Florida-based schools), increased participation in extra-curricular activities, improved parental and community involvement in character education initiatives, improvement in student and staff morale, and enhanced parental perceptions of the school climate. Each of these attributes will be examined during the course of this longitudinal evaluation. (Florida’s Partnership in Character Education, 2003).
The instruments that were used were obtained from the Show Me CHARACTERplus Evaluation Project that was conducted at participating schools in St. Louis, Missouri. The FPCE obtained permission to use these instruments. Obtaining these surveys from the Show Me CHARACTERplus Evaluation Project was valuable because it sought the same types of information that is of interest to the FPCE. Using the same instrument is also beneficial from a research standpoint because the FPCE data can be compared with the data collected in St. Louis. (Florida’s Partnership in Character Education, 2003).

The student survey, along with staff, parent and implementation surveys, was part of a four-year federally funded study on the efficacy of the St. Louis Caring School Community Program. In early March 2003, baseline data were collected from students. Factor reliabilities were estimated at grades 4, 8 and 11 using alpha-coefficients based on the combined spring 2003 student data. The majority of the reliabilities were in the .80s and .90s with the estimates being slightly higher for grades 8 and 11 than for grade 4. ((Marshall and Caldwell, 2003).

The FPCE modified the Show Me CHARACTERplus surveys slightly in order to meet the specific goals of this project, to make the surveys easier for the respondents to complete, and to enable the data to be entered via scanning software. However, the individual statements included in each survey generally remained intact. The question number was reduced to 29 questions. (Florida’s Partnership in Character Education, 2003).
The effectiveness of character education programs on student academic performance is questionable at best. Various research studies, such as those mentioned in the descriptions of some of the programs above, do not use scientific research practices which causes the results to be somewhat questionable. Much of the evidence available to support the effectiveness of such programs is based on teacher observations, teacher comments, teacher opinions or anecdotal statements.

More studies have been conducted on the effective of character education programs with respect to general discipline rates, attendance, attitude and involvement … all of which are more behavioral traits than academic.

It is generally believed that academic and character education, equally important goals for schools, can be achieved simultaneously. (Schaps, Solomon & Wilson, 1986). Schaps, Solomon and Wilson (1986) analyzed data collected from the Child Development Project and they generalized the results to state that ‘student social behavior improved and there is an “expectation” for academic improvement at the end of the study. They went on to say that teachers involved with the experimental group strongly believe that the activities the students took part in affects their character and achievement but there was no empirical data to back up that claim.

In their article on complementary goals of character development and academic excellence, Wynne and Walberg (1986) state that schools need to focus jointly on the educational goals of character development and academic learning. These two goals are not mutually exclusive but entire complementary. They go on to state that character development depends greatly on the school treating its
academic program seriously and that a commitment to push toward excellence is an important element of acquiring character.

Throughout their article Wynne and Walberg (1986) continue to stress the importance of high academic expectations combined with the infusion of character through the curriculum, increased interactions with other students and observing teachers as they model expected character traits. There is no empirical evidence to support the idea that such practices will ultimately result in academic improvements for the students involved.

In an article by Debra Viadero (2003), she noted that the most positive predictor of academic achievement in 8th grade students was the level of positive social skills that the students had when they were in 3rd grade. She describes social skills as ‘academic enablers’ to infer that those students with stronger social skills would do better academically in future years.

In her discussion on the Responsive Classroom (Viadero, 2003) she claims that studies show that children in classrooms where teachers adhere to the responsive classroom approach score higher than children in non-program classrooms on scales designed to measure five attributes of character: cooperation, assertion, responsibility, empathy and self control. She states that findings also point to decreased levels of problem behavior and to ‘some increases in academic achievement’. Specific details of what ‘some increase in academic achievement’ means were not included.

She does state that there is a lack of experiments that involve randomly assigning schools or classrooms to experimental or control group and that there is
a gap in the research related to any studies gauging the extend to which schools across the nation are using any kind of character education programs. (Viadero, 2003).

In a study that looked at data collected from Brookside Elementary School to try to show the direct link between character education and state level academic standards, Schaeffer (1998) concluded that the character education program incorporated by Brookside Elementary School had resulted in the improvement of analytical skills that the state’s standards demand. No details were provided as to how these analytical skill improvements actually transferred into improved scores on standardized tests or improved academic achievement in school-specific subjects.

Schaeffer (1998) goes on to state, from the 10 schools involved in the study she was investigating, a number of the schools were ‘noting tangible academic improvements’. Even where there are no precise test score improvements, staff members are convinced that character education is crucial to academic accomplishment. All the schools did note improved behavior and self-discipline though no details were provided as to how these improvements were determined.

In an article by David Brooks (2001), he states that character education is an important tool in the effort to improve test scores and the ‘research supports it’. He goes on to state that an analysis of the skills or habits necessary for academic achievement and the skills or habits taught through systematic character education are identical.
Brooks (2001) describes four different studies that lend support to the notion that character education programs positively influence student achievement. The first study he describes, ‘The Monk Study’ showed that middle school teachers noted improvements in academic work habits, care exhibited toward staff and involvement in volunteer/citizenship projects after the implementation of ‘Lessons in Character’. The lack of empirical research data to support the teachers’ observations indicates a need for further research in this area.

In ‘The Pygmalian Study’ teacher perceptions were shown to affect academic achievement in their students. When teachers viewed their students as ‘achievers’ the result was an increase in academic scores. This was interpreted to mean that ‘an increase in positive perceptions and the positive resulting changes in student behavior will generalize to academic achievement and better performance on test scores’. (Brooks, 2001).

Reduced discipline problems resulted from ‘The Wulf Study’ after the introduction of a character education program. The decrease in student discipline issues resulted in more time for teaching the content material, less time out of the classroom for students, and an overall improved teaching environment. (Brooks, 2001).

Brooks (2001) describes a study that is more supportive of the concept that character education programs positively influence student academic performance in South Carolina’s Department of Education’s ‘Character Education Initiative’ survey. The results showed more than half the respondents reporting
improvements in academic performance after the character education program was introduced. Improvements were noted by 60% of the respondents in 1998 and by 65% of the respondents in 2000. Details as to what denoted an ‘improvement’ were not provided.

Coyne & Coyne (2001) state that a myth exists which purports that academic achievement decreases when classroom time is spent teaching positive character. This would apply to situations in which the direct instruction of character traits is done instead of incorporating concepts of character instruction into the regular curriculum. Studies are showing that time spent facilitating character education in classrooms may be a factor for increasing student academic achievement. (Coyne & Coyne, 2001).

In 1995 Gauld found that student academic achievement improved with an increase in character education at the Hyde School. Smith (1999) stated that introducing service learning and character education concurrently with a reading program resulted in increased academic test scores and increased student civility based on results of a study at Mound Fort Middle School.

There is a commonly held notion that enhancing self-esteem will automatically improve a student’s academic achievement. This notion has been refuted by research. (Bartz & Matthews, 2001).

The lack of empirical research with significant findings on the effects of character education programs on student academic performance is evident here in the United States. Research outside the United States is even more limited. A study done in Turkey was described by Cafo and Sumuncuo (2000). Societal
problems with young people have been on the rise in many European nations.
Many of the general problems are attributed to increased divorce rates, increased theft, increased drug use, increased discipline problems in schools, irresponsible sexual behaviors, teen pregnancies and increased violence. These concerns have increased the concern about what can be done to address such problems before they become even worse. Cafo and Sumuncuo present no empirical data to support the introduction of a character education curriculum into the country’s national curriculum. They, like many others mentioned in this review, support the concept that the introduction of a character education program may help reduce some of these social ills but they have no research based upon which to base their thoughts. They state that ‘If you give your students positive values, you prepare a positive future for your society. If you give your students negative values, you prepare a negative future for your society.” (Cafo & Somucuo, 2000). They encourage a sense of commitment and responsibility for tomorrow to show that values are important and necessary to the positive development of any society. By infusing principles of Islam into the school setting, principles including: honesty, seeking the truth, abstaining from ignorance and heading toward knowledge, being tolerant and having a sense of justice; they believe that some of the more negative aspects of student behavior will decline. This seems to harken back to former days in the United States school system where the generally held belief was that religious instruction in schools would solve the problems present in society. (Cafo & Somucuo, 2000).
In middle school, the level of focus for this study, students struggle to meet their need to belong which results in them assuming the external trappings and mannerisms of their peer groups. At the same time they try to break away from traditions and develop their own individual identities. (Inlay, 2003).

The moral development of a young teen is tied in with their widening social skills and perspective-taking. (Winnings, 2002). The intellectual, psychological and moral development of a young adolescent should be seen as an intricate network of change and development with each influencing the other.

Teens are concerned with identify formation, independence and relationships with others, particularly their peers. (Winnings, 2002).

In his dissertation for the University of Illinois, Garry Raymond (2001) conducted a research study to investigate the academic impact of infusing character education into the curriculum. Raymond (2001) states that there is little empirical research devoted to seeing if character education has an impact (positive or negative) on students’ academic achievement. He cites Lockwood (1997) as stating that the largest criticism of character education is the failure of its advocates to engage in empirical research. Raymond (2001) goes on to state that the challenge has been to find data that would link character education to academic success. Until recently, most character educators have been a bit reluctant to conduct research as a result of the negative findings of the 1920’s.

Likona (1991) states that some empirical evidence has emerged that shows schools incorporating a broad-based character education program enjoy improved classroom behavior, improved playground behavior, enhanced social problem-
solving skills, and a deeper commitment to democratic values. He does not mention anything related to improved student academic performance.

In Raymond’s study (2001) he devised a research project that would determine if there was a statistically significant effect of infusing character education into the school’s curriculum at the high school level. His research design was similar to the design used by the researcher for the study that is the focus of this paper. This was the only study that was found that was similar in design. The results of Raymond’s study showed that the infusion of a character education program into the curriculum resulted in ‘the impact on students’ academic achievement was positive or neutral in three out of four classes. Students in the pilot group scored significantly higher in their biology classes. In English and Pre-Algebra classes, no significant difference was obtained. On the negative side, the students in the algebra class experienced lower academic performance.’

Raymond goes on to state that the infusion of the character education program into the curriculum required considerable staff training to insure that the intervention strategies were comprehensive and appropriate. His results also showed a neutral effect of infusion on behavior, attendance and level of virtue and he viewed this in a negative light due to the results of other research studies that indicate that most character education programs tend to show improvements in behavior and attendance. There is still much to be learned about how to implement character education with optimal impact on character and academic development. (Raymond, 2001).
The study that is the focus of this research sought to examine the effect of a responsibility-based character education program on middle school academic performance and attitude about the students’ school. As has been mentioned, there is little empirical data available to support the general claims of many character education programs available on the market. As far as could be determined, there have been no studies in character education that focused on students attending an international school. The data gathered in this study may provide a baseline of data upon which other data sets can be compared. The data gathered in this study can be compared to some data that has already been gathered.

The Florida’s Partnership in Character Education has been gathering survey data from parents, students, teachers and staff from a number of Florida-based schools. The data collected from these schools can be used as a comparison for the data collected from the international school involved in this study.

There is limited information available on the effectiveness of character education programs as far as the effects such programs have on student academic achievement. Berkowitz (1998) states that the field of character education is deficient in producing systematic outcome research and that very little is actually known about the effects of character education. He goes on to state that scientific data are scarce. (Berkowitz, 1998). Experiments involving randomly assigned schools or classrooms to experimental or comparison groups are rare among the studies in the field so far. (Viadero, 2003). Authors or publishers of many programs claim increased academic achievement but do not have the empirical data to back their claims. Weber (1996) states that evidence from research is
limited in several important ways including: studies utilizing reputable research techniques are limited; programs which have been the subject of study are primarily at the K-8 level; and several promising strategies have never been adequately studied. Many of the character education program authors or publishers have conducted studies that indicate improved behavioral issues in students such as increased attendance, decreased behavior problems in classrooms, and decreased suspension rates. (Leming, 1997). Some of the programs are fully supported by teacher comments and teacher anecdotes touting the effectiveness of a given program. (Weber, 1996). Even where there are no precise test score improvements teachers are convinced that character education is crucial to academic accomplishments. (Schaeffer, 1998). Many teachers readily support a specific program with respect to how the utilization of the program helps them be more effective as a teacher, to develop better classroom management techniques or to help them understand their students in order to create a more positive classroom environment. However, upon closer inspection, there is rarely any real research data to support many of the statements being made. (Schaps, Solomon & Watson, 1986).

Schaps (1998) stated that in a study he conducted that involved five schools and the effect of community building on academics, only two of the five schools involved showed academic improvement. Those two schools were in the same district and both had stressed academic achievement in addition to community building as the study was conducted. All five schools involved in Schaps’ study showed improved social and ethical outcomes.
With the lack of empirical research to support claims of academic improvement on the part of students involved with character education programs, this study was designed with the intention of being able to provide some level of empirical data to be able to support or refute program claims.
CHAPTER THREE - SUBJECTS AND METHODOLOGY

Subjects

The subjects for this study included all of the middle school students attending the international school in East Africa that was directly involved in the study. All of the students in grade 6, grade 7 and grade 8 were involved as part of either the experimental group or the control group. A total of 141 students took part in the study. This total was made up of 43 sixth graders, 47 seventh graders and 51 eighth graders.

Because all of the students in the middle school took part it was determined to utilize the school’s advisory program as a means of grouping students into experimental or control groups. The advisory program is devised in such a way that all students in each grade level are placed at random upon enrollment into one of four groups.

At the onset of each year the school’s secretary randomly divides the students in each grade level into four groups and assigns each group to one of the four advisory teachers for that grade level. An attempt is made to keep the group numbers balanced and to keep gender numbers balanced as much as possible. Once the school year gets underway, as new students are registered and entered into the school’s scheduling program, the middle school secretary places them into one of the four existing groups based on numbers already in the group. For example, when a new student enrolls the secretary will assign him to the advisory group with the lowest number of students. The next new student to register in that
grade will be assigned to the advisory group that has the lowest number of students.

The only input that teachers have into altering the groups is to check for any obvious mismatching or known personality clashes amongst the group members. Ultimately each advisory teacher, depending on grade level and overall enrollment, will be responsible for a group of between 10 and 14 students and will have a roughly equal combination of boys and girls.

As the study was developed, teachers were informed that it would be conducted at a given point in time during the school year. All twelve advisory teachers were asked if they would be interested in having their advisory group involved in the study or if they would prefer to exclude their group from the study. When the initial request was sent out, all twelve advisory teachers volunteered to present the responsibility-based lessons to their students. From the twelve, two of them stated that they would be happy to be involved if needed but would also be fine if their group was not included. Only one teacher stated that he would volunteer ‘if needed’ but actually preferred to have his group excluded unless they were really needed. He stated that this was based on his own lack of comfort facilitating group discussions in a group setting on specific topics.

By coincidence, of the three teachers who were willing to be involved or not involved as needed, one led a 6th grade group, one led a 7th grade group and one led an 8th grade group. This resulted in there being three advisory groups at each grade level involved and one advisory group at each grade level excluded. Numbers of students came out as follows:
STUDENTS INVOLVED IN STUDY

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Total students</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th grade students</td>
<td>43</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>7th grade students</td>
<td>47</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>8th grade students</td>
<td>51</td>
<td>21</td>
<td>30</td>
</tr>
</tbody>
</table>

STUDENTS INVOLVED IN EXPERIMENTAL/CONTROL GROUPS

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Exp/Con</th>
<th>Exp/Con</th>
<th>Exp/Con</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total exp/control</td>
<td>101/40</td>
<td>Males – 47/17 Females – 54/23</td>
<td></td>
</tr>
<tr>
<td>6th grade exp/control</td>
<td>31/12</td>
<td>Males – 12/5 Females – 19/7</td>
<td></td>
</tr>
<tr>
<td>7th grade exp/control</td>
<td>34/13</td>
<td>Males – 20/6 Females – 14/7</td>
<td></td>
</tr>
<tr>
<td>8th grade exp/control</td>
<td>36/15</td>
<td>Males – 15/6 Females – 21/9</td>
<td></td>
</tr>
</tbody>
</table>

Another characteristic of the students involved in the study included the general age ranges. The 6th grade students were age 11-12. 7th graders were age 12-13 and 8th graders were age 13-14. Based on enrollment criteria at the school and previous records presented upon enrollment, there was an occasional student in each of the grades that was a year outside of the general age range for that group. Age was not considered when analyzing the data. Only grade placement was considered.

Another characteristic of the students involved related to their nationality. Given that the school taking part in the study was an international school located in East Africa, the nationalities of all students were recorded for potential future.
studies. More than 60 nationalities were presented amongst the students involved.
For the purposes of this specific study, when analyzing the data, nationality was not considered.

Consent to conduct the study was obtained from the principal of the middle school and the superintendent of the school. The details of the study design were presented to the principal and superintendent and a general description of the lessons that would be taught in the advisory setting was presented to the principal. Both the principal and the superintendent gave their consent for the study to be conducted. Because no specific personal student information was obtained, no potential harm to students was evident, and the lessons to be covered fit within the general parameters of the school’s advisory program, it was determined that a blanket consent from the principal and superintendent would be satisfactory rather than seeking individual consent from students or parents.

Data from the CharacterPlus survey (See Appendix D. CHARACTERplus Survey Document) was collected from all of the middle school students in the advisory setting at the onset of the school year. Teachers were given a complete set of instructions and guidelines as to how to administer the survey to their student groups. Detailed descriptions were given as to how to complete the demographic data at the top of the survey. Approval to use this survey form was granted by the University of Central Florida’s Character Education grant. Consent to administer the form to the middle school students was obtained from both the middle school principal and the school’s superintendent. Again, because
no specific personal student information would be shared, no potential harm to students was evident in the survey and the school would be able to benefit as a whole from the data collected, a blanket consent was granted from the principal and superintendent to proceed with the administration of the initial survey and the follow up survey that were conducted.

The FPCE CharacterPlus survey falls under the auspices of an Institutional Review Board approval that was granted by the University of Central Florida. Due to the fact that the survey data obtained in this particular study would be incorporated into the broader FPCE character education study conducted at UCF, no additional IRB approval was required. The researcher did submit the appropriate documentation to the IRB and was granted an ‘exemption’ from needing special approval for this particular study. (See Appendix C.)

Definition of Terms

In this study a variety of terms are frequently used. For the purpose of this study, the following definitions of the major terms are provided:

‘Grades’ - Grades are letter grades that are assigned by individual teachers to each student based on the academic coursework assigned in their specific course. Though individual teachers had autonomy in terms of their grading system (weighting of homework, quizzes, tests, etc.), all teachers utilize a standardized grading scale that is determined by the school’s administration.
Individual teacher grading systems do not change from quarter to quarter but they may vary from teacher to teacher with respect to weighting of different subsets that go into determining the final grade for the quarter. In this study, letter grades were submitted to the researcher who then used the school’s standardized grading scale to reconверt the assigned letter grades back into percentages. These numerical values were used consistently for all grades in all subjects from all teachers.

‘Effort Score: ’ - The effort scores assigned by individual teachers are subjective based on how much effort the teacher determines that an individual student put into completing the required coursework for his/her class. The scale for effort scores is standardized by the school’s administration with a ‘1’ representing ‘Excellent’ effort and a ‘5’ representing ‘Poor’ effort. Teachers devise their own set of criteria to determine student effort scores their classes.
In this study, the exact scores assigned to students by their teachers were used.

‘Improvement’ - Improvement in the context of this study is defined as an increased percentage in the numerical ‘grade’ that a student earns from a given teacher. Teachers at the school involved in the study all utilize the same grading scale which is standardized by the school administration. Using the grading scale, any given percentage increase in a grade from an academic subject may be reflected in the final letter grade that a student sees on the final report card.

- Improvement in the context of this study as applied to ‘effort’ is defined as a score that is ‘closer to “1”’. All effort scores assigned by teachers are based on a standardized numerical scale approved by the school administration. The highest score is a ‘1’ and the lowest score is ‘5’. Therefore, any numerical score that is closer to ‘1’ would be interpreted as improvement in effort.
- Improvement in attitude is based on scores that students mark on the CHARACTERplus survey. All scores on the survey are based on a 5 point Likert scale with ‘1’ being the highest score and ‘5’ being the lowest score that students can mark. Any score moving closer to ‘1’ would be interpreted as improvement.

‘Subject Difference’ - Specific subjects are listed in this study in general terms. ‘Math’, for example, may be a general Math course, a Pre-Algebra course or an Algebra course depending on the individual involved. ‘English’ would represent 6th grade English, 7th grade English or 8th grade English depending on the grade a given student is in. Grades and effort scores are assigned by a given teacher for the courses they teach. No students involved in the study had a different teacher from one quarter to the next. A student taking 6th grade English would have that same teacher for the next quarter in English class.

‘Student Attitude’ - Attitude in the context of this study involved the way a given student thought about the school and
the school environment. Attitude in this context was incorporated into the CHARACTERplus survey that was administered as a pre-test and as a post-test. A 5 point Likert scale was used on the CHARACTERplus survey with a ‘1’ being the highest mark a student could assign to a question and a ‘5’ being the lowest.

Responsibility-Based Character Education Lessons - These lessons were designed by the research specifically for use in this study. All twelve lessons focused specifically on some aspect of responsibility. (See Appendix A.)

Methodology

The setting of the study was an international middle school in East Africa. The school serves the educational needs of the expatriate community primarily that is in the region for diplomatic and business purposes. Students attending the school represent more than 60 different nationalities. The parents of most students come from a relatively high socioeconomic level. Parents tend to be employed by diplomatic missions such as embassies or the United Nations or they are involved in upper level management of various businesses present in the region.

The school uses a North American curriculum as the basis for instruction and English is the language of instruction across the board. Students in the
middle school take eight subjects each day: Mathematics, Science, English, Social Studies, Physical Education, Foreign Language (French or Spanish), a quarter long Exploratory course (computers, music, drama, art, study skills, library research, or developmental guidance) and a second Exploratory course that may run for one quarter, for a semester or for an entire year (band, chorus, writing workshop, current events, country studies, or journalism).

For this study, the grades that students obtained in their two exploratory options were not considered since it was unlikely that they could continue with one course from one quarter to the next making it impossible to compare their performance over time in that subject. The mathematics, science, English, social studies, PE and foreign language grades were all taken into consideration for comparison purposes from quarter to quarter since the teacher and instructional methodology remained consistent in these subjects.

The responsibility-based instructional lessons were presented to students during their advisory time each day. The school’s advisory program is designed in such a way as to divide students in each grade level into four subsequent sub-groups. Each of these sub-groups would have 10-14 students in it. Teachers are assigned as ‘advisors’ at the onset of the year by the middle school principal.

Each grade level at the school plans and goes on an intercultural trip at some point in the school year. One group visited a geological location and focuses on fossils and the remains of early man. Another traveled to the coast to study coral reef ecology and tribal cultures associated with coastal history. The third group traveled to the central region of the country to spend a week with a
tribal group to learn about their cultural lifestyle. Teachers who accompanied the group as chaperons on their class trip were assigned as advisors to that particular grade level. This assignment allowed those advisory teachers to help in the process as students learn and prepare to go on their trip. The teachers then travel with the group and can do follow up activities with the students based on the experiences of their trip.

This intercultural trip chaperone system allows for a simplistic means to determine which teachers were assigned as advisors at the onset of each school year. For the purposes of this study, the advisors had already been pre-assigned by the school’s principal and they remained in place throughout the course of the school year serving as the facilitator of the advisory group to which they had been assigned.

A couple of months prior to the onset of the study a general survey of the advisory teachers was conducted to determine which ones would be interested in having their advisory group take part in the study. All twelve advisors expressed a willingness to have their group take part. Nine of them were very eager to have their group involved. Two advisors were willing to be involved or excluded as need be for the sake of the study. One was willing to be involved if needed but preferred to be excluded since he claimed he tended to be uncomfortable facilitating groups of this sort when specific discussions were to be conducted.

By coincidence, the three groups willing to be involved or excluded were each from a different grade level. This made it easy to exclude those three groups and allow them to conduct their own advisory lessons with no involvement in the
study and still maintain three groups in the study at each grade level. Had it been necessary to choose the groups involved, a random draw would have been conducted to determine those advisory groups involved and those to be excluded.

The school’s advisory program consists of daily meetings, each lasting about 20 minutes. At the onset of the school year the teachers involved devised a general schedule of how the daily advisory lessons would be conducted. The four teachers at each grade level met to plan out the general schedule for the year with respect to which topics would be covered and when. Then, all advisors met to plan how the lessons each week would be conducted. Monday involved some sort of instructional lesson on a topic appropriate to that grade level. Tuesday involved silent reading by all students and teachers at all grade levels. Wednesday was another instructional lesson, usually a follow up of some sort to the lesson presented on Monday. Thursday was set aside as a ‘tutorial’ time when any teacher at any grade level could request to meet with a student for an academic or social need associated with the teacher’s classroom environment. On Fridays, all students met together for a general assembly to hear announcements and to observe any other performance-related things devised by classroom teachers or students.

For this study, the advisory teachers taking part were issued a set of the instructional units to be presented during their advisory sessions. (See Appendix A. Responsibility-Based Character Education Lessons) The responsibility-based unit consisted of twelve lessons, each designed to last for approximately 20 minutes. The lessons were to be presented at the rate of two per week for a period
of six weeks in the last quarter of the school year. (See Appendix B. Character
Education Lesson Presentation).

Training time was arranged for teachers to meet with the primary
researcher during lunch periods in addition to any time before or after school.
Lessons were all self-explanatory but the teachers to present the lessons were
given the opportunity to ask any questions for clarification as needed. Throughout
the course of the weeks that the lessons were presented, the primary researcher
made unscheduled stops in different advisory rooms to observe how the
presentations of the lessons were going. This provided an opportunity to make
sure that the lessons were being followed as stated in addition to being able to
assess the general level of student involvement in the lessons as they were
presented. Each advisory group was visited at least two times during the course of
the six weeks for observation purposes. The lessons were all presented in the
classrooms in which the advisory teachers met their groups on a regular basis.

The students involved in the experimental group that was receiving the
instruction were never informed about the purpose of the study. The advisors told
the students that the primary researcher had designed the lessons and that a
general study was being conducted. They were not informed that their grades
would be compared from one quarter to the next nor were they informed about the
hypothesis of the study which stated the expectation that those presented with the
responsibility-based lessons would experience a high improvement in their grades
in the six subjects involved in the study than those who were not presented with
the lessons.
The teachers involved were also not informed about the hypothesis of the study. They were notified that the 12 responsibility-based lessons would be conducted and what the general time frame for the presentation of the lessons was. Opportunity was provided to clarify any questions or concerns that they had about the lessons but not as to the expected outcome that the lessons might have on student academic performance.

Those advisory groups who were not involved in the study at all did not notify their groups that a study was being conducted with the other groups. Those advisory teachers continued to present the general lessons and to conduct the general discussions that would have been done by all advisory groups had the study not been conducted at all. There was never any indication that students in the experimental group and those in the control group ever realized that two different things were happening in their advisory groups.

Two of the advisors reported to the primary researcher that their advisory students questioned them as to why the lessons being presented continued to focus on responsibility for so many continuous lessons. The usual pattern of lesson presentation might have three or four lessons on a given topic so it did seem unusual to some students to have so many lessons on responsibility over an extended period of time. The teachers did not indicate any distress about this issue from the students, just that the issue was raised as to why so many lessons on the topic were being covered.
Variables in the Study

The independent variable in this study involved the responsibility-based lessons designed by the primary researcher and presented by the advisory teachers at the different grade levels. The twelve lessons were prepared with a focus on different aspects of responsibility, accepting responsibility and who is responsible for various actions.

Students in the experimental group were to be presented with the series of twelve responsibility-based lessons by their advisory teachers at the rate of two lessons per week over a six-week period. Students in the control group were not presented with these lessons. Instead, their advisory teacher carried on presenting general advisory lessons and conducting general advisory discussions with no indication that the other advisory groups were doing anything different.

The dependent variables in this study involved two different sets of data obtained from the students in both the experimental and control groups. One set of data consisted of student grades, reported as percentages, and effort scores, reported in numerical form from Excellent (1) to Poor (5), in six subject areas that all students took in the course of their day-to-day studies at the school. These subject areas included: mathematics, science, English, social studies, PE, and foreign language. Grades and effort scores for students in these six graded subjects were taken from the third quarter and compared with grades and effort scores earned in the fourth quarter.

The second set of data was accumulated from the CharacterPlus survey that each student completed at the onset of the school year and again at the end of
the school year. This survey focused on student attitudes related to school and the
school environment. This study compared student attitude at the beginning of the
year with student attitude at the end of the year. The study involved the
hypothesis that those students receiving the responsibility-based lessons will
register more improvement related to their attitudes about school and the school
environment than those students who did not receive the lessons.

The setting for the presentation of the responsibility-based character
education lessons was individual classrooms where advisory groups met on a
daily basis. All students were used to reporting to their advisory class and had
developed a comfort level of being there and had already established a certain
level of rapport with the group members and the advisory teacher. Introducing
the lessons on responsibility fit into the general advisory routine. No instructional
time was needed to re-establish rapport, group norms or teacher identification
since the advisory time that was already used throughout the course of the year
had already done that. Students were able to focus on the lessons at hand and,
since responsibility falls within the realm of advisory topics for discussion and
learning, the lessons could be presented without changing the course and flow of
the regular advisory routine.

No special equipment was needed for the presentation of the lessons. The
lessons themselves were written in such a way as to include all of the necessary
directions for the advisory teacher to follow easily. The plans always included a
list of any necessary materials for the students to have available such as pencils or
paper and, when anything special was required, it was provided for all advisory teachers before the onset of the lesson.

All advisory teachers involved in the presentation of the lessons received a packet of the materials prior to the onset of the presentation. The packet included a general introductory letter, a set of color-coordinated plans, a copy of a survey form that would be used as part of one of the lessons, and a copy of the instructional timeline.

The lessons were copied on colored paper and organized in such a way as to make the presentation a bit easier for the advisory teachers. The lessons for week 1 were copied on pink paper and were related to ‘Your Responsibilities’. Lessons for week 2 were on beige paper and focused on ‘Who Is Responsible’. Lessons for week 3 were on green paper and focused on ‘When Are You NOT Responsible?’. Blue paper was used for the week 4 lessons which focused on ‘How Responsible Are You For …?’ Lessons for week 5 and for week 6 were on yellow paper and they focused on the development of responsibility skits that the groups would devise and present within their small advisory setting and then again in the setting of the entire group that had taken part in receiving the lessons. Wherein the color of the paper is not necessarily relevant, the fact that related lessons were on the same color of paper did help advisory teachers to see the relationship between the lessons.

Measures

Measures of subject characteristics were determined upon enrollment at the school involved in the study. In order to enroll at the school, all required
documentation for grade level placement needed to be submitted before students could begin attending regularly scheduled classes. All students were required to submit previous school records, a health form and proof of age. The middle school principal and school counselor analyzed age and previous school records in order to determine the most appropriate grade level placement. Health information was provided primarily for use by the school nurse with respect to extracurricular involvement or field trip participation.

Given the international nature of the school, students tend to be somewhat transient with the average length of stay being about 2.5 academic years. Students in one country often attend an international school with a different curriculum base for instruction so records need to be analyzed to ensure that students coming in have the prerequisite background knowledge to be successful in the North American-based curriculum used by the school involved in the study.

Different schools in different countries employ different age requirements for enrollment so a thorough analysis of school systems and age requirements from school to school and from country to country are done to be as certain as possible that students are placed appropriately.

Entrance examinations are administered at the time of application to the school to gain a general sense a child’s intellectual abilities for potential success with the school’s curriculum at a given grade level. Entrance examinations include assessments in mathematics, reading comprehension, writing and vocabulary. Depending on which foreign language a student wants to take, a
language placement exam may be administered to try to ensure that the students are in the level most appropriate to their abilities.

Entrance examinations may indicate a need for further testing related to English language skills that may require placement in English as a Second Language classes (ESL). Students exhibiting academic limitations in mathematics or language based entrance exams may be required to take additional testing to try to determine if additional learning support will be needed in the form of ‘learning resource’ assistance.

In general, at the school involved in the study, once students have applied and taken the entrance examinations and been found to be capable of managing the academic work load, with or without the ESL or learning resource support they may require to be successful, they will be placed into the most appropriate grade level and will be scheduled to begin attending classes.

All students enrolled at the school are assigned to one of the four advisory groups at their grade level as soon as they are scheduled for classes. For the purposes of this study, all students scheduled into the academic program were involved in the study as part of the experimental group or the control group.

The measures of the dependent variables used for this study were based on the system utilized by the school as part of its regular grading system. The academic calendar is divided into two semesters. Each semester is subdivided into two quarters. All students receive letter grades (based on a percentage scale that is standardized by the school) and effort scores (based on a 1-5 numerical
system that is standardized by the school) for all subjects listed on their report
card.

For the purposes of this study, letter grades (translated into percentages)
and effort scores were used for six subject areas taken by all students involved.
These subjects were mathematics, science, English, social studies, physical
education and foreign language.

At the end of each quarter, individual teachers for each subject area submit
their letter grades and effort marks via a computer-based system to a central data
base from which report cards are generated. In all academic subjects, teachers
devise their own grading system to determine the final grades for their students at
the end of the quarter. The final grades that are submitted to the central data base
must be based on the standardized scale that is used school-wide.

These letter grades and the school’s standardized scale were used to
transfer student grade data for the purposes of this study. The following scale was
used for statistical purposes:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97%</td>
</tr>
<tr>
<td>A</td>
<td>95%</td>
</tr>
<tr>
<td>A-</td>
<td>92%</td>
</tr>
<tr>
<td>B+</td>
<td>87%</td>
</tr>
<tr>
<td>B</td>
<td>85%</td>
</tr>
<tr>
<td>B-</td>
<td>82%</td>
</tr>
<tr>
<td>C+</td>
<td>77%</td>
</tr>
<tr>
<td>C</td>
<td>75%</td>
</tr>
<tr>
<td>C-</td>
<td>72%</td>
</tr>
<tr>
<td>D+</td>
<td>67%</td>
</tr>
<tr>
<td>D</td>
<td>65%</td>
</tr>
<tr>
<td>D-</td>
<td>62%</td>
</tr>
<tr>
<td>F</td>
<td>55%</td>
</tr>
</tbody>
</table>
At the end of the third quarter, the primary researcher obtained a printout of all student grades. These letter grades for each subject were then entered into the statistical analysis program as percentages using the standardized scale used by the school.

In addition to receiving a letter grade for each subject, all teachers assign an effort score to each student to indicate the level of effort the student has put into doing the required coursework over the quarter. The effort scale used by the school is standardized and all teachers use the same numerical scoring system to indicate the level of effort that individual students put into their course.

The effort scale used by the school is as follows:

1. Excellent Effort
2. Good Effort
3. Average Effort
4. Below Average Effort
5. Poor Effort

As with letter grades for each subject, individual teachers for each subject area submit their effort scores via a computer-based system to a central data base from which report cards are generated. Effort scores are subjective and teachers assign effort scores based on how the student’s effort would be evaluated using the school’s standardized scoring system listed above.

As for the data collected form the CharacterPlus survey, the information consisted of 29 questions each with a corresponding set of response options based on a 5 point Likert scale. The options on the survey form involved having students put a check mark in a box indicating their level of agreement with a
numbered statement. The boxes that were checked were then translated into a numerical value to indicate the student’s choices. The following scale was used:

1. Very Often or Strongly Agree
2. Between Very Often/Strongly Agree and Sometimes/No Opinion
3. Sometimes or No Opinion
4. Between Sometimes/No Option and Never/Strongly Disagree
5. Never or Strongly Disagree

Measures of the independent variables involved providing all advisory teachers involved in the study with an exact set of the responsibility-based lessons to be presented to their advisory groups. All teachers received the same notices and all teachers received the same set of instructions as to how the lessons should be conducted. Teachers were given leeway to present the lessons on the dates of their choice provided all twelve lessons were covered in the same manner as all other teachers within the specified time period allotted to the study. All teachers were expected to present lessons at the rate of two lessons per week for a period of six weeks.

No measures were required involving human judges, raters of observers. The only person involved with collecting and entering data was the primary researcher conducting the study. Individual teachers submitted their grades and effort scores for their own academic disciplines. This data was collected by the primary researcher, translated into the appropriate percentage or numerical value and entered into the statistical program by the primary researcher.

Procedure

Students who were involved in the study received no specific instructions other than those indicated on the lesson plans that were provided to the advisory
teachers doing the presentation of lessons to their advisory groups. Since all advisory teachers had received an identical set of lesson plans for the twelve lessons to be presented, all students received the same basic instructions at the onset of each lesson as indicated on the lesson plan itself.

The advisory teachers all received a general notice indicating that all teachers involved in the study should present the lessons as indicated on the lesson plans they had received. Lessons were to be presented at the rate of two lessons per week for a period of six weeks. All materials and additional papers needed to conduct the lessons were indicated on the plans. Copies of any additional papers were provided to advisory teachers before the onset of the specific lessons when they were necessary.

The responsibility-based lesson presentations were all done within the allotted advisory time each day. Twenty minutes of advisory time was scheduled for advisory lessons. All twelve lessons were designed to fit within the general 20 minute time frame for instruction. All advisory teachers involved in the study presented two related responsibility-based lessons each week. Lessons were presented over a six week time period within the fourth quarter of the school year.

Consent to conduct the study was obtained from the principal of the middle school and the superintendent of the school. The details of the study design were presented to the principal and superintendent and a general description of the lessons that would be taught in the advisory setting was presented to the principal. Both the principal and the superintendent gave their consent for the study to be conducted. Because no specific personal student
information would be obtained, no potential harm to students was evident, and the lessons to be covered fit within the general parameters of the school’s advisory program, it was determined that a blanket consent from the principal and superintendent would be satisfactory rather than seeking individual consent from students or parents.

Data collected from the CHARACTERplus survey instrument were incorporated into the second primary research question. For the purpose of the study described in this paper, the survey questions remained intact completely as devised by the Florida’s Partnership in Character Education (FPCE). However, the demographic information was altered slightly to reflect the more international nature of the school involved. Advisory teachers administering the survey to their middle school student groups were given instructions to assist the students in providing the most appropriate demographic information for them. The two areas that were most difficult for students to answer without question were the ones related to nationality and ethnicity.

For ‘nationality’, students were asked to write down the nationality of the passport they use most frequently for travel. For those students of dual nationality, this eliminated forcing them to choose one over the other. It also prevented having them write down more than one response. For those students who consider themselves technically a citizen of one country while they travel and identify themselves officially by a passport from another country, having them state the passport they use most often for travel helped to eliminate potential confusion.
The second demographic question that was difficult for some students to respond related to their ethnicity. The demographic options offered for ethnicity on the survey included: American Indian; Asian or Pacific Islander; Black, non-Hispanic; Hispanic; White, non-Hispanic; and Multi-racial.

The majority of the students involved in this survey had never been asked to officially identify their ethnicity. Cultural identifiers in the country where the survey was administered were different than those that would be generally attributable to cultural groups in the United States. To make it more clear, a document was prepared for the advisory teachers to use to help students categorize themselves using the more Americanized descriptors. This was done with the hope that it would help make the information collected more easily transferable to and comparable to data from the survey forms collected from schools in the United States.

Ultimately the data collected from this survey for the purpose of this study did not incorporate the demographic information. ‘Gender’, ‘Nationality’, and ‘Ethnicity’ were not used to break the survey group down when the data was analyzed. Only grade level was used.

The questions on the survey itself involved having respondents mark each statement on a 5 point Likert scale. ‘1’ indicated that the respondent ‘Very Often or Strongly Agreed’ with the statement. ‘3’ indicated a ‘Sometimes or No Opinion’ response. ‘5’ indicated a response of ‘Never or Strongly Disagree’.

The CHARACTERplus survey was administered at the beginning of the academic year as a ‘pre-test’ and it was administered again, after the
completion of the responsibility-based character education lessons as a ‘post-test’.

The subsequent results are shown in Chapter 4.
CHAPTER FOUR - STATISTICAL ANALYSIS

Summary of Grade Performance

This study examined the following questions:

- Hypothesis 1 – One aspect of the primary research questions was …

‘Does the implementation of a responsibility-based character education intervention have a statistically significant impact on 6th, 7th and 8th grade student academic achievement’? This question has six sub-hypotheses related to the various subject areas included in the study.

  o Hypothesis 1a - The first null hypothesis for this question was that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Mathematics, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

  o Hypothesis 1b - The second null hypothesis for this question was that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for Science, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.
- Hypothesis 1c - The third null hypothesis for this question was that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for **English**, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

- Hypothesis 1d - The fourth null hypothesis for this question was that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for **Social Studies**, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

- Hypothesis 1e - The fifth null hypothesis for this question was that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for **Physical Education**, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

- Hypothesis 1f - The sixth null hypothesis for this question was that there is no statistically significant difference in student academic achievement after the implementation of the responsibility-based intervention for **Foreign Language**, using 3rd quarter grades and 4th
quarter grades to compare those students who received the intervention and those who did not receive the intervention.

- Hypothesis 2 - The second aspect of the primary research question was … ‘Does the implementation of a responsibility-based character education intervention have a statistically significant impact on 6\textsuperscript{th}, 7\textsuperscript{th} and 8\textsuperscript{th} grade student effort’? This question had six sub-hypotheses related to the various subject areas included in the study.

  - Hypothesis 2a - The first null hypothesis for this question was that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textbf{Mathematics}, using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.

  - Hypothesis 2b - The second null hypothesis for this question was that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textbf{Science}, using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare those students who received the intervention and those who did not receive the intervention.

  - Hypothesis 2c - The third null hypothesis for this question was that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for \textbf{English}, using 3\textsuperscript{rd} quarter grades and 4\textsuperscript{th} quarter grades to compare
those students who received the intervention and those who did not receive the intervention.

- Hypothesis 2d - The fourth null hypothesis for this question was that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for Social Studies, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

- Hypothesis 2e - The fifth null hypothesis for this question was that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for Physical Education, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

- Hypothesis 2f - The sixth null hypothesis for this question was that there is no statistically significant difference in student effort after the implementation of the responsibility-based intervention for Foreign Language, using 3rd quarter grades and 4th quarter grades to compare those students who received the intervention and those who did not receive the intervention.

The primary research question related to student grades and the results for each academic subject were analyzed using a 2 X 2 mixed analysis of variance. The SPSS MANOVA procedure was used to conduct these analyses because it is
appropriate for handling repeated measures designs with multiple dependent variables. The within subjects factor was the change in scores between the third and fourth quarters. The between subjects factors were experimental and control groups and grade level. Each question is addressed individually below.

- Hypothesis 3 - The second primary research question was … ‘What is the impact of a responsibility-based character education program on middle school students’ attitudes about their school and the school environment at an international school in East Africa’? The null hypothesis for this question was that there is no statistically significant difference in student responses on the CHARACTERplus survey after the implementation of the responsibility-based intervention.

Summary of Grade Results

Mathematics

The summary statistics for the Mathematics intervention are provided in Tables 1 - 3. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference \( F_{(1,130)} = .699, \ p > .05 \). Similarly, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), \( F_{(2,130)} = 2.159, \ p > .05 \).
Table 1. Summary Statistics for Sixth Grade GRADES

<table>
<thead>
<tr>
<th>Subject</th>
<th>Exptl: 3rd Qtr (Std. Dev.)</th>
<th>Exptl: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
<th>Control: 3rd Qtr (Std. Dev.)</th>
<th>Control: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>83.23 (10.28)</td>
<td>84.00 (11.92)</td>
<td>0.93</td>
<td>76.80 (12.80)</td>
<td>84.40 (10.02)</td>
<td>9.9</td>
</tr>
<tr>
<td>Science</td>
<td>86.39 (7.40)</td>
<td>84.94 (11.05)</td>
<td>-1.68</td>
<td>82.80 (8.28)</td>
<td>82.10 (12.17)</td>
<td>-0.85</td>
</tr>
<tr>
<td>English</td>
<td>89.52 (7.16)</td>
<td>83.87 (10.64)</td>
<td>-6.31</td>
<td>84.20 (12.64)</td>
<td>80.90 (8.85)</td>
<td>-3.92</td>
</tr>
<tr>
<td>Social Studies</td>
<td>86.19 (6.28)</td>
<td>85.45 (8.31)</td>
<td>-0.86</td>
<td>82.00 (8.43)</td>
<td>83.40 (6.85)</td>
<td>1.71</td>
</tr>
<tr>
<td>Physical Education</td>
<td>87.61 (5.46)</td>
<td>89.52 (5.19)</td>
<td>2.18</td>
<td>85.90 (8.72)</td>
<td>87.90 (5.76)</td>
<td>2.33</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>82.35 (9.43)</td>
<td>79.94 (10.62)</td>
<td>-2.9</td>
<td>74.80 (15.48)</td>
<td>75.60 (16.32)</td>
<td>1.07</td>
</tr>
</tbody>
</table>

These letter grades and the school’s standardized scale were used to transfer student grade data for the purposes of this study. The following scale was used for statistical purposes:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97%</td>
</tr>
<tr>
<td>A</td>
<td>95%</td>
</tr>
<tr>
<td>A-</td>
<td>92%</td>
</tr>
<tr>
<td>B+</td>
<td>87%</td>
</tr>
<tr>
<td>B</td>
<td>85%</td>
</tr>
<tr>
<td>B-</td>
<td>82%</td>
</tr>
<tr>
<td>C+</td>
<td>77%</td>
</tr>
<tr>
<td>C</td>
<td>75%</td>
</tr>
<tr>
<td>C-</td>
<td>72%</td>
</tr>
<tr>
<td>D+</td>
<td>67%</td>
</tr>
<tr>
<td>D</td>
<td>65%</td>
</tr>
<tr>
<td>D-</td>
<td>62%</td>
</tr>
<tr>
<td>F</td>
<td>55%</td>
</tr>
</tbody>
</table>
Table 2. Summary Statistics for Seventh Grade GRADES

<table>
<thead>
<tr>
<th>Subject</th>
<th>Expmtl: 3rd Qtr (Std. Dev.)</th>
<th>Expmtl: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
<th>Control: 3rd Qtr (Std. Dev.)</th>
<th>Control: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>84.52 (9.61)</td>
<td>83.03 (10.91)</td>
<td>-1.76</td>
<td>82.42 (7.76)</td>
<td>81.58 (6.56)</td>
<td>-1.02</td>
</tr>
<tr>
<td>Science</td>
<td>83.39 (9.34)</td>
<td>85.55 (8.54)</td>
<td>2.59</td>
<td>78.58 (10.52)</td>
<td>80.58 (8.50)</td>
<td>2.55</td>
</tr>
<tr>
<td>English</td>
<td>83.52 (9.58)</td>
<td>85.33 (7.83)</td>
<td>2.17</td>
<td>77.17 (9.51)</td>
<td>83.00 (7.83)</td>
<td>7.55</td>
</tr>
<tr>
<td>Social Studies</td>
<td>87.52 (9.97)</td>
<td>85.94 (10.23)</td>
<td>-1.81</td>
<td>85.75 (8.35)</td>
<td>83.17 (6.91)</td>
<td>-3.01</td>
</tr>
<tr>
<td>Physical Education</td>
<td>90.18 (5.13)</td>
<td>89.82 (4.86)</td>
<td>-0.40</td>
<td>88.25 (6.44)</td>
<td>86.17 (6.89)</td>
<td>-2.36</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>83.42 (9.96)</td>
<td>82.06 (11.71)</td>
<td>-1.63</td>
<td>78.67 (11.55)</td>
<td>76.17 (11.09)</td>
<td>-3.18</td>
</tr>
</tbody>
</table>

These letter grades and the school’s standardized scale were used to transfer student grade data for the purposes of this study. The following scale was used for statistical purposes:

- A+ 97%  B+ 87%  C+ 77%  D+ 67%  F 55%
- A 95%  B 85%  C 75%  D 65%
- A- 92%  B- 82%  C- 72%  D- 62%
Table 3. Summary Statistics for Eighth Grade GRADES.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Expmtl: 3rd Qtr (Std. Dev.)</th>
<th>Expmtl: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
<th>Control: 3rd Qtr (Std. Dev.)</th>
<th>Control: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>79.86 (11.14)</td>
<td>76.86 (12.50)</td>
<td>-3.76</td>
<td>79.79 (12.34)</td>
<td>76.57 (10.78)</td>
<td>-4.04</td>
</tr>
<tr>
<td>Science</td>
<td>78.58 (13.49)</td>
<td>78.58 (14.66)</td>
<td>0.00</td>
<td>80.29 (9.19)</td>
<td>79.50 (10.44)</td>
<td>-0.98</td>
</tr>
<tr>
<td>English</td>
<td>87.61 (9.79)</td>
<td>87.03 (9.57)</td>
<td>-0.66</td>
<td>90.71 (8.33)</td>
<td>91.71 (7.16)</td>
<td>1.10</td>
</tr>
<tr>
<td>Social Studies</td>
<td>89.00 (7.49)</td>
<td>88.39 (10.27)</td>
<td>-0.69</td>
<td>90.79 (7.38)</td>
<td>92.50 (6.67)</td>
<td>1.88</td>
</tr>
<tr>
<td>Physical Education</td>
<td>88.58 (6.19)</td>
<td>89.08 (6.41)</td>
<td>0.56</td>
<td>91.57 (4.80)</td>
<td>90.29 (4.93)</td>
<td>-1.40</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>81.33 (10.24)</td>
<td>80.61 (11.31)</td>
<td>-0.89</td>
<td>80.71 (12.51)</td>
<td>78.93 (10.37)</td>
<td>-2.21</td>
</tr>
</tbody>
</table>

These letter grades and the school’s standardized scale were used to transfer student grade data for the purposes of this study. The following scale was used for statistical purposes:

- A+ 97%
- A 95%
- A- 92%
- B+ 87%
- B 85%
- B- 82%
- C+ 77%
- C 75%
- C- 72%
- D+ 67%
- D 65%
- D- 62%
- F 55%
Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there was only a significant interaction between 3rd/4th quarter scores and grade level ($F_{(2,130)} = 9.69, p=.000$). A graph depicting this interaction is shown in Figure 1. As shown, the pretest and posttest scores varied by grade level.

![Figure 1](Image)

Figure 1. Interaction between third and fourth quarter scores by grade level.

Science

The summary statistics for the Science intervention are provided in Tables 1-3. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = 1.263, p > .05$). Similarly, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2, 130)}= 1.955, p > .05$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there were also no significant differences.
English

The summary statistics for the English intervention are provided in Tables 1-3. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = .824, \ p > .05$). However, there was a significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2, 130)} = 6.516, \ p = .002$). The sixth grade scores dropped in the fourth quarter, the seventh grade scores went up in the fourth quarter, and the eighth grade scores stayed relatively constant between the third and fourth quarters.

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there was a significant interaction between pre/post scores (quarter) and group (experimental vs. control) ($F_{(2, 130)} = 4.733, \ p = .031$), and between pre/post and grade level ($F_{(2, 130)} = 14.513, \ p = .000$). These results are shown graphically in Figures 2-3.
Social Studies

The summary statistics for the Social Studies intervention are provided in Tables 1-3. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)}$...
However, there was a significant difference in scores across grade levels (sixth, seventh, and eighth grades) ($F_{(2,130)} = 5.397, p = .006$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there were again no significant differences.

Physical Education

The summary statistics for the Physical Education intervention are provided in Tables 1-3. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = .555, p > .05$). Similarly, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2,130)} = 1.421, p > .05$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there was only a significant interaction between $3^{rd}/4^{th}$ quarter scores and grade level ($F_{(2,130)} = 5.208, p = .007$). A graph depicting this interaction is provided in Figure 4. As shown, the pretest and posttest scores varied by grade level.
Foreign Language

The summary statistics for the Foreign Language intervention are provided in Tables 1-3. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed a statistically significant difference ($F_{(1,130)} = 3.927, \ p = .05$). The mean for the experimental group was $X$ and the mean for the control group was $Y$. However, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2, 130)} = .417, \ p > .05$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there was a significant difference between $3^{rd}/4^{th}$ quarter scores ($F_{(2,130)} = 4.046, \ p = .046$). The mean for the third quarter was 81.29 and the standard deviation was 10.84. The mean for the fourth quarter was 79.87 and the standard deviation was 11.527. Thus, although the scores differed, they decreased in the fourth quarter.

Graphs depicting an overall summary the GRADE results for the different grade levels for all six subjects included in this study are provided below. These
graphs show a simplistic representation of grade increase or decrease for each grade level and for all three grade levels combined.

Figure 5. Summary of Experimental Group GRADE Changes for All Six Subjects
Summary of Effort Results

Mathematics

The summary statistics for the Mathematics intervention are provided in Tables 4 - 6. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = .086$, $p > .05$). Similarly, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2,130)} = .796$, $p > .05$).
Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there were also no significant differences in effort.
Table 4. Summary Statistics for Sixth Grade EFFORT Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>Expmtl: 3rd Qtr (Std. Dev.)</th>
<th>Expmtl: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
<th>Control: 3rd Qtr (Std. Dev.)</th>
<th>Control: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>1.90 (0.87)</td>
<td>1.84 (1.00)</td>
<td>3.16</td>
<td>2.10 (0.74)</td>
<td>1.80 (0.92)</td>
<td>14.29</td>
</tr>
<tr>
<td>Science</td>
<td>1.45 (0.62)</td>
<td>1.81 (1.05)</td>
<td>-24.83</td>
<td>1.40 (0.52)</td>
<td>1.70 (0.68)</td>
<td>-21.43</td>
</tr>
<tr>
<td>English</td>
<td>1.35 (0.71)</td>
<td>1.77 (1.12)</td>
<td>-31.11</td>
<td>1.80 (1.03)</td>
<td>1.70 (0.48)</td>
<td>5.56</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1.77 (0.96)</td>
<td>1.74 (0.73)</td>
<td>1.69</td>
<td>1.90 (0.99)</td>
<td>1.70 (0.68)</td>
<td>10.53</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1.39 (0.62)</td>
<td>1.35 (0.66)</td>
<td>2.88</td>
<td>1.40 (0.52)</td>
<td>1.20 (0.42)</td>
<td>14.29</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>1.81 (0.91)</td>
<td>2.06 (1.10)</td>
<td>-13.81</td>
<td>2.80 (1.55)</td>
<td>2.40 (1.35)</td>
<td>14.29</td>
</tr>
</tbody>
</table>

The effort scale used by the school is as follows:

1 = Excellent Effort
2 = Good Effort
3 = Average Effort
4 = Below Average Effort
5 = Poor Effort

It is important to note the following about the effort scores: it is not possible to receive a score that is less than ‘1’, the best score a student can be assigned is ‘1’; improvement is noted by a score that has decreased leading to a score that is closer to ‘1’; the larger the score, the poorer the effort. In the chart above, the percentage changes shown indicate positive change when the score has moved closer to ‘1’ and negative change when the score has moved further from ‘1’.
Table 5. Summary Statistics for Seventh Grade EFFORT Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>Expmtl: 3rd Qtr (Std. Dev.)</th>
<th>Expmtl: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
<th>Control: 3rd Qtr (Std. Dev.)</th>
<th>Control: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>1.76 (0.94)</td>
<td>1.73 (0.91)</td>
<td>1.70</td>
<td>1.58 (0.67)</td>
<td>1.50 (0.67)</td>
<td>5.06</td>
</tr>
<tr>
<td>Science</td>
<td>2.03 (1.05)</td>
<td>1.91 (0.95)</td>
<td>5.91</td>
<td>2.33 (1.16)</td>
<td>2.25 (0.97)</td>
<td>3.43</td>
</tr>
<tr>
<td>English</td>
<td>1.82 (0.92)</td>
<td>1.64 (0.74)</td>
<td>9.89</td>
<td>2.50 (1.00)</td>
<td>1.92 (0.90)</td>
<td>23.20</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1.61 (1.06)</td>
<td>1.48 (0.94)</td>
<td>8.07</td>
<td>1.58 (0.67)</td>
<td>1.50 (0.67)</td>
<td>5.06</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1.30 (0.47)</td>
<td>1.24 (0.50)</td>
<td>4.62</td>
<td>1.50 (0.52)</td>
<td>1.83 (0.94)</td>
<td>-22.00</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>1.64 (0.99)</td>
<td>1.61 (0.90)</td>
<td>1.83</td>
<td>2.25 (1.14)</td>
<td>2.17 (0.94)</td>
<td>3.56</td>
</tr>
</tbody>
</table>

The effort scale used by the school is as follows:

1 = Excellent Effort  
2 = Good Effort  
3 = Average Effort  
4 = Below Average Effort  
5 = Poor Effort

It is important to note the following about the effort scores: it is not possible to receive a score that is less than ‘1’, the best score a student can be assigned is ‘1’; improvement is noted by a score that has decreased leading to a score that is closer to ‘1’; the larger the score, the poorer the effort. In the chart above, the percentage changes shown indicate positive change when the score has moved closer to ‘1’ and negative change when the score has moved further from ‘1’.
Table 6. Summary Statistics for Eighth Grade EFFORT Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>Expmtl: 3rd Qtr (Std. Dev.)</th>
<th>Expmtl: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
<th>Control: 3rd Qtr (Std. Dev.)</th>
<th>Control: 4th Qtr (Std. Dev.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>1.81 (1.22)</td>
<td>2.00 (1.31)</td>
<td>-10.50</td>
<td>1.79 (1.89)</td>
<td>1.93 (1.14)</td>
<td>-7.82</td>
</tr>
<tr>
<td>Science</td>
<td>1.78 (1.22)</td>
<td>1.39 (0.77)</td>
<td>21.91</td>
<td>1.57 (0.76)</td>
<td>1.50 (1.09)</td>
<td>4.46</td>
</tr>
<tr>
<td>English</td>
<td>1.61 (0.87)</td>
<td>1.58 (0.94)</td>
<td>1.86</td>
<td>1.50 (0.86)</td>
<td>1.14 (0.36)</td>
<td>24.00</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1.36 (0.72)</td>
<td>1.56 (1.05)</td>
<td>-14.71</td>
<td>1.29 (0.61)</td>
<td>1.29 (0.47)</td>
<td>0.00</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1.28 (0.45)</td>
<td>1.28 (0.62)</td>
<td>0.00</td>
<td>1.43 (0.51)</td>
<td>1.50 (0.65)</td>
<td>-4.90</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>1.67 (0.99)</td>
<td>1.89 (1.12)</td>
<td>-13.17</td>
<td>1.86 (0.66)</td>
<td>2.21 (0.80)</td>
<td>-18.82</td>
</tr>
</tbody>
</table>

The effort scale used by the school is as follows:

1 = Excellent Effort  
2 = Good Effort  
3 = Average Effort  
4 = Below Average Effort  
5 = Poor Effort

It is important to note the following about the effort scores: it is not possible to receive a score that is less than ‘1’, the best score a student can be assigned is ‘1’; improvement is noted by a score that has decreased leading to a score that is closer to ‘1’; the larger the score, the poorer the effort. In the chart above, the percentage changes shown indicate positive change when the score has moved closer to ‘1’ and negative change when the score has moved further from ‘1’. 
Science

The summary statistics for the Science intervention are provided in Tables 4-6. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = 0.145, p > .05$). However, there was a significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2, 130)}= 4.798, p = 0.01$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there was only a significant interaction between $3^{rd}$/4$^{th}$ quarter scores and grade level ($F_{(2,130)} = 5.034, p=.008$). A graph depicting this interaction is provided in Figure 5. As shown, the pretest and posttest scores varied by grade level.

![Graph](image)

*Figure 7. Interaction between third and fourth quarter scores by grade level.*
English

The summary statistics for the English intervention are provided in Tables 4-6. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = .702, \ p > .05$). However, as before, there was a significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2,130)} = 3.879, \ p = .023$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there was a significant interaction between pre/post (quarter) and group (experimental vs. control) ($F_{(2,130)} = 4.733, \ p = .031$), and between pre/post and grade level ($F_{(2,130)} = 14.513, \ p = .000$). Figures 6 – 7 show these results.

![Chart showing interaction between third and fourth quarter and group.](image)

**Figure 8.** Interaction between third and fourth quarter and group.
Social Studies

The summary statistics for the Social Studies intervention are provided in Tables 4-6. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant difference ($F_{(1,130)} = .087, p > .05$). Similarly, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), ($F_{(2,130)} = 2.371, p = .097$).

Examining changes in scores between the third and fourth quarter (the within subjects effect) also showed that there were no significant differences.

Physical Education

The summary statistics for the Physical Education intervention are provided in Tables 4-6. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed no statistically significant
difference \((F_{(1,130)} = 3.032, \ p = .084)\). Similarly, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), \((F_{(2, 130)} = .658, \ p = .520)\).

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there were again no significant differences.

**Foreign Language**

The summary statistics for the Foreign Language intervention are provided in Tables 4-6. Based on the data collected, the test of between-subject effects for the experimental group that received the intervention and the control group that did not receive the intervention showed a statistically significant difference \((F_{(1,130)} = 7.701, \ p = .006)\). However, there was no significant difference in scores across grade levels (sixth, seventh, and eighth grades), \((F_{(2, 130)} = 1.608, \ p > .05)\). The mean for the experimental group was 1.85 and the standard deviation was 1.039. The mean for the control group was 1.96 with a standard deviation of 1.046. These results are shown graphically in Figure 8.

Examining changes in scores between the third and fourth quarter (the within subjects effect) showed that there were no significant differences.
Graphs depicting an overall summary the EFFORT SCORE results for the different grade levels for all six subjects included in this study are provided below. These graphs show a simplistic representation of effort increase or decrease for each grade level and for all three grade levels combined.
Figure 11. Summary of Experimental Group EFFORT Changes for All Six Subjects
Summary of CHARACTERPlus Survey Results

The data sets for the CHARACTERPlus survey were run using a dependent t-test. This test was selected because the same subjects were used to collect both pre- and post-test data. The experimental group received the intervention involving the responsibility-based character education lessons and the control group did not receive the intervention. A summary of the data collected is shown in Table 7. The data are broken down into individual grade levels for both the experimental and control groups and an averaged data set is given that combines data from all the grade levels together.
Table 7. CHARACTERPlus Survey Pre-Test/Post-Test Results for Grade Individual Grade Levels and for All Grades Combined

<table>
<thead>
<tr>
<th>Condition</th>
<th>Group</th>
<th>Pretest Mean (SD)</th>
<th>Posttest Mean (SD)</th>
<th>N</th>
<th>Df</th>
<th>T value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th Grade</td>
<td>Experimental</td>
<td>67.2 (9.9)</td>
<td>73.5 (11.6)</td>
<td>28</td>
<td>27</td>
<td>2.63</td>
<td>P&lt;.05</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>61.9 (9.4)</td>
<td>73.4 (6.9)</td>
<td>8</td>
<td>7</td>
<td>2.973</td>
<td>P&lt;.05</td>
</tr>
<tr>
<td>7th Grade</td>
<td>Experimental</td>
<td>70.1 (9.8)</td>
<td>72.4 (11.5)</td>
<td>29</td>
<td>28</td>
<td>1.347</td>
<td>P=.189</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>70.8 (9.6)</td>
<td>79.6 (7.9)</td>
<td>12</td>
<td>11</td>
<td>2.665</td>
<td>P&lt;.05</td>
</tr>
<tr>
<td>8th Grade</td>
<td>Experimental</td>
<td>72.7 (10.2)</td>
<td>78.0 (11.4)</td>
<td>34</td>
<td>33</td>
<td>3.020</td>
<td>P&lt;.05</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>70.5 (9.7)</td>
<td>76.5 (12.8)</td>
<td>13</td>
<td>12</td>
<td>1.749</td>
<td>P=.106</td>
</tr>
<tr>
<td>Averaged</td>
<td>Experimental</td>
<td>70.2 (10.1)</td>
<td>74.8 (11.6)</td>
<td>91</td>
<td>90</td>
<td>4.125</td>
<td>P&lt;.05</td>
</tr>
<tr>
<td>over all</td>
<td>Control</td>
<td>68.5 (10.0)</td>
<td>76.9 (10.0)</td>
<td>33</td>
<td>32</td>
<td>4.156</td>
<td>P&lt;.05</td>
</tr>
</tbody>
</table>

As shown in Table 7, the results for grade 6 indicate a statistically significant change for both the experimental and control groups.

As shown in Table 7, the results for grade 7 indicate that there was not a statistically significant change in the experimental group (P=.189) but there was a statistically significant change in the control group.

As shown in Table 7, the results for grade 8 indicate that there was a statistically significant change in the experimental group but there was not a statistically significant change in the control group (P=.106).

As shown in Table 7, the results for the average data of all grade levels combined indicate that there was a statistically significant change for both the experimental and control groups.
A summary of the results of the CHARACTERplus survey data significance is provided in Table 8.

Table 8. Summary of Significance for Individual Grade Levels and All Grades Using CHARACTERplus Survey Data.

<table>
<thead>
<tr>
<th>GRADE</th>
<th>EXP. / CON.</th>
<th>SIGNIFICANT</th>
<th>NOT SIGNIFICANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>EXPERIMENTAL</td>
<td>SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>6th</td>
<td>CONTROL</td>
<td>SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>7th</td>
<td>EXPERIMENTAL</td>
<td>NOT SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>7th</td>
<td>CONTROL</td>
<td>SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>EXPERIMENTAL</td>
<td>SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>CONTROL</td>
<td>NOT SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>ALL GRADES</td>
<td>EXPERIMENTAL</td>
<td>SIGNIFICANT</td>
<td></td>
</tr>
<tr>
<td>ALL GRADES</td>
<td>CONTROL</td>
<td>SIGNIFICANT</td>
<td></td>
</tr>
</tbody>
</table>

Analysis of the Results from the CHARACTERPlus Survey Data

The original hypothesis for the CHARACTERPlus survey was that students receiving the responsibility-based character education lessons would improve their attitude about their school and their school environment more than those students who did not receive the lessons. As shown in Table 7, the results of the dependent t-test that was run do not support this hypothesis.

The hypothesis, had it been supported by the data, would have resulted in there being a statistically significant difference in the pre- and post-test results for the 6th grade, 7th grade and 8th grade experimental groups while there should not have been a statistically significant difference for the control groups in those grade levels. The same premise would have held true for the averaged combined results for all grade levels.
Instead, the results were generally more significant across the board and, in the 7th the results were actually the opposite of what was expected. The control group showed a significant difference where the experimental group did not.
CHAPTER FIVE - IMPLICATIONS AND SUGGESTIONS

Implications of the study and possible future studies

This research project involved the presentation of twelve individual responsibility-based character education lessons over a period of six weeks. All the students attending an international middle school were involved as part of the experimental group or as part of the control group.

To determine the significance of the study, student grades in six different subjects and student effort scores in the same six subjects were compared from one quarter to the next. Students who received the character education lessons were compared with those who did not receive the lessons to determine which group improved more in their grades and effort scores. No statistical significance could be generalized across the six subjects or across the six effort scores. For any given subject, there was some improvement shown at some grade levels for some subjects while, in other subjects, scores went down for that same grade level. The same thing happened with the effort scores for each grade level.

Even though, for some grade levels, in some subjects or effort scores, there was statistical significance shown in terms of the difference from one quarter to the next, those results could not be generalized across the board for any particular grade level nor could they be generalized for all grade levels combined. The results could not be generalized for the experimental group since the control group also experienced improvements and declines in grades and effort scores for the different subjects involved.
Five possible futures studies will be presented here.

The first possibility for a future study would involve a more lengthy study focusing solely on responsibility. The study presented in this paper consisted of 12 lessons presented over a six-week period. Given that the results were inconclusive leading to the inability to generalize the results, having an expanded program that focused on responsibility could result in more statistically significant results.

The lessons designed for this study were structured in such a way as to be ‘general’ in nature. There was no attempt to focus the lessons on academic responsibility but rather on responsibility in general. If additional lessons were designed and presented that had a more direct focus on helping students become more responsible for their academic course work, the results obtained may show more significance. These lessons could incorporate aspects of time management, academic integrity and individual student record keeping to help build a sense of responsibility within students. By having lessons that focus continuously on individual responsibility related to academic achievement and success, students may begin to incorporate a sense of personal responsibility into their day-to-day planning, homework and effort to see their level of academic success improve across the board in their subjects.

The combination of the dual focus of responsibilities that students have in addition to the academic responsibilities they are faced with at school could lead to higher levels of self-awareness related to responsibility and the potential
incorporation of that trait into the general lifestyle of the students either in terms of their daily interactions with others and their academic success.

Linked to this would be the possibility for similar studies to determine the length of time necessary to obtain more significant results. This study was six weeks long and the results were inconclusive and could not be generalized. A study lasting one semester may show more conclusive results. It is possible that a year would be needed. Further studies could begin to shed some light on the length of time necessary for statistical significance to be obtained.

A second possibility for future studies could include the development of a broader series of lessons that incorporate a wider variety of character traits. This broader spectrum could lead to a more broad self-awareness on the part of the students involved which could, in turn, lead to the incorporation of some or all of those traits into the general lifestyle of the students or into their individual academic success.

This study focused solely on responsibility and the results were inconclusive. By expanding the study to include other common character traits such as honesty, integrity, loyalty, and perseverance greater significance might be obtained. Lessons focusing on these traits, and others like them, could be incorporated into a broader program. The continued reinforcement of information and self-awareness related to each trait as it is discussed could increase the level of character acquisition students experience over time. The possibility of obtaining more statistically significant results would exist.
This particular study involved students at only one international school in the East Africa region. A third possibility for future studies could involve a broader scope of international schools in similar projects related to character development and academic achievement. With an increased number of international schools involved there would also be an increased number of students involved. The potential here would be to include nationality as a factor to determine if students from a given nationality respond more positively to character education lessons in terms of academic improvement as compared to students from other nationalities.

This particular study did ask for nationality as part of the demographic information obtained from all students but the overall numbers of students from any given nationality were too low to incorporate nationality as a factor with respect to outcomes. This led to the exclusion of that data as part of the study or part of the analysis.

Obvious difficulties arise when considering expanding the study to include other international schools. One difficulty would involve having some sort of similar organizational structure for the presentation of the instructional lessons. Different schools operate under different schedules and it may prove difficult to establish a similar instructional time to present the agreed upon lessons in different schools. While not impossible to organize it might be difficult to arrange.

Another difficulty could arise with respect to the level of appreciation and understanding afforded character education in schools that operate under different
curriculum-based systems. The more ‘North America-based’ schools may be
more attuned to the idea of having a school counselor or an established character
education program in place. Schools whose system are more European or host
country national based may be less accepting of the idea for the need of a school
counselor or a character education program as part of the overall school schedule.
Academic courses may take precedence over anything that might be considered
extra-curricular.

Having school counselors as part of the regular school staff is an idea that
is widely accepted in America. Having a person assigned specifically as a school
counselor in European schools or schools in other regions of the world would be a
more foreign idea that is not an integral part of the regular school system.

For example, of the 94 member schools of the Association of International
Schools in Africa (AISA) only a handful have persons employed as school
counselors. In most instances the schools have fairly low enrollments that make it
financially unfeasible to hire someone as a counselor. Other international schools
assign counselor-related duties to teachers on staff. Any given teacher may be
assigned a group of students at a particular grade level for which to provide
pastoral care.

For many of the international schools that do not employ counselors or for
whom the idea of having a person employed solely in a counseling capacity, it
could provide difficult to incorporate a character education curriculum into the
regular daily schedule. It could also prove difficult to provide the necessary
teacher training needed to ensure the proper instruction and presentation of the lessons.

However, the AISA network of schools would be an ideal place to initiate such a program. The schools registered as AISA members often send faculty members to professional development conferences that AISA organizes in each region of the continent. Training workshops could be set up to instruct teachers as to how to implement the character education lessons in their school. An internet bulletin board or a list serve could be established and maintained by AISA to allow counselors or teachers in a counseling capacity to communicate with one another to the sake of consistency of presentation.

AISA also conducts a professional development conference for regional administrators each year. This would be a terrific venue to gain administrative support for the introduction and presentation of character education programs in their schools. With administrative support and the continuous communication opportunities that counselors/teachers would have, the possibility of implementing a broader character education program across the continent of Africa could be achieved.

A fourth possibility for future studies could revolve around the way in which the experimental and control groups were established for this study. At the onset of this study, advisory teachers were asked if they would like to include their advisory student groups in the study or not. All 12 advisory teachers expressed a willingness to participate. However, 3 of the advisory teachers expressed a willingness to be involved or to not be involved, whichever was best.
for the study. The result was that those 3 advisory teachers and their advisory
groups were excluded from taking part. Hence their groups made up the control
group that did not receive the intervention.

If there was more randomness in the selection of the experimental and
control groups, the results obtained may have been different. As it turned out, the
results were generally inconclusive across the board. If the groupings were
obtained in a more random way, the results may have been different.

Associated with this, the possibility of expanding the control groups could
make a difference. In this study, 75% of the teachers and students made up the
experimental group and 25% of the teachers and students made up the control
group. Different results that may have been more statistically significant might
have been obtained if the randomness of selecting teachers and advisory groups
was combined with expanding the control group to 50%.

The fifth possibility for future research to be discussed here involves the
CHARACTERplus survey. The results of the survey were mixed with statistical
significance being obtained for both experimental and control groups in grade 6;
no significance for the experimental 7th grade group but significance for the 7th
grade control group; significance for the 8th grade experimental group and no
significance for the 8th grade control group; and, when all grades were combined,
there was statistical significance for both experimental and control groups. The
expectation had been that the experimental groups would show statistical
significance and the control groups would not.
One explanation for the unexpected results could be that the CHARACTERPlus survey focused on student attitude toward their school and school environment where the intervention focused specifically on responsibility-based lessons. The hypothesis was that if students became more responsible for their own words and actions then they might look more positively at their school and school environment rather than blaming the school for their failures or disappointing experiences. The results did not bare this out.

In a general sense, the majority of the students involved in the study, whether in the experimental group or in the control group improved their attitude about their school and the school environment. Given that the results were mixed, it is not possible to state that the responsibility-based lessons had no effect on student attitudes. Further studies with a similar design may result in more significant findings.

If character education lessons were combined with a focus on improving school morale and focusing on maintaining a positive attitude in general about school, coursework, extra-curricular activities and other things associated with school, student attitudes may show more statistically significance positive changes.

**Summary**

Over the course of the presentation of the responsibility-based character education lessons, the results of the data obtained were inconclusive. There were no statistically significant results for student grade achievement or for student effort scores that could be generalized. Though some of the data were statistically
significant for some grade levels for some subjects, further studies would be
needed before the results could be extrapolated or generalized to other student
populations.

As for the results of the CHARACTERplus survey data, the results were
mixed leading to the possibility of future studies to determine what factors led to
the final results that were obtained. Statistical significance was noted for some
grade levels and some of the groups (experimental/control) but it would be
difficult to generalize the results so that they could be applied to any broader
context.
APPENDIX A. RESPONSIBILITY-BASED CHARACTER

EDUCATION LESSONS
The lessons that were devised for use in this study are included here. All twelve lessons follow in the same format that the advisory teachers received them to use for instructional purposes.
Lesson: ONE

Topic: RESPONSIBILITY

Title: Your Responsibilities … Part A

Time: 20 minutes

Materials Needed: Students need pencil/pen and paper
Butcher paper
Marker

Purpose: To help students begin to focus on the various kinds of responsibilities they have.

Procedure:
1. a. Introduce the topic of responsibility.
   b. Have students define the term in their own words.
   c. Compare definitions.
   d. Write the generally agreed upon definition on the board.
   e. After the class is over, give the definition to the office to have it tyed out and printed for display in the classroom.

2. Have each student make a list of the things that they are responsible for. Students should keep the lists they make to use in the next session.
Lesson: TWO

Topic: RESPONSIBILITY

Title: Your Responsibilities … Part B

Time: 20 minutes

Materials Needed: Students need pencil/pen and paper
Butcher paper
Marker

Purpose: To help students understand the various responsibilities they have at home, at school and in the community.

Procedure: 1. Using the lists the students wrote in the previous session, the teacher should list all responsibilities that students have on the board or on butcher paper as each student reads his/her list. Abbreviate/shorten the responsibilities as needed.

2. Ask students to categorize the various responsibilities as to where they take place. Guide as needed for them to develop three lists consisting of responsibilities at HOME, SCHOOL and in the COMMUNITY.

In the international school circumstance, responsibilities at home may vary widely from some students having a long list of household chores they perform to those having no chores at all due to the presence of household staff who take care of those things. There is potential for discussion on whether or not how taking on the responsibility of chores in the home can be a good thing.
Lesson: THREE

Topic: RESPONSIBILITY

Title: Who Is Responsible? … Part A

Time: 20 minutes

Materials Needed: none

Purpose: To help students begin to understand that they are responsible for their actions, words and grades.

Procedure: 1. Read each of the following situations to the student group and, for each, have the group discuss and decide upon who is responsible for what happened.

   Situation A: Bob puts his book bag on the table in the student center while he goes to buy his lunch. He leaves some money in a zippered pocket on the side of his book bag. When he comes back with his lunch he sees the pocket open and his money is missing. Who is responsible for Bob’s missing money? Explain your reasons for thinking what you think.

   Teachers should guide the discussion in such a way to make it clear that Bob is responsible for leaving his money in his book bag but someone else is responsible for stealing his money.

   Situation B: Sue is sitting on the bench with her friends during break. They are talking about the upcoming dance on Friday. Alice is sitting nearby and she overhears Sue saying that she will be going to the dance with Don. Alice comments loud enough to be overheard saying, “I don’t know why Don would want to go to the dance with someone as ugly as you.” Sue, hearing Alice’s comment, jumps up and runs over to Alice and starts yelling at her saying, ‘You’re the ugly one you stupid idiot. Who do you think you are to talk about me that way?” A teacher intervenes at this point and tells both girls to go to the principal’s office. Who is responsible for getting the girls into trouble? Explain your reasons for thinking what you think.

   Teachers should guide the discussion in such a way to make it clear that both girls are ultimately responsible for their own words and actions.
Lesson: FOUR

Topic: RESPONSIBILITY

Title: Who Is Responsible? … Part B

Time: 20 minutes

Materials Needed: none

Purpose: To help students begin to understand that they are responsible for their actions, words and grades.

Procedure: 1. Read each of the following situations to the student group and, for each, have the group discuss and decide upon who is responsible for what happened.

   Situation C: Priscilla asked Jake if she could copy his homework. Jake gave Priscilla his paper, she copied it and handed it in when the teacher collected it. The teacher noticed that Priscilla’s paper and Jake’s paper were the same. Both students received a 0% on the assignment. Who is responsible for the grades that Priscilla and Jake received on the assignment? Explain your reasons for thinking what you think.

   Situation D: John is in math class. They took a test on Chapter 8 yesterday. When John gets his test back it has a D- written at the top of the test. Who is responsible for John’s grade? Explain your reasons for thinking what you think.

For both situations above, teachers should guide the discussion to make it clear that the students involved are ultimately responsible for their grades. Teachers don’t give grades, students earn them and students are responsible for earning the grades they get.
Lesson: FIVE

Topic: RESPONSIBILITY

Title: When Are You NOT Responsible? – Part A

Time: 20 minutes

Materials Needed: Pen/pencil and paper

Purpose: To help students begin to understand and accept that they are responsible for their actions, words and grades.

Procedure:
1. Divide students into pairs or triplets.

2. Ask each pair/triplet to write out a simple situation for each of the following: (They need to save their written situations for the next session.)
   a. Describe a situation when a student is NOT responsible for something they say.
   b. Describe a situation when a student is NOT responsible for something they do.
   c. Describe a situation when a student is NOT responsible for a grade they get on a school assignment.
Lesson: SIX

Topic: RESPONSIBILITY

Title: When Are You NOT Responsible? – Part B

Time: 20 minutes

Materials Needed: none

Purpose: To help students begin to understand and accept that they are responsible for their actions, words and grades.

1. Using the situations the pairs/triplets devised in the previous session, ask each to present one of their situations to the rest of the students.

a. Have students discuss the situation and come to an agreement as to whether or not it fits the situation of the student NOT being responsible in the situation as it is described.

b. Go on to the next pair/triplet and discuss one of the situations they devised. Again, have the whole group decide whether or not the student in the situation is responsible or not for what he/she said or did or for the grade he/she received.

c. Continue on with the student devised situations until instructional time has run out.
Lesson: SEVEN

Topic: RESPONSIBILITY

Title: How Responsible Are You For … ? – Part A

Time: 20 minutes

Materials Needed: Copies of the responsibility survey … one per student
Pen/pencil

Purpose: To have students begin to think about how responsible they are for different aspects of their lives.

Procedure:
1. Review the concept of responsibility using the definition the group devised in the very first session.

2. Distribute one copy of the responsibility survey to each student. Explain the directions of the survey.
   a. Students should write their name, advisor and grade at the top of the sheet.
   b. Students should circle ONE number per question to indicate how responsible they think they are for each item on the survey.
   c. They should answer individually, based on what they think, without any input from others in the class.

3. When all students have finished, collect all of the survey forms. They will be collected and returned when the data has been entered into the analysis program. In the next session, the students will use the survey forms for a general discussion on the group responses.
SURVEY SHEET

Topic: RESPONSIBILITY

Title: How Responsible Are You For ..... ?

For each of the following, circle how responsible you think you are for each of the items listed. Circle only one number for each item.

How responsible are you for:

<table>
<thead>
<tr>
<th></th>
<th>NOT AT ALL RESPONSIBLE</th>
<th>ONLY SOMEWHAT RESPONSIBLE</th>
<th>MEDIUM RESPONSIBLE</th>
<th>PRETTY MUCH RESPONSIBLE</th>
<th>COMPLETELY, TOTALLY RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HOW YOU LOOK?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. YOUR HAIR?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. YOUR WEIGHT?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. YOUR HEALTH?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. WHERE YOU LIVE?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. THE CLOTHES YOU WEAR</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. THE FOOD YOU EAT?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. THE PLACES YOU GO?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. THE PETS YOU HAVE?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. MOVIES YOU WATCH?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. BOOKS YOU READ?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. FRIENDS YOU HAVE?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. THE THINGS YOU DO?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. THE THINGS YOU SAY?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. THE GRADES YOU GET?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Lesson: EIGHT

Topic: RESPONSIBILITY

Title: How Responsible Are You For …? – Part B

Time: 20 minutes

Materials Needed: Copies of the responsibility survey completed in the previous session

Purpose: To have students continue to think about how responsible they are for different aspects of their lives and to compare how responsible they think they are with how others in the group think.

Procedure:
1. Again, review the concept of responsibility using the definition the group devised in the very first session.

2. Distribute the survey forms back to the individuals who completed them in the previous session.

3. Go through the survey items one by one, giving students an opportunity to state the answer they circled on each item. Based on student responses, the teacher should try to determine the overall ‘average’ answer for the group. (This can be done by a show of hands … ‘How many of you circled 5?’; ‘How many of you circled 4?’, etc. or any other method to determine the average response for each question.)

4. Allow for discussion on any of the items as to why certain students rated their level of responsibility for that item higher than others might have.
Lesson: NINE

Topic: RESPONSIBILITY

Title: Responsibility Skits – Part A

Time: 20 minutes

Materials Needed: none

Purpose: To have students continue to think about how responsible they are for different aspects of their lives.

Procedure:
1. Divide the group into pairs, triplets, or any size groups that will work best for the students involved.

2. Each group should discuss a short skit to present a situation in which other groups will have to determine ‘who is responsible?’.
   a. Skits should last no longer than a minute or two.
   b. Not everyone in each group needs to be involved in the presentation of the skit but everyone should be involved in the planning process.
   c. Groups should rehearse their skit.
   d. Groups should determine ‘who’ they think is responsible in their given situation before presenting it.
Lesson: TEN

Topic: RESPONSIBILITY

Title: Responsibility Skits – Part B

Time: 20 minutes

Materials Needed: none

Purpose: To have students continue to think about how responsible they are for different aspects of their lives.

Procedure:
1. Give groups a minute or two to quickly review their skit before presentations begin.

2. Have each group present its skit to the rest of the groups.

3. With no input from the group presenting the skit, the other groups should discuss ‘who’ they think is responsible in the given situation.

4. After all groups have presented their skit and have had the others discuss ‘who’ is responsible … the entire group should decide which situation brought about the ‘best’ discussion. The skit that is decided upon will be presented to the students from all other advisory groups in the next session.
Lesson: ELEVEN

Topic: RESPONSIBILITY

Title: Responsibility Skits – Part C

Time: 20 minutes

Materials Needed: none

Purpose: To have students continue to think about how responsible they are for different aspects of their lives.

Procedure:
1. All advisory groups doing the responsibility lessons will meet together in the auditorium.

2. The skits selected by each group as being the ‘best’ will be presented in a similar format to the overall group.

3. Each group will present its skit without any comment as to ‘who’ is responsible. After presenting its skit, the overall group will discuss ‘who’ is responsible in the given situation.

4. Groups will continue to present their situations in the next session until all groups have presented and have had their situation discussed.
Lesson: TWELVE

Topic: RESPONSIBILITY

Title: Responsibility Skits – Part D

Time: 20 minutes

Materials Needed: none

Purpose: To have students continue to think about how responsible they are for different aspects of their lives.

Procedure:
1. All advisory groups doing the responsibility lessons will meet together in the auditorium.

2. The skits selected by each group as being the ‘best’ will be presented in a similar format to the overall group.

3. Each group will present its skit without any comment as to ‘who’ is responsible. After presenting its skit, the overall group will discuss ‘who’ is responsible in the given situation.
# Responsibility Lesson Plans And Instructional Time Line

<table>
<thead>
<tr>
<th>WEEK</th>
<th>LESSONS</th>
<th>LESSON TITLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 12 – 16</td>
<td>Lesson 1</td>
<td>Your Responsibilities – Part A</td>
</tr>
<tr>
<td></td>
<td>Lesson 2</td>
<td>Your Responsibilities – Part B</td>
</tr>
<tr>
<td>April 19 - 23</td>
<td>Lesson 3</td>
<td>Who Is Responsible? – Part A</td>
</tr>
<tr>
<td></td>
<td>Lesson 4</td>
<td>Who Is Responsible? – Part B</td>
</tr>
<tr>
<td>April 26 – 30</td>
<td>Lesson 5</td>
<td>When Are You NOT Responsible? – Part A</td>
</tr>
<tr>
<td></td>
<td>Lesson 6</td>
<td>When Are You NOT Responsible? – Part B</td>
</tr>
<tr>
<td>May 3 – 7</td>
<td>Lesson 7</td>
<td>How Responsible Are You For …? – Part A</td>
</tr>
<tr>
<td></td>
<td>Lesson 8</td>
<td>How Responsible Are You For …? – Part B</td>
</tr>
<tr>
<td>May 10 – 14</td>
<td>Lesson 9</td>
<td>Responsibility Skits – Part A</td>
</tr>
<tr>
<td></td>
<td>Lesson 10</td>
<td>Responsibility Skits – Part B</td>
</tr>
<tr>
<td>May 17 – 21</td>
<td>Lesson 11</td>
<td>Responsibility Skits – Part C</td>
</tr>
<tr>
<td></td>
<td>Lesson 12</td>
<td>Responsibility Skits – Part D</td>
</tr>
</tbody>
</table>
April 13, 2005

Dear Mr. Howard:

The University of Central Florida's Institutional Review Board (IRB) received your protocol IRB #2341 entitled, "The Effects of a Responsibility-Based Character Education Program on Middle School Academic Achievement and School Climate at an International School in East Africa". The IRB Chair did not have any concerns with the proposed project and has indicated that under federal regulations this project using de-identified data is exempt from review by our IRB, so an approval is not applicable and a renewal within one year is not required.

Please accept our best wishes for the success of your endeavors. Should you have any questions, please do not hesitate to call me at 407-823-2991.

Cordially,

[Signature]
Barbara Ward, CIM
IRB Coordinator

Copy: IRB File
THE UNIVERSITY OF CENTRAL FLORIDA
INSTITUTIONAL REVIEW BOARD (IRB)

IRB Committee Approval Form

PRINCIPAL INVESTIGATOR(S): Terry Howard
IRB #: 05-2541

PROJECT TITLE: The Effects of a Responsibility-Based Character Education Program on Middle School Academic Achievement and School Climate at an International School in East Africa

[X] New project submission
[ ] Reclassification of lapsed project #
[ ] Continuing review of lapsed project #
[ ] Continuing review of #
[ ] Study expired
[ ] Initial submission was approved by expedited review
[ ] Initial submission was approved by full board review but continuing review can be expedited
[ ] Suspension of enrollment; email sent to PI; entered on spreadsheet; administration notified

Chair
[ ] Expedited Approval
   Dated: 2005
   Cite how qualifies for expedited review: minimal risk and

   [ ] Exempt
   Dated: 2005
   Cite how qualifies for exempt status: minimal risk

   [ ] Expiration
   Date:

   [ ] Waiver of documentation of consent approved

   [ ] Waiver of consent approved

NOTES FROM IRB CHAIR (IF APPLICABLE): Data analysis or de-identified data

Signed: (Chair)

Signed: (IRB Co-Chairs)

Dr. Sophia Dzankovwe

Dr. Jacqueline Byars

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C. UCFIRB Form

The complete IRB packet must be submitted by the 1st business day of the month for consideration at that monthly IRB meeting. Please see page 6 of this manual for detailed instructions on completing this form.

1. Title of Project: The Effects of a Responsibility-Based Character Education Program on Middle School Academic Achievement and School Climate at an International School in East Africa

2. Principal Investigator:
   Signature: [Signature]
   Name: Dr. Tarry Howard
   Degree: Ed. Specialist in Counseling
   Title: Middle School Counselor
   Department: Child, Family & Community Sciences
   College: Education
   E-Mail: thoward_abi@yahoo.com
   Telephone: 254-20-512 067 (Kenya)
   Facsimile: n/a
   Home Telephone: 254-20-512 067 (Kenya)

3. Supervisor:
   Signature: [Signature]
   Name: Dr. E. H. Robinson, III
   Degree: Ph.D.
   Title: Professor
   Telephone: 467-823-3819
   Facsimile: 467-823-3859
   Department: Child, Family & Community Sciences
   College: Education
   E-Mail: echish@yahoo.com

4. Dates of Proposed Project (cannot be retroactive):
   From: May 1, 2005
   To: June 8, 2005

5. Source of Funding for the Project: (project title, agency, and account number): none ... no funding is necessary for this study to be conducted

6. Scientific Purpose of the Investigation: The purpose of this investigation is to determine how student attitudes about their school environment are affected and how student academic achievement (grades) and/or effort scores are affected by a character education program that focuses on responsibility.
7. Describe the Research Methodology in Non-Technical Language: (the UCFIRB needs to know what will be done with or to the research participants) This study will use an existing database of information collected by the “Florida Partnerships in Character Education” project. Information in the existing “Florida Partnerships in Character Education” database includes student scores, attendance, anecdotal information related to Character Education (e.g., descriptions of school character education events, classroom projects, student work samples), and data from school climate surveys.

8. Potential Benefits and Anticipated Risks. (Risks include physical, psychological, or economic harm.) Describe the steps taken to protect participants.

There are no anticipated risks to any of the students involved in this study. As part of the school agreement with the “Florida Partnerships in Character Education” students are exposed to a defined character education program.

9. Describe how participants will be recruited, the number and age of the participants, and proposed compensation (if any): This study is an analysis of information collected by the “Florida Partnerships in Character Education”. Participants were recruited for participation by the school and the “Florida Partnerships in Character Education”. This analysis will focus on middle school students in grades 6-8 and will involve approximately 140 students.

10. Describe the informed consent process: (include a copy of the informed consent document)

Consent to utilize the existing “Florida Partnerships in Character Education” data base was obtained by the co-principal investigators. Informed consent procedures for the original data were followed according to the IRB filed by the “Florida Partnerships in Character Education”.

I approve this protocol for submission to the UCFIRB.

[Signature]

Director / Date
Memorandum

To: Barbara Ward, IRB Coordinator
From: Terry Howard
CC: Mike Robinson, Shannon Ray
Date: 31/03/2005

RE: IRB Approval for a study involving existing data base compiled by the "Florida Partnerships in Character Education"

Please accept the attached IRB packet for review. It includes the required UCF IRB form seeking approval to use an existing data base compiled by the "Florida Partnerships in Character Education" in a dissertation study at the International School of Kenya which is one of the schools involved in the "Florida Partnerships in Character Education" study of character education.

If you have any questions or concerns, please feel free to contact me in Nairobi, Kenya at 254-20-512 067. You can also reach me via e-mail at thoward_nbi@yahoo.com.

Thank you for your time and attention.

Sincerely,

Terry Howard
The following is a copy of the CHARACTERplus survey document that was administered to all students taking part in this study. This survey was slightly modified from the Florida’s Partnership in Character Education survey used by the University of Central Florida.
Secondary Students Survey

School Name: INTERNATIONAL SCHOOL OF KENYA  Date:___________  Gender: Male  Female
No.___________
Your Ethnicity: ___ American Indian  ___ Asian/Pacific Islander  ___ Black, non-Hispanic  
___ Hispanic  ___ White, non-Hispanic  ___ Multi-racial
Your Grade: (Circle One)  6  7  8  9  10  11  12

For the following items, read each sentence carefully, then decide how often the statement is true. Fill in the bubble that best matches your answer.

<table>
<thead>
<tr>
<th></th>
<th>Very Often or Strongly Agree</th>
<th>Sometimes or No Opinion</th>
<th>Never or Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The students at my school are nice to each other.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>2. The students at my school try to include everyone.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>3. The students at my school are only nice to their friends.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>4. The students at my school make fun of people who are different.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>5. The students at my school try to make new students feel welcome.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>6. The adults at my school care about me.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>7. The adults at my school are kind to me.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>8. The students at my school get along well together even if they are different.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>9. The students at my school insult or hit each other.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>10. The students at my school can work out problems without fighting or insulting each other.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>11. The students at my school take good care of school property.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>12. The students at my school write graffiti or vandalize school property.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>13. The students at my school take responsibility for their actions.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>14. The adults at my school talk politely to me.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>15. The students at my school respect their teachers.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>16. The students at my school think it’s important to be a good citizen.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
<tr>
<td>17. The students at my school think it’s important to attend school every day and be on time.</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
<td>6 6 6 6 6</td>
</tr>
</tbody>
</table>
### Secondary Students Survey (continued)

<table>
<thead>
<tr>
<th></th>
<th>Very Often or Strongly Agree</th>
<th>Sometimes or No Opinion</th>
<th>Never or Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. The students at my school treat one another fairly.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>19. The students at my school tell the truth.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>20. The students at my school cheat on their school work.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>21. The students at my school decide on school rules.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>22. The rules in our school are fair.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>23. The students at my school follow the rules.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>24. The adults at my school treat me fairly.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>25. My school expects everyone to get along even if they are different.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>26. My school expects everyone to be kind and caring.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>27. My school expects everyone to treat each other fairly.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>28. My school expects everyone to obey the rules.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>29. My school expects everyone to tell the truth.</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
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