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# AN INVESTIGATION OF THE POTENTIAL BENEFITS OF A FACULTY MENTOR PROGRAM AS RELATED TO HIGH SCHOOL STUDENTS' ATTITUDES, AFFILIATION, AND SELF-EFFICACY

Michael R. Sinatra

BA, The University of Connecticut, 1987 MS, Boston University, 1989

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Education in Instructional Leadership

in the

Department of Education and Educational Psychology

at Western Connecticut State University

## ABSTRACT

Faculty mentor programs and other types of student advisory programs are a popular topic among educational leaders today. What drives their popularity is the need to personalize students' learning experiences, a particular problem in large high schools and middle schools. Many studies have found that students who have at least one caring adult who knows them well are less likely to engage in at-risk behaviors. These students are often not only more academically successful, but are happier and healthier young adults.

While most educators are in agreement about the need for schools that offer students a personalized setting, how to best go about this often is debated. Many secondary schools have attempted to implement a faculty mentor program or similar student advisory program with mixed results. A lack of research on this topic further clouds the issue.

The study was designed to assess the potential benefits associated with a faculty mentor program. Four different instruments were used to measure 9<sup>th</sup> and 10<sup>th</sup> grade students' attitudes, affiliation, and self-efficacy in a school which has a Faculty Mentor program and a similar school with no such program. The results of this study provide the educational community with data that will help guide choices regarding how best to personalize our schools and the efficiency of faculty mentor programs in providing enhanced educational programming for all students.

The primary instrument employed in this study was the *Charles F. Kettering* (CFK), *Ltd., School Climate Profile*. A one-way between-subjects multivariate analysis

i

of covariance (MANCOVA) was used to examine differences between two levels of the independent variable, students participating in a Faculty Mentor Program and students who did not participate in a mentor program. The dependent variables consisted of the 16 subscales on the CFK School Climate instrument. While many of the *CFK* subscales measure attitude, six in particular demonstrated the value of participation in the Faculty Mentor Program: High Morale, Cohesiveness, Effective Communications, Effective Teaching-Learning Strategies, Ability to Plan for the Future, and Identification and Working with Conflicts. Students in the treatment group scored significantly higher on each of these subscales when compared with the control group of students.

Additional follow-up data specific to the Faculty Mentor Program was provided through three other instruments. These were the Faculty Mentor Program Student Survey, Student interviews, and the Mentor Survey. The first two focused on student perceptions of how effective the Faculty Mentor Program was in meeting its objectives while the latter was specific to mentor perceptions of the same. In all three cases, the data collected on the Faculty Mentor Program showed that it was meeting many of its stated objectives.

It can be concluded that participation in a Faculty Mentor Program did, in part, positively impact students' attitudes, affiliation, and self-efficacy.

ii



School of Professional Studies Department of Education and Educational Psychology Doctor of Education in Instructional Leadership

Doctor of Education Dissertation

### AN INVESTIGATION OF THE POTENTIAL BENEFITS OF A FACULTY MENTOR PROGRAM AS RELATED TO HIGH SCHOOL STUDENTS' ATTITUDES, AFFILIATION, AND SELF-EFFICACY

#### Presented by

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Finally, I wish to thank my high school for its support in this study. At every level, from my students, to my principal, to the district's superintendent, I was met with encouragement despite the demands of the study. For this, I will always be appreciative.

iv

# DEDICATION

This was probably the easiest section to write in this dissertation. My wife, Roberta, was constantly at my side offering help as a research assistant and source of emotional support. Her willingness to take on added domestic responsibilities gave me the time and space to get this study completed. I love her and can never really thank her enough. To my two beautiful daughters, Kathleen and Julia, I hope that this dissertation shows what hard work can accomplish. Our reward now that this study is complete is added time together. To my parents, Carol Rapp and Frank Sinatra, my love and gratitude for believing in me longer than anyone else. Finally, I wish to dedicate this dissertation to my uncle, Dr. Robert F. Randle. While he passed away some time ago, his inspiration as an educator and writer lives on in me. In his book *The Origins of Peace*, he offered me a dedication from Danté's *Inferno*: ...infin che il Veltro verrà ...I offer this extension of the quote:

Questi non ciberà terra né peltro, ma sapienza, amore e virtute

# TABLE of CONTENTS

	<u>F</u>	<u>age</u>
Abstract		i
Acknowledgements		iv
Dedication		v
Table of Tables		ix
Chapter One:	Introduction and Identification of the Topic	1
	Rationale for Selecting the Topic	2
	Statement of the Problem	6
	Description of Potential Benefits of the Research	7
	Definition of Key Terms	7
	Research Questions	9
	Methodology Overview	9
Chapter Two:	Review of the Literature	12
	Social and Emotional Learning (SEL)	12
	Emotional Intelligence	17
	Student Connectedness and Affiliation with School	20
	Personalization	25
	Transition Programs	31
	History of Mentor Programs	34
	Definition of Mentoring and Related Terms	40
	Need for Mentor Programs	41
Chapter Three:	Methodology	47
	Research Questions	47
	Description of the Setting and the Subjects	47

	Instrumentation	50
	The CFK School Climate Profile	50
	Student Interviews	53
	Faculty Mentor Program Student Survey	55
	Mentor Survey	56
	Description of the Research Design	57
	Description and Justification of the Analyses	61
	Data Collection Procedures and Timeline	63
	Statement of Ethics and Confidentiality	66
Chapter Four:	Analysis of Data and Explanation of the Findings	67
	Data Screening Process	69
	Descriptive Statistics	73
	Analysis of Data	77
	CFK Instrument	77
	The CFK and Attitude	81
	The CFK and Self-Efficacy	81
	The CFK and Affiliation	82
	Faculty Mentor Groups Student Survey	83
	Mentor Survey	90
	Student Interviews	91
Chapter Five:	Summary and Conclusions	99
	Summary of the Study	99
	Findings	101
	Comparison and Contrast of Findings	103
	Limitations of the Study	109

	Implications		110
	Suggestions for	or Future Research	113
References			117
Appendixes			135
	Appendix A:	Mentor Survey	135
	Appendix B:	Student Interview Questions	137
	Appendix C:	Faculty Mentor Groups Student Survey	139
	Appendix D:	The CFK, Ltd., School Climate Profile	142
	Appendix E:	Faculty Mentor Program Objectives	152
	Appendix F:	Freshmen Forum and Sophomore Seminar -	-
	Outlines and Checklists		154
	Appendix G:	Procedural Timeline Table	157

# Table of Tables

		Page
Table 1:	Total Pretest Scores for CFK by Program Level	71
Table 2:	Levene's Test of Homogeneity of Variances for CFK Pretest	72
	Total Scores	
Table 3:	t-test for Total Pretest Scores for CFK by Program Level	72
Table 4:	Descriptive Statistics for CFK Subscales for Treatment and	74
	Control Groups	
Table 5:	MANCOVA Analysis of CFK Subscales	78
Table 6:	Descriptive Summary of Positive Responses to Faculty Mentor	84
	Program Student Survey	
Table 7:	Summary of Positive Responses to Faculty Mentor Program	88
	Student Survey	
Table 8:	Mentor Survey Responses Out of a Total of 23 Completed	91
	Surveys	
Table 9:	Student Interview Responses	92
Table 10:	Belongingness/Connections to School, Mentor, and Mentor	94
	Group	
Table 11:	Benefits of Faculty Mentor Program	95
Table 12:	Difficulties in School	96

#### CHAPTER ONE

Much has been written of the need for providing a personal experience for students, particularly in large high schools. This includes calls-to-action by the Coalition of Essential Schools (1984, *Common Principles*), the Carnegie Council on Adolescent Development (1989 & 2000, *Turning Points*), and the National Association of Secondary School Principals (1996, *Breaking Ranks*). The National Research Council (NRC), in its listing of common strategies used to create comprehensive high school reform, includes the personalization of the school experience for students through the use of teachers and other staff members acting as mentors or advisors (2004, Table 8-2, p. 193). The National High School Alliance (2005) also calls for the identification of an advocate/advisor for each student. All of these reports by leading educational advocacy groups over a twenty-year period agree that establishing strong bonds between students and adult advocates or mentors may be one way of improving our nation's schools across many dimensions.

One possible way to create such a personalized high school experience is through the establishment of a faculty mentor program or student advisory program. This is a school program which, by definition, groups small numbers of students with a teacher mentor. It features frequent personal contact between the teacher and student in an attempt to focus on and facilitate both academic and non-academic growth.

The term mentor has an ancient derivation. In Greek mythology, Mentor was Odysseus's counselor. Athena, the goddess of wisdom, would often take on Mentor's form to protect and teach Odysseus's son Telemachus. Today the meaning of the word mentor has expanded to include any wise and trusted counselor or teacher. Mentoring

programs are put in place to offer students a number of potential benefits. These include, but are not limited to, stronger self-concept, greater achievement, increased feelings of belonging (Black, 2002), and reduced risk of violence (Breunlin, Lieber, Simon, & Cimmarusti, 2002).

Participation in a mentorship program is correlated with a number of positive results such as an increased likelihood to eventually hold a stable job and higher educational and professional aspirations (Black, 1999). Mentors can assist students with goal-setting and decision-making, accessing resources, communicating with both peers and adults, improving academic performance, and making successful life transitions.

#### Rationale for Selecting the Topic

According to the U. S. Census Bureau, the number of school age students continues to rise to historic high enrollments. Between 1990 and 2000, 8 million students were added to elementary and high school classrooms around the nation (Day & Jamieson, 2003). Unfortunately, many of these students will attend large, often impersonal, schools. Post World War II, the number of schools has been reduced by 70% and the average size of an American school has grown by a factor of five (McCluskey, 2002). This growth in school size is a particular problem in secondary schools.

The desire for mentor programs stems from an attempt to replicate the advantages associated with smaller, more personalized secondary schools in larger secondary schools. In fact, the National High School Alliance, in its 2005 report *A Call to Action: Transforming High School for All Youth*, noted that large high school size presents a significant roadblock to attempts to personalize high school.

A number of studies of small high schools (populations of 600 or less) document the significant advantages they offer students as compared to their larger counterparts (Blum, McNeely, & Rinehart, 2002; Cotton, 2001). Lee and Smith (1997) called for enrollments of between 600-900 students for the most effective learning to occur. The study also noted that the least learning, as measured by math and reading achievement scores, occurred in large high schools with enrollments over 2,100.

Another recent study by Johnson, Duffett, Farkas and Collins (2002) showed that parents of students in small high schools gave their schools better ratings as compared to parents of students in large high schools in a number of areas. Perceived benefits reported by the parents of children enrolled in small high schools included enhanced civility, reduced student alienation, greater parent-teacher engagement, and better academic preparation. Teachers in large high schools also give their schools lower ratings in terms of the ability to maintain high academic standards, providing help to struggling students and allowing too many students to fall through the cracks. The study demonstrated that in both large high schools and small high schools, whether the survey respondent was a parent, a student, or a teacher, there was a general perception that small high schools offer significant advantages over large high schools.

There is a consensus in the educational community that smaller schools offer a multitude of benefits to students. These benefits include reduced drop-out rates, increased student attendance, additional extracurricular involvement (Lindsay, 1982; Pittman & Haughwout, 1987); more trusting relationships (Bryk & Schneider, 2002); higher academic achievement (Fowler & Walberg, 1991; Klem & Connell, 2004); enhanced

educational equity (Lee & Smith, 1995); and a stronger bond to school, particularly at the secondary level (Berkowitz & Bier, 2005).

One way large high schools have dealt with these findings is to divide into smaller schools. This is what the Coalition Campus Schools Project (CCSP) did in New York City in 1992. Two large failing high schools were divided at the same time that 11 new smaller schools (300-400 students) were created. This reform initiative, sponsored by the Center for Collaborative Education, the Coalition of Essential Schools, the New York City Board of Education, the United Federation of Teachers, and a number of private funders, resulted in schools that are judged a success (Ancess & Ort, 1999). Graduation rates in the CCSP schools are high, drop out rates are low, and 89% of students from Manhattan schools in the cohort went on to attend college. Much of this success was attributed not only to small school size but on the emphasis placed on personal relationships between students and staff. In fact, many of the CCSP schools have a mentor program.

Despite the consensus that small high schools are often better for students, most public high school students are still attending schools with enrollments of 1,000 students or more (Johnson et al., 2002). In large high schools that can not or will not divide into smaller schools, one way to attempt to replicate the advantages smaller schools offer is through the creation of Small Learning Communities (SLCs). Establishing a SLC may afford students with many of the benefits enjoyed by students in a smaller educational setting. The National Research Council's Committee on Increasing High School Students' Engagement and Motivation to Learn and The Institute for Research and Reform in Education's First Things First (FTF) program, like many similar education

reform groups, advocate the use of SLCs. Interestingly, the FTF program calls on coupling SLCs with student advisory or advocacy programs (Klem & Connell, 2004).

These educational reform efforts are, in turn, an outgrowth of the earlier *schools within schools* and *mini-schools* movements. All of these school reform initiatives feature an attempt to focus on the needs of learners in a personalized setting that encourages active, student-centered learning and collaboration between all members of the educational community.

Faculty mentor programs also can represent a significant expenditure of resources, both financial and human, to school districts. As such, it is important to determine if a mentor program is worthwhile. For school districts that have already implemented a mentor program, it is important to provide empirical data to justify the continuation of such a program. Evidence of success must be gathered with a specific emphasis on whether the program's purpose is being addressed. In addition, it is important to determine what, if any, components of the Faculty Mentor Program might be changed to ensure even greater success.

A pilot study was conducted by this researcher to examine perceived benefits associated with a Faculty Mentor Program. The study consisted of a series of open-ended survey questions that were given to all mentors (with the exception of the Instructional Leader of the Faculty Mentor Program) at a large suburban high school in Connecticut. Currently, these mentors work with both freshmen students as part of the Freshmen Forum and sophomore students as part of the Sophomore Seminar programs.

Mentors (n=33) differed across a number of variables including sex (18 female and 15 male faculty members), academic discipline (most departments being

represented), years of experience as a teacher, and years of involvement in the Mentor Program. It is important to note that the latter factor may be particularly significant in that four mentors were new to the program during the 2006-2007 school year while other mentors had been with the program since its inception five years ago.

In the 2006 Mentor survey (see Appendix A), a number of Faculty Mentor Program strengths were identified. These responses were grouped into four main areas. These include more personalization, the development of bonds between mentor and their mentor group students, the establishment of a safe place for students to unwind and voice questions, and the creation of a program that can assist students in crisis.

The limitations in this pilot study were the reliability and validity of the survey instrument, the lack of focus on student responses, and the small sample size. The findings did suggest, however, that it would be worthwhile to examine both mentor and students' responses using a more reliable and valid instrument.

#### Statement of the Problem

One way to create a personalized high school experience is through the establishment of a faculty mentor program. While other methods of establishing these personalized experiences have been extensively studied, this is not the case for faculty mentor programs. Perhaps one reason for this is the relative lack of school districts that are willing to commit the resources needed to make a mentor program a success (Adelman & Taylor, 2006). Another problem educators confront in justifying the implementation of a faculty mentor program is the dearth of empirical research demonstrating the benefits of this approach. An exhaustive review of the literature and an analysis of the success of faculty mentor programs and student advisory programs failed

to reveal the existence of a single research study that provides empirical evidence for the benefits of such an approach.

To further complicate matters, there are a variety of types of mentoring programs available to students in secondary schools. Some programs feature connections between students and adult role models from the community such as programs like Big Brothers/Big Sisters. Others attempt to recruit members of the business community to serve as mentors for students. Educators who wish to provide students with a mentor experience by using adults from the school community – teachers and other support staff – have even less information at their disposal about the merits of such an approach.

#### Potential Benefits of the Research

The Faculty Mentor Program is one that required significant support from its district both in human and financial resources. Naturally, this district was eager to obtain data that support the need and value of such a program. The results of this study may offer valuable insight into how the Faculty Mentor Program should change and evolve in the future. Furthermore, this research on the effect of mentor programs in secondary schools may prove advantageous to other researchers in this area. Many high schools, in Connecticut and across the nation, are currently considering the addition of faculty mentor or student advisory programs. Without more data that support the advantages these programs offer to students, these efforts may be slowed or stymied.

### Definition of Key Terms

The following terms are relevant to this proposed research:

1. *Mentor Programs* are those initiatives which provide a "…way of developing learners, learning organizations and more cohesive communities" (Miller, 2002,

pp. xiv). They represent "...a one-on-one commitment by volunteers to improve the self-esteem, attitudes, and attendance of youngsters ... (Weinberger, 1992, p. 8).

- 2. Student advisory systems are similar to faculty mentor programs. They are defined as programs in which "each student is known well by one staff member" and "each staff member receives all important information on the student." In addition, "the staff member knows the student's parents or guardians" and serves as the student's "advocate in the school" (Goldberg, 1998, pp.1-2).
- 3. *Small learning communities* are "any separately defined, individualized learning unit within a larger school setting" (Sammon, 2000, p.16).
- 4. *Self-efficacy* is defined by Bandura (1997) as "one's capabilities to organize and execute the courses of action required to produce given attainments" (Driscoll, 2005, p. 316).
- 5. *Climate* is the generalized "feelings and attitudes, emotions, and the behaviors" associated with a specified locale (Gershenfeld & Napier, 2004, p. 381).
- 6. Attitudes are defined in Gagné's Taxonomy of Learning Outcomes model (1985) as "acquired internal states that influence the choice of personal action toward some class of things, persons, or events" (Driscoll, 2005, p. 363).
- 7. Affiliation is defined in Moos and Trickett's Classroom Environment Scale as "how well students feel they know one another, how much they want to help one another..., and to what degree they enjoy working together" (Schmuck & Schmuck, 2001, p.69).

#### **Research Questions**

Based on prior research and by using a systematic approach, this research explored the effects of a Faculty Mentor Program on high school students. It specifically focused on three areas:

- 1. What are the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy?
- 2. What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?
- 3. What are Mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?

# Methodology Overview

The methodology employed in this study involved a mixed methods design. Quantitative data was provided through two different instruments. The primary quantitative instrument used in this study was the *Charles F. Kettering (CFK), Ltd., School Climate Profile.* This instrument was employed to address research question one. A quasi-experimental design was used in which a sample treatment group of both freshmen and sophomores who had participated in the Faculty Mentor Program (n=49) was compared with a sample control group of freshmen and sophomores (n=49) from another similar high school that did not have a Faculty Mentor Program or other advisory program in place. Students at both sites were surveyed in September of 2007 and then again in December of 2007 to determine what, if any, significant difference occurred in students' attitudes about their school. Additional qualitative data was provided through the Faculty Mentor Program student survey given to both freshmen and sophomore students (n=432). The Likert-scale design provided site-specific feedback on a variety of topics tied to the objectives of the Faculty Mentor Program. In addition, eight student interviews were conducted. Students were tape recorded during the interview and the interview transcribed so that coding might be facilitated. The results of these interviews and the Faculty Mentor Program student survey were used to address research question two. Both the student interview questions and the Faculty Mentor Program student survey questions were reviewed by colleagues on the Faculty Mentor Steering Committee (consisting of two counselors and four teacher-mentors) to ensure content validity.

The third source of qualitative data for the study was obtained through a Mentor Survey. It consisted of three open-ended questions that were given to all 33 mentors. The results of this survey were analyzed by the Faculty Mentor Program Steering Committee to identify common themes and patterns of responses and ensure content validity. The results were used to address research question three.

#### Conclusion

Chapter One focused on the fact that the educational community continues to search for ways to personalize the high school experience for students in large population schools. The benefits afforded by strong personal relationships between students and an adult mentor are universally recognized. Despite this recognition, there is a noticeable lack of advisory or faculty mentor programs in large high schools to address this problem.

While some research suggests a number of important benefits associated with mentoring, there is a lack of empirical research at the high school level to support this assumption. The research entailed in this study seeks to examine whether a Faculty Mentor Program positively impacts student attitudes about themselves and their schools, affiliation with their school or group within their school, and overall self-efficacy. A literature review suggests that students who possess these positive attitudes will see benefits in a number of dimensions from health to academic achievement. The establishment of a Faculty Mentor Program that meets its objectives by personalizing the high school experience and positively impacting students' attitudes, affiliation, and self-efficacy may have a significant effect on students' overall well-being.

#### CHAPTER TWO

# **REVIEW OF THE LITERATURE**

Research on faculty mentor programs is lacking (Goldberg, 1998). This is true in terms of the small number of studies on this topic as well as the quality of the research. In addition, the few studies that do exist often are focused on the middle school experience or provide a single narrative account (Makkonen, 2004). This chapter will review the literature and related research on (a) social and emotional learning, (b) emotional intelligence, (c) student connectedness and affiliation with school, (d) personalization of students' school experience, (e) middle school to high school transition programs, (f) a history of mentor programs, (g) a definition of mentoring and related terms, and (h) the need for mentor programs.

# Social and Emotional Learning (SEL)

One conceptual lens through which we can examine the benefits of a faculty mentor program is in the work being done on social and emotional learning as a fairly recent educational reform. In 1999, The National Center for Innovation and Education issued its guiding beliefs that today represent the heart of social and emotion programming. These include a focus on the development of caring relationships and attention to the emotional well-being of students (Novick, Kress, & Elias, 2002). Many have called SEL the missing piece in the United States efforts to improve our schools (Elias et al., 1997). The same is true for international efforts to reform education using SEL (Elias, 2003).

Educators have recognized for some time that to focus solely on a child's academic needs is a mistake. They also intuitively know that a child's emotions can help or hinder the learning process and their future (Devaney, O'Brien, Tavegia, & Resnick, 2006). Many programs have been implemented over the years to address other aspects of students' lives that move beyond the academic realm. Unfortunately, many of these programs were fragmented and often temporary in their scope and effect (Weissberg, Resnik, Payton, & O'Brien, 2003).

In 1994, at a meeting hosted by the Fetzer Institute, the term social and emotional learning was first coined. Other organizations, notably the Collaborative for Academic, Social, and Emotional Learning (CASEL), and researchers have since used SEL to mean "the process of acquiring the skills to recognize and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively" (Devaney et al., 2006, p. 11).

SEL proponents argue that focused, long-term efforts in this area are needed (Greenberg et al., 2003; O'Brien, Weissberg, & Shriver, 2003). Unfortunately, some educators have been slow to embrace SEL in the face of mounting academic requirements, high-stakes testing, and new government mandates. What has been necessary is for SEL proponents to demonstrate that SEL is not simply an optional program but an approach that will yield benefits in many dimensions, including facilitating academic learning, for students (Bloodworth, Weissberg, Zins, & Walberg, 2001; Zins, Weissberg, Wang, & Walberg, 2001).

Cooperative learning as an educational concept shares with SEL a focus on many of the same skills. These include self-awareness, self-management, social awareness,

relationship skills, and responsible decision making (Munro, O'Brien, Payton, & Weissberg, 2006). While many educators are familiar with cooperative learning as a classroom strategy, like SEL it may be used both in and outside the classroom with success. Cooperative learning is also similar to SEL in terms of the benefits it offers – increased student engagement, motivation, empathy and learning (Munro et al., 2006).

Social and emotional skills, like academic skills, are not learned and internalized unless coherent, systematic efforts are made to teach students these skills from preschool through high school and beyond (Elias, 2006). Previous programmatic efforts in this area were often preventative measures which were frequently taken in response to some real or perceived societal problem. These efforts were often disjointed and short-term in nature and, as such, had a limited impact. Today the focus has moved to a broader definition of youth development that encompasses not just preventative programs but programs which build the skills and competencies that children need to be successful and happy individuals (Pittman, Irby, Tolman, Yohalem, & Ferber, 2003). Some have even called for a broader conceptualization of social and emotional learning in schools so as to include the spiritual growth of children and young adults in terms of their understanding of themselves and their place in their communities and world (Lantieri, 2001).

As a reform movement, SEL presents a comprehensive effort to address all the types of learning that a child needs to accomplish these goals (Walberg, Zins, & Weissberg, 2004). Rather than viewing academic learning as separate from social and emotional learning, they argue that research from a number of fields suggests that these types of learning are inextricably linked (Elias, 2006; McCombs, 2001). Hawkins (1997) recommends programs that promote social and emotional learning in schools as a way to

positively affect students' academic performance. In other words, a focus on social and emotional learning can not only help bring about academic learning, but it can also help children avoid problem behaviors (O'Brien et al., 2003).

Additional research suggests that health, ethical development, citizenship and motivation to achieve are all impacted by SEL in a positive way (Devaney, O'Brien, Resnik, Keister, & Weissberg, 2006; Hawkins, Smith, & Catalano, 2004). SEL programming can foster children's social and emotional well-being and bonding to school (Lopes & Salovoy, 2004). It can also improve children's interpersonal relationships and the climate of the school as a whole. The key, then, to SEL and academic learning that is both long-lasting and impactful is to establish nurturing relationships within the school (Elias, 2006).

In a meta-analysis involving 11,000 statistical findings, Wang, Haertel, & Walberg (1997) found that social and emotional factors play a direct role on student learning. Rather than being seen as a frill whose impact on learning is negligible, this study concludes that positive student teacher social interaction has a profound effect on learning. In fact, their analysis showed that constructive relationships between students and teachers had a much greater influence on learning as compared to factors such as school policies, curriculum and instruction, and classroom assessment. The authors go on to suggest that positive student teacher interaction may engender both greater selfesteem and affiliation with their school among students.

A more recent meta-analytic study by Weissberg and Durlak (2005) presented data on school-based SEL interventions to the American Psychological Association. This study, which examined more than 700 programs that focused on SEL or other similar

aims, confirms many of the earlier research studies that SEL benefits students in a myriad of ways. Weissberg and Durlak reported that youth in school-based SEL programs showed improvements in social and emotional skills, school affiliation, prosocial norms, self-perceptions, positive social behaviors, and academic achievement. In achievement tests, students increased their scores by 14%. They also experienced significantly less conduct problems and substance abuse. Statistics on the former include a 7.5% decrease in the rate of aggressive behavior and an 8% decrease in school disciplinary actions.

Elias, Zins, Graczyk, and Weissberg (2003) proposed that successful reform efforts in education must recognize the connection between academics and SEL rather than mistakenly focusing solely on academics. The latter approach is all too easy in an era of high stakes testing, new federal mandates such as the No Child Left Behind (NCLB) Act of 2002, and increasing drives for accountability in education. Furthermore, enduring and successful programs will be flexible enough to meet the diverse needs of learners, will feature training for teachers or mentors in the skills needed to deliver a SEL program, and will contain continuous evaluation of any SEL initiatives.

SEL programming does not specify one single approach. Rather, a single district may have a program dedicated to social and emotional leaning, such as a faculty mentor program, may choose to weave SEL into existing academic curriculum, or may opt for both of these approaches (Fredericks, 2003). SEL programming does address the need for community in schools as well as addressing the movement for learner-centered education (McCombs, 2001). The key, however, is to coordinate and plan SEL programs around a common mission so as to have an even greater impact on students (Elias, Bruene-Butler, Blum, & Schuyler, 1997).

#### **Emotional Intelligence**

Related to the concept of SEL and, in fact, developed and popularized by many of the same researchers, is the concept of emotional intelligence or EQ. Originally it emerged as a model popular in business mentoring in the 1990s. Daniel Goleman, the best-selling author who has perhaps done the most for bringing the term emotional intelligence to a wider audience, has noted the link between emotional intelligence and mentoring. In his book *Working With Emotional Intelligence* (1998), Goleman states that "… mentoring can also serve as a coaching forum to boost emotional competence" (p. 273). He goes on to note that long-term mentoring can provide opportunities for learning and personal growth regardless of whether the mentor-mentee relationship is formal or more informal as in peer-to-peer mentoring.

The concept of emotional intelligence also offers much to student-focused mentor programs as well. Mayer and Salovey (1997) define it as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (p. 10).

The concept of emotional intelligence has gained increasing recognition and acceptance both in the popular press and in the scientific community. This is true in both the United States and other countries as well. In Scotland, for example, the Education and Industry Department focuses on the need for social competence in schools (The Scottish Office, 1998). They define social competence as inclusive of many types of emotional intelligence.

There is also the widespread belief that emotions are likely to play a significant role in academic success (Salovey & Sluyter, 1997). A student who accesses his emotions to write a stirring musical composition or another who uses her emotions to make a persuasive argument during a debate is both using their emotions in an intelligent manner to forward their academic success. The researchers also note that emotional competence, for example, the ability to form and maintain friendships with both peers and adults, is linked in many studies to academic success and the absence of negative outcomes such as dropping out of school and dissatisfaction with school.

A recent empirical study by Mayer, Caruso, and Salovey (2000) demonstrated that emotional intelligence, as measured by the *Multifactor Emotional Intelligence Scale* (MEIS), meets the accepted criteria for the standard definition of intelligence. To do so, the researchers conducted two studies in which both adults (*N*=503) and adolescents (*N*=229) demonstrated that emotional intelligence, as measured by MEIS, meet the three classical criteria of a standard intelligence: the capability of being operationalized as a set of abilities, meeting key correlational criteria, and an incremental increase in intelligence as both age and experience increase. This success led the same researchers in 2002 to develop their own EQ test, known as the *Mayer, Salovey and Caruso Emotional Intelligence Test* (MSCEIT), which has demonstrated reliability (Mayer, Salovey, Caruso, & Sitarenios, 2003).

What perhaps drives the popularity of EQ as a concept is the acceptance that there are many types of intelligence, as in Howard Gardner's theory of multiple intelligences. Gardner himself acknowledges the congruence between emotional intelligence and his own conception of interpersonal intelligence and intrapersonal intelligence yet rejects

some of Goleman's ideas on emotional intelligence as lacking scientific rigor due to his focus on "recommended behaviors" and values (Gardner, 1999, p. 69). Regardless of whether you approach the topic of EQ from a scientific perspective or a social policy perspective, the ideas that a high IQ and educational attainment do not automatically translate into success in school or happiness in life have come to be accepted. Indeed, studies show that there is a weak link between educational achievement and life satisfaction (Diener & Lucas, 1999).

In addition, there are a number of studies which indicate that EQ is associated with multiple benefits. Trinidad & Johnson (2002) examined emotional intelligence in middle school students (n=205). Using an abbreviated version of MEIS, they found that tobacco and alcohol use was negatively correlated with emotional intelligence. Brackett & Mayer (2003) examined emotional intelligence in college students (n=207) using three leading tests for EQ including the MSCEIT. Their results demonstrated that high scores on the MSCEIT were negatively and significantly correlated (r=-.27,  $p\leq$ .001) with social deviance. Another study involving college students (n=103) and the MSCEIT found that high emotional intelligence scores were associated with positive relationships with others (r=0.83, p<.05) and less negative interactions with close friends (r=0.89, p<.05). This was true even after controlling for both personality traits and verbal intelligence (Lopes, Salovey, & Strauss, 2003). Halberstadt, Denham, and Dunsmore (2001) focused on how one's ability to manage emotions, through self-expression, emotional regulation, and the ability to recognize others' emotional states, plays a pivotal role in social interactions throughout one's lifetime.

#### Student Connectedness and Affiliation with School

Certainly one of the purposes of a faculty mentor program is to ensure that each student feels that he or she is part of the school community. As part of this connection, it is hoped that each will gain a positive outlook on school, other members of the school community, and a sense of self-worth. The feeling of a connection to school will afford students a kind of safety net that prevents them from dropping out (National Research Council and the Institute of Medicine, 2004). Data from a national longitudinal study supports this notion. The study examined the educational careers of students who were in 8<sup>th</sup> grade in 1988 and found that, of those who had later dropped out of high school, 20.4% reported not feeling that they belonged as a reason (Berktold, Geis, & Kaufman, 1998).

This affiliation that students have for their school is synonymous with school connectedness, a sense of community, or bonding. Goleman (1998) defines affiliation as "... a genuine appreciation and enjoyment of other people ..." and links it to personal success (p. 111). Comer & Hayes (1999) refer to affiliation as "social climate." Bosworth (2000) advocates the establishment of "a protective school culture." Libbey (2004) notes the multiple terms present for school connectedness in the research but also focuses on one common theme present in most of the literature – a link with teacher support.

While there are many factors that help build a positive social environment in a school, perhaps the two most powerful are students' relationships with other students and students' relationships with adult staff members (Adelman & Taylor, 2006; Schaps, 2005). Students who have developed strong ties to other students are more likely to be

bonded to their school (NRC, 2004). Unfortunately, many educators seem accepting of the fact that certain students, often labeled at-risk students, seem destined to never develop a strong attachment to an adult member of their school due to circumstances beyond the control of school (Gibson, 1997).

In a study of urban high school students (n=56) by Davidson and Phelan (1999), however, it was positive relationships between students and staff that were found to be particularly crucial. Fully half of the students surveyed commented on the importance of having a relationship with adults in their school who care about them as both students and individuals. These findings concur with an earlier study in which 64% of respondents in a phone survey of 1300 high school students stated that they would learn more if their teachers "personally cared about his [*sic*] students as people" (Public Agenda, 1997).

At a 2003 national conference, sponsored by the Center for Adolescent Health and Development at the University of Minnesota, school connectedness was defined as "the belief by students that adults in the school care about their learning as well as about them as individuals." Conference attendees, including leaders in education and children's health, went on to issue the Wingspread Declaration which calls for improving school connectedness for all students so that they are more likely to succeed. They also emphasized the extensive research base that supports the notion that school affiliation yields positive outcomes.

Other children's advocacy groups, such as the Search Institute, have called for a number of key developmental assets that are necessary for adolescents (ages 12 to 18) such as positive adult relationships, a caring school climate, school engagement and bonding to school (Leffert, Benson, & Roehlkepartain, 1997). Some studies assert that

affiliation and bonding is based on the perception among students that their school is a safe and supportive environment. Bryk, Schneider, and Kochanek (2002) discussed the concept of quality relationships in schools as important and powerful social exchanges that lead to both affiliation and self-identification. This affiliation leads to academic achievement and social and emotional growth (Learning First Alliance, 2001).

A number of education leaders have advocated for an emphasis on school bonding in terms of the avoidance of negative behaviors and the promotion of positive behaviors. For example, Bosworth (2000) called for school bonding through empathy, mutual respect and support systems as one major drug prevention measure. Catalano, Haggerty, Oesterle, Fleming, and Hawkins (2004) defined school bonding as a combination of attachment (characterized by close affective relationships with others at school) and commitment (characterized by an investment in school and success at school). Their research consisted of two longitudinal studies, the Seattle Social Development Project (SSDP) and Raising Healthy Children (RHC). Both studies consisted of interventions aimed at elementary school age students by three different agents: teachers, peers and parents.

In the SSDP, bonding to school was significantly higher for subjects in the full treatment group (n=156) than for those in the control group (n=220) at both age 16 and 18, fully six years after the conclusion of the program. Further analysis of the SSDP sample showed that school bonding during the middle and high school years was significantly and negatively associated with substance use, delinquency, gang membership, violence, academic problems, and sexual activity in adolescents and young adults. The early results for the RHC sample show similar results. Both studies confirm

the earlier findings that school bonding can have a profound and beneficial effect on students.

Another study that examined the effect of school connectedness examined the Safe Communities-Safe Schools Initiative (SCSS). This program began in 1999 at the Center for the Study and Prevention of Violence at the University of Colorado at Boulder. It followed the school shooting that had occurred at Columbine High School in Littleton, Colorado. The SCSS model sought to improve school climate through strengthened relationships within the school community. After surveying students at nine middle schools (n=1,177) and ten high schools (n=1,117), the data suggest that school connectedness is negatively related to and strongly predictive of the likelihood that a student is aggressive or a victimized (b=-.344, p $\leq$ .000) (Wilson, 2004). In general, the more students feel connected to school, the less likely they are to engage in activities such as fighting or bullying.

Voisin, Salazar, Crosby, Diclemente, and Staples-Horne (2005) conducted a study that showed teacher connectedness was associated with avoidance of a number of healthrisk behaviors. In their sample of 550 detained adolescents (ages 14-18), those students with low teacher connectedness were 1.8 times more likely to have used marijuana and 2.1 times more likely to have engaged in sex with multiple partners in the two months prior to their detention.

In a monograph titled *Improving the Odds: The Untapped Power of Schools to Improve the Health of Teens*, data from the National Longitudinal Study of Adolescent Health (Add Health) were analyzed and it too suggested that school connectedness resulted in healthier and more successful students (Blum et al., 2002) Add Health was

conducted in 1994-1995. More than 90,000 students in grades 7-12 were surveyed. The data showed that school connectedness was a powerful predictor of a number of healthy behaviors. Specifically, students who felt connected to school were less likely to be engaged in substance abuse, experienced less emotional distress, became less involved in violent or deviant behavior or became pregnant. The problem was that 31% of students surveyed did not feel connected to school and thus were more likely to engage in at-risk behaviors. These findings were independently confirmed by McNeely & Falci (2004) (p<.05).

Healthy behaviors are not only the result of school bonding but they were also predictors of school connectedness. The study used multiple variables and analyzed them using linear and logistic regression models. Research showed that less cigarette smoking (n=1,959) and better student health in general (n=1,959) were linked to enhanced school bonding (Bonny, Britto, Klostermann, Hornung, & Slap, 2000). Whether a predictor or a cause, several of these studies suggest the importance of school connectedness in the overall health of students.

Blum (2005) defined connectedness as a student belief that his or her school is composed of adults who care not only about their learning but about them as individuals as well. He points out that connectedness is critical in an era when as many as 40-60% of high school students in urban, suburban, and rural schools report chronic disengagement from school. In fact, other studies show that it may be at-risk students, even more than the general population who benefit from a school composed of caring teachers (Muller, 2001). The best schools provide connectedness through a combination of both academic rigor and social and emotional support systems.

The importance of students' perceptions that their teachers are caring was also confirmed in a study by Wentzel (1997). The study involved a large number of students (n=248) who were surveyed in sixth grade and then again in eighth grade. In both grades, perceived caring from teachers was related significantly and positively to the adoption of prosocial goal pursuit (r=.39, p $\leq$ .001), responsibility goal pursuit (r=.45, p $\leq$ .001), internal control beliefs (r=.27, p $\leq$ .001), and academic effort on the part of students (r=.36, p $\leq$ .001). In addition, caring was related significantly and negatively to students' reports of distress (r=-.23, p $\leq$ .001). A more recent study by Furrer and Skinner (2003), involving elementary school-age children (n=641), confirmed that students who felt connected to school were more likely to be more fully engaged (r=.25, p $\leq$ .01), and thus experienced enhanced academic performance(r=.16, p $\leq$ .01).

While school bonding may occur between a student and the school as a whole, Berkowitz and Bier (2005) pointed out that this may prove difficult, particularly in large schools. They explained that a more realistic goal may be to increase connectedness to school via membership in a subdivision of the school such as an advisory or mentor group. For many students, it is belonging to this kind of an intimate and vibrant community that improves their overall perceptions of belongingness to school as a whole.

# Personalization

Another goal associated with most mentor programs is to foster a personalized relationship between the mentor and his or her advisees. All individuals have the need to belong and to form relationships with others. When these needs are fulfilled, we lead happier and healthier lives (Myers, 1999).
Young adults, too, are more likely to thrive and become engaged members of the community when provided with ongoing relationships, a role model, and support systems (Pittman et al., 2003). These types of relationships are particularly crucial for students from economically disadvantaged backgrounds (The Institute for Research and Reform in Education, 2003).

There is also evidence that caring relationships are particularly important, but often noticeably lacking, between minority students and their high school teachers. In a descriptive study involving Latino students (n=56) at an urban Midwestern high school, students noted the rarity of close, trusting relationships with their teachers (Yowell, 1999). Instead, students often reported that the last time they had a positive relationship with a teacher was in elementary school where they often felt well-known by at least one teacher. They also had a sense that their elementary school teacher would serve as advocates on their behalf. Yowell pointed out the serious consequences of this feeling of disconnection with high school teachers – difficulty on the part of students in taking the necessary steps to educational and career success. In some cases this may even lead to students dropping out of school. The U. S. Census Bureau reports that from 1990 to 2000, 9.8 % of 16 to 19 year olds dropped out of high school. Among races and ethnicities polled, Hispanics had the highest (21.1%) dropout rate (Day & Jamieson, 2003).

Faculty and administrators in schools hope to foster opportunities where every student is well-known by at least one caring adult. This occurs naturally in small schools which is the reason for reform movements such as schools-within-schools and Smaller Learning Communities (SLCs). Indeed, there is much evidence to suggest that small high schools, for example, offer enhanced social relations as compared to their larger

counterparts (Ancess & Ort, 1999; Blum et al, 2002; Lee, Smerdon, Alfred-Liro, & Brown, 2000; McCluskey, 2002). The benefits to students in smaller schools include higher levels of support, perceptions that their teachers truly care about them, and the presence of a safety net that can prevent students from becoming isolated or marginalized. While researchers acknowledge the curricular advantages large schools can offer to a wide spectrum of students, they also point out that administrators and teachers in small schools are better able to know students as individuals and hence can better meet their individual needs.

Steinberg et al. (2000) conducted a series of case studies involving six different high schools that were members of the Coalition of Essential Schools (CES). This national network, founded by Theodore Sizer approximately 20 years ago, has, as one of its core principles, the belief that all schools must create small, personalized learning communities where all members know each other well. All the schools in the case studies were committed to CES principles and were focused on restructuring. While the schools differed both in location, size and socio-economic profiles, the researchers did identify a number of patterns of commonalities between all the schools examined. One of these similarities is that all of the schools examined found a measure of success by committing to using adult mentors in a variety of ways to assist students in their learning and development.

There are many potential benefits associated with programs that focus on relationship-building in schools. Indeed, this has led many leading educational reform groups to call for transformed relationships between students and staff as one of the keystones of real school improvement (IRRE, 2003). For example, the National High

School Alliance (2005) included the establishment of personalized learning environments as one of its six core principles that must be addressed for significant long-term change to occur.

Some of the research that has led to this call focuses on how strong personal relationships between teachers and students can help prevent societal problems. For example, Kalafat (1997) called for changes in schools to facilitate more quality interaction between students and teachers as a way to address and prevent youth suicide. According to the Centers for Disease Control and Prevention, suicide is indeed a current problem among young people. In the 2005 Youth Risk Behavior Survey (YRBS), 8.4% of high school students (13,917 surveyed) had attempted suicide during the 12 months preceding the survey (Eaton et al., 2006).

Croninger & Lee (2001) suggest that supportive relationships between teachers and students, which they define as social capital, result in a nearly 50% reduction in the probability of students dropping out of high school. This represents a significant benefit in the lives of young adults as dropping out of high school is associated with potential future unemployment, lower earnings, and job instability (Halperin, 1998).

Supportive relationships between teachers and students are also linked to overall satisfaction with school. In a study involving 11-, 13-, and 15- year-old students from four European countries (Finland, Latvia, Norway, and Slovakia), researchers identified supportive teachers as one of the most important predictors of student satisfaction with school (Samdal, Nutbeam, Wold, & Kannas, 1998).

Other research has examined the link between schools with strong personal relationships between students and staff and academic achievement. These studies

demonstrate the link between caring teachers and students (n=233) who are engaged, socially and academically confident, and less disruptive (Ryan & Patrick, 2001). School engagement also is associated with better attendance, reduced drop-out rates, and academic performance (Klem & Connell, 2004; McCombs & Lambert, 1998). Klem & Connell's descriptive study involved both elementary school students (n=1,846) and secondary school students (n=2,430).

While there are many ways that schools can personalize the experience for students, advisory programs are reported as one of the most powerful avenues to this goal. Many educators report that the bond between mentor and student can become so meaningful in high school that it can last well into a student's later life (Benitez, 2004).

Learning First Alliance (2001) and other educational policy groups have called for the establishment of safe and supportive learning communities. They cite that these small, highly personal environments result in students' commitment to the value system of the school. As this commitment increases, so too does their adoption of positive behaviors.

Cook, Hunt, and Murphy (2000) conducted a study involving students in grades 5-8 in Chicago schools that implemented the Comer School Development Program. This program is based on the idea that an improved school climate and better interpersonal relationships must first be addressed if gains in academic achievement are to follow. Comer himself notes the importance of relationship building in the healthy development of children when he stated that "…relationships are to development what location is to real estate: We need relationship, relationship, relationship. The best instructional

methods, curricula, and equipment are not going to produce good outcomes in bad relationship environments ..." (1999, p. xxiv).

Cook's study bears out Comer's statement and educational philosophy. As compared to students in non-Comer schools, students in Comer schools reported their school social climate as better and also showed final mean differences for attachment to school, valuing of school and education, and caring attributed to teachers. At the end of the five-year-study period, these students also saw improvements in reading and math standardized test scores, decreases in self-reported behavioral problems and anger, and more mainstream beliefs for what constitutes misbehavior (Cook et al., 2000).

Similar results were reported by Battistich & Hom (1997) in a study involving 1,434 students in grades 5 and 6. Students with higher average sense-of-community scores were significantly and negatively associated with problem behaviors. These included student drug use(r=-.137, p $\leq$ .001), delinquency(r=-.183, p $\leq$ .001), and victimization(r=-.160, p $\leq$ .001).

Breunlin et al. (2005) reported the results of a four-year effort to personalize a large (3,700 students) suburban high school. While this effort did not include the establishment of a faculty mentor program during the study, it did include a number of other efforts aimed at fostering a personalized environment. These included professional development on personalization of the classroom environment and conflict management, the establishment of a student leadership development program and a co-curricular activity known as the Peaceable Schools Initiative, a conflict-skills training program offered to students who were suspended due to violence, and a Citizens Advisory Council that also considered issues related to personalization. Over the four years of the study, the

researchers reported statistically significant improvements in all four scales of a personalization of the climate survey completed by student raters. Interestingly, the school also chose to adopt an advisory program at the end of the study to further increase personalization.

#### **Transition Programs**

Much has been written about the need to support students as they transition from middle school into high school (Mizelle & Irwin, 2000). The National High School Alliance (2005), for example, includes transition programs as one of its recommended strategies in making the critical move from middle school to high school a positive one for students. A ninth grade mentor program may be one way to address this need.

It has been reported that, while many eighth graders look forward to new opportunities, they also are concerned about bullying, more difficult academic assignments, the possibility of lower grades, and feeling lost in a larger, more impersonal school (Cushman, 2006; Mizelle, 1995). Administrators note that the transition from grade eight to nine comes with a new environment that is often larger, more impersonal, and more academically challenging. The result of this school culture shock can include academic failure, retention in grade nine, potential for dropping out of school, and emotional distress (Beland, 2007).

Students also are concerned about the changes in their social network the transition to high school will bring. Mizelle and Irwin (2000) note that research shows that friendships and social interaction are particularly crucial during this time period. Effective transition programs will recognize this by providing a structure for students to

interact with other freshmen students as well as facilitating connections with older high school students and adults in their new school community.

Research confirms that many of the concerns held by adolescents on the transition process are, indeed, legitimate concerns. Nansel et al. (2001) conducted a study which showed that 29.9% of their student sample (N=15,686) were identified with moderate or frequent involvement in bullying (as a bully, a target of bullying, or both) in grades 6 through 10. At the other end of the high school experience, Greene and Winters (2005) examined public high school graduation rates from 1991 until 2002. They reported that the graduation rate had remained flat during this time period with a national average of 71% in 2002. They also noted that the percentage of minority students graduating in 2002 with a regular diploma was significantly lower for African-American students (56%) and Hispanic students (52%) as compared to white students (78%). Clearly there is a need for programs that might help alleviate the stress and alienation that often accompanies both the transition from middle school to high school and high school to college or the workplace.

Many middle schools begin the high school transition process in the eighth grade. While some transition programs end after eighth grade, others continue through ninth grade as well. In some cases, guidance departments have developed programming focused on the special needs of freshmen in high school that may be used in one-on-one consultation or informal group meetings. These include programs that focus on issues such as self-awareness, self-acceptance, problem-solving, decision-making, and goalsetting (DaGiau, 1997).

Other programs are more formalized. They may cover a semester or longer in the freshman year. Often called seminar programs, they have at their heart a focus on transitioning students through the use of SEL and the creation of SLCs (Beland, 2007).

Mentor programs are another popular way to aid students in the transition process (Cushman, 2006). Lampert (2005) reported on a Freshmen Advisory program which used both advisory teachers (n=16) and upper class mentors (n=50). This program's goal was to decrease the failure rate among the nearly 400 freshmen and to increase their participation in extracurricular activities. The first goal was met with a decrease in failure rates from 37% in the first semester of 2002-2003 to 23% in the first semester of 2004-2005. Extracurricular activity involvement showed less dramatic growth with 72% of freshmen reporting participation at the end of the first year of the program as compared with 78% of freshmen active in extracurricular activities by the end of the program's second year.

Rost and Royer (1999) conducted an action research study on the effectiveness of one high school's transition program known as the Charger Connection Class. One third of the school's freshmen class (n=98) was randomly assigned to small classes (average size being 16) which met for 45 minutes every 8 days. At the end of the year, the investigators reported a number of benefits of the students in the treatment group (Charger Connection Classes) in comparison to the rest of the approximately 300 student freshmen class. These included half as many disciplinary problems (68% of freshmen had three or more disciplinary referrals compared with 38% of Charger Connection students) and an overall positive transition to high school. The latter was measured by students' ability to work well in the library media center (76% of Connection students reported this

vs. 46% of non-Connection students), the level of involvement in extra-curricular activities (124% of Connection students reported involvement in one or more vs. 64% of non-Connection students), and their ability to set goals (81% of Connection students reported this vs. 54% of non-Connection students).

#### History of Mentor Programs

Mentoring as a popular movement in the United States began in the early 1900s as one of many charitable initiatives aimed at improving the lives of children, particularly those growing up in poverty. Emerging from this time period was Big Brothers Big Sisters (BBBS), today the most popular and well-known mentor program for youth. BBBS matches an adult volunteer from a specific community with a child from the same community who is usually from a single parent household. The adult volunteer serves as a role model, a source of advice, a friend – in essence, a mentor.

Tierney, Grossman, and Resch (1995) conducted an eight year study measuring the effectiveness of the Big Brothers Big Sisters program. One part of the study was conducted in a variety of communities across the U.S. and involved 959 children who were 10- to 16 years of age. Half of these applicants were randomly assigned to the treatment group (n=487) while the other half were assigned to the waiting list control group (n=472). Adult mentors met with their matched youth for three to four hours three times per month for a year, the normal contact guidelines of BBBS programs.

At the end of the 18-month study period, a number of positive results were found. Little Brothers and Little Sisters were 46% less likely to initiate drug use, 27% less likely to initiate alcohol use, and approximately 33% less likely to hit someone as compared to the control group during the study period. In addition, BBBS youth felt more competent

in schoolwork (r=.71, p $\leq$ .01), skipped fewer classes(r=-.51, p $\leq$ .05), skipped fewer days of school (r=-.47, p $\leq$ .01), and showed modest gains in grade point average (r=.08, p $\leq$ .10). Overall, they reported better relationships with their parent (r=1.5, p $\leq$ .05) and enhanced emotional support from peers (r=.29, p $\leq$ .10) if in the study group (Tierney et al., 1995).

Federal involvement in mentoring programs also mirrors the findings of not-forprofit groups such as BBBS. The U. S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP) began a Juvenile Mentoring Program (JUMP) in 1995 as part of their SafeFutures initiative. JUMP matched young people in need of mentoring with an adult volunteer from the community. In many cases, BBBS was the organization responsible for establishing the mentoring relationship. In a 2-year evaluation of the JUMP program, OJJDP concluded that mentoring was linked to increased school performance as measured by factors such as better grades. Both youth (49%) and mentors (30%) surveyed reported "a lot" of benefits in this area as a result of JUMP participation. There was also a corresponding reduction in antisocial behaviors such as fighting. A lot of benefits in this area were reported by both youth (57.4%) and mentors (41.5%) alike (Grossman & Garry, 1997).

Mentor programs began to grow in popularity as a concept during the 1970s due to corporate America's desire to help women and minorities succeed in the business world. The 1980s saw continued growth in mentoring during the Reagan and Bush administrations as one way for the Federal government to encourage its drive for volunteerism. The 1983 publication of *A Nation at Risk* by the National Commission on Excellence in Education further increased interest in mentoring programs by calling on both public and private organizations to assist America's youth who were struggling with

a variety of issues. At the 1997 Presidents' Summit for America's Future, the drive for increasing mentoring programs continued. The leaders at the summit called for "an ongoing relationship with a caring adult mentor, tutor, or coach" as one of five key resources to which every child in America has a right (Lauland, 1998). One year later, America's Promise-The Alliance for Youth Coalition, led by then chairman General Colin L. Powell, reported significant inroads in providing mentoring opportunities across the nation, particularly for disadvantaged youth.

Today, mentor programs exist in a variety of settings and with a variety of age groups. Their increasing popularity, both in the United States and internationally, may be credited, in part, to the growing use of the World Wide Web to disseminate information on mentoring programs and practices (Miller, 2002). Davidson (2004) noted the bewildering variety of forms that mentor programs can take such as programs that differ by the amount of contact time between mentor and students, frequency of contact between mentor and student, composition of mentor groups which can vary by gender or grade composition, and program goals.

Philip and Hendry (2000) studied informal mentoring relationships between adults and young people. Their study revealed five distinct types of informal mentoring relationships that occur. In 'Classic' mentoring, there exists a one-to-one relationship between a young person and an adult mentor. Individual/team mentoring features a group of young people who look to an individual or small number of individuals for support. Friend-to-friend mentoring (best friend mentoring) involves a young person and a peer who offers advice and counsel. Peer group mentoring is characterized by a small number of youth who are counseled by another youth group, often on a specific issue of common

interest and for a limited time period. Finally, long-term risk mentoring occurs when a young person seeks counsel from an older adult who has gained experience through previous rebellion and risk-taking behaviors.

In addition to natural or informal mentoring, there are a number of formal or planned types of mentoring programs. Programs that are specifically focused on pairing secondary school age children with adult mentors also are varied. In some cases these programs rely on community volunteers. In other cases, local business leaders are tapped as mentors for students. Community activists and representatives from industry are interested in mentor programs that provide an opportunity to address many societal ills such as high drop-out rates, teen pregnancy, youth violence, increases in single-parent homes and homes where parents are working longer hours. These groups also hope to prepare students for their transition to college and the workforce.

Weinberger (1992) reported on the successes associated with just such a program in Norwalk, Connecticut. The Norwalk Mentor program paired K-12 students in the Norwalk Public Schools with an adult mentor from a local business. Students were recommended for participation in the program by teachers who felt students were at-risk. The goals of the program were for students to improve in terms of their self-esteem, attitudes, and attendance at school. A 5-year analysis of the program revealed that students had, in fact, improved their attendance at school (87%), demonstrated greater self-confidence (92%), showed greater cooperation in class (96%), improved their level of responsibility (91%), and completed more tasks (84%).

The focus of the present study, however, was on mentor relationships between secondary school students and adult mentors from within the school community. Even

with this narrowing of the definition, there are many different types of advisory programs. A single school district, such as New York City, contains a variety of structures within their advisory programs (Imbimbo, Morgan, & Plaza, n.d.). They may vary in terms of group size, when advisory meets, how long the mentor period lasts, student composition (e.g., gender, grade level), and purpose.

Most mentor programs do offer two critical components: one-on-one personal advisement and a place for group interaction between the mentor or mentors and a number of students. Research suggests that both components are necessary for healthy development. Johnson and Johnson (2004) note that small groups are one of the basic units of the human experience and that our ability to work within and between these groups enables us to become successful participants in our families, our jobs, and our lives in general. Their research-based model, known as the Three Cs Program, focuses on the development of three key skills within a small group setting demonstrating: cooperation, conflict resolution, and civic responsibility.

Schaps and Lewis (1999) have expanded their research beyond looking only at small group interaction to examine the importance of community building as a whole. They define students' sense of community as "a place where students belong and their voices are heard" and note that community building may occur as a result of a number of different programs and policies. In their research on the Child Development Project, an elementary school community-building initiative, they have reported a causal link between a sense of community and students' later development of academic motivation, concern for others, democratic values, conflict-resolution skills, altruistic behavior,

inclusive attitudes toward outgroups, positive interpersonal behavior in class, and an inclination to adopt their school's values.

While small group interaction is important in terms of the development of peer relationships, positive social skills, and a caring school community, one-on-one advisement may also be critical, particularly for some students. Adelman and Taylor (2006) note that some students may need periodic assistance with problems while others may have much more significant needs. These may include difficulty in forming peer friendships, serious academic difficulties, or negative behaviors that result in disciplinary action on the part of school personnel. They mention mentoring as one possible way to assist these students. Mentors can be critical in offering advice, serving as an advocate and friend, and even in providing specific instruction on intrapersonal and interpersonal social and emotional learning.

Mentor programs themselves may be organized as a class, a homeroom, or a special activity period. Some potential drawbacks in mentorship programs include inadequate training for mentors, groups which are too large (over 12 students), mentors who have been forced into a mentorship role, programs that do not match with the school's mission, and/or inadequate meeting time, for example, 10 minutes or less per week. In addition, it is important that all stakeholders understand the role and purpose of the mentor (Lieber & Poliner, 2004). Mentors are not counselors. They can, however, perform many of the roles that a typical school counselor may engage in and often work in tandem with counselors.

# Definition of Mentoring and Related Terms

To understand further the concept of faculty mentoring in secondary schools, it is useful to distinguish the term mentoring from other terms that are often used synonymously. Miller (2002) points out the differences between mentoring and four other terms which are similar but are associated with key differences.

The term *befriending*, for example, is associated with emotional and social support. While mentoring may include a relationship involving friendship, it is not a requirement. Mentoring is also more frequently associated with more objective and less intense emotional and social support than befriending.

*Counseling* is another term that differs from mentoring. This is particularly important to note as most schools have a guidance department consisting of counselors and other support staff. Counselors are trained professionals whose mission is to help advance their charges' emotional, social, and academic development. Mentors, while they may employ some of the same techniques as counselors such as active listening, typically have contact with their mentees in a less formal setting. As non-specialists, certain therapeutic and diagnostic techniques commonly associated with counseling are not used by mentors. Interestingly, many school reform efforts call on many traditional guidance and counseling functions to be done by other members of the school staff, including teachers, in conjunction with and supported by guidance professionals (NRC, 2004, p. 220). Mentors would certainly be appropriate in this new, expanded counseling setting.

*Coaching* is yet another term frequently used in school albeit in the context of sports. It can also appear in others contexts as well, such as a student who hires a voice

coach or the advisor whose title is Debating Coach. In each case, coaching is usually associated with a specific task or outcome. In contrast, mentoring focuses on a range of skills and performance outcomes. Mentoring also typically focuses more on building a close personal relationship than coaching does.

Finally, *tutoring* occurs in and outside of schools as well. While mentors may use some of the same skills that a tutor uses, there are a number of important distinctions. Mentoring is focused on life-skills while tutoring usually focuses on specific academic subjects or talent areas. Mentoring usually is associated with a long-term relationship whereas tutoring is typically short-term. Finally, the development of a warm and caring relationship, a goal in mentoring, is not necessarily typical in tutoring.

# Need for Mentor Programs

Another question that must be answered is what, if any, needs do secondary school students have that a mentor program might be able to address? In other words, are there problems associated with secondary school education or the lives of American adolescents that can and should be addressed? An analysis of the data from recent surveys would suggest the need for programs that can positively impact the lives of youth and improve the delivery of educational services.

Dryfoos (1997) reviewed data from a variety of sources, including the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBS), to uncover a variety of problem behaviors among high school students (n=14,041). For example, 14% of students are frequent cigarette smokers, 41% of 9<sup>th</sup> graders drink alcoholic beverages, and 25% had been offered, sold, or given an illegal drug on school property. Violence is also a problem with approximately 25% of students reporting that

they had carried a weapon within 30 days of the YRBS survey and 19% reporting that they had made a suicide plan. Dryfoos concludes that comprehensive programs which prevent and address these behaviors are clearly needed. Unfortunately, more recent (2006) YRBS data show that many of these problems persist (Eaton et al.).

Clearly, there is a need for reform and many educators and healthcare professionals agree. *Healthy Children 2010* calls for the use of schools to provide all children with comprehensive, high-quality preventative programs (Weissberg, Gullotta, Hampton, Ryan, & Adams, 1997). Adelman and Taylor (2000) call for a new model of prevention that is both more comprehensive and integrated into the daily operations of schools. Their model represents a cone of intervention in the lives of students. The wide end of the cone represents primary prevention efforts aimed at all students. The next, narrower segment represents treatment of problems in students after early-onset. Finally, the narrowest segment of the cone, needed for only a small segment of students, represents treatment for chronic or severe problems. Adelman and Taylor suggest that it is this type of interconnected continuum of efforts that will break down the barriers to learning in schools.

A second area for reform in education focuses not on health issues but economic issues. In *21<sup>st</sup> Century Skills for 21<sup>st</sup> Century Jobs* report, the United States government recognizes the changing economy and calls for changes in the way we educate students who will become the future workforce (Stuart & Dahm, 1999). Among the necessary skills workers will need are organizational skills. These include interpersonal skills, the ability to communicate effectively, and self-management. These are some of the very same skills that mentor programs are focused on.

The Secretary's Commission on Achieving Necessary Skills (SCANS) Report for America 2000 seconds the need for the types of skills fostered in a quality mentor program (U. S. Department of Labor, 1992). SCANS calls for both workplace competencies, such as interpersonal skills, and foundation skills, such as thinking skills and personal qualities, that are critical in successful future job performance and higher earnings potential. Interestingly, SCANS calls for educational efforts in developing these skills not only for students' future economic well-being but also as a way to prepare them for their roles as future citizens and parents.

While mentor programs may help provide students with these necessary interpersonal skills, they may also help students in their own confidence that they do possess these needed skills. Bandura and other psychologists have explored the notion of the necessity of self-efficacy which has been extensively studied in the business world as well (Goleman, 1998). High self-efficacy is associated with confidence to take on new challenges, persistence at difficult tasks, and higher personal goal-setting. Indeed, high self-efficacy may prove just as important for students as their actual skill level attainment in terms of overall success. Goleman cautions, though, that self-efficacy is domain specific. In other words, a student may possess high self-efficacy in terms of their interpersonal skills but low self-efficacy in their academic skills. Any efforts that schools can make that boost students' self-efficacy should provide benefits in a variety of ways.

Non-governmental organizations (NGOs), like governmental and business communities, also recognize the need to make reforms in education and elsewhere to aid the healthy development of our youth. The Search Institute Report identified a number of startling statistics in their survey of over 99,000 adolescents (Benson, Scales, Leffert, &

Roehlkepartain, 1999). These include low numbers of students in grades 6-12 reporting self-esteem (47%), interpersonal competence (43%), a caring school environment (25%), success in school (23%), and the ability to resist danger (20%). In addition, a significant number of students (49%) did not indicate that they were bonded to their school, many (43%) never reported valuing diversity, a number (37%) lacked achievement motivation or school engagement (36%), and a significant number (30%) lacked a positive view of their personal future. What was most striking to the researchers was that all young people, regardless of their socio-economic circumstances, are affected by some of the challenges to their health development. They too call for warm, caring relationships among youth and their peers and adults as a way of ensuring a solid foundation for development while minimizing or eliminating risk factors.

Another basis for a mentor program is that they help fulfill student's psychological needs. Social psychology theory emphasizes that all humans have certain basic needs that must be filled. For example, Maslow's Hierarchy of Needs Theory (1943), now considered a classic theoretical model in psychology, discusses certain basic needs that must, in turn, be satisfied before any other needs can be addressed. The primary needs for individuals are physiological (e.g., food, oxygen) followed by higher order needs such as safety and then love. Maslow defines love in broad terms including both affection and belongingness under this umbrella term. The next highest needs are esteem needs. These include self-respect, appreciation from others, confidence and independence. It is only when all these needs are met, in ascending order, that individuals have the potential for self-actualization or what others might call achieving their personal best (Maslow, 1943).

More recent social psychological theories on needs include Fiske's Core Social Motives theory and Deci and Ryan's Self-Determination Theory (SDT). Fiske (2004) discusses five basic needs: belonging, understanding, controlling, enhancing self and trusting. Belonging is the central need of all of these core needs. Fiske defines it as the need for strong, stable relationships. Without this key need being met, an individual cannot be successful in the context of human society either physically or psychologically.

Fiske (2004) also notes the importance of attitude in our role as social beings. Attitude, defined as "the positive or negative judgment of an attitude object" (Fiske, 2004, p. 216), has a powerful correlational effect on individuals. This "attitude object" can be another person, a group, or even an institution. Fiske indicates that an overall positive attitude will likely lead to a positive attitude about a program such as a faculty mentor program. In addition, a positive experience in a faculty mentor program should result in a better overall attitude. Furthermore, attitude can be evaluated in any of three ways: affect, behavior, or cognition.

Deci and Ryan's Self-Determination Theory (2000) identifies three basic human needs. These are autonomy, competence, and relatedness. Unlike Maslow's and Fiske's theories, there is no hierarchical element or root need to SDT theory which states that all three needs are of equal importance and not necessarily interrelated.

Of the three innate psychological needs identified in this theory, relatedness has perhaps the most to do with an initiative such as a faculty mentor program. Ryan and Deci define this as "the need to feel belongingness and connectedness with others" (2000, p. 73) and stress that certain supportive environments promote this need while others which lack it can result in alienation and poor mental health.

# Conclusion

While there is little or no research specific to the benefits of faculty mentor programs, this chapter discussed a number of related topics about which there is ample evidence. The benefits of social and emotional learning, and the related concept of fostering emotional intelligence, are becoming more popular and widely accepted in the educational community. Certainly, mentoring fits nicely in the construct of meeting students' social and emotional needs. The concepts of promoting affiliation to school and personalizing students' experiences are also not only part of the objectives of most faculty mentor programs but are demonstrated in the research as crucial to students' overall success. This chapter also addressed the history and definition of mentorship with an understanding that empirical research supporting the benefits of faculty mentor programs is still needed.

# CHAPTER THREE

### METHODOLOGY

This chapter is a review of how this research study was conducted and specifically includes information on (a) the research questions, (b) a description of the setting and the subjects, (c) instrumentation, (d) a description of the research design, (e) a description and justification of the analyses, (f) data collection procedures and timeline, and (g) an ethics statement.

# **Research Questions**

Based on prior research and by using a systematic approach, this research explored the effects of a Faculty Mentor Program on high school students. It specifically focused on three areas:

- 1. What are the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy?
- 2. What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?
- 3. What are Mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?

Description of the Setting and the Subjects

The sample for this study was derived from a population of 9<sup>th</sup> and 10<sup>th</sup> grade students from two large suburban high schools located in two school districts in Connecticut. These school districts were characterized as having a relatively wealthy, homogenous student population. The State of Connecticut has placed the study site with the Faculty Mentor Program in District Reference Group (DRG) A and the control group of students drawn from a high school with no mentor or advisory program in District Reference Group B. DRGs, of which there are nine in the state (A-I), are defined by the Department of Education as a grouping based on certain characteristics of students' families. Districts in DRG A and DRG B are similar in their classification because families in these districts both have relatively high median family income; high parental educational attainment; parental occupation in executive, managerial and/or professional specialty jobs; low poverty; traditional (two-parent) family structures; and English as the typical home language.

Both districts were similar in a number of other ways as well. They were located in small towns, both in terms of geographic size and population (between 10,000-20,000 residents), located in the same county. Both were founded in the 1700s as farming communities but today are best known as wealthy suburban enclaves that serve as bedroom towns for commuters. Each town is known for the quality of their high schools and their relatively homogenous student populations. For example, neither school has a significant minority enrollment. According to the State of Connecticut's Strategic School Profiles for 2006-2007, the treatment group school was attended by 93% White students, 2% Hispanic students, 1.5% Black students, and 4% Asian American students. The control group school was attended by 94% White students, 3% Hispanic students, .5% Black students, and 2% Asian American students. In both schools, more than 85% of students go on to college.

While both high schools are similar in terms of their student profiles, they do differ in size. The DRG A study site school had a population of approximately 1300

students while the DRG B control group school was comprised of approximately 900 students. A similar size discrepancy exists in the number of teachers present at both study sites.

The sample for this study for the primary instrument consisted of 49 randomly selected freshmen and sophomores at the only DRG A School which had a Faculty Mentor Program or student advisory program in place. An identically sized group of freshmen and sophomores from a district in Connecticut that did not have a Faculty Mentor Program acted as a control group (see Appendix G). This purposeful sampling was based on those students at both study sites who completed a pretest and posttest using the primary instrument.

In addition to this sample of students drawn from both study sites, almost all freshmen and sophomore students (n=432) at the Faculty Mentor Program site participated in a student survey that was specifically tailored to focus on the Mentor Program itself. Eight students were also part of the experimental group and were selected to participate in a series of one-on-one interviews designed to elicit qualitative data on their experience in the Mentor Program.

Mentors (n=23) at the same site provided additional qualitative data through their responses to a brief survey. While mentors varied in terms of gender, age, academic background and years of experience as a mentor, all participants had actively participated in the Faculty Mentor Program for at least four months. Each mentor had received at least some information on the skills needed when mentoring students and the specifics of the Faculty Mentor Program at the DRG A site. In addition, mentors were part of a small

group who met on a regular basis (usually once every eight days) to plan activities and troubleshoot any problems.

#### Instrumentation

The study utilized four different evaluative tools:

### The CFK School Climate Profile

The primary instrument for the study was a survey administered to students. This quantitative data was gathered to address the first research question: What are the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy? The *Charles F. Kettering* (CFK), *Ltd., School Climate Profile* (1974) is a popular measure of school climate. This instrument, updated and published by Howard, Howell, and Brainard (1987), is considered one of the most valid and reliable school climate assessments (Marshall, 2006). Content validity was established by asking a group of more than 200 national educational leaders to assist in the construction of the *CFK School Climate Survey* by confirming the instrument's items (Dennis, 1979). Reliability was demonstrated in one study which examined the two discrepancy-format columns present in the CFK. The Cronbach alpha reliability measures for the composite scores on all "What is" column items was .90 while the Cronbach alpha for the composite scores on all the "What should be" column items was .85 (Johnson, Johnson, Gott, & Zimmerman, 1997).

The *CFK School Climate Profile*, while designed so that it could be completed by any member of a key school constituency, was used to specifically focus on student perceptions of their school climate. The paper-and-pencil format survey required students to read a series of statements about their school and rate their feelings about the statement

using a 4-point scale (1-Almost Never, 2-Occasionally, 3-Frequently, and 4-Almost Always). They also were asked to rate the statement under both a "What Is" column, reflecting the state of their school, and a "What Should Be" column, reflecting how important the student perceived an individual item. For the purposes of this study, only data collected from the "What Is" column was analyzed

The survey was further organized into four parts; specifically, Part A - General Climate, Part B - Program Determinants, Part C - Process Determinants, and Part D -Material Determinants. Of these four parts, only two (Part A and Part C) were administered to students in this study due to the applicability of these particular sections to the study. These two sections cover 16 different climate categories with five items in each subscale. The 16 subscales used in this study were as follows: Respect, Trust, High Morale, Opportunity for Input, Continuous Academic and Social Growth, Cohesiveness, School Renewal, Caring, Problem-Solving Ability, Improvement of School Goals, Identifying and Working with Conflicts, Effective Communications, Involvement in Decision Making, Autonomy with Accountability, Effective Teaching-Learning Strategies, and Ability to Plan for the Future. The CFK survey is usually completed within 20 to 25 minutes; but as only half of the original survey was administered, most students were able to complete the survey during a single meeting with their mentor. Johnson et al. (1997) assessed the CFK scales and found construct validity for student scores thus suggesting that this is an effective instrument.

In conducting this study, a number of CFK subscales were viewed by the researcher as linked to the three constructs of attitude, self-efficacy, and affiliation that were part of the first and primary research question. In terms of attitude, Johnson et al.

(1997) conducted a study on the *CFK Part A General Climate Factors*. One of the eight subscales on this part of the *CFK* includes High Morale. The researchers concluded that the *CFK* may potentially be useful in predicting student attitude.

Effective Communications was the second *CFK* subscale to be linked to the construct of attitude in this study. One study by Fenton and O'Leary (1990) supports this connection. The researchers found that instructors trained in communication skills reported improved attitude in their students.

The construct of self-efficacy had a single *CFK* subscale, Identifying and Working with Conflicts, linked to it in this study. Favorable school climates are marked by conflicts within and between individuals and groups that are recognized and approached in positive ways (Howard, Howell & Brainard, 1987). Vera, Shin, Montgomery, Mildner, and Speight (2004) found that self-efficacy is a significant predictor (F=.92, p $\leq$  .05) of conflict resolution styles in a sample (n=178) of seventh and eighth graders. Their study suggested that schools which address self-efficacy in students are more likely to feature productive conflict resolution.

Affiliation was examined using three different subscales of the CFK: Ability to Plan for the Future, Effective Teaching-Learning Strategies, and Cohesiveness. A number of educators have noted the link between affiliation or school connectedness and planning skills. Bosworth (2000) listed the involvement of students in planning as one key strategy in reinforcing a positive culture in the classroom. Blum (2005, p. 1) included student engagement in current and future academic progress as one of seven qualities that seem to influence students' positive attachment to school.

The Effective Teaching-Learning Strategies subscale of the *CFK* is further defined as the establishment of clearly stated educational goals, teachers which seek student feedback and employ individualized methods to maximize student learning, and students who are allowed to choose from a variety of educational activities and offerings (Howard, Howell & Brainard, 1987). Blum (2005) concurs that high academic rigor is required before affiliation with school can occur. Blum stated that "based on current research evidence, students' school connectedness can be increased through ... implement(ing) high standards and expectations, and provid(ing) academic support to all students" (p. 2). Other researchers offer further support for the link between high academic expectations and rigor coupled with support for learning as a critical requirement for students to feel connected with their school (Catalano et al., 2004).

Finally, cohesiveness is also linked to affiliation. Howard, Howell & Brainard (1987) defined the Cohesiveness subscale of the CFK as measuring school spirit or students' sense of belonging to school (p. 7). Using this definition, the construct of affiliation may be seen as synonymous with cohesiveness.

### Student Interviews

Additional information was gathered through individual student interviews conducted at the Faculty Mentor Program site (see Appendix B). The intention was to elucidate information for triangulation with the CFK School Climate Profile. Triangulation of sources and methods is key in qualitative research in that aids in reducing bias associated with one data-collection method or source (Gall, Gall & Borg, 2003). The qualitative data from the student interviews was gathered to address the

second research question: What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?

A purposeful sample of interview subjects was selected based on mentor recommendations. Mentors were asked to nominate an individual from their groups who had benefited the most from being in the Faculty Mentor Program. They were asked to note the reason for their nomination of this student. From this pool of potential interview subjects, four freshmen out seven potential candidates and four sophomores out of nine potential candidates were invited to participate in a private interview session about their experience in the Faculty Mentor Program.

Students selected to participate in the interview sessions represented a range of different possible benefits associated with student participation in the Mentor Program. The criterion for selection was that the mentor perceived this student's participation in the Faculty Mentor Program as having a notable positive outcome for him or her. Criterion sampling, as a type of purposeful sampling, is particularly useful when studying educational programs (Gall et al., 2003). Both male and female students were chosen to help ensure a representative sample. All student interviews were tape recorded for later transcription and coding. Member checking was addressed by playing back each audio recording for the students interviewed so that each might have the opportunity to verify and correct statements made.

The format of the interviews was structured and relatively brief (see Appendix B). Additional questions were only used to allow for clarification or further elaboration within a limited scope. Structured interviews are appropriate when accurate and complete information from all respondents is crucial (Isaac & Michael, 1997). Most of the

interview questions were open-ended so as to gather as much information as possible from individual interview subjects. Certain questions were tailored to explore the relationship between the student and his or her mentor while others sought to examine the relationship between the student and the mentor group. Still other questions were more global in nature and sought to determine the student's feelings about his or her school and school experience as a whole. All questions used in the interview were approved of by the members of the Faculty Mentor Steering Committee consisting of two counselors and four teacher-mentors in addition to the researcher who chaired the Committee. Membership on the Faculty Mentor Steering Committee is strictly voluntary and is based on years of experience in education and the Faculty Mentor Program. The researcher did not serve as supervisor for any of the members of the committee thus assuring their independence. All members of the Faculty Mentor Program Steering Committee indicated that the student interview questions had content validity.

## Faculty Mentor Program Student Survey

Another instrument used in the study was a Likert scale survey, called the Freshman and Sophomore Faculty Mentor Groups Student Survey. It was designed by the Faculty Mentor Steering Committee at the experimental group school to assess the program. The members of this committee were considered the "content experts" needed to establish content-related validity in the instrument (Gall et al., 2003). The intention was for this survey to also provide information for triangulation with the *CFK School Climate Profile*. This qualitative data was gathered to provide additional insight on the second research question: What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives? This survey had previously been

piloted the year before. The data from this earlier survey were used by the Faculty Mentor Program Steering Committee to slightly alter the wording on three of the 20 questions on the survey used in this study.

The survey was administered to all of the students enrolled at this site only (see Appendix C). The student survey consists of 20 statements in which individuals had to select one of five possible responses. Students were able to mark each statement as strongly agree, agree, undecided, disagree, or strongly disagree. As many of the statements that students were asked to rate speak to objectives that are specific to this Faculty Mentor Program, content validity was supported (see Appendix E).

# Mentor Survey

The final instrument used in the study was the Mentor Survey (see Appendix A). The intention was to elucidate information for triangulation with the CFK School Climate Profile. As with the other two qualitative instruments, content validity was established by having the Faculty Mentor Steering Committee approve the Mentor Survey questions before distribution. This qualitative data was gathered to address the third research question: What are mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?

The 3-question survey was developed in the spring of 2004 by the Instructional Leader for the Guidance Department. All of the questions were open-ended in design in order to maximize mentor feedback on the Faculty Mentor Program. The same questions have been administered to mentors since the inception of the Faculty Mentor Program with only minor changes to the wording over time. In 2008, all 33 mentors were surveyed

and 23 responded using a series of three open-ended questions that they were asked to complete.

# Description of the Research Design

The study employed a mixed methods research design. It included quantitative analyses using a pre-test/post-test quasi-experimental approach. In order to counteract the limitations associated with single-method research design, corroboration was sought in gathering additional qualitative data. Multiple strategies were used to improve the trustworthiness and transferability of the study (see Figure 1) (Krefting, 1991). Triangulation of data sources (students, mentors) and methods (interviews, surveys), a hallmark of qualitative research, was thus addressed in the study (Stake, 1995).



Figure 1. Triangulation strategy for methods and data sources

The sole quantitative instrument in the study, specifically used to obtain data for the first and primary research question, was the *CFK School Climate Profile* (see Appendix D). The independent variable for the first research question is that of program type with two levels: students who participated in a Faculty Mentor Program and those who did not participate in a mentor program. The dependent variables consisted of the 16 subscales of the *CFK* with p < .05. Random assignment to group was not possible; therefore, a convenience sample was used. Student subjects were enrolled in schools based on the towns where they lived. All freshmen and sophomore students attending the Demographic Reference Group (DRG) A school participated in the Faculty Mentor Program which, for the purposes of this study, became the experimental group. The freshmen and sophomore students attending the DRG B School, which did not have a Faculty Mentor Program or similar student advisory system in place, were considered the control or comparison group.

The treatment for the experimental group involved students meeting with their mentor on a regular basis during the middle of the school day. The Faculty Mentor Program at this school consisted of two components known as Freshman Forum for those students enrolled in 9<sup>th</sup> grade and Sophomore Seminar for those students enrolled in 10<sup>th</sup> grade. The frequency of meetings varied from an average of three per month for freshmen to once per month for sophomores. The duration of each meeting was typically 35 minutes. Mentors also had contact with their mentees during homeroom which was infrequent (on average once per month was typical) and brief (usually no more than 8 minutes in duration). In some cases, mentors might also have a few mentees enrolled in their classes, but this was not the norm.

There were 333 freshmen and 311 sophomores enrolled in the 33 Faculty Mentor Program groups in the 2007-2008 school year making for average group size of 11 students per mentor. In some cases, Mentor groups also had one or two upperclassmen who were asked by the mentor to help facilitate the group as well as provide students with a peer perspective on topics of discussion. Many of these students were drawn from a student organization known as Peervention. This club consists of students who have been nominated for membership by their teachers based on their interpersonal skills and caring nature. Students were expected to assist the school community in both peer facilitation and prevention education. All Peervention members underwent a three month training program led by school counselors, psychologists, social workers and other guest speakers.

Guidance counselors also played a significant role in the Faculty Mentor Program. Most mentors were paired with a single counselor. Each counselor was responsible for five or six Mentor groups. Counselors were expected to participate in Mentor group activities on a rotating basis. Mentors and counselors were also expected to communicate on a regular basis about any mentees of concern. If additional school personnel were required to assist a Mentee or if family communication was needed, it was the responsibility of the counselor to initiate these contacts.

The Faculty Mentor Program was guided by the following mission statement: the purpose of the Freshman Forum and the Sophomore Seminar is to provide an environment that personalizes the school community through learning about the school, learning about oneself, developing inner resources, and learning from one another in a

small group setting. In addition, the Faculty Mentor Program has a number of defined objectives (see Appendix F).

To accomplish the mission statement and meet these objectives, Mentors were provided with both training and resources. While formal training for mentors was limited (typically consisting of a few hours per school year), informal training was accomplished by having mentors meet in small groups to plan for upcoming activities. These small groups of mentors, consisting of 5-8 mentors, met at least once every 8 days. Mentors who were new to the Faculty Mentor Program were dispersed among the groups to ensure that they received some individualized help in their planning from more experienced mentors. Each group reported on their meetings via e-mail to the Instructional Leader for the Faculty Mentor Program. They also kept track of activities they engaged in with their respective Mentor groups by using a checklist provided to them (see Appendix G). Each checklist was specific to either the Freshman Forum or Sophomore Seminar with the latter being much more abbreviated due to more limited contact time between mentors and their Mentees during the sophomore year. All items on the checklists were linked to specific Faculty Mentor Program objectives.

Resources available to mentors included a comprehensive Faculty Mentor Program handbook which consisted of pertinent information such as icebreaker activities, group cohesion exercises, orientation (specific to Freshman Forum) assistance, academic goal-setting, social and emotional learning opportunities, and community service suggestions. The high school library also had a specific collection of both print and video resources available to mentors. One resource that was particularly useful in developing programming was *The Advisory Guide* (Poliner & Lieber, 2004).

### Description and Justification of the Analyses

Analysis of the *CFK School Climate Profile* results involved a one-way betweensubjects multivariate analysis of covariance (MANCOVA). This was done in order to determine differences between the two levels of the independent variable, students at the Faculty Mentor Program site and students at the non-Faculty Mentor Program site, in the December scores. The dependent variables consisted of the 16 subscales on the *CFK* instrument. The total scores for the "What Is" column of the following categories were examined: Respect, Trust, High Morale, Opportunity for Input, Continuous Academic and Social Growth, Cohesiveness, School Renewal, Caring, Problem-Solving Ability, Improvement of School Goals, Identifying and Working with Conflicts, Effective Communications, Involvement in Decision Making, Autonomy with Accountability, Effective Teaching-Learning Strategies, and Ability to Plan for the Future.

An alpha level of .05 was pre-established for the quantitative statistical analysis. In this case, p<.05 for 11 out of the 16 *CFK* subscales, demonstrating that there is a significant statistical difference between the two groups. Table 2 illustrates the results of the MANCOVAs with the *CFK* pretest scores as covariate. This pretest/posttest analysis confirmed that students in the treatment group, the Faculty Mentor Program, consistently gave higher scores to a number of dependent variables (*CFK* subscales) as compared to students in the non-Faculty Mentor Program group. *The Statistical Package for the Social Sciences (SPSS)* 16.0 for Windows, Graduate Package, was the primary statistical program used for data analyses.

Both the student interviews (N=8) were conducted and the Mentor Surveys (N=23) were administered and then examined using qualitative analysis through selective
coding of information. Specifically, selective coding was used to identify categories that surrounded participation in a Faculty Mentor program and to identify possible relationships or patterns between these categories. In terms of the Mentor Survey, responses were coded and listed based on frequency and then grouped by program strengths and program concerns. The student interviews were recorded and coded using HyperRESEARCH Qualitative Analysis Tool, Version 2.8. Student responses were coded by type of comment and frequency of response. The data obtained from the student interviews and the Mentor Survey were further analyzed by triangulation of both data sources and data methods in order to strengthen the credibility of the data.

The Faculty Mentor Program student survey, a Likert-scale survey, consisted of 20 items (see Appendix C). Freshmen and sophomore students were given this survey in January of 2008. Listwise deletion resulted in 24 student surveys, or 5.3% of respondents, eliminated from the study due to incomplete surveys or inappropriate responses. The 432 remaining responses were then analyzed by triangulation of the other three data sources and methods in order to verify the information obtained.

The issue of trustworthiness was addressed with all three qualitative components of the study; specifically, the Faculty Mentor Program Student Survey, the Mentor Survey, and the student interviews. Lincoln and Guba (1985, p. 290) cited the importance of trustworthiness in qualitative research in order to support that a study is "worth paying attention to" in terms of its findings. The four issues associated with trustworthiness are credibility, transferability, dependability, and confirmability.

Credibility may be defined as an evaluation that the research findings represent a believable conceptual interpretation of the data (Lincoln & Guba, 1985, p. 296).

Credibility of the study was supported through both triangulation of multiple sources and methods and, in the case of the student interviews, member checking.

Transferability is the degree to which the study findings may apply in other settings. To address transferability, detailed information on the study site and key documents used in the research (see Appendix A-G) were provided so that other researchers might assess the applicability of the research to their own school milieu.

Lincoln and Guba (1985) defined dependability as an assessment of the quality of the three integrated processes of data collection, data analysis, and theory generation. Confirmability was defined as the measure of how well the study's findings were supported by the data. To provide dependability and confirmability, an audit trail was maintained when coding and analyzing the data. The researcher provided colleagues with the raw data and coding categories established by the researcher for analysis and independent evaluation. In each case, the evaluators were knowledgeable in both the Faculty Mentor Program and qualitative analysis. These individuals concurred that the research was dependable and confirmable.

#### Data Collection Procedures and Timeline

The sample of students (*N*=49) at the Faculty Mentor site and the DRG B site completed the *CFK School Climate Profile* survey in both September and December of 2007 (see Appendix G for a timeline of procedures and analyses). This time period was selected because it represented both the beginning and end of the first school semester. At the Faculty Mentor site, this survey was administered during a regularly scheduled Faculty Mentor meeting time by the mentors or, when available, upperclassmen not associated with the Faculty Mentor Program. At the DRG B site, that did not have a

Faculty Mentor program, the survey was administered to students by their English teachers during their regularly scheduled English class. Responses to the survey were tabulated by an adult who was also not one of the researchers.

The following procedures were followed in order to collect data from students at both sites:

- Invitations, information on the study, and permission slips were sent to students and parents of students entering 9<sup>th</sup> and 10<sup>th</sup> grades at both school sites. This information was mailed out in July of 2007. As stated on the permission slip, students were able to withdraw consent at any time thereby terminating their participation in the study. No penalty was assigned to students for non-participation. Due to initial poor return rates on permission slips, multiple copies were provided to students at both study sites to increase the possible sample size for the study.
- 2. The *CFK School Climate* survey was administered to the pool of students who agreed to participate in the survey.
- 3. Individuals not associated with the research on the Faculty Mentor Program were asked to administer both the pre and post tests at both sites. All instruction on completing the *CFK School Climate Profile* was read aloud and provided to students in writing. All student surveys had names removed and had a code assigned to ensure anonymity. Limited demographic data, specifically student grade (freshman or sophomore), gender, and school attended, were collected along with survey responses.

- 4. The Freshman and Sophomore Faculty Mentor Groups Student Survey (*N*=432) also was administered in January of 2008 at the Faculty Mentor Program site after the Faculty Mentor Program Steering Committee determined that the instrument (and the other two qualitative instruments) had content validity. Students were instructed not to place their names on this survey to ensure candid responses. The only demographic data collected were each student's grade level. This survey was given to students in homeroom by a student in the homeroom and placed in a sealed envelope after the surveys were completed. The mentor was not present in the room during this time. This was done so that the mentor's presence did not influence students' candid responses to the Faculty Mentor Program survey.
- 5. The eight student interviews were conducted during the school day in January of 2008. Students were contacted based on mentor recommendation directly by the researcher. In a few cases, mentors spoke with the students first about their willingness to participate in the interview. In every case, students were given the opportunity to decline an interview. Each student was asked to arrange with the researcher a mutually agreed-upon time for the interview. Each interview was tape-recorded and lasted approximately 10 minutes.
- 6. Mentor surveys (N=23) were distributed and collected during January of 2008. To ensure that responses would be anonymous, each mentor was asked to complete the questionnaire by typing their responses and leaving it with a school secretary not affiliated with the Faculty Mentor Program. This individual recorded which mentor had completed and handed in a survey and

placed reminder phone calls to those mentors who had not handed in a survey so as to obtain as many mentor surveys as possible. The only demographic data collected were years of experience as a mentor.

#### Statement of Ethics and Confidentiality

Permission to participate in this research was sought from each district's superintendent, each school principal, all parents of students, and the students themselves. To assure confidentiality, each participant was assigned a coded identification number. All data were stored in a locked filing cabinet in the researcher's home or office and were maintained there until the findings were published, accessible only to other researchers for whom the data might prove useful in further comparative analyses and who were enrolled in Western Connecticut State University's Doctor of Education in Instructional Leadership Program.

#### CHAPTER FOUR

#### ANALYSIS OF DATA AND EXPLANATION OF THE FINDINGS

The purpose of this study was to analyze the effects of participation in a specific student advisory program, known as the Faculty Mentor Program, regarding ninth and tenth grade students' attitudes, affiliation, and self-efficacy when compared to a non-participation in a Faculty Mentor Program. This study was also designed to evaluate the Faculty Mentor Program in terms of its stated objectives. To that end, three research questions were addressed: (1) What are the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy? (2) What are students' perceptions of the effects of a Faculty Mentor Program objectives? (3) What are Mentors' perceptions of the effects of a Faculty Mentor Program in regard to program in regard to program objectives?

The results of this research inquiry are presented in three sections: (a) the data screening process, (b) descriptive statistics, and (c) analysis of data including tables and figures. Chapter Four presents the data gathered from all four measurement tools used in this study and discusses how these qualitative and quantitative findings reflect on the research questions that were central to the study.

The *CFK*, *Ltd. School Climate Profile* survey was the primary quantitative tool employed to gather data for the analysis section of this research study. This quantitative instrument was used to address the first research question: What are the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy? The *CFK* consists of four parts: (a) General Climate Factors; (b) Program Determinants;

(c) Process Determinants; and (d) Material Determinants. The portion of the *CFK* administered to students consisted of the two parts most applicable for this study: (a) General Climate Factors and (c) Process Determinants (see Appendix D). Part A is designed to provide baseline data on school climate based on eight key climate factors. Each of these climate factors represents a separate subscale in Part A of the *CFK*. Part C of the *CFK* is a diagnostic tool (Howard et al., 1987). The eight subscales on Part C evaluate process determinants that describe the quality of a school's climate. The 16 subscales (Part A and Part C) on the *CFK* were the 16 dependent variables used in conducting the study

Each subscale consisted of five items that students were to evaluate in two columns. The first column, labeled "What Is", asked students to evaluate current aspects of their school climate while the second column, labeled "What Should Be," asked them to identify how important those same items were. Data from the *CFK* were collected from students twice with pretreatment data collected in September 2007 and post-treatment data collected in December 2007. This was the same procedure used to collect data from a control group of students at a different high school. These students did not receive the treatment of participation in a Faculty Mentor Program.

Additional quantitative data were collected and analyzed using the Freshman and Sophomore Faculty Mentor Groups Student Survey designed and implemented at the Faculty Mentor Program site. The qualitative data from the student interviews was gathered to address the second research question: What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives? This student survey consisted of 20 statements specific to the Faculty Mentor Program experience that

students evaluated using a Likert-type scale (see Appendix B). Freshmen and sophomore students (n = 432) completed this survey in January of 2008.

The qualitative data from the student interviews was gathered to address the second research question: What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives? Eight students answered a series of questions about their experience in the Faculty Mentor program (see Appendix B). These interviews were recorded and transcribed for ease of analysis.

The third type of qualitative data collected was through the Mentor Survey at the Faculty Mentor Program site. This qualitative data was gathered to address the third research question: What are mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives? All 33 mentors were given a brief survey which consisted of open-ended questions about their past year's experience in the Faculty Mentor Program (see Appendix A). Twenty-three mentors completed and returned the survey in January of 2008.

#### **Data Screening Process**

#### Code and Value Cleaning

After data were collected from the *CFK* surveys, they were examined for code and value cleaning. This process involved checking for the appropriateness of numerical codes that stood for the values of each variable studied (Myers, Gamst, & Guarino, 2006). The objective was to determine the legitimacy of numerical codes or values and whether the coding itself seemed reasonable. While code cleaning does not address the correctness of coded values, it does ascertain that a variable's code, in this case a score on a CFK subscale, is indeed within the specified range.

The first step in code cleaning involved a simple visual inspection of the data. Individual *CFK* survey data were removed from the study sample if a student had completed only one of the two required surveys. If, for example, a student completed a September pre-test but not the December post-test, the subject was removed from the study. In other cases, student data were removed from the study because they were incomplete with sections of the survey left blank. This method of handling missing data is known as listwise deletion (Myers, Gamst, & Guarino, 2006).

The sample size reduction due to either of these two criteria resulted in the loss of 11 freshmen and 18 sophomores from the Faculty Mentor Program group and two freshmen and two sophomores from the control group for a total of 33 cases. From each of these groups, 49 students were selected as a representative sample for the control and experimental groups. In order to equalize the group sizes, individuals were randomly selected for removal using a table of random numbers.

#### Pretest Group Equivalencies

In order to verify if groups were equal at the beginning of the study, an independent samples t-test was conducted using CFK pretest total scores where program (students participating in a faculty mentor program, students not participating in a faculty mentor program) was used as the independent variable. Means and standard deviations for pretest scores are presented in Table 1.

#### Table 1

#### Total Pretest Scores for CFK by Program Level

			Standard
Program Level	Ν	Mean	Deviation
Students not participating in a faculty mentor program	49	190.27	41.14
Students participating in a faculty mentor program	49	226.59	35.02

In order to ensure that Total Scores were homogenous across the two levels of the independent variable, Levine's Homogeneity of Variance test was used to verify that the error variance of the dependent variable (Total *CFK* score) is equal across both groups. When p>0.5, the data was homogeneous suggesting that an independent samples t-test was an appropriate test to conduct. In this case, p=.43 or p>.05 (see Table 2).

#### Table 2

Levene's Test of Homogeneity of Variances for CFK Pretest Total Scores

F	Р
.64	.43

Since the data passed the Levene's test, a t-test was conducted to determine similarities or differences between the groups. The t-test (Table 3) indicates that there is a statistically significant difference between students participating in a faculty mentor program ( $\mu$ =226.59) and students not participating in a faculty mentor program ( $\mu$ =190.27).

Table 3

t-test for Total Pretest Scores for CFK by Program Level

				95% Confidence Interval of					
				the Difference					
			Mean						
t	df	P (2-tailed)	Difference	Lower	Upper				
4.71	96	.00	36.33	21.01	51.65				

Since there was a statically significant difference between program level (t=4.71, p>.05), these Pretest Total scores were used as a covariate in further analyses.

### Descriptive Statistics

The descriptive statistics for *CFK* scores presented in Table 4 represent the final (posttest) *CFK* data set used for statistical analysis following the initial data screening process.

## Table 4

# Descriptive Statistics for CFK Subscales for Treatment and Control Groups

Treatment Group						Control Group				
CFK Subscale			Standard					Standard		
Category	Ν	Mean	Deviation	Skewedness	Kurtosis	Ν	Mean	Deviation	Skewedness	Kurtosis
Respect	49	15.2	2.6	-0.18	-0.39	49	13.6	3.3	-0.06	-0.48
Trust	49	12.9	3.2	0.26	0.00	49	11.5	3.4	0.12	-0.04
High Morale	49	13.9	2.9	-0.16	0.10	49	11.1	3.7	0.25	-0.56
Opportunity for										
input	49	12.9	3.8	0.11	-0.47	49	10.0	3.6	0.43	-0.35
Continuous social										
and academic										
growth	49	13.9	3.0	-0.03	-0.76	49	12.3	3.4	0.18	-0.47
Cohesiveness	49	15.2	2.9	-0.15	-0.95	49	12.3	3.5	0.32	0.21
School renewal	49	14.8	2.7	-0.02	-0.06	49	12.5	3.4	0.19	-0.39

## Table 4 (continued)

# Descriptive Statistics for CFK Subscales for Treatment and Control Groups

			Treatment	Group		Control Group					
CFK Subscale			Standard			Standard					
Category	N	Mean	Deviation	Skewedness	Kurtosis	Ν	Mean	Deviation	Skewedness	Kurtosis	
Caring	49	14.6	3.7	-0.69	1.47	49	12.7	3.6	0.14	-0.19	
Problem solving											
ability	49	14.1	3.3	-0.02	-0.92	49	12.0	3.4	0.34	0.14	
Improvement of											
school goals	49	14.2	3.6	-0.07	-0.85	49	12.3	3.0	0.52	-0.08	
Identifying and											
working with conflicts	49	15.0	3.3	-0.11	-1.06	49	11.7	3.4	0.31	0.00	
Effective											
communication	49	15.1	3.1	-0.35	-0.18	49	12.6	3.0	0.71	0.30	

## Table 4 (continued)

# Descriptive Statistics for CFK Subscales for Treatment and Control Groups

	Treatment Group						Control Group				
CFK Subscale			Standard					Standard			
Category	Ν	Mean	Deviation	Skewedness	Kurtosis	Ν	Mean	Deviation	Skewedness	Kurtosis	
Involvement in											
decision											
making	49	13.2	3.6	0.12	-0.37	49	10.6	3.6	0.82	-0.05	
Autonomy with											
accountability	49	14.4	3.7	-0.28	-1.00	49	11.9	3.7	0.22	-0.61	
Effective teaching											
and learning											
strategies	49	14.5	3.1	-0.13	-0.31	49	11.9	3.1	0.49	0.33	
Ability to plan for											
the future	49	14.5	3.4	-0.49	-0.22	49	11.6	3.4	0.48	0.06	

#### CFK Instrument

*The Statistical Package for the Social Sciences (SPSS)* 16.0 for Windows XP, Graduate Package, was used to analyze the quantitative data obtained from the *CFK* instrument. The purpose of this analysis was to address research question one and determine the effects of the Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy.

A one-way between-subjects multivariate analysis of covariance (MANCOVA) was used to determine differences between two levels of the independent variable, student participation in the Faculty Mentor Program and student non-participation in the Faculty Mentor Program. The dependent variables were the 16 subscales on the *CFK* instrument. The total scores for the "What Is" column of the following categories were examined: Respect, Trust, High Morale, Opportunity for Input, Continuous Academic and Social Growth, Cohesiveness, School Renewal, Caring, Problem-Solving Ability, Improvement of School Goals, Identifying and Working with Conflicts, Effective Communications, Involvement in Decision Making, Autonomy with Accountability, Effective Teaching-Learning Strategies, and Ability to Plan for the Future.

An alpha level of .05 was pre-established for the quantitative statistical analysis. In this case, p < .05 for 6 out of the 16 *CFK* subscales, demonstrating that there is a significant statistical difference between the two groups. Table 2 illustrates the results of the MANCOVAs with the *CFK* pretest score totals as covariate. This pretest/posttest analysis confirmed that students in the treatment group, the Faculty Mentor Program, were consistently associated with higher scores on a number of dependent variables (*CFK* subscales) as compared to students who did not participate in the Faculty Mentor Program.

### Table 5

## MANCOVA Analysis of CFK Subscales

		Treatment		Control	Type III					Partial
	Treatment	Standard	Control	Standard	Sum of		Mean			Eta
CFK Subscale Category	Mean	Deviation	Mean	Deviation	Squares	df	Squares	F	Р	Squared
Respect	15.2	2.6	13.6	3.3	.37	1	.37	.05	.82	.00
Trust	12.9	3.2	11.5	3.4	1.08	1	1.08	.12	.73	.00
High Morale	13.9	2.9	11.1	3.7	38.02	1	38.02	4.47	.04 <sup>a</sup>	.03 <sup>b</sup>
Opportunity for input	12.9	3.8	10.0	3.6	9.93	1	9.93	.89	.35	.01
Continuous social and										
academic growth	13.9	3.0	12.3	3.4	1.31	1	1.31	.16	.69	.00
Cohesiveness	15.2	2.9	12.3	3.5	36.27	1	36.27	4.52	.04 <sup>a</sup>	.03 <sup>b</sup>

<sup>a</sup>Statistically significant at p≤.05

<sup>b</sup>Demonstrates a small effect size (Huck, 2008)

## Table 5 (continued)

## MANCOVA Analysis of CFK Subscales

		Treatment		Control	Type III					Partial
	Treatment	Standard	Control	Standard	Sum of		Mean			Eta
CFK Subscale Category	Mean	Deviation	Mean	Deviation	Squares	df	Squares	F	Р	Squared
School renewal	14.8	2.7	12.5	3.4	12.44	1	12.44	1.72	.19	.01
Caring	14.6	3.7	12.7	3.6	4.63	1	4.63	.46	.50	.00
Problem solving ability	14.1	3.3	12.0	3.4	6.68	1	6.68	.79	.38	.00
Improvement of school										
goals	14.2	3.6	12.3	3.0	1.80	1	1.80	.19	.67	.00
Identifying and working with conflicts	15.0	3.3	11.7	3.4	33.25	1	33.25	3.69	.06 <sup>a</sup>	.02 <sup>b</sup>
Effective communication	15.1	3.1	12.6	3.0	33.78	1	33.78	4.60	.03 <sup>a</sup>	.03 <sup>b</sup>

<sup>a</sup>Statistically significant at p≤.05

<sup>b</sup>Demonstrates a small effect size (Huck, 2008)

## Table 5 (continued)

# MANCOVA Analysis of CFK Subscales

		Treatment		Control	Type III					Partial
	Treatment	Standard	Control	Standard	Sum of		Mean			Eta
CFK Subscale Category	Mean	Deviation	Mean	Deviation	Squares	df	Squares	F	Р	Squared
Involvement in decision										
making	13.2	3.6	10.6	3.6	23.67	1	23.67	2.27	.13	.01
Autonomy with										
accountability	14.4	3.7	11.9	3.7	21.43	1	21.43	2.28	.13	.01
Effective teaching and										h
learning strategies	14.5	3.1	11.9	3.1	42.25	1	42.25	5.61	.02ª	.03 <sup>b</sup>
Ability to plan for the										
future	14.5	3.4	11.6	3.4	52.84	1	52.84	5.83	.02 <sup>a</sup>	.03 <sup>b</sup>

<sup>a</sup>Statistically significant at p≤.05

<sup>b</sup>Demonstrates a small effect size (Huck, 2008)

#### The CFK and Attitude

While many of the *CFK* subscales measure the construct of attitude, two in particular demonstrate the value of participation in the Faculty Mentor Program: Effective Communications and High Morale. Each of these two subscales contains statements that speak to Gagné's (1985) definition of attitude as "acquired internal states that influence the choice of personal action toward some class of things, persons, or events" (Driscoll, 2005, p. 363). The partial Eta-squared effect sizes were .03 or both Effective Communications and High Morale. Group means for each of these dependent variables (Table 5) revealed that the treatment group had statistically higher scores on Effective Communications (M = 15.1, SD = 3.1) than did the control group (M = 12.6, SE = 3.0), and the treatment group had higher scores on High Morale (M = 13.9, SD = 2.9) than did the control group (M = 11.1, SD = 3.7). A sample statement that students were asked to rate on this subscale was "I feel the teachers are friendly and easy to talk to" (Howard, Howell, & Brainard, 1987, p. 64).

#### *The CFK and Self-efficacy*

Student self-efficacy was also positively impacted by the Faculty Mentor Program. Self-efficacy is defined by Bandura (1997) as "one's capabilities to organize and execute the courses of action required to produce given attainments" (Driscoll, 2005, p. 316). Students with high self-efficacy view themselves as empowered and capable (Bandura, 1994). One subscale on the *CFK survey*, Identifying and Working with Conflicts, indicated that students in the Faculty Mentor Program feature higher selfefficacy as compared to their peers who do not participate in a mentor program. This subscale contain statements that focus on Bandura's conception of self-efficacy as an individual's view of himself or herself as able to effect the course of their life. The partial Eta-squared effect size for Identifying and Working with Conflicts was .02 demonstrating

a small effect size. Group means for each of this dependent variable (Table 5) revealed that the treatment group had statistically higher scores on Identifying and Working with Conflicts (M = 15.0, SD = 3.3) than did the control group (M = 11.7, SD = 3.4). One sample item from this subscale reads: "There are procedures open to me for going to a higher authority if a decision has been made that seems unfair" (Howard, Howell, & Brainard, 1987, p. 63). Mentoring encourages students to self-advocate. Students in the mentor group are provided with concrete examples by their mentor or peers on how this approach can often meet with success. These lessons encourage students to feel that they too have a measure of control in their education and life.

#### The CFK and Affiliation

Finally, affiliation was increased in students who participated in the Faculty Mentor Program. Affiliation is defined in Moos and Trickett's Classroom Environment Scale as "how well students feel they know one another, how much they want to help one another..., and to what degree they enjoy working together" (Schmuck & Schmuck, 2001, p.69). The research is clear that school connectedness or a sense of belonging offers numerous benefits to students. Three subscales on the CFK, Ability to Plan for the Future, Effective Teaching-Learning Strategies, and Cohesiveness, demonstrate that the Faculty Mentor Program is linked to the concept of affiliation. The partial Eta-squared effect sizes were all small at .03 for Ability to Plan for the Future, Effective Teaching-Learning Strategies, and Cohesiveness. Group means for each of these dependent variables (Table 5) revealed that the treatment group had statistically higher scores on Ability to Plan for the Future (M = 14.5, SD = 3.4) than did the control group (M = 11.6, SD = 3.4), the treatment group had higher scores on Effective Teaching-Learning Strategies (M = 14.5, SD = 3.1) than did the control group (M = 11.9, SD = 3.1), and the treatment group had higher scores on Cohesiveness (M = 15.2, SD = 2.9) than did the

control group (M = 12.3, SD = 3.5). While affiliation can involve peer-to-peer connections and student-to-teacher/mentor connections, the definition can also include a sense of membership or association a student feels between himself and his school. This affiliation, in turn, creates positive attitudes about the school and the student's place in it. Students at the Faculty Mentor site note a strong sense of affiliation when they agreed with items such as "our school is ahead of the times" (Howard, Howell, & Brainard, 1987, p. 66).

#### Faculty Mentor Groups Student Survey

The Faculty Mentor Groups Student Survey is a 20-item survey administered to provide additional descriptive data that was specific to the Faculty Mentor Program site (see Appendix C). The data gathered was to address the second research question: specifically, what are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives? Freshmen and sophomore students were given this survey in January of 2008. Listwise deletion resulted in 24 student surveys, or 5.3% of respondents, eliminated from the study because of incomplete or inappropriate responses. The 432 remaining responses were analyzed as displayed in Table 6. Reliability, calculated by Cronbach's Alpha, of this total affective instrument is .903. An affective instrument has adequate reliability at .70 or above (Gable, 1986).

## Table 6

# Descriptive Summary of Positive Responses to Faculty Mentor Program Student Survey

		Percent				Percent
		responding	Percent	Percent	Percent	responding
		strongly	responding	responding	responding	strongly
Item	Concept	agree	agree	undecided	disagree	disagree
1	Grade level	n/a <sup>a</sup>				
2	Comfort with communicating personal concerns	12%	42%	33%	10%	3%
3	Met with mentor informally	8%	21%	19%	35%	17%
4	Enjoy/relaxed in mentor group	33%	53%	8%	3%	2%
5	Know mentor group students better	14%	44%	27%	13%	3%
6	Important high school information given	18%	53%	19%	8%	2%
7	Feel part of school due to mentor program	8%	27%	40%	22%	3%

## Table 6 (continued)

Descriptive Summary of Positive Responses to Faculty Mentor Program Student Survey

		Percent				Percent
		responding	Percent	Percent	Percent	responding
		strongly	responding	responding	responding	strongly
Item	Concept	agree	agree	undecided	disagree	disagree
8	Met with mentor about academics	14%	37%	17%	24%	8%
9	Mentor assisted academic planning/concerns	13%	39%	26%	17%	5%
10	School resource information provided by mentor	19%	58%	15%	7%	0%
11	Stress management and coping discussed	9%	40%	32%	16%	3%
12	Mentor group is a trusted, safe place	19%	45%	20%	12%	4%
	Mentor group gave information on leadership,					
13	volunteer, extracurricular activities	13%	50%	21%	13%	2%
	Mentor group provided access to guidance					
14	counselor	13%	41%	23%	19%	4%

## Table 6 (continued)

Descriptive Summary of Positive Responses to Faculty Mentor Program Student Survey

		Percent				Percent
		responding	Percent	Percent	Percent	responding
		strongly	responding	responding	responding	strongly
Item	Concept	agree	agree	undecided	disagree	disagree
15	Desire to meet with mentor even more	21%	30%	27%	16%	7%
16	Mentor program improved communication skills	10%	28%	34%	22%	6%
	Mentor program helped access study groups, study					
17	aides, and testing advice	12%	47%	27%	11%	3%
18	Mentor program discussed alcohol and drug abuse	8%	29%	20%	31%	11%
	Mentor program discussed issues of diversity and					
19	prejudice	9%	32%	28%	23%	8%
20	At least one guest speaker in mentor group	34%	44%	11%	8%	4%

Table 7 showed that 11 out of 19 items had 50% or higher response rates from students. This indicated that a majority (58%) of student responses to the statements posed in the survey either agreed or strongly agreed with statements concerning various positive aspects of the Faculty Mentor Program.

## Table 7

		Percent	Percent responding
		responding	undecided,
		agree or	disagree or
Item	Concept	strongly agree	strongly disagree
1	Grade level	n/a <sup>a</sup>	n/a <sup>a</sup>
2	Comfort with communicating personal		
	concerns	54%	46%
3	Met with mentor informally	29%	71%
4	Enjoy/relaxed in mentor group	87%	13%
5	Know mentor group students better	57%	43%
6	Important high school information given	72%	28%
7	Feel part of school due to mentor		
	program	35%	65%
8	Met with mentor about academics	51%	49%
9	Mentor assisted academic		
	planning/concerns	52%	48%
10	School resource information provided		
	by mentor	78%	22%
11	Stress management and coping		
	discussed	49%	51%
12	Mentor group is a trusted, safe place	64%	36%

Summary of Positive Responses to Faculty Mentor Program Student Survey

### Table 7 (continued)

		Percent	Percent responding
		responding	undecided,
		agree or	disagree or
Item	Concept	strongly agree	strongly disagree
13	Mentor group gave information on		
	leadership, volunteer, extracurricular		
	activities	63%	37%
14	Mentor group provided access to		
	guidance counselor	54%	46%
15	Desire to meet with mentor even more	51%	49%
16	Mentor program improved		
	communication skills	38%	62%
17	Mentor program helped access study		
	groups, study aides, and testing advice	59%	41%
18	Mentor program discussed alcohol and		
	drug abuse	38%	62%
19	Mentor program discussed issues of		
	diversity and prejudice	41%	59%
20	At least one guest speaker in mentor		
	group	77%	23%

### Summary of Positive Responses to Faculty Mentor Program Student Survey

The highest percentage of positive responses came from item 4 in the survey. This statement had to do with how relaxed they were in their Faculty Mentor Group and how

much they enjoyed it. A majority (83.2 %) of students indicated that they were comfortable in their Mentor groups.

Two other items that elicited a high percent of student agreement were item 10 and item 20. The former was about the Mentor group being useful in terms of serving as a conduit of school information (76.4% agreed or strongly agreed) while the latter indicated that at least one guest speaker came to the Mentor group (75.2% agreed or strongly agreed).

#### Mentor Survey

The mentor survey was comprised of three open-ended questions. It was conducted to provide qualitative data that addresses Research Question Three: What are Mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives? Of the 33 mentors in the Faculty Mentor Program, 23 responded to the survey. The researcher, who was a mentor, did not participate in the survey due to potential conflict of interest. All seven guidance counselors were also asked to complete the survey and two did so. Repeated attempts were made by the secretary of the Guidance Department to elicit more responses to the survey.

Responses were collaboratively analyzed by both the researcher and the rest of the Faculty Mentor Steering committee. This group was composed of two teachers not affiliated with the Faculty Mentor Program, three mentors and a guidance counselor. Responses were coded and listed based on the frequency of responses made. Table 8 indicated these aggregated responses grouped by program strengths and program concerns.

#### Table 8

Program		
Strength or		Number of
Concern	Response	respondents
Strength	Small weekly group meetings are worthwhile	17
Strength	Combining Freshmen Forum and Sophomore Seminar	6
	students into homeroom run by mentor	
Strength	More sharing among mentors	3
Strength	Better rapport with students in Faculty Mentor Group	2
Concern	Too many surveys	7
Concern	Lack of time with sophomores	6
Concern	Scheduling – last minute changes	5
Concern	Better communication about schedules	2
Concern	Communication in general	2
Concern	Freshmen/sophomore combination in homeroom	2

#### Mentor Survey Responses Out of a Total of 23 Completed Surveys

#### Student Interviews

The eight student interviews were recorded and coded using HyperRESEARCH Qualitative Analysis Tool, Version 2.8. The responses provided additional supportive qualitative data about the value of the Faculty Mentor Program in meeting many of its stated objectives (research question #2). Triangulation with the data obtained from both the Mentor Survey and the Faculty Mentor Program Student Survey provided further evidence that program objectives were met by the Faculty Mentor Program.

A total of 23 codes were created based on comments that students made during the interviews. Table 9 represents both the coding and the frequency with which these statements were made across all eight interviews. Note that, in some cases, students repeated a comment during an interview but a maximum of one individual coded response per interview was recorded in terms of the frequency column.

Table 9

Student Interview Response.	S
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Coded Response	Frequency of response
Positive school climate	7
Feels connection with Mentor Group	6
Mentor Group is a stress-free place	6
Faculty Mentor Program is beneficial	5
Mentor helps with academic	5
advisement/courses	
Feels connection with mentor	5
Mentor Group is fun	5
Mentor helps with personal and social skills	5
Mentor Group has open communication	5
Mentor provides helpful advice	4

### Table 9 (continued)

Student Interview Responses

Coded Response	Frequency of Response
Connection to school is limited	4
Mentor helps with students' teacher problems	4
Mentor helps with academic advisement/class	3
selection	
Strong connection to school	3
Small group environment is positive	3
Mentors help you get to know the school	2
Mentors have empathy for students	2
Peer-to-peer advisement occurs in Mentor	2
Group	
Problem identification occurs in Mentor	2
Group	
Mentors provide needed stress-reduction	2
advice	
Mentor Group is a source of important school	2
information	
Mentor provides positive feedback	2
School can be a hectic, stressful place	2

There was support in these interviews that the Faculty Mentor Program improved students' high school experience. Tables 10-12 offer further analysis of these interviews:

#### Table 10

	Number Responding
Interview Responses	( <i>n</i> = 8)
Positive school climate	7 (88%)
Feels connection with Mentor group	6 (75%)
Mentor group is a stress-free place	6 (75%)
Feels connection with mentor	5 (63%)

Belongingness/Connections to School, Mentor, and Mentor Group

While seven out of eight students mentioned that their high school had a positive school climate, this may or may not be attributable to the Faculty Mentor Program. What is significant, however, is that six out of eight interviewed subjects (75%) reported that they felt a sense of connection to their Mentor Group that they described in positive terms. These interview responses speak directly to Faculty Mentor Program Objectives #11, #12, #13, #16 and indirectly to a number of other objectives (see Appendix E). It also corroborates many of the results found on the Faculty Mentor Program Student Survey; specifically, item #2, item #4, item #12, and item #15 (see Table 7). The following comments included student statements about their sense of belonging in Mentor Group and their descriptions of the group as a stress-free place:

Student 3: "I like to participate and say my feedback regarding conversations after a performance that happens in the school auditorium. We would discuss what the message was, your opinion, and what we got out of it; and we get to say our opinions about it. I feel that I could raise my hand and give feedback into the conversation and benefit from whatever is said. I feel great. I like my Mentor group." Student 4: "I know all the kids in there, so I feel like I belong. ... we talk about our week and stuff and we comment on it and get advice here and there. It is casual, and that makes it really great. It is not too formal, and that makes it relaxing."

Student 5: "It is a great environment. It is calm and she (the mentor) makes it great. She brings games and ... It's perfect."

### Table 11

#### Benefits of Faculty Mentor Program

Interview Responses	Number Responding
	( <i>n</i> = 8)
Faculty Mentor Program is beneficial	5 (63%)
Mentor helps with academic advisement/courses	5 (63%)
Mentor group is fun	5 (63%)
Mentor helps with personal and social skills	5 (63%)
Mentor group has open communication	5 (63%)

A majority of students (63%) identified a number of other benefits associated with the Faculty Mentor Program. These included academic assistance with their studies, an opportunity for fun, personal and social skill development, and a forum that featured open and frank communication. These interview responses speak directly to Faculty Mentor Program Objectives #1, #4, #5, #6, and #15 and indirectly to a number of other objectives (see Appendix E). It also corroborates many of the results found on the Faculty Mentor Program Student Survey; specifically, item #2, item #4, item #6, item #7, item #8, item #9, item #11, and item #16 (see Table 7). Student 7: "It is really open. You can talk about problems you are having in school and with friends. It is a good environment and it takes all of the stress out of your day."

Student 8: "It is really relaxed. It is kind of really open. I never have to think about what I am saying, I can just say it."

Student 1: "I think just being able to reflect makes you more open. ... you really learn (in Mentor group) to kind of socialize with everyone and not just your friends."

Student 2: "I think it helps to just talk to somebody like my mentor. Sometimes. if I am stressed out; it makes me feel better. Like I can have someone to talk to."

Table 12

#### Difficulties in school

Interview Responses	Number Responding
	( <i>n</i> = 8)
Connection to school is limited	4 (50%)
Mentor provides helpful advice	4 (50%)
Mentor helps with students' teacher problems	4 (50%)

Interestingly, half of the students interviewed reported a limited connection to the school as a whole. Despite this, many of these same students reported that their Faculty Mentor Group was a place where they could receive help and advice on a variety of topics. This includes difficulties that students occasionally run into with other teachers. The students reported that their mentors either gave them advice on handling the situation or actively advocated on their behalf. These interview responses speak directly to Faculty Mentor Program Objectives #2, #9, #10, #16 and indirectly to a number of other objectives (see Appendix E). It also corroborates many of the results found on the Faculty

Mentor Program Student Survey; specifically, item #9, item #11, and item #16 (see Table 7).

Student 3: "I think I went to her (mentor) for an academic writing piece. We worked on that piece, and that has helped me on an academic level."

Student 4: "Sometimes you have questions if you are just coming to the school or even in the middle of the year. You need advice on what classes to take and what not to take. (My mentor) has advice to give."

Student 5: "In the beginning of the year, I was having a problem with my biology teacher. We just were not clicking, and I was just not liking the whole idea of her. So I talked with (my mentor) about it and she arranged an appointment for me to meet with her. They put me in another class."

These statements suggest that students see tangible benefits associated with the Faculty Mentor Program. While the range of reported benefits varied from student to student, as did the level of need for a mentor, all the students interviewed acknowledged the importance of a program like the Faculty Mentor Program and the need for adult mentors in the lives of students.

#### Summary

The analyses presented in this chapter summarized the responses to the three research questions posed at the onset of the study. The data analysis for research question one investigated the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy. The results indicated that there are significant benefits to student participation associated with this type of mentoring program. Students who participated in a Faculty Mentor Program scored significantly higher on 6 of 16 of the *CFK* instrument subscales as compared with their non-Faculty Mentor Program school counterparts. This includes such important dimensions as High Morale,
Cohesiveness, Identifying and working with conflicts, Effective Communication, Effective teaching and learning strategies, and Ability to plan for the future.

Research question two explored students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives. The results from both The Faculty Mentor Program Student Survey and the student interviews revealed satisfaction among students with their Faculty Mentor Group and mentor. Students reported a number of benefits that may be linked directly to the Faculty Mentor Program objectives.

The third research question provided additional information on Mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives. While the Mentor Survey responses tended to focus on specific 2007-2008 programmatic changes in the Faculty Mentor Program, mentors did write about a number of strengths associated with the program. Many of these strengths tie directly to the objectives of the Faculty Mentor Program.

The quantitative research conducted using the CFK, supported with the results of the three qualitative instruments used in the study, reveal a number of benefits associated with student participation in a Faculty Mentor Program. The implications of these findings will be discussed in depth in Chapter Five.

#### CHAPTER FIVE

# SUMMARY AND CONCLUSIONS

The six sections of Chapter Five reiterate and provide further analysis of the research topic of this study. The Summary of the Study section provides an overview of the research conducted to determine the potential benefits of a Faculty Mentor Program as related to high school students' attitudes, affiliation, and self-efficacy. In addition, information on student and mentor perception of how the Faculty Mentor Program meets its stated objectives is presented. The Findings section examines the research outcomes of both the quantitative and qualitative aspects of this study. The Comparison and Contrast of Findings section specifically examines these findings as related to the literature reviewed in Chapter Two. The Limitations of the Study section expands on the assertions made in Chapter Three through a candid examination of issues and questions that arise from this research study. The Implications section offers suggestions on how the results of this study might be used to promote more personalized high schools and how to go about implementing these suggestions. Finally, the Future Research section proposes directions for additional study on this topic that may assist school personnel who are considering implementing a Faculty Mentor Program or looking to improve their current advisory program.

## Summary of the Study

The central focus for this investigation was whether participation in a student advisory program, such as the Faculty Mentor Program, could positively impact high school students. Many large schools are all too often impersonal institutions where students feel alienated, unmotivated or even threatened. These schools are in search of programs that provide many of the benefits of smaller schools – highly individualized instruction, strong personal connections between students and their peers, and positive

relationships between students and members of the adult school community. It is this type of environment that best promotes student growth, not only in terms of their socialemotional well-being but in children's academic development as well.

This study sought to use both quantitative and qualitative analysis to determine the effects of a particular model of student advisory program, the Faculty Mentor Program, on student attitudes, sense of affiliation with their school, and feelings of selfefficacy. The research questions that guided the study were:

- 1. What are the effects of a Faculty Mentor Program on high school students' attitudes, affiliation, and self-efficacy?
- 2. What are students' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?
- 3. What are Mentors' perceptions of the effects of a Faculty Mentor Program in regard to program objectives?

Data were collected in four forms: (a) The Charles F. Kettering (CFK), Ltd.,

School Climate Profile (1974), which served as the primary instrument to gather quantitative data on students' attitudes about themselves, about their connection to their school, and about their self-efficacy at both the Faculty Mentor Program site and another similar high school that did not have any kind of student advisory program (research question 1); (b) the *Faculty Mentor Program Student Survey*, a Likert scale survey specifically designed to qualitatively evaluate the Faculty Mentor Program, given to students (n=432) at the study site (research question 2); (c) student interviews, qualitative research which involved a purposeful sample (n=8) of students from the Faculty Mentor site whose interview sessions were recorded and analyzed using HyperRESEARCH (research question 2); and (d) a Mentor survey, additional qualitative research consisting of three open-ended questions that were responded to by a majority of mentors and counselors (n=23) at the Faculty Mentor Program site (research question 3).

In terms of the quantitative analysis of the data derived from the *CFK survey*, a MANCOVA was used to examine differences between two levels of the independent variable, student participation in the Faculty Mentor Program and student non-participation in a mentor program. The dependent variables consisted of the 16 subscales on the *CFK* instrument; specifically: Respect, Trust, High Morale, Opportunity for Input, Continuous Academic and Social Growth, Cohesiveness, School Renewal, Caring, Problem-Solving Ability, Improvement of School Goals, Identifying and Working with Conflicts, Effective Communications, Involvement in Decision Making, Autonomy with Accountability, Effective Teaching-Learning Strategies, and Ability to Plan for the Future. A pretest-posttest quasi-experimental research design was implemented in this portion of the study to investigate the first research question.

Students (n=98) completed the *CFK* instrument in both September and December. Of these students, 49 were in the control group and attended a school with no Faculty Mentor Program. The other students were in the experimental group and did attend a school that had a Faculty Mentor program.

The participants in this study represent a sample of convenience. The target population was freshmen and sophomores at two different high schools. Both schools were similar in terms of demographics, and the target sample was representative of the school populations.

# Findings

The primary quantitative data analysis of the study included a two-group multivariate analysis of covariance (MANCOVA) with the *CFK* Pretest covariate. The dependent variables consisted of the 16 different subscales on the *CFK* instrument. The

data set was analyzed using the independent variable of program with two levels, student participation in the Faculty Mentor Program and student non-participation in a mentor program.

The findings from the MANCOVA demonstrated that there was a significant statistical difference between the two groups for six of the 16 dependent variables (High Morale, Cohesiveness, Identifying and Working With Conflicts, Effective Communication, Effective Teaching-Learning Strategies, and Ability to Plan for the Future) at the p < .05 confidence level. The partial Eta-squared effect sizes for all six of these subscales were small (.02 or .03). Means scores for the experimental group were higher on all six of these dependent variables.

Additional supportive follow-up data for this study was also gathered from both students and mentors using three other instruments. In terms of student perceptions of the effects of the Faculty Mentor Program in regard to program objectives, additional qualitative data were afforded using the Faculty Mentor Program Student Survey. Many student responses to the statements posed in the survey were either positive or strongly positive about various aspects of the Faculty Mentor Program. The highest percentage of positive responses by students came from survey items that indicated a relaxed, comfortable atmosphere in their Faculty Mentor Group (83.2 % agreed or strongly agreed), the usefulness of the Mentor group as a conduit of school information (76.4% agreed or strongly agreed), and the ability of the Mentor group to serve as a platform for important guest speakers such as guidance counselors, administrators, and support service staff (75.2% agreed or strongly agreed).

Qualitative data from students about the Faculty Mentor Program was also gathered through student interviews at the Faculty Mentor Program site. The eight student interviews revealed some important facts that support the Faculty Mentor

Program as one way to improve high school students' quality of life. Seven out of eight students (88%) mentioned that their high school had a positive school climate and six out of eight interview subjects (75%) reported that they felt a sense of connection to their Mentor Group. A majority of students (63%) identified other benefits associated with the Faculty Mentor Program, including academic assistance, a positive relationship with their mentor, opportunities for relaxation, personal and social skill development, and open and frank communication.

Finally, qualitative data on Mentor perceptions of the effects of a Faculty Mentor Program in regard to program objectives was obtained from the Mentor Survey. The results of the Mentor Survey revealed some important programmatic information and the importance of all of these findings will be reviewed in the implications section of this chapter.

## Comparison and Contrast of Findings

The Review of the Literature discussed in Chapter Two suggested that social and emotional learning (SEL) research has its roots in the constructs of figures such as Maurice Elias (1997, 2003, 2006). Susan Munro's work on cooperative learning (2006) and the work of Daniel Goleman (1998), John Mayer (1997, 2000, 2003), and Peter Salovey (1997) on emotional intelligence (EQ) have also been instrumental in supporting the idea of mentorship programs in schools. The importance of school connectedness and affiliation with school was examined by researchers such as Robert Blum (2002, 2005) and Kathryn Wentzel (1997). Personalization of schools was also promoted by Theodore Sizer (1984) and James Comer (1999). Finally, Albert Bandura's theory of self-efficacy (1994) and Abraham Maslow's hierarchy of needs theory (1943) informed much of this investigation. This study supported the assertion that student advisory programs, such as the Faculty Mentor Program, can lead to a more personalized environment in large high schools. This, in turn, translates into students who are happier with themselves, their relationships, and with their school. Both quantitative data and qualitative responses demonstrated that students who participated in the Faculty Mentor Program were associated with positive attitudes, affiliation with their school, and feelings of self-efficacy.

Maurice Elias, one of the leading proponents of social-emotional learning, asserts that it is SEL that "...when added to academic learning, provides educators with the possibility of capturing the balance children need" (Elias, 2006, p. 5). The balance that Elias speaks to is the need for such skills and attributes as effective problem-solving, responsibility for personal health and well-being, positive social relationships, caring for others, citizenship, and decision-making that is guided by morality and character. Rather than taking time away from academics or serving as ineffectual window-dressing, Elias and others have found that school efforts that promote SEL actually enhance students' academic learning at the same time.

SEL, like academic content, needs to be a school priority. As Elias explained "effective, lasting academic and social-emotional learning is built upon caring relationships and warm but challenging classroom and school environments" (Elias, 2003, p. 8). Large schools, in particular, face a challenge in providing opportunities for relationship building. This study revealed that advisory programs, such as the Faculty Mentor Program, can provide just the type of caring, highly personalized environment that students need. Many of the subscales on the *CFK* survey, in particular Cohesiveness, support this conclusion in that there was a significant difference between those students participating in a Faculty Mentor program and those students who did not participate in a

mentor program. An added benefit of a mentor program is that they can serve as a venue for the introduction or reinforcement of critical SEL skills.

The typical structure of most student advisory programs, including the Faculty Mentor Program, features a small group setting led by at least one adult facilitator. In some cases, older student peers are also involved with leading the group. The basis for this design stems from the work of collaborative learning theorists like Susan Munro (2006). They postulate that, as social creatures, humans naturally benefit from social interaction. Structuring our educational system to recognize this fact accrues multiple benefits to students. Munro, Utne and Payton report that "studies of cooperative-learning strategies regularly report an increase in engagement and active participation in the learning process, which in turn increase student motivation, time on task, and retention times and improve cognitive reasoning and the ability to see from others' perspectives" (p. 2).

Like SEL skills, cooperative learning skills can be explicitly taught. It may be done both inside and outside the classroom. While this study did not focus on the use of cooperative learning as a particular strategy, the small group nature of the Faculty Mentor Program may provides the type of forum where cooperative learning can take place. Students reported a high degree of satisfaction with their mentor and their mentor group. Many of the hallmarks of cooperative learning, such as group discussion and reflection, were reported as routine parts of Faculty Mentor Group activities.

An understanding of emotional intelligence (EQ) theory provides another key underpinning to the development and promotion of mentor programs. Daniel Goleman (1998) based his concept of emotional intelligence on the work of John Mayer and Peter Salovey (1997, 2000, 2003). Like SEL theory, emotional intelligence theory promotes the importance of emotional health as crucial in an individual's happiness and social success.

Mayer and Salovey (1997) defined emotional intelligence as composed of four key skills: (a) reflective regulation of emotions to promote emotional and intellectual growth; (b) understanding and analyzing emotions; employing emotional knowledge; (c) emotional facilitation of thinking; and (d) perception, appraisal, and expression of emotion. The results of the present study support the contention that student participation in the Faculty Mentor Group meets many of their emotional needs. These including a need for belonging, a need to share common experiences, and a need to analyze and problem-solve emotional and social challenges. It also provides a break in the often frenetic pace of the academic day allowing students to socialize and reflect upon the course of the day. Students' emotional needs can be met through a strong relationship with their adult mentor, a positive dialogue with their peers in the mentor group, and/or a combination of both.

School connectedness and affiliation with school has been shown to be positively correlated with a number of benefits. Unfortunately, Blum (2005) reported that as many as 60% of high school students suffer from chronic disengagement. Wentzel (1997) established that caring teachers are associated with such positive attributes as internal control beliefs and behavioral goal setting. The statistically significant differences in the *CFK* scores of students who participated in the Faculty Mentor Program and those who did not participate in such a program, particularly in terms of their subscale scores on Cohesiveness, Effective Teaching-Learning Strategies, and Ability to Plan for the Future, suggest that students who are part of this type of mentoring program are provided with the type of affiliation that Blum and Wentzel envision.

Theodore Sizer and the Coalition of Essential Schools (2007) have advocated for the establishment of small, personalized learning communities for decades. James Comer (1999) also has focused his work on the critical nature of relationship-building in schools.

His Comer School Development Program begins with the premise that improved school climate and better interpersonal relationships must first be addressed if gains in academic achievement are to follow (Cook, Hunt, & Murphy, 2000). This study revealed a marked difference in school climate and the degree of positive relationships in schools with a Faculty Mentor Program. This was evidenced in statistically significant differences on six of the 16 *CFK* survey subscales between students who participated in the Faculty Mentor Program and students who did not participate in the Faculty Mentor Program. The value of programs, like the Faculty Mentor Program, which create and foster small communities within the larger setting of the high school, is supported by this research.

While much of the literature reviewed thus far is relatively recent, the research of two historical theorists' also has influenced this study. Albert Bandura, a social psychologist, has explored the concept of self-efficacy for the last two decades. He defined self-efficacy as "…people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (1994, p. 71). Bandura noted that it is the school that functions as the primary agency for the development of self-efficacy with the result being the eventual creation of a healthy, productive adult citizen. Bandura and cooperative learning theorists like Munro agree that structures must be put into place in our schools that can provide students with the knowledge and skills that lead to cognitive self-efficacy. One specific subscale on the *CFK School Climate Profile*, Identifying and Working with Conflicts, aided in measuring self-efficacy. The results of the study show that students who participated in the Faculty Mentor Program demonstrate a higher degree of self-efficacy than students who did not participate in a Faculty Mentor Program.

Abraham Maslow's hierarchy of needs theory (1943) visualizes human needs as a pyramid in which primary needs (physiological and then safety) must first be met before

individuals can go on to focus on other higher level needs. These include social needs, such as love/ belonging, followed by the need for esteem. Individuals must strive to meet each of these needs in order to reach the apex of the pyramid which he terms self-actualization (Maslow, 1943). It is at this point that individuals can focus on aesthetic needs and become, not only healthy in mind and body, but exemplars of human productivity and influence. The data that the present study produced demonstrates that many of these higher order needs, such as friendship, acceptance, and recognition, are being met for students at the Faculty Mentor Program school. This is evidenced by significant differences in student scores on the CFK survey subscales for High Morale and Cohesiveness in students who participated in the Faculty Mentor Program when compared with the scores of students who did not participate in a mentor program.

## Limitations of the Study

There were a number of potential threats to the validity of the research. In terms of the study's internal validity, these included such threats as history, testing, and statistical regression. History threats involved possible external events affecting student responses rather than specifically their participation or nonparticipation in a Faculty Mentor Program. For example, the school which conducts the Faculty Mentor Program also runs other student programs such as Peervention, a peer-to-peer counseling and mediation program. Testing threats were those in which the effects of the pretest possibly altered responses on the posttest. This may have played a significant role in that the two test administrations were only three months apart. Finally, statistical regression, or the tendency of extreme scores to move toward the middle in post-testing, may have occurred (Isaac & Michael, 1997).

The most significant threat to construct validity of cause and effects in this study involved the possibility of hypothesis-guessing on the part of both students and mentors (Isaac & Michael, 1997). As the researcher was a full-time teacher, mentor, and Instructional Leader for the Faculty Mentor Program, it is possible that both students and colleagues at the Faculty Mentor Program treatment location answered questions in a way that they thought would benefit either the researcher or the school. Fortunately, a majority of students in the study were relatively unknown to the researcher (not enrolled in any of the researcher's classes or in the researcher's Mentor group) thus minimizing this threat.

External threats to validity included interaction of selection and treatment, interaction of setting and treatment, and interaction of history and treatment. All three cases involve the ability to generalize the results of this study to other people, places or

times beyond the one examined. Student advisory programs across the nation vary in their content, implementation, and settings. Results from the Faculty Mentor Program, therefore, may not be generalizable to other high schools particularly if the student population differs significantly from the experimental group site in terms of size or socioeconomic factors.

The administration of the study's primary instrument, the *CFK* survey, often posed problems as well. Makers of the survey note that administration should take between 20-25 minutes. While students were only provided with half of the survey to complete, some still took the full time. A few mentors and teachers at both treatment locations also resented the time commitment needed for administering the survey and did not provide their students with an opportunity to participate. Recruitment of student participants at the control site was particularly difficult.

A final limitation to the study was its short-term nature. There may be significant quantitative and qualitative differences between short-term and long-term study results (Isaac & Michael, 1997). Serial post-tests, particularly one at the end of the school year, would have improved the possibility of determining if the results of this study extended over time.

# Implications

This study provided support for the implementation of a Faculty Mentor Program as a type of student advisory program in a high school setting that improves students' attitudes, affiliation, and self-efficacy. Participation in a mentor program had a statistically significant effect on student perceptions of school climate as measured by six of the subscales on the *CFK* instrument. The descriptive statistics obtained from student interviews and the *Faculty Mentor Program Student Survey* supported the benefits of the Faculty Mentor Program model in terms of positively affecting student perceptions of the

effects of a Faculty Mentor Program in regard to program objectives. This section will address the degree to which the effect of the treatment was observed.

# Implications of Effects of the Treatment

A two-group multivariate analysis of covariance (MANCOVA) with the *CFK* Pretest covariate was conducted on the 16 subscales present in the *CFK* survey. The independent variable contained two levels: students who participated in the Faculty Mentor Program and students at another high school who did not participate in a mentor program or similar student advisory program. On six of the 16 CFK subscales, students exhibited a significant positive effect following their involvement in the Faculty Mentor Program.

Students who were participants in the Faculty Mentor Program were beneficiaries of a number of important life skills. These included the opportunity to build relationships, both with peers and with their adult mentor, to enhance their communications skills, to learn problem-solving techniques, and many other priorities (see Appendixes E and F). Certainly, developing a positive attitude is important in human development (Fiske, 2004). The literature suggests that attitude can be evaluated using cognition hence the value of student responses on the *CFK* survey.

While many of the *CFK* subscales measure climate factors and process determinants that may lead to a positive attitude, the results of this study showed that two in particular, Effective Communications and High Morale, demonstrate the value of participation in the Faculty Mentor Program:. Each of these two subscales contains statements that speak to Gagné's (1985) definition of attitude as "acquired internal states that influence the choice of personal action toward some class of things, persons, or events" (Driscoll, 2005, p. 363). Students in the treatment group scored significantly higher on both of these subscales when compared with the control group of students. A

sample statement that students were asked to rate on this subscale was "I feel the teachers are friendly and easy to talk to" (Howard, Howell, & Brainard, 1987, p. 64). While this specific item measured student attitude about teachers, other items and subscales show an overall increased positive attitude by students in the Faculty Mentor Program on a number of dimensions.

Student self-efficacy was also positively impacted by the Faculty Mentor Program. Self-efficacy is defined by Bandura (1997) as "one's capabilities to organize and execute the courses of action required to produce given attainments" (Driscoll, 2005, p. 316). Students with high self-efficacy view themselves as empowered and capable (Bandura, 1994). One subscale on the CFK survey indicated that students in the Faculty Mentor Program feature higher self-efficacy as compared to their peers who did not participate in a mentor program. It contained statements that focused on Bandura's conception of self-efficacy as an individual's view of themselves as able to affect the course of their life. This subscale was Identifying and Working with Conflicts. This subscale featured the greatest significant difference (P=.01) between the groups. One sample item from this subscale reads: "There are procedures open to me for going to a higher authority if a decision has been made that seems unfair" (Howard, Howell, & Brainard, 1987, p. 63). Mentoring encourages students to self-advocate. Students in the Mentor group are provided with concrete examples by their mentor or peers on how this approach can often meet with success. These lessons encouraged students to feel that they too had a measure of control in their education and life.

Finally, affiliation was increased in students who participated in the Faculty Mentor Program. Affiliation was defined in Moos and Trickett's Classroom Environment Scale as "how well students feel they know one another, how much they want to help one another..., and to what degree they enjoy working together" (as cited in Schmuck &

Schmuck, 2001, p. 69). The research is clear that school connectedness or a sense of belonging offers numerous benefits to students. Three subscales on the *CFK*, Ability to Plan for the Future, Effective Teaching-Learning Strategies, and Cohesiveness, demonstrate that the Faculty Mentor Program is linked to the concept of affiliation (Adelman & Taylor, 2006; Schaps, 2005; Bosworth, 2000; Davidson & Phelan, 1999). While affiliation can involve peer-to-peer connections and student-to-teacher/mentor connections, the definition can also include a sense of membership or association a student feels between himself and his school. This affiliation, in turn, creates positive attitudes about the school and the student's place in it. Students at the Faculty Mentor site note their strong sense of affiliation when they agreed with items such as "our school is ahead of the times" (Howard, Howell, & Brainard, 1987, p. 66).

## Suggestions for Future Research

The literature supporting the need for and benefits of SEL, EQ, school connectedness and affiliation, and personalization in schools is extensive. There is also wide acceptance of the theoretical constructs proposed by Bandura's concept of self-efficacy (1994) and Maslow's focus on key human needs (1943). Mentoring as a concept has been extensively studied in certain populations such as at-risk youth (Black, 1999) and in certain settings such as business (Goleman, 1998). There is, however, a lack of studies that focus on the impact of mentoring programs in a general high school setting. Makkonen (2004) substantiates this when he noted that, "Few quantitative, systemic studies have been conducted on advisory, and there is little comprehensive data on its outcomes" (p. 11). This section will propose future research on mentoring that focuses on four specific areas: (a) additional quantitative research, (b) additional qualitative research, (c) longitudinal studies, and (d) research focused on mentors.

# Additional Quantitative Research on Mentoring

More research in the area of mentoring students in a high school setting that uses quantitative methods to collect and analyze data needs to be conducted. As mentor programs vary widely in their make-up and objectives, this is particularly important to determine how best to configure a mentor program so as to maximize the benefits to students. This study, for example, focused on students who spent a relatively limited amount of time per week in contact with their mentor. One question to consider is whether more or additional benefits accrue to students who have more contact time with their mentor.

# Additional Qualitative Research on Mentoring

Future research must also address the impact of a mentor program on students. The use of qualitative measures is ideal in investigating the effects of participation in a mentor program. Interviews with students who are at-risk academically along with students who excel academically might uncover critical data on how best to structure an advisory program based on the student population. In addition, mentor interviews may clarify how their attitudes or specific curricular elements may play a role in the successful implementation of a mentor program.

#### Longitudinal Studies on Mentoring

If mentoring is about relationships, relationships are about time. Strong, personal relationships do not develop overnight. Research that examines how relationships build and strengthen over time would greatly advance the body of knowledge on mentoring. The Faculty Mentor Program is currently a two-year program. Many other high school advisory programs cover all four years of a high school student's experiences. Future studies may uncover important information on how the relationship between the mentor

and the members of his or her advisory group changes over time and what times during these four years it is most crucial to have this type of relationship.

# Research Focused on Mentors

There is currently quite a bit of anecdotal descriptions of the ideal mentor. Most include such qualities as friendliness and caring. Future research needs to build upon this base to identify what qualities are essential. In addition, research on how mentoring changes the attitudes or nature of the mentor would be beneficial. School districts that could be assured that both their students and their staff would benefit from the implementation of a successful mentor program may be even more inclined to invest time and effort in such a venture.

## Summary

The Faculty Mentor Program is a specific type of student advisory program that promotes social and emotional learning (SEL). While there are significant recent studies that support the benefits of SEL, affiliation, and strong, personal relationships between students and adult mentors, there has been a distinct paucity of empirical research on the benefits of mentor programs themselves in a high school setting. This study finds that student advisory programs, like the Faculty Mentor Program, do offer students significant advantages. This was evidenced in both students' qualitative responses about the benefits of the Faculty Mentor Program and in quantitative data such as the fact that participation in a mentor program had a statistically significant effect on six of the 16 subscales on the *CFK* instrument as compared to students in the non-Faculty Mentor Program group.

While additional research on the benefits of mentor programs in a high school setting is needed, there is both a strong theoretical base and extensive anecdotal evidence for the benefits of student participation in a mentor program. Educators looking to personalize large high schools and develop students' SEL skills have a unique and cost-

effective option in the use of mentor programs. This study on the benefits to high school students of a Faculty Mentor Program provides strong evidence that mentoring is one effective way of fostering positive bonds between students and their peers and between students and a teacher mentor thereby contributing to students' development into successful and psychologically healthy adults.

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Mentor Survey

## Appendix A

### Mentor Survey

1. What do you see as the strengths of the 2007-2008 Faculty Mentor Program? How has it been helpful?

2. What concerns do you have about the 2007-2008 Faculty Mentor Program?

3. What, if any, suggestions do you have for improving the Faculty Mentor Program? What other comments do you have?

# Appendix B

Student Interview Questions

## Appendix B

## Student Interview Questions

What grade are you currently in?

What benefits have you derived from having a mentor?

Recall one instance when having a mentor made a real difference to you.

How connected do you feel with your Mentor group? With the rest of the school?

How would you characterize the climate of your Mentor group? Of the school as a whole?

Has your mentor helped with your academic success? If so, in what way?

Has your mentor helped you with personal or social skills? How so?

Appendix C

Freshman and Sophomore Faculty Mentor Groups

Student Survey – 2007-2008

## Appendix C

#### Freshman and Sophomore Faculty Mentor Groups Student Survey – 2007-2008

Using a pen or pencil, mark on the sheet the letter that best represents your reaction to each statement.

1. I am a a) Freshman b) Sophomore

2. I would feel comfortable speaking with my mentor about a personal concern. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

3. I have met with my mentor outside of the group setting. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

4. I usually enjoy and feel relaxed while attending my Mentor group.a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

5. I got to know many of the students in my Mentor group better.a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

6. The Mentor Program provided me with important information about this high school. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

7. I feel more a part of the school community as a result of the Mentor Program. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

8. I met with my mentor about academic progress or concerns. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

9. My mentor assisted me with academic planning or concerns.a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

10. My mentor provided information about various resources at this school. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

11. I learned about stress management and coping skills in the Mentor Program.a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

12. My Mentor group was a trusted, safe place in which to discuss personal issues and school issues. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

13. My Mentor group provided me with information on extra-curricular, leadership, and/or volunteer opportunities. a) strongly agree b) agreec) undecided d) disagree e) strongly disagree

14. My Mentor group provided me with additional access to my guidance counselor. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

15. I would have liked to have met more often with my Mentor group or mentor. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

16. The Mentor program has improved my communication skills with family, peers, and/or teachers. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

17. The Mentor group has helped me with access to study groups, study aids, and/or advice on studying. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

18. My Mentor group discussed alcohol and drug abuse. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

19. My Mentor group discussed issues of diversity and prejudice. a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

20. My Mentor group has had at least one guest speaker (i.e., teacher, administrator, or student). a) strongly agree b) agree c) undecided d) disagree e) strongly disagree

# Appendix D

The CFK, Ltd., School Climate Profile

Name:

Code #:

## The CFK, Ltd., School Climate Profile

### Purpose

This instrument gives you an opportunity to express your feelings about many aspects of your school's climate. Although it may not include every item you consider important in your school, it does provide an overall assessment of a school's climate. The instrument has two parts, covering a number of climate categories with five items for each category. The ratings for the various items in Parts A and C of this instrument will help in deciding which climate factors should be looked at more intensively when engaging in school improvement projects.

### Directions

1. Fill in your name on the upper left hand corner of this sheet. This is to ensure that a permission slip for participation in the survey is on file for you. Note that your name will be removed after you complete the profile to ensure your anonymity. Surveys with no names will be discarded.

2. Check the categories you fall under:

Male Fresh
------------

\_\_\_\_Female

\_\_\_\_\_ Sophmore

- 3. Read each item thoughtfully and indicate a rating under both the "What Is" column and the "What Should Be" column. Use the following scale to indicate your rating for each item in both columns.
- 1 Almost Never
- 2 Occasionally
- 3 Frequently
- 4 Almost Always

IF TIME PERMITS: In the box at the bottom of each column of the sections, total your score. Your lowest possible score for each section would be 5; the highest 20.

## Part A General Climate Factors

	м	hat Is:	What Shoul	d Be:
Re	spect:			
1.	In this school even low achieving studen are respected.	ts _		
2.	Teachers treat students as persons.	-		
3.	Parents are considered by this school as important collaborators.	-		
4.	Teachers from one subject area or grade level respect those from other subject areas.	-		
5.	Teachers in this school are proud to be teachers.	-		
		Total: _		
	Trust:			
1.	Students feel that teachers are "on their side."	-		
2.	While we don't always agree, we can share our concerns with each other openly.	-		
3.	Our principal is a good spokesperson for our interests and needs before the superintendent and the board.	-		
4.	Students can count on teachers to listen to their side of the story and to be fair.	-		
5.	Teachers trust students to use good judgment.	-		
		Total:		

# High Morale:

1.	This school makes students enthusiastic about learning.	 
2.	Teachers feel pride in this school and in its students.	 
3.	Attendance is good; students stay away only for urgent and good reasons.	 
4.	Parents, teachers, and students would rise to the defense of this school's programs if it were challenged.	 
5.	I like working in this school.	 
	Total:	 
	<b>Opportunity for Input:</b>	
1.	I feel that my ideas are listened to and used in this school.	 
2.	When important decisions are made about the programs in this school, I, personally, have heard about the plan beforehand and have been involved in some of the decisions.	 
3.	Important decisions are made in this school by a governing council with representation from students, faculty and administration.	 
4.	While I obviously can't have a vote on every decision that is made in this school affects me, I do feel that I can have some important input into that decision.	 
5.	When all is said and done, I feel that I count in this school.	 
	Total:	 

## **Continuous Academic and Social Growth**

1.	The teachers are "alive"; they are interested in life around them; they are doing interesting things outside of school.	 	
2.	Teachers in this school are "out in front" seeking better ways of teaching and learning.	 _	
3.	Students feel that the school program is meaningful and relevant to their present and future needs.	 	
4.	The principal is growing and learning too. He or she is seeking new ideas.	 _	
5.	The school supports parent growth. Regular opportunities are provided for parents to be involved in learning activities and in examining new ideas.	 _	
	Total		
Cohesiver	ness	 	
1.	Students would rather attend this school than transfer to another.	 -	
2.	There is a "we" spirit in this school.		
3.	Administration and teachers collaborate toward making the school run effectively; there is little administrator-teacher tension.		
4.	Differences between individuals and groups (both faculty and students) are considered to contribute to the richness of the school not as divisive influences.		
5.	New students and faculty members are made to feel welcome and part of the group.	 -	
	Total		

## Social Renewal

]	When a problem comes up, this school Has procedures for working on in; problems Are seen as normal challenges, not as "rocking the boat."		
2.	Teachers are encouraged to innovate in their classroom rather than to conform.		
3. Y	When a student comes along who has special Problems, this school works out a plan that helps hat student.		
4. S	Students are encouraged to be creative rather than to conform.		
5. ( ]	Careful effort is made, when new programs are Introduced, to adapt them to the particular needs of this community and this school.		
	Т	otal	
Caring:			
1. 7	There is someone in this school that I can always count on.		
1. T	There is someone in this school that I can always count on. The principal really cares about students.		
1. 7 2. 7 3. I po	There is someone in this school that I can always count on. The principal really cares about students. think people in this school care about me as a erson and are concerned about more than just ow well I perform my role at school.		
1. 7 2. 7 3. I pe ho 4. I	There is someone in this school that I can always count on. The principal really cares about students. think people in this school care about me as a erson and are concerned about more than just ow well I perform my role at school. feel wanted and needed in this school.		
1. 7 2. 7 3. 1 po ho 4. 1 5. N	There is someone in this school that I can always count on. The principal really cares about students. think people in this school care about me as a erson and are concerned about more than just ow well I perform my role at school. feel wanted and needed in this school. Most people at this school are kind.		

## Part C Process Determinants

		What Is:	What Should Be:
roblem-	Solving Ability:		
1.	Problems in this school are recognized and worked on openly and are not allowed to slide.		
2.	If I have a school related problem, I feel there are channels open to me to get the problem worked on.		
3.	People in this school do a good job of examining a lot of alternative solutions first, before deciding to try one.		
4.	Ideas from various ethnic and minority groups are sought in problem solving efforts.		
5.	People in this school solve problems; they don't just talk about them.		
		Total	
nprover	nent of School Goals		
1.	This school has set some goals as a school for this year and I know about them.	ol	
2.	I have set some personal goals for this ye related to school, and I have shared these goals with someone else.	ear	
3.	Community involvement is sought in Developing the school's goals.		
4.	The goals of this school are used to provi direction for programs.	ide	

## Identifying and Working with Conflicts:

1.	In this school people with ideas or	 
2.	There are procedures open to me for going	 
3.	This school believes there may be several alternative solutions to most problems.	 
4.	In this school the principal tries to deal	 
5.	When we have conflicts in this school, their _ resolution is constructive, not destructive.	 
	Total	 
Effective	Communication	
1.	Teachers feels free to communicate with the principal.	 
2.	I feel the teachers are friendly and easy to talk to.	 
3.	The principal talks with us frankly and openly.	 
4.	Teachers are available to students who want help.	 

5. There is communication in our school between \_\_\_\_\_\_ different groups – older teachers and younger ones, well–to–do students and poorer ones, black parents and white parents etc.

Total \_\_\_\_\_

## **Involvement in Decision Making:**

- 1. Teachers help in selection of new staff \_\_\_\_\_\_ members.
- 2. Parents help to decide about new school programs.
- 3. Decisions that affect this school are made by the superintendent and the central staff only after opportunity has been provided for discussion and input from the school's principal, staff and students.
- 4. I have influence on the decisions within the school that directly affect me.
- 5. The student government makes important \_\_\_\_\_\_ decisions.

Total

## Autonomy with Accountability

1.	Teachers, students, and parents help to evaluate this schools program.		
2.	Teacher evaluation is used in improving teacher performance.		
3.	Teachers or students can arrange to deviate from the prescribed program of the school.		
4.	The principal encourages experimentation in teaching.		
5.	Teachers are held accountable in this school for providing learning opportunities for each of their students.		
	Total		

## **Effective Teaching-Learning Strategies**

1.	The teachers in this school know how to teach as well as what to teach.	 
2.	When one teaching strategy does not seem to be working for a particular student, the teacher tries another and does not blame the student for the initial failure.	 
3.	This community supports new and innovative teaching techniques.	 
4.	Inservice education programs available to teachers in this building help them keep up-to-date on the best teaching strategies.	 
5.	The school systematically encourages students to help other students with their learning activities.	 
	Total	 

## Ability to Plan for the Future

1.	In this school we keep "looking ahead"; We don't spend all our time "putting Out fires.	 
2.	Our principal is an "idea" person.	 
3.	Parents and community leaders have Opportunities to work with school Officials at least once a year on "things we'd like to see happening in our school.	 
4.	Some of the programs in our school are termed "experimental."	 
5.	Our school is ahead of the times.	 

Total \_\_\_\_\_

## Appendix E

Faculty Mentor Program Objectives

## Appendix E

## FACULTY MENTOR PROGRAM OBJECTIVES:

1. To orient students to the academic expectations and resources at this school

2. To help ensure students fully access the program in support of their individual goals and interests

3. To help students reflect upon their values and personal goals

4. To help students identify their academic strengths and areas of concern

5. To help monitor student progress in meeting academic goals

6. To help monitor student progress in meeting credit and performance graduation requirements

7. To orient, encourage and monitor students' involvement in extracurricular opportunities

8. To help students explore leadership and volunteer opportunities

9. To teach effective communication skills to use with faculty, staff and peers

10. To review and enhance students' study, organizational, and time management skills

11. To provide early identification for students who may be at risk and to ensure that no student "falls through the cracks"

12. To help students demonstrate the School Belief Statements within the school community

13. To provide a trusted, safe place for the organized discussion of school issues and appropriate decision-making

14. To provide an organized setting in which to address school crises or emergencies

15.To gather over time student feedback regarding their learning needs and their overall educational experience

16.To help students develop and enhance their stress management and coping skills

# Appendix F

Freshmen Forum and Sophomore Seminar

Outlines and Checklists

## Appendix F

Freshmen Forum Outline and Checklist:

## Introduction/Orientation:

- \_\_\_\_\_ Select upperclassmen as co-facilitators
- \_\_\_\_\_ Preparation for class
- \_\_\_\_\_ Counselor introduction/review of the Student Handbook and disciplinary issues
- \_\_\_\_\_ Review Mission Statement/purpose of Mentor Program
- \_\_\_\_\_ Team building/getting to know students begins (name tags/photos/exercises)
- \_\_\_\_\_ Building orientation tour
- \_\_\_\_\_ Academic expectations (teacher syllabus/rules, communicating with teachers)
- \_\_\_\_\_ Attend Activity Fair
- \_\_\_\_\_ Student generated topics (use for the rest of the year)
- \_\_\_\_\_ Upperclassmen discussions on extracurricular activities and time management
- \_\_\_\_\_ Getting to know administrators and support personnel

### Academic Program:

- \_\_\_\_\_ Scheduling/registration (counselor visits)
- \_\_\_\_ Counselor visit to focus on course sequences, pass/fail options, independent study opportunities, other topics listed below
- \_\_\_\_ Credit requirements
- \_\_\_\_\_ Performance Graduation requirements
- \_\_\_\_\_ Extra help/tutoring services
- \_\_\_\_\_ Report cards
- \_\_\_\_ Interim reports

## Personal Academic Goals:

- \_\_\_\_\_ Learning style review
- \_\_\_\_\_ Year-long academic goal-setting (achievable and concrete)
- \_\_\_\_\_ Review of interim reports
- \_\_\_\_\_ Review of report card

#### Student Skills:

- \_\_\_\_\_ Test preparation
- \_\_\_\_\_ Time-management strategies
- \_\_\_\_\_ Midterm/final exam preparation (NHS tutor night, organizational methods, etc.)
- \_\_\_\_\_ Self-advocacy
- \_\_\_\_\_ Communications with adults (lunch with the admin., role play, etc.)
- \_\_\_\_\_ Understanding plagiarism/cheating
- \_\_\_\_\_ Parent Issues (include teacher speakers who are parents, parents and students in planning)

### **Extracurricular Program:**

- \_\_\_\_\_ Attendance at Activity Fair
- \_\_\_\_\_ Getting involved (athletics, club sign-up)
- \_\_\_\_\_ Introduction to leadership skills and development (definition, styles, activities)
- \_\_\_\_\_ College and Career Center summer opportunities (camps, volunteer, jobs)
- \_\_\_\_ Continuing Education Office (jobs)

### **School Climate:**

- \_\_\_\_\_ Diversity issues
- \_\_\_\_\_ Holiday/End of year celebration
- \_\_\_\_\_ Charity/volunteerism
- \_\_\_\_\_ Upperclassmen discussion on school pride
- \_\_\_\_\_ Respect for facilities
- \_\_\_\_\_ Hazing awareness (definition, role-play)
- \_\_\_\_\_ Feedback on Freshmen Forum (survey, discussion)

#### Safety Net:

- \_\_\_\_\_ Mental health awareness
- \_\_\_\_\_ Stress mgt./coping skills
- \_\_\_\_\_ Counselors/Support Services community and school resources
- \_\_\_\_\_ Substance abuse

## Sophomore Seminar Outline and Checklist:

- \_\_\_\_\_ Select upperclassmen as co-facilitators
- \_\_\_\_\_ Continue team-building/group dynamics exercises
- \_\_\_\_\_ Academic advisement/individual relationship-building
- "Senior Talk" Student speakers on goal setting (academics, social, etc.)
- \_\_\_\_\_ Guest speaker on school climate topic
- \_\_\_\_\_ Pre-registration with counselors
- \_\_\_\_\_ Invite guest speakers in for discussions on summer job searches
- \_\_\_\_\_ Holiday/end of year celebrations

# Appendix G

## Procedural Timeline Table

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Procedural Timeline Table

Date		Procedure	Data Analysis
	Sept. 2007	CFK School Climate Profile (pretest) Faculty Mentor Program site ( <i>n</i> =49) Control site ( <i>n</i> =49)	Descriptive statistics, MANCOVAs
	Dec. 2007	CFK School Climate Profile (posttest) Faculty Mentor Program site (n=49)	Descriptive statistics, MANCOVAs
	Feb. 2008	Student interviews $(n=8)$ Faculty Mentor Program site only	Selective coding
	Feb. 2008	Mentor surveys ( <i>n</i> =23) Faculty Mentor Program site only	Selective coding
	Dec. 2007	Likert-scale student survey Faculty Mentor Program site only ( <i>n</i> =432)	Descriptive statistics