

Georgia Southern University Digital Commons@Georgia Southern

Electronic Theses & Dissertations

Graduate Studies, Jack N. Averitt College of

Spring 2007

Grade Inflation: An Analysis of Teacher Perception, Grade Point Average, and Test Scores in one Southeastern Georgia High School

Aimée Claire Taylor Georgia Southern University

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/etd

Recommended Citation

Taylor, Aimée Claire, "Grade Inflation: An Analysis of Teacher Perception, Grade Point Average, and Test Scores in one Southeastern Georgia High School" (2007). *Electronic Theses & Dissertations*. 414. https://digitalcommons.georgiasouthern.edu/etd/414

This dissertation (open access) is brought to you for free and open access by the Graduate Studies, Jack N. Averitt College of at Digital Commons@Georgia Southern. It has been accepted for inclusion in Electronic Theses & Dissertations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

GRADE INFLATION: AN ANALYSIS OF TEACHER PERCEPTION, GRADE POINT AVERAGE, AND TEST SCORES IN ONE SOUTHEASTERN GEORGIA HIGH SCHOOL

by

Aimée Claire Taylor

(Under the Direction of Professor Abebayehu Tekleselassie)

ABSTRACT

The following case study examined the existence of grade inflation at one high school in southeastern Georgia—South High School. This mixed methodology research study examined grade inflation from two major perspectives—student data and teacher data; thus, creating a quantitative and qualitative research study. Triangulation in data collection was used to gather information about 160 seniors and 76 classroom teachers, which offered greater insight into evidence and perceptions of grade inflation. The standardized test scores of students and their GPAs were correlated to determine the extent of the relationship between GPAs and SAT scores and between GPAs and End of Course Test scores. Correlation analysis was also utilized to determine if such relationships depended on race or gender. In addition, a survey examined teacher responses to statements about grading standards, standardized test scores, and grade inflation. The researcher also conducted individual interviews with teachers to ascertain their perceptions of grade inflation and the possible causes of its existence.

The conclusion of the quantitative portion of this research study (student data) suggests that grade inflation does not exist at this one particular school, as strong positive relationships were found between standardized test scores and grade point averages. As test scores increased, so did GPAs; however, the qualitative portion of this study (teacher data) suggests that grade inflation exists on a daily basis at this school. Through both the teacher survey and through the interviews, teachers expressed that they perceived grade inflation existed due to a number of reasons. The contradiction of the results reveals the difficulty in definitively proving that grade inflation exists, as the definition of grade inflation and the assessment tools used to gauge it may be problematic. Yet, the information gained through this study, especially teacher perceptions, revealed valuable information about grading policies in one southeastern Georgia high school.

INDEX WORDS: Grade inflation, Grading standards, Standardized testing, Teacher evaluations, SAT, Grade point average, High school, Secondary education

GRADE INFLATION: AN ANALYSIS OF TEACHER PERCEPTION, GRADE POINT AVERAGE, AND TEST SCORES IN ONE SOUTHEASTERN

GEORGIA HIGH SCHOOL

by

Aimée Claire Taylor

B.A., Armstrong Atlantic State University, 1998

M.Ed., Armstrong Atlantic State University, 2000

A Dissertation Submitted to the Graduate Faculty of Georgia Southern University in Partial Fulfillment of the Requirement for the Degree

DOCTOR OF EDUCATION

STATESBORO, GEORGIA

2007

© 2007

Aimée Claire Taylor

All Rights Reserved

GRADE INFLATION: AN ANALYSIS OF TEACHER PERCEPTION, GRADE POINT AVERAGE, AND TEST SCORES IN ONE SOUTHEASTERN GEORGIA HIGH SCHOOL

by

Aimée Claire Taylor

Major Professor: Abebayehu Tekleselassie Committee: Linda Arthur Paul Brinson

Electronic Version Approved:

May 2007

DEDICATION

In recognition of their patience, understanding, love, and support,

I hereby dedicate this dissertation to my sons,

Zachary and Isaac Taylor,

who always understood that Mom had homework, too.

ACKNOWLEDGMENTS

I would like to extend sincere gratitude to each member of my dissertation committee. Thank you to Dr. Brinson for jumping in mid-way through this process after a former committee member moved out of state. You were a life-saver and a welcomed addition to this experience. Thank you to Dr. Arthur for always giving positive and encouraging words throughout all stages of this endeavor. Your "orange" personality helped brighten some very stressful days. A special thank you to Dr. Tekleselassie who calmly and patiently answered all of my questions. You were always supportive and went out of your way to assist me despite your hectic schedule. I am very lucky to have had such knowledgeable and professional guidance in my dissertation chair.

I am also grateful for my family, friends, and professional peers. Even when neglected, they each did what they could to help me make it through the next task on my agenda. Without the help and participation of teachers and administrators at my school, I would not have been able to collect, analyze, or generate new data about grade inflation. Without the encouraging words, smiles, and hugs from my friends, I would not have made it through many chaotic days. Yet, most of all I am grateful to my family—for my parents and grandparents always telling me I could accomplish anything, for my siblings being inspired by my multitasking, for my children knowing that there are no limits to your dreams, and for my husband never doubting in my abilities and for always telling me that I am his greatest investment. Thank you each for your love and support.

TABLE OF CONTENTS

ACKNOWL	EDGM	ENTS.	vii		
LIST OF TA	BLES.		xi		
CHAPTER					
I.	FOU	NDATION OF THE STUDY1			
	A.	Intro	duction1		
	B.	Back	ground of the Study2		
	C.	Rese	arch Study6		
		1.	Statement of the Problem6		
		2.	Research Questions7		
		3.	Significance of the Study8		
		4.	Delimitations9		
		5.	Limitations9		
		6.	Methodology10		
			a. Research Design10		
			b. Population11		
			c. Sampling11		
			d. Instrumentation11		
			e. Data Analysis, Tools, and Techniques12		
	D.	Sum	mary		
II.	REV	VIEW OF RELATED RESEARCH AND LITERATURE14			
	A.	Intro	duction14		

TABLE OF CONTENTS (continued)

	В.	Contex	xt of Research	
		1.	Grading Standards20	
		2.	Standardized Testing and Grade Point Averages25	
		3.	Assessing Learning27	
		4.	Predicting Future Success	
		5.	Making Achievement Meaningful and Measurable32	
		6.	Factors Contributing to Grade Inflation	
	C.	Summ	ary46	
III.	METH	IODOL	OGY48	
	A.	Introd	uction48	
	B.	Metho	dology49	
		1.	Research Questions49	
		2.	Population, Participants, and Sampling49	
		3.	Instrumentation	
		4.	Data Collection	
		5.	Response Rate	
		6.	Data Analysis54	
		7.	Reporting the Data55	
	C.	Summ	ary56	
IV.	REPO	RT OF	DATA AND DATA ANALYSIS57	
	A.	Introduction		
	B.	Research Questions		

TABLE OF CONTENTS (continued)

	C.	Respondents			
	D.	Research Findings			
		1. Analysis of Student Data			
		2. Analysis of Teacher Survey67			
		3. Analysis of Teacher Interviews			
	E.	Summary			
V.	SUMN	MARY, CONCLUSIONS, AN IMPLICATIONS91			
	A.	Summary91			
	B.	Response to Research Questions			
	C.	Analysis of Research Findings99			
	D.	Conclusions103			
	E.	Implications109			
	F.	Recommendations112			
	G.	Dissemination			
REFERENCE	ES				
APPENDICE	S				
А.	LETT	ER TO SUPERINTENDENT TO CONDUCT			
	RESE	ARCH120			
В.	IRB PROPOSAL				
C.	GRADE INFLATION SURVEY123				
D.	INFORMED CONSENT LETTER126				
E.	GRAE	DE INFLATION INTERVIEW QUESTIONS129			

LIST OF TABLES

Table 1: EOCT and SAT Correlations for All Students 60
Table 2: EOCT and GPA Correlations for All Students
Table 3: SAT and GPA Correlations for All Students
Table 4: EOCT and SAT Correlations for Male Students 61
Table 5: EOCT and GPA Correlations for Male Students
Table 6: SAT and GPA Correlations for Male Students
Table 7: EOCT and SAT Correlations for Female Students
Table 8: EOCT and GPA Correlations for Female Students 63
Table 9: SAT and GPA Correlations for Female Students 63
Table 10: EOCT and SAT Correlations for White Students
Table 11: EOCT and GPA Correlations for White Students 64
Table 12: SAT and GPA Correlations for White Students 65
Table 13: EOCT and SAT Correlations for Minority Students 65
Table 14: EOCT and GPA Correlations for Minority Students
Table 15: SAT and GPA Correlations for Minority Students
Table 16: Analysis of Grade Inflation Survey Based on Teacher Content Area 69
Table 17: Analysis of Grade Inflation Based on Teaching Experience

CHAPTER I

FOUNDATION OF THE STUDY

Introduction

Student assessment, grading standards, and teaching practices vary as much as the students themselves; yet, educational critics, politicians, and researchers still debate best practices, accountability, and measurable student achievement. Educational reformists often look to the past to determine what needs to be improved upon in the future, and one current concern is the topic of grade inflation. Kohn defines grade inflation as "an upward shift in students' grade-point averages without similar rise in achievement" (2002, \P 6); likewise, other researchers define grade inflation as a "decreasing value of grades in the coin of student achievement" (Wood, Ridley, & Summerville, 1999, p.1). Grade inflation is also defined as "an increase in grades without a [concomitant] increase in ability" (Ziomek & Svec, 1995, p. 6). Finally, grade inflation is "when a grade is viewed as being less rigorous than it ought to be" (Milton, Pollio, & Eison, 1986, p. 29). Thus, if a student's grade does not reflect what others perceive to be an accurate measurement of knowledge, then such a grade can be called inflated.

What has triggered the interest in grade inflation the past three decades has been a steady increase in Grade Point Averages (GPAs) in both high school and college, as outlined in several quantitative studies. Contrastingly, college entrance exams such as the ACT and the SAT have seen a steady decrease over the past 30 years (College Board). Yet, researchers debate both the true existence of grade inflation and how to measure

grade inflation, especially finding a way to consistently measure achievement, as well as the number of contributing factors for such a phenomenon. Quite simply, "the term 'grade inflation,' too, is subjective" (Ediger, 2001, p. 7). Empirical studies both support the existence of grade inflation and refute it. In addition, in the studies which claim to prove that grade inflation exists, researchers disagree on what causes it and what can be done to prevent it. In fact, teachers themselves have not been represented nor consulted in such empirical studies, which means that the people who daily assess student learning and assign grades do not have a voice in this debate. Researchers even disagree on what the existence of grade inflation "proves" about the quality of education students are receiving (Basinger, 1997; Kohn, 2002; Stanley & Baines, 2001).

Furthermore, scholars such as Basinger (1997), Kohn (2002), and Mullen (1995) explain that grades and grade inflation have been popular topics since the beginning of formal education not just in America, but in other countries, as well. In general, the tendency is to overlook positive contributions in the field of instruction and assessment, saying that a negative influence has caused GPAs to increase while student achievement has decreased. Again, the studies both support and refute such a notion. Determining the existence of grade inflation begins with an analysis of grading standards.

Background of the Study

The measuring device for gauging academic success or failure for most people is the final grade received on a traditional report card. Yet, the grading standards and the point spread for such grades differ not just from state to state, but from teacher to teacher. "Despite the importance of grade inflation and the widespread reports of it, there has been little systematic research exploring changes in grading standards…" (Koretz & Berends, 2001, p. iii). According to the U. S. Department of Education's Office of Educational Research and Improvement (OERI), grading standards themselves are problematic due to inconsistencies in measuring academic achievement. Assigned grades neither accurately assess knowledge, nor should they be used as predictors of future academic success (OERI, 1994). Ediger concludes, "grading students is a human, not a scientific creation" (2001, p. 4); thus, grades will never clearly express the extent of knowledge gained.

Researchers (Kohn, 2002; Basinger, 1997) caution against being quick to defend the presence of grade inflation. "The fact is that it is hard to substantiate even the simple claim that grades have been rising" (Kohn, 2002, ¶ 4). Most states utilize different standardized tests to measure student achievement, but without a set instrument for comparison, researchers have difficulty determining the existence of grade inflation nationally. Hence, the findings are inconsistent. In addition, many studies rely on students' self-reporting, which is "unreliable" and "unrepresentative" (Kohn, 2002, ¶ 4). No one can accurately prove, according to Kohn, that students today are learning less than students in the past, and that "the burden rests with critics to demonstrate that those higher grades are underserved" by today's students (2002, ¶ 6-7). Kohn reiterates Ediger by saying, "the real threat to excellence isn't grade inflation at all; it's grades" (2002, ¶ 37). Still, American schools traditionally rely on grades to determine placement in courses and admission into colleges, while also relying heavily on standardized tests, like the ACT and SAT, to predict future academic performance.

Basinger (1997) agrees that grades do not always accurately gauge the amount of learning or quality of learning in most classrooms. Without narrative explanations on

report cards, teachers are forced to fit students into specific categories. "Inflated grades are but a symptom of an underlying problem; misguided educational standards, inappropriate content, modes of presentation and/or modes of assessment" (Basinger, 1997, ¶ 39). False assumptions about grade inflation include the belief that teachers are pressured into changing grades. "Most teachers both implicitly and explicitly encourage students to achieve high marks, and every school has many ways of honoring students who do so" (Basinger, 1997, ¶ 20). Kohn (2002) adds that perhaps motivational teachers see an increase in grades, as students want to please these positive educators.

In a study conducted for and through the University of Missouri system, Mullen (1995) also found no evidence of grade inflation at the collegiate level. Over five years, Mullen examined high school GPAs, class rank, ACT scores, and freshman college GPAs (1995, p. 5). Mullen found that both high school and college GPAs had increased in proportion to ACT scores. "It appears that the increase in mean first-year GPA is the result of better prepared students rather than a relaxing of grading standards" (Mullen, 1995, p. 10). Mullen adds that "mean GPAs more closely matched their predicted levels, given ACT scores and high school ranks of the entering students" (1995, p. 10). Such a claim relies on the assumption that tests can predict future success, which contradicts what previously mentioned studies concluded (Basinger, 1997; OERI, 1994). Mullen attributes higher freshman college GPAs to better college preparation programs and better admission standards for determining qualified applicants. Mullen does acknowledge that "grading on the curve has contributed to grade inflation at selective institutions" and that "some grade elevation" will occur whenever state standards for admission change (1995, p. 11).

Again, many researchers disagree about proving the existence of grade inflation at both the secondary and college level, and even though the previous researchers found no "statistically significant" evidence of grade inflation in their studies, most admit that grading standards in American schools can be improved. Assessment and grading standards are confusing for educators, parents, and students. Thus, relying on such standards to prove or disprove grade inflation is questionable. What makes the attempt to prove grade inflation most troublesome is that many parents are pleased with high grades and only question assessment when a child is receiving poor or low marks. According to the 1994 study on grade inflation by the U. S. Department of Education's Office of Educational Research and Improvement (OERI), happy parents do not typically question graded results associated with school classroom assessments that reflect the standard A through F range.

Yet, if grade inflation does exist, in addition to making parents and students happy, other factors may contribute to grade inflation in schools. Bishop (2003) blames admission policies for colleges, school budget referendums and funding being attached to student achievement, and the use of standardized tests in comparison to GPAs. For example, "when class rank and GPA determines access to college, teachers are seen as judges not coaches. They are not perceived as on the student's team" (Bishop, 2003, p. 8). Also, using class rank and GPAs pressures challenging teachers to "dummy down" courses, offer loads of extra credit, forget about grading standards, creatively manipulate percentages and weighting of assignments, change schools, or quit the profession.

Bishop recommends, as many previous researchers have, that end of course tests known as "curriculum-based external assessments" evaluate student knowledge for each

class, but that such assessment not be used to predict future performance (2003, p. 9). Using standardized tests for college admission and to predict success in college also sends negative messages to all students. Bishop says that such practices really imply: "We reward the Smart, not the Studious...We don't care how much you learned about art or literature...make sure your child gets a good test prep course..." (2003, p. 4).

Research Study

Statement of the Problem

In order to prove that grade inflation exists, researchers define grade inflation, decide how grades are and should be measured, and examine what factors (if any) contribute to grade inflation. Large research studies across many years suggest that grade inflation does occur at the high school level. In addition, standardized test scores, such as the ACT and SAT, show less correlation between projected GPA (the GPA a student expects to earn) and test performance. Problems do stem from traditional grading standards and a recent need to have "student friendly" assessment to help bolster selfesteem, focusing less on performance, quality of learning experience, and knowledge gained. In addition, standardized tests are not administered to all students, nor are they used in the same manner. For example, the ACT and SAT are used to determine admission into college and as predictors of college performance, while end of course tests and achievement tests measure actual subject knowledge and more consistently gauge learned content and mastery of skills. These tests cannot be used interchangeably. Test re-norming and other adjustments must be considered before comparing one generation of students to another as well.

Researchers who only examine limited schools tend to conclude that grade inflation is not provable and that other influences have increased GPAs. Better college preparation programs, improved assessment, and teacher preparation standards are all factors that may have helped improve GPAs. Students are being challenged more than ever before in order to compete in a technologically advanced society, and both modern conveniences and new forms of communication give broader access to information. Therefore, the researcher's purpose was to examine perception and evidence of grade inflation in-depth at one school through both quantitative and qualitative research.

Research Questions

Previous studies on grade inflation have been strictly quantitative and none have involved the most influential component in the grade inflation scenario--teachers. Teachers have the greatest impact on student achievement as they daily instruct and assess academic performance, applying grading standards and measuring content knowledge, and thus influence both GPAs and standardized test scores in a variety of ways. Therefore, with the previous considerations, a new research problem emerged for one southeastern Georgia high school. The researcher's purpose of this study was to examine if grade inflation existed as evidenced by test scores and teacher perception. The following research questions guided the study:

- 1. To what extent do high school GPAs and SAT scores relate?
- 2. To what extent do high school GPAs and EOCT scores relate?
- 3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender?
- 4. To what extent do teachers perceive that grade inflation exists?

Significance of Study

Studying grade inflation is not new, but a qualitative study in conjunction with statistical analysis adds to the previous quantitative research conducted over the past 30 years. Teachers and administrators strive to bridge the gap between new policies and actual classroom experiences; otherwise, reform is futile. Teacher perception of such policies greatly alters what is implemented and how it is implemented, as well as how students are assessed. Learning should be the priority and supersede grades. If consideration is first and foremost student learning, then teachers may not feel that a discrepancy exists between standardized test scores and GPAs, but if GPAs are considered more important than student learning, grade inflation may be perceived to exist. Personal reflection by teachers in such a case study could also foster a new appreciation for already imposed grading standards. Most importantly, grades should measure student learning.

A qualitative study increased knowledge of why some students are not performing as well as expected in college. For example, high school teachers need to know that setting students up for failure by giving elevated grades is a disservice. Conducting a qualitative study provided further insight into teacher perception about grade inflation and grading standards, as well as examined the relationships among content tests, GPAs, and college entrance exams. The discussion, reflection, and assessment of grading practices yielded a variety of unsuspected information, proving to be even more valuable than the existence or non-existence of grade inflation.

A quantitative analysis determined to what extent a discrepancy existed between GPAs and SAT scores as well as between GPAs and EOCT scores. The statistical

analysis of such data increased the understanding of the relationship between grading standards and standardized tests and to what extent they were measuring content knowledge. As an educator, the researcher was personally vested in the entire research process, as whatever information was gained can lead to instructional improvement for the entire school. In addition, the perceptions of the teachers at this school now can serve as catalysts for other schools, other researchers, and other policy makers.

Delimitations

The researcher limited the scope of the study to one southeastern Georgia high school where the researcher is employed. The researcher utilized available local resources, research data, testing results, and participants. In particular, the researcher looked at local grading standards, standardized test scores, and GPAs at this school.

Limitations

The high school to be studied is in a predominately white, middle-class suburban area outside a larger metropolitan area. The nature of this one school is not typical because it attracts mainly affluent white families, including military families with officers serving at two nearby military bases. The demographic factors were limited to gender and race because the data base did not allow for other demographics. The small town where the high school is located has recently experienced a population boom which is expected to continue for several more years. The high school still has a small minority population but has seen the numbers rising as the overall population grows. It is hard to have a comprehensive set of background factors due to the population being mainly white middle class. The majority of the students at this high school are on a college preparatory track with a large number of students qualifying to receive the HOPE scholarship for college (70 % in 2006). Typically, only college bound students take the SAT or ACT, but all students are required to take the EOCT for the subjects that currently have that state requirement.

In a close-knit community, teachers were leery of participating in this study and a few were hesitant to give completely honest answers (such as displayed by the omission of demographic information on the teacher survey) perhaps in fear that their responses might detract from the positive reputation of this school. Teachers might also have feared retribution if they gave a negative impression of the school, especially since the researcher is employed by the same school in a leadership role. Thus, an entirely honest evaluation of grade inflation from some teachers' perceptions was difficult to achieve, but this is also where the statistical analysis added to the quality of the overall analysis of grade inflation at this same school, as did the in-depth teacher interviews. The purpose of this study was to show an in-depth analysis of one school and not to draw any conclusions or generalizations about grade inflation existing in multiple schools across the country. This research study was limited to one southeastern Georgia high school and not intended to provide a national profile on grade inflation in other high schools.

Methodology

Research Design

The researcher conducted a mixed methodology research study with both qualitative and quantitative analysis. Since previous studies were based on examining standardized test scores, GPAs, and some grading standards, this researcher added the perception of teachers of local grading standards and grade inflation in addition to standardized test scores and GPAs, as ultimately teachers make the daily curriculum, instruction, and assessment decisions, and thus greatly impact GPAs, test preparation, and test performance.

Population

For the quantitative portion of this study, the researcher analyzed testing data from the student population, examining EOCT and SAT scores, as well as student GPAs for 160 high school seniors. For the qualitative portion of the study, the population was the faculty at one southeastern Georgia high school. The researcher initially administered a Likert scale survey with one open-ended question to all 76 classroom teachers employed at this one school and requested volunteers to participate in a series of in-depth interviews. The researcher hoped to choose at least two participants from each core academic area, but no one from the science department volunteered.

Sampling

For the quantitative portion of the study, the researcher also utilized purposive random sampling to look at documentation for high school students, including SAT scores, EOCT scores, and the students' respective GPAs. In addition, the researcher utilized a form of purposive random sampling by utilizing participants from the school where the researcher is employed, using participants from each major academic area. The researcher had 10 participants actively involved for the duration of the qualitative portion of the study.

Instrumentation

The researcher utilized statistical software to analyze the correlations between GPAs and SAT scores and between GPAs and EOCT scores. The researcher used triangulation to increase the validity and quality of the study. The researcher used a

Likert scale survey along with an open-ended question administered to the entire faculty at this school to acquire initial information about the overall perception of grade inflation. Subsequently, the researcher conducted a series of interviews with teachers from each academic core area except science and from two different elective areas to gain information on teacher perception of grade inflation at this school.

Data Analysis, Tools, and Techniques

For the quantitative analysis, statistical software examined correlations to determine to what extent a relationship existed between high school GPAs and SAT scores and to what extent a relationship existed between high school GPAs and EOCT scores at one particular school. The analysis looked at discrepancies in such findings based on race and/or gender in a southeastern Georgia high school. To determine how teachers perceived that grade inflation existed, qualitative analysis examined recurring themes in both the surveys and the interviews.

Summary

Conducting a mixed methodology research study of grade inflation at one southeastern Georgia high school, pseudonym South High School, offered a chance for the researcher to closely examine the relationship between standardized test scores and grade point averages at one school, instead of trying to generalize statistical findings across the nation. Grade inflation at one school does not prove that grade inflation exists at every school. For the researcher, this vested interest provided an opportunity to better understand how students perform at South High School. Also, the findings provided an opportunity for teachers to reflect on how students perform on both standardized tests as well as with formative and summative classroom assessments. Analyzing themes from the research findings became more beneficial than proving whether or not grade inflation exists at South High School.

In addition, this particular research study contributes to the already existing scholarly information on the topic of grade inflation. With many studies claiming to prove and disprove grade inflation at the college level, additional research was and is still needed to assess this concern at the secondary level. In fact, none of the studies in the following review of literature conducted a case study of one high school. Instead, longitudinal studies of standardized test scores and self-reported GPAs from the students taking the said standardized tests served as the statistical bases for each study. Thus, this research study was unique in its approach and composition and has the potential to serve as a springboard for other secondary level case studies of grade inflation.

CHAPTER II

REVIEW OF RELATED RESEARCH AND LITERATURE

Introduction

For many years standardized tests have been used to measure content knowledge, student achievement, and to predict future success. Just as traditional grading standards may be problematic, standardized tests may be poor tools to assess student learning. The focus shifts from student learning to test performance. "When preparations for ACT, SAT, and advanced placement tests drive the curricula, many of the more important purposes of school are sabotaged" (Edwards, 2000, p. 544-45). Despite the recent accusation that teachers at all levels are "teaching to the test," more test preparation has not helped most standardized tests. In fact, standardized test scores have dropped the past three decades, while high school and college GPAs are steadily rising (Edwards, 2000, p. 538). The following research shows a plethora of information claiming to prove (Ziomeck & Svec, 1995; Woodruff & Ziomeck, 2004; Bishop, 2003) and disprove (Mullen, 1995; Ediger, 2001; Kohn 2002) the existence of grade inflation at the college level. Other studies like Koretz and Berends (2001) suggest that grade inflation may be content related, since the humanities tend to post higher grades than the math and science courses, but they also stipulate that more research is necessary to prove that grade inflation is a rampant epidemic in both American high schools and colleges.

Yet, far fewer studies focus on secondary education. The few studies which do analyze high school grade point averages and standardized test scores also contradict each other, are inconclusive, and/or rely heavily on past research statistics. In "The High School Transcript Study" of 1990-2000, researchers found a definite increase in high school GPAs (Perkins et al, 2004). "High school graduates earned a higher overall GPA in 2000 than in 1990. In 2000, high school graduates earned a 2.94 overall average GPA; in 1990, high school graduates earned a 2.68 overall average GPA" (Perkins et al, 2004, p. C-6). Yet, the increase in GPA is also accompanied by a larger number of students taking math and science courses, honors courses, and Advanced Placement courses. Seniors earn the highest GPA, and students are earning more credits than ever before (Perkins et al, 2004, p. 2-3). "A number of factors may explain the general increase in GPA from 1990 to 2000:" an increase in "academic achievement…changes in teachers' standards for grading, changes in material taught," and other non-measurable changes are some possibilities (Perkins et al, 2004, p. 3-14).

Using statistics from both the ACT and the SAT, J. E. Stone (1995), a professor from the Department of Human Development and Learning at East Tennessee State University, explains why grade inflation does exist and how it can be defined. "When higher grades are unaccompanied by higher student achievement," flags should signal an alert to inflated grades (Stone, 1995, ¶ 2). From 1965 to 1980, a steady increase in the number of higher grades existed at the college level, while this same time period also shows a decline in achievement on standardized tests (Stone, 1995, ¶ 7). Yet, some researchers like Kohn (1998, 1999, 2001, 2002) stress that standardized tests and class grades are not measuring the same areas. Kohn (2002) dismisses even the accusation of grade inflation saying that a number of factors influence grading, but they do not mean that grades are inflated. Rosovsky and Hartley (2002), in a report for the American Academy of Arts and Sciences, claim "there is overwhelming evidence that standards regarding student grading have changed substantially over time" (p. 2-3). Yet, Kohn (2002) finds Rosovsky and Hartley's findings inconclusive since they too compared standardized tests to GPAs. However, each study claiming to prove the existence of grade inflation relies on the correlation between GPA and standardized test scores, particularly the SAT. While some critics like Kohn disagree with using GPA and/or SAT scores to examine grade inflation, others find no alternate way to statistically analyze the data. "The use of SAT scores as a measure of ability does have its limitations, yet another adequate alternative eluded" each research study (Mathies, Bauer, & Allen, 2005, p. 23). The researchers who say that grade inflation does not exist focus on the problems of using traditional grades to assess learning. Each study proving or disproving inflation relies on strictly quantitative data such as surveys and test scores. None of the quantitative studies involve perceptions of teachers and instructors.

The debate of grade inflation existing at the college level does reveal possible causes for and implications from the existence of grade inflation, which may be quite relevant to secondary education, as this phenomenon and debate did not just appear one glorious morning on a picturesque college campus. In fact, grade inflation at the secondary level may be the root cause of grade inflation at the college level (Hassel & Lourey, 2004; Schilling & Schilling, 1999). According to Hassel & Lourey (2004), grade inflation begins in high school when teachers try to please everyone (p. 4). Students become accustomed to little effort being rewarded by higher grades. Such a view is tainted since grade inflation "calls into question central values of academic life" (Rosovsky & Hartley, 2002, p. 2). Academic integrity, fair practices, and learning are all hampered when students and/or teachers question the validity of grading practices. "Grade inflation is a creeping paralysis in our midst, sapping the strength of our academic systems" (Farley, 1995, p. 3).

Once it starts, grade inflation and inflated letters [of recommendation] are subject to self-sustaining pressures stemming from the desire not to disadvantage some students or colleagues without cause. This self-sustaining character eventually weakens the very meaning of evaluation: compression at the top before long will create a system of grades in which A's predominate and in which letters consist primarily of praise. Meaningful distinctions will have disappeared. (Rosovsky & Hartley, 2002, p. 21)

Grade inflation is "a social and economic cancer," extending influence on staggering tuition fees, while lowering daily standards and expectations (Stone, 1995, ¶ 17-18). Grade inflation "means that educational accomplishments of present-day students are not as impressive as their grades would indicate" (Stone, 1995, ¶ 19). Grade inflation ultimately leads to skepticism about our education system.

Yet, Kohn (1999) argues that "The proper occasion for outrage is not that too many students are getting A's, but that too many students have accepted that getting A's is the point of going to school" (¶ 22). Examining the possible causes of grade inflation must go hand in hand with examining its existence and the quality of grading standards being used, especially when comparing grade point averages to standardized test scores.

The present situation creates internal confusion giving students and colleagues less accurate information; it leads to individual injustices because of compression at the top that prevents discrimination between a real and an inflated A; it may also engender confusion for graduate schools and employers. (Rosovsky & Hartley, 2002, p. 12)

If students expect to receive high grades without putting forth the effort, then they will assume that the workplace has just as unrealistic expectations of their performance. Grade inflation is not just about pumping up GPAs then; grade inflation is about the deterioration of academic standards, quality teaching, and fundamental ethics.

Context of Research

Determining the presence of grade inflation may help administration better gauge the quality of both instruction and assessment. Educational administrators operating on misperception or lack of data may be misjudging the quality of education in a school. They may be working on an "if it isn't broken don't fix it" mentality. If grade inflation exists, administration needs to analyze the grading standards and ensure that grades are distributed fairly and consistently to best prepare students as they compete for college admissions and scholarships. If grades are inflated at the high school level, then students have unrealistic expectations about the difficulty of the work load in college. "Students are out of touch with what their grades really symbolize" (Hassel & Lourey, 2004, p. 2). If grades are inflated, the teachers are setting students up for failure in the future, and administrators are not evaluating their teachers appropriately, which may be a sign of poor leadership. In a survey to freshmen college students asking about grading, accountability, and learning, over 80 percent of the respondents considered themselves to be above average students (Hassel & Lourey, 2004, p. 8). Similarly, in another survey of college psychology students, Gaultney and Cann (2001) found that 65 percent of the students listed earning a high grade as the most rewarding experience in a class. Only 35 percent of the respondents declared that learning was their priority in college (p. 86-87). Expectations of the entire learning experience have diminished to a simple letter grade.

In the state of Georgia, if grades are inflated, some students may undeservingly qualify for the Hope Scholarship when these limited funds are intended to reward students who do well in school. Healy (1997) examined the impact of HOPE scholarships on standards and grades at the University of Georgia. "University of Georgia officials have insisted that no grade inflation has resulted from the state's merit based HOPE scholarship program, which began in 1993" (\P 4). Yet, professors see little evidence that students are stronger now then before the HOPE program began, even though students must earn a B average in high school to qualify and must maintain a B average in college to keep the HOPE scholarship. Instead, students expect professors to accommodate their needs by altering grades (Healy, 1997, ¶ 22-24). In addition to keeping scholarships, students expect to receive high grades to get them into internships and apprenticeships that will lead to dream jobs after graduation. "Too many students expect an A, regardless of the amount of intellectual energy that they are willing to extend, because they need that grade to get a good job," which translates in a high paying career and not life-long learning (Martinson, p. 50). A "gap" exists between the expectations of students and

professors (Gaultney & Cann, 2001, p. 86). This miscommunication or misperception is the basis for the argument of who is to blame for grade inflation as well.

Grading Standards

Grading standards vary from school to school and from state to state, but in order to examine grade inflation, grading standards must be defined and understood to compare student performance in the class to student performance on standardized tests. Such grading standards also reveal much about student and teacher expectations, curriculum and instruction, formative and summative assessment, and placement in both high school and college courses. The notion of assigning a number or a letter to symbolize one's level of learning or achievement dates as far back as the 1700s. In fact, the traditional 4.0 scale used today stems from 1780 when Yale University assigned a number to rank the quality of student work. Previously, schools gave written or narrative assessments, but after Yale began using the numerical system, other schools followed. Harvard University placed students in six levels or "divisions" closely related to today's 100 point scale beginning in 1877 (Marzano, 2000, p.11). Finally, the letter grade with an equivalency on a 100 point scale was introduced by Mount Holyoke College in 1897 with the letter "A" meaning "Excellent" and being equivalent to the range of 95-100 percent (Marzano, 200, p.11). Over 100 years later, this grading scale is still used in over 90 percent of high schools and colleges (Marzano, 2000, p.11).

In 1998, The College Board conducted research to examine grading standards and assessment policies by adding questions to a survey distributed to over 29,000 high schools in America specifically addressing traditional grading standards. With a response rate of just under 16,000 schools, the survey revealed 91 percent of the respondents still "use the traditional grading system of A-F or numeric grades" (Camara, 1998, p.1-2). According to Rosovsky and Hartley (2002), grades are intended to be objective and to serve a variety of functions today, including assessing learning, analyzing strengths and weaknesses, and setting criteria for which colleges may base admissions (p. 3). Grades are "an efficient way to communicate valid information, but only if a meaningful range of grades exists" (Rosovsky & Hartley, 2002, p. 3). Yet, the researchers do not offer a definition of "meaningful." Rosovsky and Hartley (2002) also outline the characteristics of a "good grading system:" grades must be "rigorous, accurate, fair...candid...supportive of learning and helpful to students in achieving their educational goals" (p. 14). With the majority of school systems still using the traditional grading system, it is interesting that many critics find problems with these standards.

Marzano (2000) outlines three major problems of using traditional grades to assess learning: 1) teachers may use "non-achievement factors" such as participation to calculate grades, 2) teachers may alter the weighting of grades to get a desired result, and 3) one score or letter grade is used to represent a multitude of quite varying "knowledge and skills" (p.13). "A grade does not communicate all that many teachers want to say" (Birk, 2000, ¶ 8). Grades have also been used for the wrong reasons in that they are not used to measure student learning. In fact, grades are often used to motivate students, to assist teachers in determining which teaching strategies work best in the classroom, and to structure master schedules by varying course offerings. In addition, final grades in high school are used for college admission selection, which Rosovsky and Hartley (2002) see as a necessary function, but Marzano (2000) and Edwards (2000) see as problematic: "Grades cannot be justified exclusively for college entrance purposes" (Edwards, 2000, p. 544). In addition, grades are used to give students information about where they stand in relation to other students and to promote or retain students. Kohn (1998) says that grades are used to motivate, to sort, and to provide feedback, but the success of these purposes is not uniform (p. 198-99). None of these purposes show mastery of a content area or the acquisition of a particular skill (Marzano, 2000, p. 15).

In another article, Kohn (1999) discusses the negative impact of traditional grading saying that students lose the desire to think, especially when they begin to see how arbitrarily grades are assigned by teachers. "Grades aren't valid, reliable, or objective" (Kohn, 1999, ¶ 9). Teachers pick and choose what to teach, just as they pick and choose what to test. Objectivity has already been thrown out the window the moment the school bell rings (Kohn, 1999, ¶ 9). And according to French (2005), if grade inflation exists, it "results from inappropriate standards" (p. 66).

Perhaps students actually are producing better work with the addition of technology. Perhaps educators of the past were less likely to give exceptional marks. Perhaps students no longer have to take as many core or fundamental courses in fields they do not enjoy. Perhaps the quality of instruction and assessment has improved, as well (Kohn, 2002). Perhaps, Basinger suggests, even the mention of grade inflation "has the potential to harm teaching and learning," as teachers are blamed once again for what ails American education (2002, \P 26).

Koretz and Berends (2001) attempted to answer such questions of "perhaps" in their study comparing GPAs with standardized test scores as reported both in the High School and Beyond Study (HSB) of 1982 and the National Education Longitudinal Study (NELS) of 1988. In particular, their study focused on achievements in mathematics from 1982-1992. Their study concluded that grade inflation for mathematic classes did not exist over the span of the previous research studies. As math scores increased, so did math grades and GPAs. Yet, researchers Koretz & Berends (2001) also contend that the subject of math lends itself more to standardized testing. In math, one answer is typically the only suitable answer; there is no subjectivity. Also, math tests do accurately measure mastery of skills and concepts.

Finally, Koretz and Berends (2001) stipulate that grade inflation can only be refuted if the means of assessment are shown to test content recently learned, but they add that these tests should not be used as predictors of future success. They conclude that grade inflation exists in other more subjective areas (and found such cases in higher income school systems) and that the only way to truly measure such cases is to follow students from high school into college, examining high school GPAs, standardized test scores, college GPAs, and courses taken (Koretz & Berends, 2001).

Grading standards are part of a school's accountability. Schools concerned with maintaining a successful accountability protocol "should include several measures of student achievement, including not only test scores [,] but also other evaluations of student work, including evaluations of student writing, collections of student work, and appraisals of student proficiency conducted by the classroom teacher and independent evaluations" (Reeves, 2004, p. 106). In addition, educators must remember that other factors influence grades, such as attendance, the curriculum, and the quality of teachers (Reeves, 2004, p. 106). Because "teachers have substantial flexibility to determine grading standards" (Camara, 1998, p. 2), in most schools even with the same grading standards, grades can vary from one class to the next. "It continues to be difficult to

evaluate students' grades without a context for components used by individual teachers in grading or the school policies concerning specific aspects of the grading system" (Camara, 1998, p. 2). It is hard to compare one student's grade point average to another then, as they will never be on equal footing. Yet, this strict comparison not only guides research in the area of grade inflation, it also guides student ranking, college admission, and accountability.

"While letter grades may be a practical and political necessity in most schools, they cannot stand alone as accurate descriptions of student work, and they never, announced as isolated symbols, help a student understand how to get better" (Reeves, 2004, p. 47). Traditional grading standards "not only undermine competition between students, they undermine striving for quality by individual students as well" (Edwards, 2000, p. 543). To truly gauge learning, grades should reflect student-directed learning, stem from high expectations being set by both students and teachers, assess depth and not breadth of learning through complex, empirical research projects and the utilization of higher order thinking skills instead of mere memorization of facts (Edwards, 2000, p. 544). The traditional grading system proves unreliable in assessing individualized learning.

An example of unreliable grading standards is the traditional and widely acceptable "bell curve," especially at the collegiate level. Ediger (2001) explains that using such a curve "is a stringent way of grading students" (p. 1). Relying on set standard deviations does not take into consideration class size, actual class mean, work ethics of students, or the composition of college tests. "By using the bell curve as a reference point for grading, a teacher is implicitly assuming that the performance of students should or will approximate the bell curve. Consequently, the teacher forces a set of scores or set of grades into a normal distribution" (Marzano, 2000, p. 19). Ediger adds, "tests are not that valid and reliable...would have a high standard of error...are typically multiple choice...do not reflect the real world of work, skills, and doing...do not predict how well the test taker will do in the world of work" (2001, p. 2). Ediger concludes, "grading students is a human, not a scientific creation" (2001, p. 4); thus, grades will never clearly express the extent of knowledge gained.

Standardized Testing and Grade Point Averages

Many of the studies examining grade inflation rely on self-reporting by students of their grades. According to The College Board study of 1998, students' self-reporting their grades is unreliable and may lead to the interpretation of grade inflation (Camara, p. 1). Kohn (2002) agrees that any research study which is based on students self-reporting their GPAs is problematic because "self-reports are notoriously unreliable" (¶ 4). Higher grades do not automatically mean that grades are not earned either. In fact, Kohn (2002) adds, "No one has ever demonstrated that students today get A's for the same work that used to receive B's or C's. We simply do not have data to support such a claim" (\P 7). Kohn also disagrees with studies such as Rosovsky and Hartley (2002) that compare GPA to SAT scores saying, "it is difficult to argue that a standardized test taken in high school and grades for college course work are measuring the same thing" $(2002, \P 9)$. Citing an increase in the number of high school students taking the SAT, Kohn argues that the composition of the test takers is now much different than thirty years ago when the majority of college bound students were white males from families who could afford to pay for a college education (2002, \P 9).

Kohn outlines three reasons why an increase in GPA does not prove the existence of grade inflation. The first discrepancy is in the belief that the SAT measures the same skills and concepts that a college GPA does. Standardized tests like the SAT do not assess content knowledge. For example, the verbal section on the SAT measures vocabulary and not intelligence, motivation, or the ability to learn, all of which help a student achieve success in college (Kohn, 2001, ¶ 7). "The sort of quantification of educational performance that is most commonly used... is the traditional machine-scored, norm-referenced, multiple-choice, fill-in-the-bubble exam" (Kohn, 1998, p. 199). "The limits of those tests, along with their pernicious effect on creative teaching and learning, are well-known to educators" (Kohn, 1998, p. 199). Also, the population of students taking the SAT has greatly varied over the past three decades. In fact, the number of students taking the test has increased by over 200,000 students, which is also a factor when examining the decline of the SAT average. SAT scores of students wanting to attend Ivy League schools are expected to differ from those wanting to attend local state schools. Finally, the SAT test itself has gone through major changes, including "renorming" in the 1990s and the recent addition of an essay section, while most schools still rely on the traditional 4.0 scale to measure GPAs (Kohn, 2002, ¶ 9-11). Some schools are not even requiring SAT scores for admission. "At least 280 colleges and universities [more than 700 as of 2005] don't require applicants to take either the SAT or the ACT" ("ACT/SAT Optional," 1997, cited by Kohn, 1998, p. 199).

Kohn (2001) goes even further in his article "Two Cheers for an End to the SAT," outlining why the SAT should not be used to evaluate student learning. A strong correlation exists between socio-economic status and one's SAT score; poor students typically receive lower scores. Also, students with college educated parents score higher than students whose parents did not attend college. Consequently, the SAT prevents entrance into college for students who do not test well, especially minority students. Often the scores are used to compare one state to another which is unfair since the test is not mandatory, and test-taking populations vary greatly from state to state (Kohn, 2001, ¶ 5-10).

Assessing Learning

Basinger (1997) examines not only grading standards, but also how education itself has changed over the past thirty years in that less material is being taught, textbooks are written at a less complicated level, and professors have dummied down every aspect of college classes (\P 6-7). "Student work is no longer being assessed appropriately" (Basinger, 1997, ¶ 8). According to Kohn (1999) students are not being assessed properly because the same grading standards of 100 years ago are being used. Teachers hate to grade because it is time consuming. Thus, they assign "easy" or "busy" work since rote assignments are easier to grade even though a test assessing sheer facts does not show true learning; higher order thinking skills are never utilized and become less sharp as time goes on in a student's academic career. Students also may be more tempted to cheat, and all of these problems create an obstacle between teachers and students, as their roles become blurred (Kohn, 1999, ¶ 10-15). Students think the outcome or reward for each class is the final grade and not the journey of discovery or pushing oneself to what was thought to be unachievable (Kohn, 2001, \P 17). Students become driven to beat a classmate instead of to learn. "What is far more disturbing about even the current emphasis on grades, let alone the prospect of enhancing their significance, is the damage

they do when students are led to compulsively groom their transcripts" (Kohn, 2001, ¶ 13). In such cases, standard grades stifle creativity, foster competition in a negative way, and in order to receive higher grades students take shortcuts, choose easy classes, and avoid challenging work to get the easy grade needed to increase a GPA (Kohn, 2001, ¶14-16). Ironically, Kohn's findings do show not only that standardized grades are problematic, but also that the standards are deteriorating, which has been identified by other researchers as part of the definition of grade inflation.

Not every state has set tests to be administered at the end of each course to completely show successful learning. The state of Georgia has been in the process of implementing End of Course Tests (EOCTs) for the past four years and will continue to implement them in all academic areas. An EOCT is given the last couple of weeks of the semester with the results being calculated in the final grade for each course tested. Some researchers like Kohn recommend the implementation of such tests at the end of each course to better gauge student achievement in conjunction with various forms of formative and summative assessment.

When alternative forms of assessment like portfolios are implemented, student work can be assessed more thoroughly and serve as a better judge of the required time management and work ethic skills needed to do well in college. Similarly, Ediger (2001) sees the use of portfolios as a great addition to standardized tests-a way for teachers to offer in great detail through narration an assessment of not only what a student knows, but how far each student has come individually in each course. Portfolios allow selfassessment and constant reflection which leads to higher self-esteem. Collaboration and becoming involved with local programs and causes can provide alternate forms of learning. Having an active role in one's community allows students to transfer knowledge from the classroom to the real world (Edwards, 2000, p. 544). The need arises for a more thorough investigation into grading standards in addition to utilizing a variety of assessment tools to prevent such an accusation of grade inflation and to better determine if students are mastering necessary skills and concepts at all levels of education.

Predicting Future Success

In the 1940s, Carl Bingham, a well-known psychologist, was asked to develop a new college entrance exam to better "predict success in college" (Marzano, 2000, p. 44). Known initially as the Scholastic Aptitude Test (SAT), then changed to the Scholastic Achievement Test and now known as a reasoning test with an acronym that does not match, the SAT did not and does not assess content learning but instead the ability of a student to reason, showing according to Bingham, the certainty to which one could be successful in college (Marzano, 2000, p. 44). However, "High school grades are the most frequently used predictors in college and university admission decisions" (Camara, 1998, p. 1). (With the real priority being grades then, it is understandable that some may feel compelled to inflate grades to assist students in pursuing a college education.)

Conflicting studies have even been reported by The College Board. In 1987, The College Board found:

Since 1987, the population of students with A plus, A, and A minus grade-point averages has grown from 28 percent to a record 37 percent, while their SAT scores have fallen an average of 13 points on verbal and 1 point on math. This year's grade average for all SAT takers is 3.22 on a four-point scale (A=4), well above the average of 3.07 in 1987. (The College Board, 1997, p. 2)

Yet, in another study conducted by Kobrin and Michel (2006) for The College Board using the SAT to predict college success, the researchers determined that both GPA and SAT scores successfully gauge achievement. Kobrin and Michel do contend though that the SAT assesses one's skill of reasoning at the college level, while one's high school grade point average assesses content learning, as well as "effort, attendance, conformity, and motivation" (2006, p. 1). Kobrin and Michel (2006) hypothesized that the SAT would be a better predictor of college success than high school grade point average. They found, however, that the accuracy of SAT scores predicting college success varies based on racial groups, grading criteria, the type or level of prestige of a university, *and* high school grade point average (Kobrin and Michel, 2006, p. 1-6).

"High school grade point average tends to have higher accuracy rates for predicting the unsuccessful students and the SAT tends to have higher accuracy rates for predicting the successful students" (Kobrin & Michel, 2006, p. 6). Students attending less prestigious universities had higher accuracy rates of college success based on high school GPA, while the SAT produced "higher accuracy rates for predicting the unsuccessful students" with GPAs ranging between 3.0-3.5 their first year of college (Kobrin & Michel, 2006, p. 6). For ethnic groups, the SAT was a stronger predictor of college success than high school GPA, and the SAT was also more successful at predicting college success for students attending more prestigious universities. For students attending colleges with less rigorous admission standards, high school GPA was better at predicting college success than SAT. For the students with the highest first-year college GPAs, neither the SAT nor high school GPA better predicted college success (Kobrin & Michel, 2006, p. 5-6). The researchers Kobrin and Michel do recognize the imperfections of this study since only students already attending college were studied instead of examining the GPAs and SAT scores of all high school seniors. Because classes, professors, majors, and schools also varied, it is difficult to identify just how all of the expectations varied as well (Kobrin & Michel, 2006, p. 1-6).

Kohn (2002) finds fault with researchers who compare the GPAs and SAT scores of Ivy League students with those attending schools with less competitive admission policies, particularly since not only are SAT scores higher at these schools, but their students typically had higher GPAs in high school and strive to continue high marks in college (¶ 10-26). Again, Kohn (2001) warns that SAT scores cannot and should not predict college performance (¶ 9).

Not all studies are as straight-forward. Goodwin and Holman (2003) examined grade inflation in rural Arkansas schools after that state's Department of Education noticed gaps between ACT scores and GPAs. For reasons of accountability, a 2001 mandate created a formula to determine which schools had inflated grades. Unfortunately, there were errors in the calculations as well as in applying the formula to the wrong year's set of scores. In addition, "to make such an accusation based on only one year's data is irresponsible" (Goodwin & Holman, 2003, p. 6). In fact, the researchers also discovered that the statistics from rural schools were problematic because classes were much smaller. In a small graduating class, one student's GPA or ACT score could greatly alter the results of such a formula. In addition, many of the students found to have elevated or "inflated" high school GPAs also went on to have high college GPAs, which could indicate that hard work and studying are more important predictors of future success than were standardized test scores. Goodwin and Holman concluded that "accountability" is a more pressing issue than grade inflation.

Making Achievement Meaningful and Measurable

Examining the results from the 1988 National Education Longitudinal Study on poverty levels, reported GPAs, and standardized test scores conducted by the National Center for Educational Statistics (OERI, 1994), researchers also found that "A" students in high poverty schools scored the same on reading tests as "C" and "D" students from wealthier school systems, and results were similar for math tests (1994). Researchers found that assigned grades neither accurately assessed nor predicted standardized test performance, especially in schools where the majority of students received free or reduced lunches. To give students a false sense of success sets them up for failure. "How fair is it for a student who has received A's and B's all through school to arrive to college and find that he or she is unprepared for college-level math courses?" (OERI, 1994, p. 4-5). While the researchers hypothesized that grades may be inflated because of "an attempt to motivate students" (OERI, 1994, p. 3), they also admit that such an unfair assessment does not truly explain to parents how each student compares nationally. Thus, some students with very high GPAs are not scoring as high on standardized tests as they should if GPA is used as an indicator of future success.

Researchers Ziomek and Svec (1995) investigated GPA and ACT performance over a five year period. "The results of this study not only provide evidence supporting the grade inflation hypothesis, but also that the phenomenon appears to be especially substantial at the higher end of the grade point scale" (Ziomek & Svec, 1995, p. 5). More students reported higher GPAs than did not, and the students with higher GPAs did not always produce higher ACT scores. "An obvious conclusion, which supports common knowledge, is that grading and the standards teachers use to award grades are relative" (Ziomek & Svec, 1995, p. 11). In conclusion, high school GPAs were reportedly higher than ACT scores, suggesting that grades did not reflect actual knowledge gained in courses, while also supporting the notion of grade inflation, since "grade inflation is an increase in grades over time for the same level of student achievement" (Woodruff & Ziomek, 2004, p. 1).

In a follow up study, Ziomek again examined ACT scores and grade inflation with fellow researcher Woodruff (2004). "The hypothesis under investigation in this study was that, unlike ACT scores, high school grades have been subject to inflation" (Woodruff & Ziomek, 2004, p. 2). This time examining data over 13 years, instead of the previous study of just five years, the researchers found a large variation of ACT scores, but the GPAs still showed a steady increase (2004, p. 25). For example, "Composite grade inflation from 1991 to 2004 varies between 0.21 and 0.29 for ACT Composite scores between 13 and 27" (Woodruff & Ziomek, 2004, p. 15). "The marginal analyses indicated the average amount of grade inflation for this 13 year period to be about 0.25," using the traditional 4.0 scale (Woodruff & Ziomek, 2004, p. 24). In conclusion, student achievement was not consistent with reported GPAs.

In 1993, the average GPA of a University of Georgia freshman was 3.33, but this mean increased as soon as the HOPE scholarship program was implemented. In just four years, the mean GPA increased to 3.52, while SAT scores barely changed (Healy, 1997, ¶ 24). At the end of the freshman year though, almost half of the students no longer qualified for HOPE (Healy, 1997, ¶ 17). Healy points out that either the students did not

earn the required high school grades and came to college unprepared, or students think that all professors will inflate grades to ensure that students succeed. Students spend less time studying today, but grade point averages have increased (Schilling & Schilling, 1999, p. 6). Surprisingly, in 1996, almost 63 percent of freshmen earned A's and B's compared to 51 percent in 1993. Sadly, more black students than white students lose the HOPE scholarship after their first year of college despite many professors being accused of inflating grades to help maintain a strong minority presence on campus (Healy, 1997, ¶ 40-44).

In another study examining grades at the University of Georgia, Mathies, Bauer, and Allen (2005) find that grade inflation has been a problem since 1974 (p. 4). "Questions are being raised as to whether faculty are reluctant to give low grades due to the fact that merit-based scholarships are only available to students if they maintain a B average" (Mathies, Bauer, & Allen, 2004, p. 4). Looking at the records of almost 400,000 students, the researches detected GPAs increasing from 2.77 in 1974 to 3.27 in 2004, with grades rising the most since the late 1980s (Mathies, Bauer, & Allen, 2004, p. 9). At the same time, the university saw applicants with consistent SAT scores until 1984, when those SAT rose from the average of 1084 to 1201. (Again, the SAT was renormed in the 1990s.) Yet, even though both GPAs and SAT scores increased, the GPAs increased at a greater rate, and these findings were consistent regardless of gender or race. Female students made up 55 percent of applicants with males at 45 percent, and 90 percent of the applicants were white with just 10 percent non-white (Mathies, Bauer, & Allen, 2004, p. 10-13). "While SAT scores and GPAs have risen over time, the standard deviation (an indication of the variance among scores) has decreased. This indicates that while grades

and SAT scores are increasing, the variation between scores is decreasing" (Mathies, Bauer, & Allen, 2004, p. 12). The GPA change was 18.05 percent while the SAT change was 10.77 percent suggesting grade inflation. But the researchers caution that "to conclude that grade inflation has or has not occurred based solely on the percentage change in SAT scores and term GPA cannot be accurate" (Mathies, Bauer, & Allen, 2004, p. 20).

Inflated grades may cause a higher number of students to need remediation in college as well, as they may not have learned the required content, time management skills, or study habits necessary to excel at the college level. "By one estimate, one third of all college and university students were forced to take remedial education courses, and the need for remediation has increased over time" (Rosovsky & Hartley, 2002, p. 6). One would expect students with solid high school GPAs to be prepared for college. If instructors do not establish classroom expectations from day one, set high academic standards, and teach a "rigorous curriculum," then students will continue to expect a high grade with minimum effort. Such students are then caught off guard when an instructor expects them to tow the line or when they do poorly on standardized tests and may be referred for remedial course requirements (Schilling & Schilling, 1999, p. 6). In addition, grade inflation leads to compression at the top of the grading scale, "making it difficult to discriminate the best from the very good, the very good from the good, the good from the mediocre" (Mansfield, 2001, \P 7). Each student's accomplishments then look just as impressive as the next, and grades no longer carry any meaning.

To eliminate the accusation of grade inflation, educators need to rethink grading standards. French (2005) outlines a number of changes which will make achievement

meaningful and measurable even when others claim grades are inflated. First, ranking students will make them competitive. Then analyze current grading standards and revamp where necessary. Finally, "Lobby administrators to provide time, support, and guidance for faculty to evaluate stated outcomes for courses; create assessments to test for achievement...reevaluate...in light of the results" (French, 2005, p. 67).

Factors Contributing to Grade Inflation

Academic achievement has become increasingly more competitive not just in an attempt to gain admission into college, but also to receive valuable scholarships. Many parents demand higher grades and funding has been contingent on student performance. Parents and educators are consequently contributing to grade inflation. "Some have gotten so caught up in issues of funding, self-esteem, and public relations that they have forgotten that a central point of schooling is a child's intellectual development" (Stanley & Baines, 2001, p. 227). The grade has become more important than the learning. "When a grade becomes an indicator of something other than academic achievement, precious little remains to help gauge a student's progress" (Stanley & Baines, 2001, p. 227), especially when students themselves recognize "the sham." High school students are not being prepared for college as they have been in the past; they see favoritism and learn that it is acceptable; they care less about the quality of work in general; they have lost a passion for knowledge and truth. According to Stanley and Baines, one of the only ways to eliminate grade inflation is to examine grading standards and by not "providing all children with the same set of minimal competencies" (2001, p. 230).

Researchers who argue that grade inflation exists point out that the biggest jump in GPAs began in the 1960s, but a number of causes are attributed to this jump. During the 1960s with the threat of young men being sent off to fight in Vietnam, "faculty members were reluctant to give poor grades to male students...forcing them to drop out of school would have made them subject to wartime military service" (Rosovsky & Hartley, 2002, p. 7). Many young men who had not considered going to college before the war were also enrolling to avoid service. Even the composition of the faculty changed, and many of the professors were against the war anyway, so altering grades to prevent sending men to fight became a form of protest in this "shifted...ideological base" (Rosovsky & Hartley, 2002, p. 7-8). Other professors may have felt compelled to conform to keep pace with the ones assigning higher grades (Rosovsky & Hartley, 2002, p. 11). Also, in the 1960s, the number of mandatory classes decreased, "especially those in foreign languages, mathematics, and science" (Edwards, 2000, p. 539). Students began to have more flexibility in designing schedules catered to their interests.

Over the past thirty years, college campuses have changed in their ethnic make-up with an increase in diversity. The shift in the 1960s not only involved male students trying to avoid military service, but also more females and minority students began attending college and may not have had adequate preparation for taking college entrance exams. In fact, Mansfield (2001) says that Affirmative Action sent inadequate students to college, which led some sympathetic professors to give black students higher grades than they deserved (¶ 19-22). Thus, the "quality" of the student changed (Edwards, 2000, p. 538-39). Admission standards changed in order to allow students with less academic training to enter college as well (Rosovsky & Hartley, 2002, p. 8).

Even the course offerings have changed. Many schools removed the most challenging courses from their requirements, and some allow students to make up their own requirements. Students began majoring in courses based on personal interests and talents, especially in the humanities where professors are notoriously lenient in grading (Mathies, Bauer, & Allen, 2005, p. 4). Later withdrawal dates allow students to drop classes without penalty, and some students are able to repeat courses and remove the first attempt grade to improve their GPAs (Rosovsky & Hartley, 2002, p. 9; Edwards, 2000, p. 539). Professors are demanding less work from students, assigning less reading, shortening writing assignments, and giving higher grades (Rosovsky & Hartley, 2002, p. 10). The result is "content deflation" and grade inflation (Mathies, Bauer, & Allen, 2005, p. 27). With technology today, students also have access to a tremendous amount of information, which both can assist students in their learning and make it easier for them to cheat (Mathies, Bauer, & Allen, 2005, p. 27).

Instead of seeing themselves as institutions of learning, many universities consider themselves businesses and want to do whatever is necessary to maintain or even increase enrollment. Colleges hesitate to have students drop out due to low GPAs. Pressure is imposed on specific departments and even specific professors to inflate grades to keep students in school (Edwards, 2000, p. 539). Successful undergrads may stay and pursue advanced degrees, adding even more money to the university's purse (Rosovsky & Hartley, 2002, p. 10). "However, students are not customers, they are students—they are novice scholars who come to gain knowledge, understanding of, or skill in a field by study, instruction, or experience under the direction or guidance of a teacher" (French, 2005, p. 66). Colleges need to remember that students are learners.

Almost half of today's college courses are taught by graduate assistants or adjunct faculty members. Graduate assistants are overworked and may not care about assigning

grades, and adjunct professors are more likely to be lenient in hopes of receiving good evaluations and being asked back to teach next semester (Rosovsky & Hartley, 2002, p. 10). In a study comparing the grades assigned by adjunct faculty to full-time faculty, Sonner (2000) also found the existence of grade inflation at the college level, but only when a university has a high number of part-time instructors. Over the course of two years, Sonner examined almost 400 business classes with 70 percent of the classes being taught by adjunct at one small state university. "The average grade given by full-time faculty was a 2.6, compared with an average grade of 2.8 by adjuncts" (Sonner, 2000, p. 6). Sonner hypothesized that adjuncts may give higher grades in an attempt to ensure being well-liked by students to receive high evaluations and thus be asked back to teach. Sonner concluded that adjunct need training in assessment and grading standards to prevent grade inflation and to be "consistent" with full-time faculty (2000, p. 7). In addition, the level of grade inflation may be increasing due to the increase use of adjunct at many universities (Sonner, 2000, p. 5). In 1974, 78 percent of undergraduate courses at the University of Georgia were taught by professors, but in 2004, that number decreased to just 44 percent, with more courses now being taught by adjunct professors (Mathies, Bauer, & Allen, 2004, p. 21). Once again though, student achievement is not accurately measured by a GPA.

Adjunct professors are not the only ones assigning high grades today. In fact, due to the popularity of using student evaluations to assess professors, grade inflation may be caused by professors wanting to receive high evaluations from students. Surveys require students to anticipate their final grade for the course while also rating the quality of instruction given by the professor. If a professor consistently receives poor evaluations, his/her position is in jeopardy. To avoid a negative evaluation, professors may curve or inflate grades to get in favorably with students. Professors may also require fewer assignments, dummy down tests, and try to foster friendships with students. "Faculty realize that giving poor grades is not in their economic best interest" (Edwards, 2000, p. 539). Rosovsky and Hartley found that students reported receiving higher grades from the professors to whom they gave positive evaluations (2002, p. 9).

In 1998-1999 V. E. Johnson conducted research at Duke University, known as the DUET Experiment, to analyze the relationship between student evaluations of professors and the grades students received in class (Johnson, 2003). The results of the study support Sonner's (2000) claim that professors will alter grades in order to receive better evaluations. The students receiving the highest grades give their professors the best evaluations. Students most often choose to take professors who have been labeled as lenient by more students with higher class averages. Higher grades are given by some professors in an attempt to "establish rapport" and because unhappy students complain to administration, parents, and contributing alumni (Johnson, 2003, p. 235-236). "Student evaluations of teaching have contributed to a mentality that has affected the academic culture far more than many are willing to recognize" (Martinson, p. 49). Some researchers even go so far as to say that course evaluations lead to undeserved promotions; thus, the most ethical professors, the ones who may also be teaching the most effectively, are weeded out over time, as less deserving professors who dole out A's get the largest amount of praise through student evaluations (Johnson, 2003, p. 193; Hassel & Lourey, 2004, p. 4). Such a conclusion dismisses the ethics and dedication of

all professors instead of isolating the reactions of a few. Yet, the evaluations have a tendency to open faculty members up to such scrutiny as well.

Inconsistent grading standards result in unjust evaluation of students and faculty, and discourage students from taking those courses that would be of greatest benefit to them. It is somehow paradoxical that given the vast resources devoted each year to improving education within our colleges, so basic a problem has remained unrepaired for so long. (Johnson, 2003, p. 239)

Student evaluations of professors are also poor indicators of learning: "higher mean course grades do not reflect higher levels of student achievement," and "students can (and probably do) manipulate their GPAs by selecting courses with instructors who grade leniently" (Johnson, 2003, p. 193).

Also, student evaluations are based on an "impersonal anonymous, multiple choice questionnaire" at most colleges and universities (Martinson, p. 50). Vindictive students may use the evaluations as payback against the professors who do set high standards in their courses. The students then have more power than the professors and ironically assess those professors on how they assess others. Johnson (2003) also refers to Rosovsky and Hartley's 2002 study on grade inflation, especially citing their suggested list of solutions to eradicate this menace saying that while students should be able to provide feedback about the quality of education they receive, this information should not be used to punish instructors, as the students are not the experts or professionals equipped to make such judgments that impact one's livelihood. Professors should not feel pressured into inflating grades. Citing the studies of Rosovsky and Hartley (2002) as well as Johnson (2003), Mathies, Bauer, and Allen assert, "A faculty member not wanting to deal with undergraduate students can give higher grades to appease them...This indicates that the correlation of positive faculty evaluations and grades given needs to be taken into account" when determining grade inflation (p. 22).

In an attempt to create friendly classroom environments and encourage academic success, some professors are also making building a student's self-esteem a simultaneous goal paired with learning. Yet, "most studies do not support the connection between academic success and self-esteem" (Rosovsky & Hartley, 2002, p. 13). It is a misguided belief that "the purpose of education is to make students feel capable and empowered" to the point that building one's self-esteem supersedes teaching and learning (Mansfield, 2001, \P 16). Throwing standards aside with quality instruction though, professors lose focus of teaching and learning. The result becomes graduating or promoting students who are unprepared for graduate school, business internships, or other professional careers. These students now have unrealistic expectations about their future (Edwards, 2000, p. 539). The professors may also be appealing to self-esteem issues in order to receive favorable evaluations. Some professors may additionally want to be popular on campus, and it is easier to avoid the debate or complaining after the end of the term if the priority is just making students happy (Mansfield, 2001, \P 2-5).

Mansfield (2001) address what has become known as the "Ivy League Scandal" and what serves as the foundation for many studies proving the existence of grade inflation. Harvard University, where Mansfield has been a professor for over thirty years, has seen an incredible jump in GPAs of all students. "The average grade now at Harvard is an A minus" (Lawler, 2001, p. 133) with over 43 percent of students earning an A average (Farley, 1995, p. 6). Yale, Princeton, Dartmouth, Stanford, and other top schools have seen graduations where over 90 percent of the students graduate with honors as well (Farley, 1995, p. 5-6). In 1969, only 29 percent of students earned A's at Stanford, while in 1993, 41 percent of students earned A's. The average grade now is no longer a C; it is a B+ or A- at Stanford (Vale, 1993, \P 4). According to Lawler (2001), the most prestigious universities "now cultivate a way of life without the more admirable virtues" of the past (p. 136).

Dismissing the notion that the students of today are better prepared than the students of the past, Mansfield says, "we have lost the notion of an average student…when bright students take a step up and find themselves with other bright students, they should face a new, higher standard of excellence" ((2001, ¶ 9). In addition Mansfield rebuts the claim that students are better today saying, "But if they are in some measure better, the proper response is to raise our standards and demand more of our students" instead of declaring them all equally excellent (2001, ¶12). The lack of correlation between GPAs and SAT scores may still show grade inflation. "Scores on both the math and verbal portions have fluctuated only about 20 points over the last 23 years…Yet, despite no demonstrable improvement on the SAT since 1976, students continue to report more A's" (Birk, 2000, ¶ 14).

"Higher average grades unaccompanied by proportionate increases in average levels of achievement defines grade inflation" (Rosovsky & Hartley, 2002, p. 7). Defining student achievement depends on the form of measurement; but GPAs are one form. Just because GPAs are higher now in colleges does not necessarily itself prove grade inflation. Class averages may be higher today for other reasons. For example, instructors may feel compelled to "weed out" students; such a mentality could scare off lower achieving students, making the class average higher. Instructors may assign large amounts of reading or make bold statements about the number of students who fail just to scare students into withdrawing from class early in the semester. Again, the class average could change, and some students who remain in such a class may study even more to prove the professor wrong (Kohn, 2002, ¶ 19-26).

Grade inflation is not limited to seniors in high school or to freshman in college. In fact, the researchers who found evidence of grade inflation recognize that the phenomenon is never-ending. Wood, Ridley, and Summerville (1999) looked at GRE scores and GPAs of college students getting ready to enter graduate school. They also found that verbal scores on the GRE did not coincide with grades in language and literature courses in college. Yet, they did not find evidence of grade inflation when comparing math grades to quantitative and/or analytical scores. The researchers still "produced a wealth of findings that are highly relevant to the problem of identifying grade inflation and declining academic standards" (Wood, Ridley, & Summerville, 1999, p. 1). The researchers also developed a new methodology for testing the presence of grade inflation which was "humanistic" and "scientific"-relying on "the use of a multiple factor analysis of covariance for two factors" (Wood, Ridley, & Summerville, 1999, p. 9). Again, math grades and math test scores are more aligned and less subjective.

According to King (2005), many critics scream about grade inflation but offer no solutions (p. 127). "Students want high grades," and they are no longer looking for "enlightenment and erudition" (King, 2005, p. 128). Each school claims they do not have a problem with grade inflation, but they are also quick to identify it at other schools (King, 2005, p. 128-131). At the same time though, most educators admit that

"undergraduates are unconditionally and unrealistically focused on grades" (King, 2005, p. 128). Mansfield (2001) offers a solution to the dilemma of grade inflation. He now gives every student in his classes at Harvard two grades. One grade is posted on the transcript to make the student happy, an inflated grade which he calls a "flattering grade," and one grade is handed to the student that is "realistic" and based on full and fair assessment of each student (Mansfield, 2001, ¶ 1). Mansfield says that this practice appeases demanding students, eliminates negative evaluations, and keeps his job position secure at Harvard. Yet, he continues to vocally speak out against the atrocities of grade inflation. In essence though, he is simply further fostering the idea, claiming to have a solution, but doing nothing more than covering it up with a friendly band-aid. He is hypocritically still part of the problem because the causes of grade inflation have not been curtailed, nor have the ramifications.

Even the best professors are hesitant to risk their positions and refrain from "insulting students with low grades," and students choose the "safest" path, manipulating schedules, harassing professors when they disagree with their grading policies, negotiating grade changes, pleading for extra time, wanting the opportunity to revise, requesting extra credit assignments, turning in unfounded and negative evaluations of professors, and trying their best to put forth as little effort as possible to receive the highest grade achievable (Lawler, 2001, p. 133-136; Hassel & Lourey, 2004, p. 8). Again, "the lack of a corresponding increase in standardized test scores" to the increasing high school and college GPAs shows that grades have become inflated and that more research is needed to find causes of and solutions for this ethical dilemma (Hassel & Lourey, 2004, p. 4). Yet, as Kohn and other researchers have pointed out previously, in order to prove grade inflation, one must prove that students today who earn high grades are undeserving of those grades and are thus inferior to students of the past. Many researchers are assuming that education has become stagnate the last three decades and that no one cares about the quality of education. Such conclusions negate any academic gains of the past thirty years as teachers and administrators have strived to close up academic gaps. Again the debate of grade inflation continues. Research must begin at individual schools examining the evidence of grade inflation before claiming that grade inflation is rampant across America.

Summary

The researcher's examination of grade inflation as evidenced by test scores, GPAs, and teacher perception allowed for an in-depth view of grading standards at South High School. In addition, determining the existence of grade inflation revealed much about the school's curriculum and instructional standards. Utilizing teacher input also addressed an area of research that a number of researchers had admitted is lacking. Getting to the root of the causes of grade inflation was not necessarily as important as determining how grade inflation influences students and their performance in college at the beginning of this study. Yet, teacher input revealed a number of possible causes of grade inflation and how it has evolved. Unresolved issues of how to deal with grade inflation or fear of admitting that grade inflation exists can prevent academic reform as well. Thus, the cycle of grade inflation may spin on for many years.

Even though it was difficult to gauge to what degree grade inflation exists at South High School, the analysis of grading standards and correlations between grade point averages and standardized test scores is still relevant, as the goal of educational leaders typically is to be looking for ways to improve academics instead of waiting until problems arise. The findings still give insight into how students measure when compared to other students taking college entrance exams, taking content tests, and taking honors courses. Such findings are a validation of the current curriculum and instruction at this one high school, even though some interviewed teachers perceived that it does exist and that they may be biased in their own expectations of students. Teachers felt that grades were not being properly assigned by all teachers and some put less stock in their own abilities to positively impact student learning. Ultimately, the results revealed information not even considered by the researcher, which proved to be even more vital to leadership, curriculum, instruction, and assessment.

CHAPTER III

METHODOLOGY

Introduction

On a daily basis teachers formally and informally gauge content mastery in their classrooms. Yet, nationally the push has become to "prove" how much learning actually takes place by imposing more and more standardized testing. Thus, in addition to college entrance exams, such as the SAT used to predict possible academic success in college, content based tests are being used to measure actual material learned in each individual high school class. Simultaneously, teachers are being held accountable not just for the test scores, but also for the grades students earn in their classes. Instead of examining why an individual student has not done well in a particular class, parents and administrators want teachers to justify a specific grade, often looking at class averages out of context and not looking at relationships between grades and standardized tests.

Teachers are the first ones to see learning take place and assign class grades, but not all learning can be measured on a standardized test. In addition, none of the previous studies utilized teacher perceptions when proving or disproving grade inflation. Conducting a mixed methodology research study, combining a qualitative case study to thoroughly examine teacher perspectives through survey questions and interviews with a quantitative analysis of standardized test scores and GPAs, provided an in-depth analysis at a more personal and local level, gaining valuable information to improve instruction and assessment, allowing for real-life analysis of a national ethical dilemma. This research study provided relevant local insight into grade inflation by studying teacher perception of grade inflation as well as had the statistical findings to enhance the validity of the topic.

Methodology

Research Questions

The researcher proposed to examine the correlation between grade point averages and standardized tests as well as teacher perception as evidence of grade inflation. Thus, the research study was guided by the following questions:

- 1. To what extent do high school GPAs and SAT scores relate?
- 2. To what extent do high school GPAs and EOCT scores relate?
- 3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender?
- 4. To what extent do teachers perceive that grade inflation exists?

Population, Participants, and Sampling

Focusing on whether or not grade inflation existed at this one high school in Georgia, pseudonym South High School, the researcher utilized purposive random sampling to analyze testing data for 160 current high school seniors, looking at cumulative GPAs, EOCT scores, and highest SAT scores from their permanent records. All of this data comprised the quantitative portion of the research study. The qualitative portion of the study centered on teacher perceptions as determined by conducting a school-wide survey of 76 classroom teachers and by conducting interviews through purposive random sampling of ten teachers representing the academic core content areas of math, social studies, and English, and the elective areas of physical education and the arts.

Instrumentation

The researcher developed a Likert based scale of twenty-two questions with an open-ended question to administer to the faculty at South High School. The questions, based on research studies included in the literature review of this study, asked participants to rate how they felt about current grading standards, standardized test scores, grade point averages, student learning, and grade inflation. The survey had questions about demographics and asked for volunteers to be interviewed for the rest of the qualitative portion of the study.

Data Collection

In order to obtain the necessary data of GPAs, EOCT scores, and composite SAT scores for students from South High School, the researcher first secured permission from the school system's superintendent (see Appendix A). Then the researcher composed a research proposal and submitted the request to conduct research for IRB consideration (see Appendix B). The researcher then began collecting data. First, the researcher ran queries of data to generate a list of high school seniors at South High School because only seniors would have all three pieces of information—EOCT scores, SAT scores, and GPAs. South High School has 299 seniors, but not all seniors have chosen to take the SAT. In addition, because the EOCT tests are still relatively new in the state of Georgia, the first year's test results were used to norm the test. Honors students who took the first set of EOCT tests, because they were a year ahead of other students in taking courses, had scores that were also not used in the data analysis since many of their test scores

were not reported. In addition, students taking AP classes have weighted GPAs. Individual teachers determine how much an AP class is weighted, thus these GPAs vary greatly. Consequently, only non-weighted GPAs were used to be consistent with data reporting. Because of norming the EOCT tests, some of the current seniors did not have their EOCT scores reported on their transcripts, which greatly reduced the number of students with an actual reported EOCT. The researcher chose to use the American Literature EOCT, since it was the one content based test that the most seniors had reported on their transcripts. The highest composite SAT score was used for any student reporting multiple attempts at the SAT. The most current GPA was used for each student. A total of 160 high school seniors at South High School then had data for all three areas (EOCT, SAT, and GPA) to be used in the data analysis.

Included in the application to conduct research was a faculty survey (see Appendix C). Following the Likert scale format, the survey questions were based on studies contained in chapter two of this research study. The domains of standardized tests, grading standards, and grade inflation were considered when constructing the survey. In addition, questions addressing gender, race, and socio-economic status were incorporated into the survey as well, since researchers such as Healy (1997), Schilling and Schilling (1999), and Stanley and Baines (2001) all suggested these factors may influence grade inflation. To test the format, quality, and reliability of the survey, a pilot study was conducted.

In order not to reduce the available population size of high school teachers, who would be the focus of the qualitative portion of the study, the researcher piloted the survey with middle school teachers from the same school district. Middle school teachers were used because their population had the same composition of teachers, and they teach students in the same area with the same backgrounds. The middle school teachers were first asked to answer the survey questions following the directions on the survey. Then, after completing the survey, these same teachers were asked to make any recommendations to the wording, content, or administration of the survey. All of the teachers stated that they would not make any changes to the survey. When their surveys were tested for internal consistency by entering their responses into SPSS software, the Cronbach's Alpha showed a high reliability for the questions, meaning that the questions measured what they were intended to measure. The researcher also showed the survey to the supervising committee who felt the survey did not warrant any changes. The researcher then asked permission of the school's principal to administer the faculty survey.

During a faculty meeting, the researcher administered the survey to the entire faculty of South High School. Although the survey contained one open-ended question, only three teachers filled in this section. Four teachers did not fill out the demographic section of the survey. In the section where the researcher asked for volunteers to participate in individual interviews, twelve teachers filled in their names volunteering to participate in the interviews.

After the faculty survey was administered, the researcher reviewed the few openended responses. With so few responses, the researcher chose not to code the responses but to report each of the responses in the findings section of this chapter. From the twelve teachers who volunteered to participate in the interviews, ten teachers were chosen based solely on who was available to participate without scheduling conflicts. While the researcher had first proposed to use between 8 and 14 teachers with at least two teachers from each of the four core content areas, the teachers who volunteered comprised a different set of content areas. Thus, the researcher conducted the interviews with two teachers representing social studies, two teachers representing mathematics, two teachers representing foreign language, two teachers representing fine arts, one teacher representing English, and one teacher representing physical education. No teachers volunteered to represent the science or vocational content areas.

The researcher interviewed each teacher separately in a private office setting during each teacher's planning period on a typical school day. Each participant was given an Informed Consent form to read and sign (see Appendix D). The interviews were each digitally recorded and sent to a professional to transcribe. Each participant had the opportunity to preview the transcripts and make any clarifications or to request omissions of information before the researcher began coding their responses. The interviews lasted around 15 minutes each. The questions for the interviews were based on the faculty survey, asking for specific feedback concerning grading standards, standardized test scores, grade inflation, and any additional information from the participants (see Appendix E).

The researcher administered both the surveys and the interviews. The survey responses were anonymous, but volunteers for the interviews disclosed their names only to sign up for the interview process. Numbers were assigned to each interviewee to report their responses in this study. The researcher collected the surveys and used statistical software (SPSS) to analyze the scaled questions. The SPSS software was also utilized to examine the statistical data from SAT scores, EOCT scores, and GPAs, performing correlations between SAT and EOCT, SAT and GPA, and GPA and EOCT. Using this triangulation helped increase validity and quality of the study, as well as offered an indepth analysis of student performance at South High School. The researcher examined major themes and trends in the responses, analyzing the positive and/or negative perceptions teachers had of grade inflation and student performance at South High School.

Response Rate

To ensure a high response rate for the survey, the researcher distributed them at a faculty meeting and waited in person while the teachers completed the survey. The researcher also explained that the survey was anonymous and that in no way could be used against them. The researcher also offered a compensation of a faculty reception to thank those who volunteered for the interviews once the study was completed. The goal was a 100 percent response rate for the surveys.

Data Analysis

The following research questions were analyzed:

- 1. To what extent do high school GPAs and SAT scores relate?
- 2. To what extent do high school GPAs and EOCT scores relate?

Statistical software (SPSS) was used to examine correlations to determine the extent of the relationships between high school GPAs and standardized test scores at South High School. The analysis of these questions and the data they generated served as the quantitative portion of this study. In addition the following question linked the qualitative and quantitative portions:

3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender? After disaggregating the data derived from the analysis, the researcher looked at any relationships that existed between gender and test scores, gender and GPAs, race and test scores, and race and GPAs. In addition, the researcher examined whether or not

discrepancies existed in the research findings due to race and/or gender.

The survey questions and interviews addressed the following research question:

4. To what extent do teachers perceive that grade inflation exists? Coding both the surveys and the interviews from the qualitative portion of the study gave insight into teacher perception of grade inflation at South High School. Also, the responses to the survey and the interview questions built on the responses to the research question about race and gender in that the information gained by both integrated the qualitative and quantitative portions of this research study. Clarity, in-depth explanations, and reasoning behind responses by the teachers interviewed gave insight to the data produced from the statistical analysis of the other research questions.

Reporting the Data

The results of the quantitative portion of the study were reported both in narrative form and in statistical tables produced by using SPSS software. Narration was also used to discuss the interviews, with portions of the interviews being reproduced in the research findings section of the study. Both narration and SPSS were used to show the results of the survey.

Summary

Using the mixed methodology of quantitative and qualitative approaches to analyze the existence of and perceptions of grade inflation at South High School offered a better understanding of how grades are assigned and how they relate to standardized test performance. The researcher did not definitively prove grade inflation exists at this high school, because there was a contradiction between the findings from the quantitative and qualitative portions. Nonetheless, the analysis revealed information not even considered before the research began. A greater understanding of the correlation between traditional grading standards and both state and national level standardized tests shined light on how students compare at this high school to predicted expectations. In addition, this research study gave teachers a voice in the debate of the existence of grade inflation than the analysis of student data. Teacher input also revealed valuable information about the uses and quality of standardized testing in addition to their feelings about South High School's grading policies.

CHAPTER IV

REPORT OF DATA AND DATA ANALYSIS

Introduction

The purpose of this research study was to examine evidence of grade inflation at the secondary level by conducting a case study of one southeastern Georgia high school using both quantitative and qualitative data. The information was used only to gauge grade inflation at South High School and not intended to generalize about grade inflation at the secondary level across the United States. Since previous research studies relied on quantitative data to analyze the presence of grade inflation, the researcher added a qualitative portion of analysis to this particular study by incorporating teachers' perceptions of grade inflation in addition to standardized test data for both an End of Course Test (EOCT) and composite SAT scores at South High School. The Grade Point Averages for each student who had a reported EOCT score and a reported composite SAT score were used to conduct correlation analysis. The teachers' perceptions were included by administering a faculty opinion survey on grade inflation and by conducting individual interviews with open ended questions to discuss grading standards, standardized test scores, and the presence of grade inflation. The mixed methodology of this study in conjunction with the triangulation of research data collection was also used to increase both reliability of the data and validity of the data analysis.

To display the research findings, the researcher created correlation tables to show the relationships between standardized test scores (SAT and EOCT) and grade point averages in response to the first three research questions. Tables were first generated using data for all students at South High School with reported SAT and EOCT scores. Then, the researcher broke the findings down into correlations based on gender and then race. Significant findings were noted on each table. Tables were also explained through narration. Two additional tables were created to show the responses from teachers to the grade inflation survey. Following each statement from the survey were the percentile responses of teachers along with the chi-square values. One table displays the analysis based on teachers' content areas, and the other table shows the analysis based on number of years teaching experience. Significant findings were noted on each table, and narration was used to thoroughly explain the research results.

Research Questions

The researcher proposed the following research questions to guide the study:

- 1. To what extent do high school GPAs and SAT scores relate?
- 2. To what extent do high school GPAs and EOCT scores relate?
- 3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender?
- 4. To what extent do teachers perceive that grade inflation exists?

The research questions were designed to offer quantitative data analysis of student learning and qualitative data analysis of teachers' responses, since they are responsible for such student learning.

Respondents

Out of 76 full-time teaching positions at South High School, all 76 teachers participated in the survey for a 100% response rate. The majority of the teachers filled out

the entire survey, but a few teachers did not fill out the demographics section. It is difficult to ascertain why this may have happened. Respondents varied in years of teaching experience from first year teachers to two teachers with 36 years of teaching experience. South High School also does not have a diversified faculty, with only 4 Black teachers and 64 White teachers. Three teachers listed themselves as "other" race, and 5 teachers did not provide information for their race. No other ethnicities were represented by teachers at South High School. (The administration is composed of two males and two females, all of whom are White.) The racial composition of the faculty does not mirror the racial composition of the student body at South High School. The student population at South High School is 76% White, 13% Black, 2% Asian, 4% Hispanic, 4% Multi-racial, and 1% Other.

Research Findings

Analysis of Student Data

In order to analyze the student data, the researcher set up correlations for all 160 senior students between the American Literature EOCT and the composite SAT, between the American Literature EOCT and the current cumulative GPA, and between the composite SAT and the cumulative current GPA. The correlations were used to answer the first three research questions:

- 1. To what extent do high school GPAs and SAT scores relate?
- 2. To what extent do high school GPAs and EOCT scores relate?
- 3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender.

The following tables resulted:

Table 1

		American Lit	Composite SAT
American Lit	Pearson Correlation	1	.625**
	Sig. (2-tailed)		.000
	Ν	160	160
Composite SAT	Pearson Correlation	.625**	1
	Sig. (2-tailed)	.000	
	Ν	160	160

EOCT and SAT Correlations for All Students

**p<.01 (two-tailed)

Table 2

EOCT and GPA Correlations for All Students

		American Lit	current GPA
American Lit	Pearson Correlation	1	.354**
	Sig. (2-tailed)		.000
	Ν	160	160
current GPA	Pearson Correlation	.354**	1
	Sig. (2-tailed)	.000	
	Ν	160	160

**p<.01 (two-tailed)

Table 3

SAT and GPA Correlations for All Students

		Composite SAT	current GPA
Composite SAT	Pearson Correlation	0/1	.493**
Composite OAT	r earson correlation	1	.435
	Sig. (2-tailed)		.000
	Ν	160	160
current GPA	Pearson Correlation	.493**	1
	Sig. (2-tailed)	.000	
	Ν	160	160

**p<.01 (two-tailed)

Examining the correlation results for 160 seniors at South High School reveals that there is a strong significant relationship between American Literature EOCT scores and composite SAT scores (.625). There is a moderately strong and significant relationship between the composite SAT scores and current cumulative GPAs for the seniors (.493) and to a lesser degree a significant relationship between the American Literature EOCT scores and the current cumulative GPAs for the seniors (.354).

The same set of correlations were set up, but this time the researcher broke down the correlations between male and female students to see if any discrepancies existed based on gender. The following correlation tables resulted for 83 male seniors at South High School:

Table 4

		American Lit	Composite SAT
American Lit	Pearson Correlation	1	.623**
	Sig. (2-tailed)		.000
	Ν	83	83
Composite SAT	Pearson Correlation	.623**	1
	Sig. (2-tailed)	.000	
	Ν	83	83

EOCT and SAT Correlations for Male Students

**p<.01 (two-tailed)

Table 5

EOCT and GPA Correlations for Male Students		
	American Lit	current GF

		American Lit	current GPA
American Lit	Pearson Correlation	1	.473**
	Sig. (2-tailed)		.000
	Ν	83	83
current GPA	Pearson Correlation	.473**	1
	Sig. (2-tailed)	.000	
	Ν	83	83

**p<.01 (two-tailed)

Table 6

		Composite	
		SÁT	current GPA
Composite SAT	Pearson Correlation	1	.517**
	Sig. (2-tailed)		.000
	Ν	83	83
current GPA	Pearson Correlation	.517**	1
	Sig. (2-tailed)	.000	
	Ν	83	83

SAT and GPA Correlations for Male Students

**p<.01 (two-tailed)

The results for the male students closely resembled the results for all seniors. There was a strong significant relationship between the American Literature EOCT scores and the composite SAT scores for male students (.623). There was a moderately strong significant relationship between the composite SAT scores and current GPAs for the males as well (.517). The relationship between the American Literature EOCT scores and the current GPAs was still significant but just slightly to a lesser degree (.473).

Correlations were then set up for 77 female seniors with the following tables resulting:

Table 7

		American Lit	Composite SAT
American Lit	Pearson Correlation	1	.642**
	Sig. (2-tailed)		.000
	Ν	77	77
Composite SAT	Pearson Correlation	.642**	1
	Sig. (2-tailed)	.000	
	Ν	77	77

EOCT and SAT Correlations for Female Students

**p<.01 (two-tailed)

Table 8

EOCT and GFA correlations for Female Students			
		American Lit	current GPA
American Lit	Pearson Correlation	1	.233*
	Sig. (2-tailed)		.041
	Ν	77	77
current GPA	Pearson Correlation	.233*	1
	Sig. (2-tailed)	.041	
	Ν	77	77

EOCT and GPA Correlations for Female Students

*p<.05 (two -tailed)

Table 9

		Composite	
		SAT	current GPA
Composite SAT	Pearson Correlation	1	.496**
	Sig. (2-tailed)		.000
	Ν	77	77
current GPA	Pearson Correlation	.496**	1
	Sig. (2-tailed)	.000	
	Ν	77	77

SAT and GPA Correlations for Female Students

**p<.01 (two-tailed)

The results for the females were also similar to the males with just mere variations in the levels of significance. There was a strong significant relationship between the American Literature EOCT scores and composite SAT (.642). There was a moderately strong significant relationship between composite SAT scores and current GPA (.496), and to a lesser degree a significant relationship between American Literature EOCT scores and current GPA (.233).

Next the researcher set up correlations to see if any variations were based on race. At first, the researcher attempted to compare results for Whites, Blacks, Asians, Hispanics, and Multi-Racial students; however, the school's small minority population made it difficult to obtain results for each racial population. Thus, the researcher recoded the categories into White and Minority students. South High School has 130 White seniors with EOCT and SAT scores and 30 minority students also reporting SAT scores, EOCT scores, and current GPAs. The following tables resulted for White students:

Table 10

		American Lit	Composite SAT
American Lit	Pearson Correlation	1	.551**
	Sig. (2-tailed)		.000
	N	130	130
Composite SAT	Pearson Correlation	.551**	1
	Sig. (2-tailed)	.000	
	Ν	130	130

EOCT and SAT Correlations for White Students

**p<.01 (two-tailed)

Table 11

		American Lit	current GPA
American Lit	Pearson Correlation	1	.332**
	Sig. (2-tailed)		.000
	Ν	130	130
current GPA	Pearson Correlation	.332**	1
	Sig. (2-tailed)	.000	
	Ν	130	130

EOCT and GPA Correlations for White Students

**p<.01 (two-tailed)

Table 12

		Composite SAT	current GPA
Composite SAT	Pearson Correlation	1	.457**
	Sig. (2-tailed)		.000
	Ν	130	130
current GPA	Pearson Correlation	.457**	1
	Sig. (2-tailed)	.000	
	Ν	130	130

SAT and GPA Correlations for White Students

**p<.01 (two-tailed)

The results showed a moderately strong significant relationship between American Literature EOCT scores and composite SAT scores for White students (.551). There was also a moderately strong significant relationship between composite SAT scores and current GPA (.457) for White students. To a lesser degree, there was a significant relationship between American Literature EOCT scores and current GPA (.332).

The results differed somewhat for 30 minority students as displayed on the following tables:

Table 13

		American Lit	Composite SAT
American Lit	Pearson Correlation	1	.739**
	Sig. (2-tailed)		.000
	Ν	30	30
Composite SAT	Pearson Correlation	.739**	1
	Sig. (2-tailed)	.000	
	Ν	30	30

EOCT and SAT Correlations for Minority Students

**p<.01 (two-tailed)

Table 14

		American Lit	current GPA
American Lit	Pearson Correlation	1	.338
	Sig. (2-tailed)		.068
	Ν	30	30
current GPA	Pearson Correlation	.338	1
	Sig. (2-tailed)	.068	
	Ν	30	30

EOCT and GPA Correlations for Minority Students

Table 15

		Composite	
		SAT	current GPA
Composite SAT	Pearson Correlation	1	.570**
	Sig. (2-tailed)		.001
	Ν	30	30
current GPA	Pearson Correlation	.570**	1
	Sig. (2-tailed)	.001	
	Ν	30	30

SAT and GPA Correlations for Minority Students

**p<.01 (two-tailed)

Indeed, there was an even stronger significant relationship for Minority students between American Literature EOCT scores and composite SAT scores (.739) than for White students at South High School. There was also a stronger significant relationship between composite SAT scores and current GPAs (.570) for Minority students.

The results showed that for all seniors at South High School, regardless of gender or race, as American Literature EOCT scores go up, so do their composite SAT scores. As their composite SAT scores go up, so do their current GPAs but to a lesser degree than the relationship between EOCT and SAT scores. To an even lesser degree, as EOCT scores go up, so do their GPAs. There are some differences in the degree to which the relationship exists for each set of variables based on race and gender though. The strongest significant relationship between American Literature EOCT scores and composite SAT exists for Minority students (.739). The strongest significant relationship between composite SAT scores and current GPA exists for Minority students (.570) but only barely stronger than that for all male students (.517). The strongest significant relationship between American Literature EOCT scores and current GPAs exists for all male students (.473). Every combination of correlations thus shows that there is no discrepancy among standardized test scores and grade point averages, which suggests that no grade inflation exists at South High School as evidenced by test scores and grades.

Analysis of Teacher Survey

In addition to student data, the researcher also used teacher data in the form of a faculty opinion survey and in a series of ten interviews collected additional data to answer the following research question #4:

To what extent do teachers perceive that grade inflation exists?

After the pilot study revealed a high internal consistency, the researcher did not make any changes to the content, phrasing, or format of the survey. The researcher then administered the same survey on grade inflation to the entire faculty of South High School. Once results were received, the researcher ran reliability analysis again with the teacher generated responses. Cronbach's Alpha again revealed a high internal consistency at .8785 with 74 respondents answering questions for the domain of grade inflation. For questions from the grading standards domain, Cronbach's Alpha revealed high internal consistency at .7207 with all 76 teachers responding to these questions. The researcher

did not condense any domains or eliminate any questions when running statistical analysis for this data.

First, the researcher ran frequency statistics for each of the 22 survey questions to analyze teachers' self-reported answers based on a Likert scale. Teachers could respond not true at all, true to a small degree, true to a moderate degree, true to a considerable degree, and very true. In addition, a demographic section asked teachers to respond with their gender, number of years teaching experience, teaching content area, and ethnicity. Out of the 76 teachers who participated in the survey, 26 were male, 47 were female, and 3 teachers did not identify their gender.

Teaching experience varied greatly for teachers at South High School with 12 teachers having less than 5 years of experience, 24 teachers with between 6 and 10 years of experience, 13 teachers with between 11 and 15 years of experience, 11 teachers with experience between 16 and 20 years, and 12 teachers with over 25 years of teaching experience. No teachers reported having between 21 and 25 years of experience. Four teachers did not provide their teaching experience data.

In response to their content areas, six teachers did not respond. Thirteen math teachers, 10 social studies teachers, 11 English teachers, 5 physical education teachers, 3 fine arts teachers, 7 vocational teachers, and 3 foreign language teachers responded. An additional 10 teachers identified themselves as teaching an unlisted "other" content.

The researcher then ran frequency tables for the teacher responses and crosstabulated teacher responses to the survey based on their content areas to see if responses varied based on teaching fields. In addition, the researcher cross-tabulated the teacher responses to see if any variations existed based on number of years in the teaching profession. For the majority of responses, there are only slight variations in teacher responses based on content areas. In addition, there are only slight variations based on teaching experience. However, there are responses which do vary based on content, and there are responses which do vary based on teaching experience.

Table 16

Survey Question	z	% not true at all	% true to a small degree	% true to a moderate degree	%true to a considerable degree	% very true	χ²
Your school's report card accurately displays student learning.	70	2.9	5.7	47.1	40.0	4.3	39.820
Students today are producing better work than in years past because they are self-motivated.	70	21.4	44.3	27.1	7.1	0.0	24.412
Students today are producing better work than in years past because of technology.	70	8.6	27.1	28.6	28.6	7.1	34.577
Students today are producing better work than in years past because of improved teacher training.	70	10.0	20.0	34.3	31.4	4.3	46.023*
Students today are earning higher grades than students in the past.	70	10.0	18.6	48.6	21.4	1.4	30.938
Students today are earning higher scores on standardized tests than students in the past.	70	5.7	15.7	51.4	24.3	2.9	36.830
Teachers today are just as tough on students when it comes to grading as they were in years past.	70	10.0	32.9	35.7	20.0	1.4	23.135

Analysis of Grade Inflation Survey Based on Teacher Content Areas

				1			
End of Course Tests	70	40.0		05.7	40.0		
accurately assess specified	70	18.6	31.4	35.7	12.9	1.4	28.802
content learning.							
Minority students' grades							
are equally comparable to	69	10.1	34.8	36.2	13.0	5.8	51.980*
white students' grades.							
Boys and girls earn equally	69	5.8	15.9	42.0	29.0	7.2	25.546
comparable grades.	03						
The SAT accurately predicts							
a student's ability to do well	70	20.0	34.3	30.0	14.3	1.4	36.422
in college.							
The SAT accurately	69	11.6	39.1	37.7	10.1	1.4	23.985
assesses learning.	69						
Students from affluent							
homes earn higher grades							
than students from	69						
economically disadvantaged		1.4	10.1	21.7	52.2	14.5	24.113
homes.							
Teachers give higher grades							
to help motivate a student	69	8.7	40.6	43.5	5.8	1.4	48.435*
and/or build self-esteem.							
With the HOPE Scholarship							
available to students,							
teachers feel it necessary to	69						
"bump" up students to the B	00	26.1	43.5	21.7	8.7	0.0	28.614
range.		20.1	10.0	21.7	0.7	0.0	20.011
Teachers are pressured into							
changing low grades to	69	20.3	37.7	20.3	14.5	7.2	37.801
higher grades by students.	00	20.0	07.7	20.0	14.0	1.2	07.001
Teachers are pressured into							
changing low grades to	69	13.0	21.7	30.4	24.6	10.1	42.344
higher grades by parents.	03	15.0	21.7	50.4	24.0	10.1	42.044
Teachers are pressured into							
changing low grades to	69	23.2	<u></u>	20.0	174	7.2	20 405
higher grades by		23.Z	23.2	29.0	17.4	1.2	39.485
administrators.							
Teachers change grades to	60	24.7	22.0	24.0	15.0	4.0	60 000**
avoid parent-teacher	69	21.7	33.3	24.6	15.9	4.3	62.820**
conferences.							
Teachers assign higher							
grades to improve their	69	14.5	34.8	30.4	14.5	5.8	33.096
failure rates.							
Teachers assign higher							
grades to improve their	69	18.8	36.2	31.9	10.1	2.9	30.835
yearly evaluations.							
Grade inflation exists at this							
school as evidenced by							
GPAs being higher than	68						
standardized test scores		14.7	30.9	44.1	8.8	1.5	38.464
(SAT and/or EOCT).							
· /		í	l				

*p<.05; **p<.01

Table 17

Analysis of Grade Inflation Survey Based on Teaching Experience

Survey Question	z	% not true at all	% true to a small degree	% true to a moderate degree	%true to a considerable degree	% very true	χ ²
Your school's report card accurately displays student learning.	72	2.8	5.6	47.2	40.3	4.2	14.958
Students today are producing better work than in years past because they are self-motivated.	72	22.2	43.1	27.8	6.9	0.0	16.457
Students today are producing better work than in years past because of technology.	72	8.3	26.4	27.8	30.6	6.9	16.128
Students today are producing better work than in years past because of improved teacher training.	72	9.7	19.4	34.7	31.9	4.2	18.837
Students today are earning higher grades than students in the past.	72	9.7	18.1	50.0	20.8	1.4	8.370
Students today are earning higher scores on standardized tests than students in the past.	72	5.6	15.3	50.0	26.4	2.8	14.153
Teachers today are just as tough on students when it comes to grading as they were in years past.	72	9.7	34.7	34.7	19.4	1.4	16.403
End of Course Tests accurately assess specified content learning.	72	19.4	31.9	34.7	12.5	1.4	13.493
Minority students' grades are equally comparable to white students' grades.	71	9.9	35.2	36.6	12.7	5.6	13.128
Boys and girls earn equally comparable grades.	71	7.0	15.5	40.8	28.2	8.5	10.369
The SAT accurately predicts a student's ability to do well in college.	72	19.4	34.7	30.6	13.9	1.4	16.663
The SAT accurately assesses learning.	71	12.7	38.0	38.0	9.9	1.4	10.593

Students from affluent homes earn higher grades than students from economically disadvantaged homes.	71	1.4	11.3	21.1	52.1	14.1	8.264
Teachers give higher grades to help motivate a student and/or build self-esteem.	71	11.3	39.4	42.3	5.6	1.4	20.859
With the HOPE Scholarship available to students, teachers feel it necessary to "bump" up students to the B range.	71	28.2	42.3	21.1	8.5	0.0	12.607
Teachers are pressured into changing low grades to higher grades by students.	71	21.1	36.6	21.1	14.1	7.0	19.307
Teachers are pressured into changing low grades to higher grades by parents.	71	14.1	21.1	31.0	23.9	9.9	27.077*
Teachers are pressured into changing low grades to higher grades by administrators.	71	23.9	22.5	29.6	16.9	7.0	16.615
Teachers change grades to avoid parent-teacher conferences.	71	22.5	32.4	23.9	16.9	4.2	23.361
Teachers assign higher grades to improve their failure rates.	71	15.5	33.8	29.6	15.5	5.6	20.370
Teachers assign higher grades to improve their yearly evaluations.	71	19.7	35.2	31.0	11.3	2.8	31.111*
Grade inflation exists at this school as evidenced by GPAs being higher than standardized test scores (SAT and/or EOCT).	70	15.7	30.0	44.3	8.6	1.4	27.707*

*p<.05

As the data suggest, there is not significant evidence of a difference in responses among teachers from various content areas ((χ^2) (1, N=70)=39.820, p=0.161), but 46.1% of all teachers feel to a moderate degree that it is true that the school's report card accurately displays student learning, and 39.5% feel it is true to a considerable degree. Based on teaching experience, there is also not significant evidence of a difference in responses ((χ^2) (1, N=72)=14.958, p=0.528). As the data suggest, there is not significant evidence of a difference in responses among teachers from various content areas ((χ^2) (1, N=70)=24.412, p=0.438), but 43.4% of all teachers feel to a small degree that it is true that students today are producing better work because they are self-motivated and 27.6% feel it is true to a considerable degree. Based on teaching experience, there is also not significant evidence of a difference in responses ((χ^2) (1, N=72)=16.457, p=0.171).

The data suggest that there is not significant evidence of a difference in responses from teachers of different content areas $((\chi^2) (1, N=70)=34.577, p=0.346)$, nor is there significant evidence of a difference based on teaching experience $((\chi^2) (1, N=72)=16.128, p=0.444)$, but there is a consensus that teachers feel it is true that students today are producing better work because of technology, as 27.6% responded true to a small degree, 27.6% responded true to a moderate degree, and 28.9% responded true to a considerable degree.

In response to the statement that students today are producing better work than in years past because of improved teacher training, 35.5% of teachers found this true to a moderate degree, and 30.3% found this true to a considerable degree. In addition, the data suggest that there is significant evidence of a difference in responses among teachers based on content areas. For example, 100% of Foreign Language teachers found this to be true to a moderate degree, while only 38.5% of Math teachers, 50% of Science teachers, and 36.4% of English teachers found it true to a moderate degree. In fact, 23.1% of Math and 20% of Social Studies teachers found this to be not true at all ((χ^2) (1, N=70)=46.023, p=0.052), but there is no significant evidence of a difference in responses based on teaching experience ((χ^2) (1, N=72)=18.837, p=0.277).

In response to the statement that students today are earning higher grades, 50% of all teachers found this to be true to a moderate degree and 19.7% found it both true to a small degree and true to a considerable degree. There is no significant evidence of a difference in responses based on either content ((χ^2) (1, N=70)=30.938, p=0.520) or years of teaching experience ((χ^2) (1, N=72)=8.370, p=0.937).

The data also suggest that there is no significant evidence of differences in responses to the statement that students today are earning higher scores on standardized tests regardless of content areas ((χ^2) (1, N=70)=36.830, p=0.255) or number of years teaching experience ((χ^2) (1, N=72)=14.153, p=0.587), even though 51.3% of all teachers found this to be moderately true.

Teachers responded true to a small degree at 34.2% to the statement teachers today are just as tough on students when it comes to grading and 35.5% say it is true to a moderate degree. The data do not show significant evidence of a difference among teacher responses based on content ((χ^2) (1, N=70)=23.135, p=0.874) or teaching experience ((χ^2) (1, N=72)=16.403, p=0.425).

Teachers responded that end of course tests accurately assess specified content learning by a rate of 34.2% true to a small degree and 32.9% true to a moderate degree. The data do not suggest that there is significant evidence of a difference in responses by teachers based on either content area ((χ^2) (1, N=70)=28.802, p=0.629) or years of experience ((χ^2) (1, N=72)=13.493, p=0.636).

The data suggest that there is significant evidence of a difference in responses among teachers from various content areas when considering that minority students' grades are equally comparable to white students' grades. Fine Arts teachers, at a rate of 67.7%, found this to be not true at all, while 66.7% of Foreign Language teachers found this statement true to a considerable degree ((χ^2) (1, N=69)=51.980, p=0.014). Overall, 32.9% of all teachers found this true to a small degree and 38.2% found it true to a moderate degree. The data showed no significant evidence of differences in responses among teachers based on years of teaching experience ((χ^2) (1, N=71)=13.128, p=0.663).

Data suggest that there is no significant evidence of a difference in responses among teachers based on either content area ((χ^2) (1, N=69)=25.546, p=0.783) or years of teaching experience ((χ^2) (1, N=71)=10.369, p=0.847) in response to the statement that boys and girls earn equally comparable grades, but 43.4% of all teachers find this true to a moderate degree.

The statement that the SAT accurately predicts a student's ability to do well generated a response of 34.2% from all teachers saying it is true to a small degree and 30.3% responded true to a moderate degree. There is no significant evidence of a difference in responses among teachers based on content area ((χ^2) (1, N=70)=36422, p=0.270) or their number of years in teaching ((χ^2) (1, N=72)=16.663, p=0.408).

The data suggest that there is not significant evidence of a difference in responses among teachers based on either their content areas ((χ^2) (1, N=69)=23.985, p=0.845) or their years of teaching experience ((χ^2) (1, N=71)=10.593, p=0.834) to the statement that the SAT accurately assesses learning. True to a small degree was the response for 36.8% of the teachers and the same number (36.8%) also responded true to a moderate degree.

Fifty percent of all teachers responded true to a considerable degree that students from affluent homes earn higher grades than students from economically disadvantaged

homes. There is no significant evidence of a difference among teacher responses due to content areas ((χ^2) (1, N=69)=24.113, p=0.840) or years of experience in teaching ((χ^2) (1, N=71)=8.264, p=0.941).

The data suggest there is significant evidence that responses for teachers differ based on their content areas ((χ^2) (1, N=69)=48.435, p=0.031) to the statement that teachers give higher grades to help motivate a student and/or build self-esteem. For example, Fine Arts teachers respond across the categories saying true to a small degree (33.3%), true to a moderate degree (33.3%), and very true (33.3%). True to a small degree generated the most responses for teachers of Social Studies (60%), Vocational/Business (66.7%), and Foreign Language (66.7%). There is no significant evidence of a difference among their responses due to years of teaching experience ((χ^2) (1, N=71)=20.859, p=0.184). The response from all teachers shows that 40.8% say the statement is true to a moderate degree.

Teachers responded (42.1%) true to a small degree that they feel it necessary to bump up students to the B range because of the HOPE Scholarship. The data shows that there is not significant difference in responses among teachers due to content area ((χ^2) (1, N=69)=28.614, p=0.235) or years of teaching experience ((χ^2) (1, N=71)=12.607, p=0.398).

The data suggest that there is no significant evidence of a difference in responses among teachers from various content areas ((χ^2) (1, N=69)=37.801, p=0.221) or from teachers with varying years of experience ((χ^2) (1, N=71)=19.307, p=0.253) when given the statement that teachers are pressured into changing low grades to high grades by students. True to a small degree generated a 36.8% response rate from teachers. Teachers responded true to a small degree (21.1%), true to a moderate degree (30.3%), and true to a considerable degree (23.7%) to the statement that teachers are pressured into changing low grades to higher grades by parents. There is no significant evidence of a difference in responses among teachers from various content areas ((χ^2) (1, N=69)=42.344, p=0.104). Yet, there is significant evidence of a difference in responses based on number of years of teaching experience ((χ^2) (1, N=71)=27.077, p=0.041). For example, teachers with the least amount of experience responded true to a considerable degree (33.3%), while teachers with 6-10 (41.7%) and 11-15 (53.8%) years responded true to a small degree (45.5%). While many teachers felt this was true to some degree, the longer a teacher has taught, the less a teacher feels pressured by parents to change a student's grade.

Most teachers responded true to some degree that administrators are pressuring teachers into changing low grades to higher grades. True to a moderate degree generated a response rate of 30.3%. The data show no significant evidence of differences in responses from teachers due to their content areas ((χ^2) (1, N=69)=39.485, p=0.170) or years of experience ((χ^2) (1, N=71)=16.615, p=0.411).

The data suggest that there is significant evidence of a difference in responses among teachers based on their content areas ((χ^2) (1, N=69)=62.820, p=0.001) to the statement that teachers change grades to avoid parent-teacher conferences. For example, content areas which are considered more subjective found this statement most true with Fine Arts teachers responding very true (66.7%) and Foreign Language teachers responding true to a considerable degree (66.7%), while other content areas felt this to be less true. Vocational teachers responded not true at all (50%). More objective or data driven content areas, like Math and Science teachers, were evenly split between not true at all and true to a small degree (at 30.8% and 37.5% respectively in each category). There is no significant evidence of a difference in responses based on teaching experience ((χ^2) (1, N=71)=23.361, p=0.104).

Teachers responded that they assign higher grades to improve their failure rates true to a small degree (32.9%) and true to a moderate degree (30.3%). The data do not suggest significant evidence of a difference in responses due to teachers' content areas ((χ^2) (1, N=69)=33.096, p=0.413) or years of experience ((χ^2) (1, N=71)=20.370, p=0.204).

Teachers to a small degree (34.2%) and to a moderate degree (31.6%) feel that it is true that they assign higher grades to improve their yearly evaluations. The data suggest that there is no significant evidence of a difference in responses based on content areas ((χ^2) (1, N=69)=30.835, p=0.525); yet, there is significant evidence that responses vary because of teaching experience ((χ^2) (1, N=69)=48.435, p=0.013). For example, teachers with less than five years of experience have answers varying from not true at all (33.3%) to true to a moderate degree (41.7%). Teachers with more experience have less of a spread in their responses. Teachers with 6-10 years experience responded true to a small degree (45.8%), as did teachers with 16-20 years of experience (54.5%). Teachers with over 25 years of experience responded true to a moderate degree (54.5%). Veteran teachers find this to be the most true.

In response to the statement that grade inflation exists at this school as evidenced by GPAs being higher than standardized test scores, 44.7% of teachers responded true to a moderate degree. The data suggest there is no significant difference among teacher responses based on their content areas ((χ^2) (1, N=69)=38.464, p=0.200), but there is significant evidence of a difference in their responses based on the number of years they have been teaching ((χ^2) (1, N=70)=27.707, p=0.034). For example, less experienced teachers have the highest response to not true at all (41.7%), while experienced teachers found this to be true at a higher level. Teachers with 11-15 years of experience found this statement true to a moderate degree (76.9%). Thus, while all teachers responded true to a moderate degree even more, suggesting that grade inflation does exist at South High School.

Analysis of Teacher Interviews

To enhance the responses of the faculty survey and to provide even greater depth of answers, interviews were conducted with ten volunteers. Each volunteer read and signed the informed consent, agreeing to be digitally recorded during the interview process. Each participant was given the opportunity to read the finished transcript and make any adjustments or omissions as he or she saw fit. Once the researcher received approval from each volunteer, the analysis began. To analyze their responses, the researcher first coded the responses by color-coordinating the responses based on the domains of grading standards, standardized testing, and grade inflation. The researcher, using different color pens, underlined and circled key passages pertaining to the respective domains, making notes in the margin for clarification or to mark possible passages to quote. Then, the researcher categorized the interviews into agreeing or disagreeing that grade inflation exists, creating an additional category when it became obvious that some teachers were indecisive about the existence of grade inflation. Representing a variety of content areas of both core academics and elective courses, these teachers gave candid answers and insight into whether or not they perceive grade inflation existing at South High School. Overall, six teachers stated that they absolutely believe that grade inflation exists but that it might not be intentional, two stated that it certainly does not exist and that no one ever pressures teachers into changing grades, and two other teachers stated that it may exist, but it would be difficult to gauge the extent or prove the existence of grade inflation at South High School. Interestingly though, even when teachers being interviewed taught the same subjects, they did not necessarily have the same beliefs or opinions about grade inflation.

Consider, for example, two art teachers from South High School. John Davis teaches drawing and painting classes, which are strictly elective classes, and he has been teaching for less than ten years. When asked if grade inflation exists, he said that he personally would think so but could not say whether his beliefs are true, claiming that he stays isolated in his studio and really does not know what other teachers do. He says that the pressure must be there, but teachers do not necessarily cave to the pressure. He mentions that he does not think students are learning as much, despite accountability issues and increased standardized testing. There is no EOCT for his course, nor can students be tested about art on the SAT. He blames the lack of learning on students by saying, "I think students today have shorter attention spans. They expect quicker results, instant gratification type thing, so they will not spend quality time on a project for a result that might not happen for a week—it is not there, so I don't think they are learning as much." He has had parents come in and question his grading of art projects and feels that since many assume art to be subjective, they are more likely to question assessment, even

though he utilizes rubrics to evaluate student work. Regardless, Davis has never changed grades and does not know if others have.

Bob Hawkins, also an art teacher, has been teaching drawing and ceramics for thirty years. He stated that grade inflation exists for one main reason: "It is a lot easier to pass a kid than fail a kid." Hawkins elaborated, "Confrontation" is a big concern. "And really maybe, and I don't want to be judgmental on a teacher's performance because I don't want to have that job, but some teachers probably aren't doing their fullest job skills or potential that they could be doing." Hawkins continued explaining that parents want to question his grading because art should be an easy class, and that the grade is based on only his opinion. He added that he has never felt pressured by administration to change a grade, and that he would only consider it if a student had been very ill and was diligently trying to make up assignments. He closed by reflecting on how much education has changed over the years, especially about over-testing students.

So many people are afraid they are going to fail because they might not have enough time to study for the standardized tests...everything is based on numbers anymore instead of you know again the spirit of education...there is the percentile and the big picture things instead of like okay, what educational experience did you learn?

Hawkins shook his head before concluding, "Everyone doesn't test well, but I mean they are basing everything on tests and test scores. So, I mean you could be a visual learner and then all of a sudden you are out in the cold."

Another elective teacher, this one of physical education classes, also found that grade inflation runs rampant in schools across America, citing a number of examples from previous jobs but no specifics from South High School. A teacher for 36 years, Hayden Johnson seemed very passionate about the topic. He first referred to college athletes only needing to maintain a 1.8 GPA when he was in college, which led to a discussion about grading standards deteriorating everywhere. When redirected and asked about grade inflation existing at this school, he explained that grade inflation is due to both administrative and parental pressures in this community, especially since parents feel entitled to tell teachers what to do on a daily basis.

I think there is no doubt about it. I think at this school, at ANY school, anytime you have administrators who occasionally mention at a faculty meeting that we have to basically see and talk to the teacher because X% of the class failed, that is an intimidation of some type. The teachers do not feel comfortable with that. You mean to tell me I am only supposed to be able to fail whatever percentage they mentioned and after that I become... it is my fault? That is the way teachers feel. I'm not saying that that is true, but that is the feeling. I think that the other thing here is in this community you again have a lot of parents who come in and more or less demand that their student receive a higher grade. They don't care that the kid is involved in recreation, involved in sports, involved in everything, that they can figure is never home on the weekends, is never home at night. I have even had parents tell me that school shouldn't give homework because 'we don't have time for it.' Now, I am sorry, but I think your priorities are mixed up...

He ended the interview by discussing how the SAT has been dummied down, standards have deteriorated, and teachers are fed up. Johnson never mentioned whether he himself

has ever changed grades, although he did say that using extra credit was a form of grade inflation and that he has seen it offered elsewhere.

The teachers of core content areas agree most frequently in the existence of grade inflation at South High School, also citing administrative and parental pressures, but two core teachers disagreed. Joe Duffy, a teacher of English and the elective drama, was more concerned with the weighting of grades and the purpose of testing than with whether or not grade inflation exists. He did admit that "parents beg all the time" for teachers to change grades, but he adds that he does not think teachers actually change them. He did discuss possible scenarios of when he himself would change a grade.

You know you always get those one or two who don't have a good home life, who work forty hours a week, who come to school part time basically you know and it is not a real priority to them because they have issues of basically, you know where is my next meal coming from, where am I going to sleep tonight, I don't have time to do all this homework, project work. You know, at the end of the semester they are five points short of passing and going on and you always, I think good teachers always have a dilemma as to what do I do with this kid? Does it serve their needs to come back or not? You know I think every teacher probably goes through that.

Duffy does not give extra credit, he says he has "never heard of a pattern" of grade inflation at South High School, and that even though grading standards have changed, he still believes students are learning more today. He does not believe that EOCT scores are important because he feels these content based tests are designed by the state to produce great results. "My college prep students make 90 and 92 and 94 [per cent] on it [American Literature EOCT] without even trying." He also feels that the federal government is simply using standardized tests as a way of blaming schools who are not successful. Duffy concludes that if classes were not so large, then teachers would be able to do an even better job teaching. "We don't have the time to focus on the minutia that we focused on fifteen or twenty years ago...we are delivering to so many more kids today."

Another content teacher, this one of history, does not feel that grade inflation exists at this school either. Steve Wilkerson has taught a variety of social studies courses for the past seven years. He has never felt pressured by anyone to change grades and cannot think of any teacher who has. Interestingly though, when asked about extra credit and whether it can be used to inflate grades he responded, "I have never looked at it as inflating grades, but it is. I've never thought about that, but yeah. It would definitely be. If I offer it to one, they all get it. You have got to be fair." He also added that if a senior needed a point or two in order to pass his class and graduate, he would consider changing the grade if the student had worked hard in his class.

If I had a senior who needed my Econ Government class to graduate and they are coming up with a 68 or 69, I would seriously consider giving them

some extra credit...I would not want to fail them. Now, there are a lot of parameters that would go with that. Has that kid, did that kid try in my class? Did he turn in everything? All right, you know has he been there? If he has been absent a lot and he has a 69, oh well, sorry.

Wilkerson does not see bumping a senior's grade up a point or two as inflating the grade. He concluded that students are learning more and performing better that he did, and he attended this same high school as a student almost twenty years ago.

His colleague, a female AP history teacher who serves as the department head, has an entirely different view about grade inflation. While she has never been pressured by administration to change a grade she adds, "I have never felt pressured to change a grade at the end of the nine weeks or even on a weekly basis. I have felt pressured that we don't give grades lower than a certain percentage grade... I just, I felt pressured if you got a 69, bump it to a 70 or lower it to a 68." Louise Beech referred to the common practice of changing grades at South High School in two ways. First, teachers have been strongly urged never to put a 69% on a student's report card, as it is difficult to explain to students and parents that a student failed by just one point. Next, she also discussed the practice of bumping a first quarter grade to at least a 55% in hopes that the student will perform better the next semester and still be able to pass. For example, if a student earns a 32% first quarter, then that students has no hope of passing the course and may become a discipline problem. Yet, if the teacher raises the grade to a 55%, then the student must work to achieve an 84% the next quarter to have the grade round up to passing for the semester. Teacher #2 does believe that teachers change grades all of the time by not really checking student progress.

They are doing it in every class homework grade or something of that... Inflating grades to me means this: I give you a homework assignment and I'll grade you by walking by your desk and going okay, you have half of it so you will get 50%. If you have three-quarters of it you will get 75%. If you have 100%, then you will

get 100, but nobody checks to see if it is right or wrong. That is grade inflation to me and I can assure you that we are doing that.

Beech also says that while not all students test well on the SAT, she does believe the AP exams are good for assessing student learning in her classes. She says that the scores on the AP exam very closely match what each student does on a daily basis for her. She also feels that most students are over-tested because of the graduation test and the EOCTs.

Two other teachers each teach a different foreign language but agree that grade inflation exists to some degree at South High School. Claude Perot teaches French classes and finds that the level of class expectations differs among teachers saying,

Sometimes I see that grades are inflated. Sometimes students from one class to another come into my class and I see that, perhaps it is just my expectations, but I see that I wouldn't have believed a student had merited a grade that they have received in a previous class based on their performance in my class.

He also reflected on extra credit as a means of grade inflation if it is abused. He prefers to use an extra credit assignment for "amnesty" like when a student really does just forget to do a homework assignment or had a conflict. Perot feels that large chunks of extra credit used to replace test or project grades is different and over used by too many teachers.

Another point was mentioned about standardized testing by Perot, too. He concluded, "It is a necessary evil, however, I think it is taking away from the class time, taking away from discovery time, taking away from letting the students explore." Like other teachers interviewed, he saw the pressure on students and teachers to perform well on tests, but he was also saddened by what is being lost by such pressure.

Teacher Sandra Munos agrees that grade inflation is a problem. She teaches Spanish and sometimes picks up a math class, as she is certified in both areas. She too discussed the pressure imposed by administrators to not have students fail.

We have pretty much been explicitly told that 69s are not allowed and that does put you in a position of making the decision do I bump the child to a 70 or do I lower them to a 68? I have a real problem with taking away points from a child who has earned them, but I have probably as much trouble giving points to someone who hasn't, and so you have to make that decision; well did they really work for it or did they not really work for it?

She points out that this is another way that control has been taken away from classroom teachers. "That a parent who comes in and complains about a 69 has more pull than the teacher who knows what is going on in the classroom is very indicative of a lot of the problems we are having." She also explained that more blatant grade inflation occurs because "you hear all the time about being pressured by coaches or administration."

Munos concluded by admitting that she has bumped students up to passing because in the great scheme of things a point or two in a Spanish class does not change how much a student did or did not learn in her class.

The last two teachers both teach math on all levels and agree that grade inflation is not something blatant most of the time, but instead is the result of teachers not having high expectations for their students. Joanne Millsaps teaches pre-calculus and AP statistics, but she also teaches a tech-prep math class for students who struggle and need both acceleration and remediation. She explains why she feels grades can be considered inflated at South High School. I think some do even though they are not doing it intentionally. I really believe there are some unintentional ones that just by their grading practices are inflating the grades. They are not purposely thinking, oh I am going to add this many points, although there may be some that do that, I don't know. I do though believe that there are some who are less strict in their grading or they are writing their tests more easy and so the students are able to score better on those tests even if they do grade them strictly because the test was easier than they maybe it should have been and that, that is another way of inflating grades.

Millsaps does not believe in extra credit, as it is a form of grade inflation to her. She does not want students to work on extra assignments if they cannot do well on the required assignments, quizzes, and tests. She concludes that students are being tested too often and for the wrong reasons in that the graduation test would be more valuable if it did a better job of assessing learning. She feels it is "watered down to the point that it is not doing anything." Most students do well on it because it is written at too low of a level.

Marla White is also a math teacher of AP calculus and honors geometry, and she serves as the head of the math department. She feels that the Algebra EOCT is too easy and that the Geometry EOCT is just right. She does not believe that students should have both an EOCT and a final exam and a graduation test. She too feels though that teachers may not be blatantly changing grades because of outside pressure, but they may be avoiding conflict by not challenging their students to achieve more.

I don't know if they are inflating grades as much as they don't have as high a standards. They give a test that is easier because they think that that is the test for the average, whereas my tests may be harder. So, is it an inflation of grades?

Well, a kid in their class is going to do better on that test because it is an easier test and yes, there are some that do give way too much extra credit. Usually instead of it being actual inflation, it is more of, the test is too easy, we are not working at the level, our expectations are not where they need to be for the students that we are teaching in our population.

White says that administration needs to make sure that teachers are setting high expectations for students and worry less about grades and more about the learning experience. She blames education programs for not preparing students better to become future teachers, too. "I think that a lot of the younger teachers that have come in came up on a weaker curriculum so they are not holding to the standards." Weak teachers only add to the problem of grade inflation.

Summary

While the student data show no discrepancy between student grades and standardized test scores, the information provided by the teachers contradicts the same notions about grade inflation. No grade inflation is evidenced by the relationships between tests and grades. As students perform better on tests, so, too, they earn higher grades and vice versa. If grades and standardized tests both gauge student learning, then no grade inflation exists. Yet, the data generated by both the faculty survey and the interviews speaks to the contrary.

Through the survey, teachers revealed feeling pressured to change grades by students and parents. In the interviews, they discussed how they especially felt pressured by administrators to ensure that no student had the devastating 69% on a report card and not to assign extremely low failing grades even if students earned them. Many of the teachers admitted to changing grades (or feeling that others do) to avoid conferences and to improve failure rates and ultimately their yearly teaching evaluations through their responses to the survey.

The in-depth interviews revealed similar findings and a great concern about overtesting students as well. A number of the teachers interviewed worried about students truly learning and losing the joy of learning because of the emphasis on mandatory tests. Six out of ten teachers interviewed said grade inflation exists at many levels, and even two of the teachers who said it does not exist at South High School admitted to changing grades through extra credit or to keep a student from failing, which really is admission of contributing to grade inflation whether they see it as so or not. Does grade inflation exist at South High School? It depends on who is being asked and what definition of grade inflation is being used.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary

The purpose of this research study was to examine evidence of grade inflation at one southeastern Georgia high school. Using a mixed-methodology case study and analyzing quantitative and qualitative data were used to assess both statistical testing data and to inquire about teachers' perceptions of the existence of grade inflation to best determine its presence at the secondary level. Four questions were proposed by the researcher and analyzed for this case study of South High School. A combination of quantitative and qualitative data were collected, generated, and analyzed based on the following research questions:

- 1. To what extent do high school GPAs and SAT scores relate?
- 2. To what extent do high school GPAs and EOCT scores relate?
- 3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender?
- 4. To what extent do teachers perceive that grade inflation exists?

Running correlations between standardized tests and grade point averages for 160 students at South High School by using SPSS software gave the researcher an opportunity to see the relationships that existed and to determine if such relationships suggested that grade inflation was indeed a problem at this one high school. These correlations utilized SAT scores, EOCT scores, and GPAs for 160 seniors at this high school. Correlations were calculated for all students first. Then correlations were calculated based on both gender and race to determine if any discrepancies existed. For the qualitative portion, 76 teachers were asked to participate in a survey and in interviews about grade inflation. Using teachers' opinions in response to survey questions about grading standards, standardized testing, and grade inflation, in conjunction with open-ended questions through participation in interviews also revealed important information about school grading policies and the pressures imposed on teachers to minimize failing grades for students.

Response to Research Questions

The data collected from student records, teacher surveys, and teacher interviews were used in an attempt to answer this study's overarching question as to whether or not grade inflation exists at South High School. The individual research questions each relate to a specific aspect of this national concern. The following research questions were proposed to guide the study, and data collection and analysis led to the explanations for each answer.

1. To what extent do high school GPAs and SAT scores relate?

For all students at South High School, there is a moderately strong significant relationship between GPAs and SAT scores as evidenced through correlation tests (.493). For 160 students, as GPAs increased, so did SAT composite scores. Students are achieving comparable GPAs and SAT scores, which suggests that grade inflation does not exists at South High School.

2. To what extent do high school GPAs and EOCT scores relate?

At South High School, GPAs and EOCT scores suggest a strong significant relationship for all students (.354). Although the relationship is not as strong as the relationship between GPAs and SAT scores, the data still shows that as students' GPAs increase, so do students' EOCT scores. The relationship between GPAs and EOCT scores suggests that grade inflation does not exists at South High School.

3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend upon race and gender?

By breaking down the initial correlations into new sets of correlations, one based on gender and one based on race, the researcher then examined the relationship between GPAs and standardized tests. When examining the degree of the relationship between EOCT and GPA and then SAT and GPA based on gender, only slight differences existed. Males had a slightly stronger but still significant relationship between EOCT scores and GPAs (.473) than the females (.233). When examining the relationship between SAT scores and GPAs, the data suggest similar results. Males had a slightly stronger significant relationship (.517) than did the females (.496). Thus, the relationship between GPAs and standardized test scores do not change significantly based on gender.

The relationship between high school GPAs and standardized test scores barely differed due to race. White students had an almost identically strong significant relationship between EOCT scores and GPAs (.332) as did Minority students (.338). The relationship for White students between SAT scores and GPAs was slightly less strong (.457) but still moderately significant than that of Minority students (.570). At South High School, the relationship between GPAs and standardized test scores did not change due to race. Again, as one variable increased, so did the other, which suggests that grade

inflation does not occur in any population at South High School, and that few grading and testing differences are based on gender and/or race.

4. To what extent do teachers perceive that grade inflation exists?

Teachers at South High School voiced their opinions to this question in both a faculty survey and in ten one-on-one interviews. Twenty-two different questions on the survey asked them to evaluate the school's grading standards, standardized test scores of students, grade point averages of students, and whether or not teachers are pressured into changing grades. Ultimately, their answers to the questions reveal interesting information about what teachers perceive to be happening not only in their own classrooms, but in the classrooms of other teachers as well. Teachers could respond not true at all, true to a small degree, true to a moderate degree, true to a considerable degree, or very true. To some degree (small, moderate, or considerable), 92% of all teachers reported that the high school's report card accurately displays student learning. This question was important in laying down the foundation for teachers to then assess the quality of the grades being assigned. That is, if teachers felt the report card was a solid measure of student learning, then the resulting GPAs of these students could be compared to standardized tests. The confidence teachers had of the tests is also important since past researchers claimed that a variation between GPAs and standardized test scores can be a sign of grade inflation. As reported previously, the student data do not suggest that grade inflation exists at South High School since there was a strong significant relationship between such variables.

In response to the other questions addressing grading standards, teachers also suggested a level of confidence in assigned grades. For example, teachers reported to some degree true that students are producing better work today than in years past (90.7% of teachers) for a variety of reasons. Teachers (77.6%) responded true to various degrees that students are producing better work today due to technology. Improved teacher training influencing better work from students was true to some degree for 85.5% of the teachers. Teachers also responded true to some degree that students are performing better on standardized tests (93.4%). Teachers even responded true to some degree that teachers are just as tough now as they had been in the past (89.4%). Thus, if students are producing better work, teachers are not lowering standards, students are earning higher grades and performing better on standardized tests, then grade inflation is not evident according to past research studies and according to the past definitions of grade inflation.

Yet, such a conclusion is not that easy to achieve. First of all, 86.9% of teachers responded true to some degree that teachers give higher grades to help motivate students or to help foster a stronger self-esteem. Such an admission implies that teachers are increasing or inflating grades for a purpose other than accurately displaying student learning. The very first question asked teachers to consider if the school's report card accurately displayed learning, and the teachers responded true to some degree. In fact, 46.1% said true to a moderate degree and 39.5% said true to a considerable degree. A discrepancy exists between their answers to these two questions. In addition, teachers also responded true to some degree (71.1%) when asked about increasing grades to help more students qualify for the HOPE scholarship.

Other questions addressed grade inflation more directly, especially asking about the pressures teachers are under to change grades. If grade inflation does not exist at South High School, then teachers would not feel such pressure, or at least they would not succumb to such pressure. Yet, while teachers responded less often true to a small degree that students pressure them to change grades (77.7%), they responded more often true to some degree that parents and administrators pressure them. Parents pressuring teachers generated a true to some degree response for 84.3% of the surveyed teachers and administrators generated a true to some degree response at 75.1%.

The notion that teachers feel pressured into changing grades is further displayed in their responses to questions about conferences and evaluations. Teachers responded true to some degree (76.3%) that they change students' grades to avoid conferences with parents. Teachers also responded true to some degree at a rate of 83% that they change grades to make their failure rates look better, and they change grades to improve their yearly evaluations (true to some degree at a rate of 78.9%).

When specifically asked to rate the degree of truth in the statement that grade inflation exists at South High School, teachers responded true to a small degree (28.9%), true to a moderate degree (44.7%), true to a considerable degree (7.95), and very true (1.3%), which means that to some degree, 75.85% of teachers perceive that grade inflation exists. Even when only looking at the average degree of truth, 44.7% of teachers responded true to a moderate degree.

The results from the opinion survey of faculty members at South High School suggest that teachers perceive grade inflation exists for at least some undesignated number of students due to teachers changing grades. While the teachers themselves may or may not change grades, they perceive that some unidentified number of teachers on occasion change grades for a variety of reasons. When given the opportunity to clarify or elaborate on their answers in an open-ended question, only three teachers chose to respond. The three teachers' responses varied greatly, but each implied that grade inflation exists at South High School. One teacher stated, "Students may be getting better grades, but they certainly are not earning them. The quality of work I see out of my students here is far below where it should be—honor students function on an average CP level; CP on a TP level, and nothing out of TP." Another said, "Administration (principal) wants more passing grades, although many students will not do their work." Finally, a third said, "Not all teachers [inflate grades] but only a few have...students with less than a 55% usually are given the grade...no 69s on report cards." Apparently teachers recognize that changing grades from lower to higher is a form of grade inflation, but they also explain this by referring to school policy to support increasing grades. Administration does not like to see failing grades as evidenced by the survey and by these open-ended responses.

Interviewing ten classroom teachers also gave interesting results. Two teachers do not believe that grade inflation exists at south high school, even though one admitted to changing grades to allow a student to graduate. Two teachers think it may exist but that it would be hard to prove it is and was done purposely. Six teachers believe that grade inflation exists, and most of those agree that usually it is the result of teachers lowering their standards. Two though say that administration and parents can regularly influence teachers to change grades.

Proving that grade inflation exists is difficult. No matter which definition is used (Kohn, 2000; Ziomeck & Svec, 1995; Milton, Polio, & Elison, 1986), it is hard to show that teachers blatantly change grades and/or that students are not learning. If one measures grade inflation solely based on the relationship between standardized test scores and grades, then students at South High School do not have inflated grades.

Across the nation, high school students today take standardized tests throughout the school year in addition to regular class tests. At the state level, the EOCTs are content based but have not been established yet for every class in Georgia. In addition, students do not compare one EOCT test from year to year, since each test is used to only assess learning in that one class. SAT tests are used for college admission across the country and as a predictor of possible performance in college. Not all students test well, and not all students who earn top grades earn top scores on the SAT. Hard working students who put forth extra effort may achieve high GPAs and then not perform well on more analytical tests, which does not mean that they have not learned in the past or cannot learn in the future. Students in Georgia also take a graduation test before being able to graduate. Yet, teachers complain that the test is at such a basic level that is does not truly assess skills, concepts, or content taught at the high school level. Students are still expected to do well on the test no matter what they have earned as grades in their classes.

If one measures grade inflation based on whether or not teachers change grades, then grade inflation most certainly does exist at South High School. On the faculty survey and in interviews, teachers expressed that outside pressures cause some to change grades. Whether a teacher changes a grade due to student, parent, or administrative pressures, changing a grade prevents the school's report card from accurately displaying student learning. In fact, the school's policy of not putting a 69% on the report card and bumping first quarter grades to at least a 55% really is a more blatant form of inflating grades, no matter what the rationale.

The majority of teachers interviewed also explained that by some teachers lowering class expectations and making their classes easy, grades are being inflated. An "A" in one class is not the same as in another. Unless all teachers are following the exact same standards *and* using the exact same forms of assessment, it is really difficult to measure accurately the degree of grade inflation, especially if the standardized tests used to assess learning are also watered down.

Teachers do believe for the most part that students are learning more today, but they do not feel that standardized tests are reflecting student learning as well as teachers can assess achievement daily as expressed through a variety of grades. In addition, teachers voiced a concern that power to make instructional choices has been taken away from them; without freedom to choose how to deliver content, teachers are being pushed into simply "teaching to the test." In the best scenario, teachers can follow the same standards but successfully use a variety of teaching strategies to deliver the curriculum without the classes being dummied down.

Analysis of Research Findings

Based on the studies presented in chapter two and based on this research study, the researcher concludes that grade inflation does not exist at South High School when standardized tests and GPAs are used to conduct analysis. Perkins (2004) suggested that standardized test scores, especially the SAT, have gone down in American high schools but GPAs have risen, which proves that grade inflation exists. Yet, at South High School, the correlation between the two variables is strong. SAT scores have increased, just as EOCT scores have increased, just as GPAs have increased. Whether looking at GPAs and SAT scores or GPAs and EOCT scores, the data for students at South High School displays strong positive correlations. Neither race nor gender significantly impacted the comparisons, so in general, as scores on tests go up, so do GPAs. Ziomeck and Svec (1995) stated that higher grades do not equate to higher standardized test scores. However, at South High School, students who achieve high GPAs also achieve high EOCT scores. Grade inflation is not evidenced by the relationship between GPAs and SAT scores, nor is it evidenced by the relationship between GPAs and EOCT scores. The relationship between GPAs and standardized test scores does not vary based on race or gender, which also suggests that grade inflation is not evidenced by the analysis.

Kohn (2002) points out that determining grade inflation based on testing results and GPAs is problematic. He says it is hard to compare just SAT scores to GPA because they are not intended to measure the same variables. While the SAT assesses analytical skills, it does not measure content learning. And because teachers vary in their instruction and assessments, one really cannot compare GPAs for students either unless they have taken all of the same classes taught by the exact same teachers. Kohn (2002) also mentions that students from economically disadvantaged homes notoriously underscore students from affluent homes, which was true according to teachers at South High School, too. Students from more affluent homes perform better on standardized tests and usually they have higher GPAs as well. It is difficult to determine how much learning influences their grades and test performance.

Kohn (2002) also found that it is hard to prove that students are not learning more, which he says is a requirement in determining evidence of grade inflation. If test scores are going up and GPAs are going up, are students really learning more? If test scores go down and GPAs go down, are students really learning less? Kohn (2002) cautions that jumping to such conclusions excludes too many influential factors. At South High School, teachers responded for the most part that students are learning more today because of technology, improved teacher training programs, and other reasons. Yet, some teachers in the interviews were concerned that students do not have the work ethics of past students and are not accomplishing as much as they should in individual classes, which could be indicative of inflated grades if the grades do not reflect these shortcomings.

According to Rosovsky and Hartley (2002), grading standards have drastically deteriorated in American schools at all grade levels. With deteriorating standards but higher GPAs comes the accusation of inflated grades. Yet, at South High School, teachers overwhelming responded that standards are still high and that students are learning more. Only in the interviews did teachers state that some teachers do not set high expectations. They saw this as more of an individual problem with a small number of teachers and not a systematic concern for all teachers at South High School.

Again though, some contradictory themes resulted. While most teachers believe that students are learning more today, the responses on the survey showed that teachers admit feeling pressured to give higher grades to ensure that students have the "B" average needed to qualify for the Hope Scholarship in Georgia. Healy (1997) discussed that the mandatory "B" average causes teachers in Georgia to feel guilty that some students now can go to college basically for free, while others have to take out loans to pay for college. The difference between a 79% and an 80% may only be one point, but that one point means going to college or not going to college for many students. No one wants to know that one point changed a student's future. Teachers are also pressured into changing grades because their evaluations are linked to student performance. Mansfield (2001) said that teacher evaluations, especially when students are allowed to evaluate teachers or professors, ultimately lead to inflated grades. At the high school, administrators do not take into account the student populations in each class, or the performance of such students in other classes, past and present. A number becomes indicative of student success in a classroom. If a teacher has too many low or failing grades in a class, the assumption becomes that the teacher did not teach instead of that the student did not learn (or both). A blame game leads to inflating grades. To avoid the accusation, teachers increase grades from low to high. The survey revealed that teachers perceive this to be quite common since they feel that grades need to be increased because of their yearly evaluations. Teachers feel pressured into changing grades in order to receive more favorable evaluations. According to the teacher survey and the interviews, grade inflation does exist at South High School.

When teachers lose control in their classrooms, the students lose the most. Teachers are restricted in their creativity and spend less time planning for passionate and intriguing assignments that may be balked at if they require student effort. If grading standards limit teachers' abilities to also convey student learning, then this may also cause them to spend less time worrying about meaningful assessment. According to Birk (2000), traditional grading standards already limit a teacher's ability to communicate student achievement. One number represents so much time, effort, and learning. Even when a grade is low, it may not display how far a student has come or how many improvements resulted from a particular assignment, remediation, or activity. As Basinger (1997) adds, grades are poor communicators of learning. Thus, at South High School, if the grading standards are questioned by teachers, it may be difficult to prove that grade inflation exists. This debate over the quality of the grading standards was mentioned in the interviews, despite most teachers responding that the report card displays student learning accurately in the survey.

Finally, just as Koretz and Berends (2001) found grade inflation to exist most often in elective or humanities courses, the teachers at South High School feel that some course are considered more subjective. Both art teachers expressed scenarios of parents contesting grades because the parents felt that the teachers should have flexibility and be more lenient in an art class. Yet, neither teacher admitted to changing grades are feeling pressured by administrators to change grades. What is important to note though is that usually only students serious about art choose to take art classes as electives. These students already have an interest and some amount of talent before entering the class. In this case, the teacher serves as a mentor, providing constructive criticism and honest evaluations in order to help students improve artistically. Not everyone should realistically earn an "A." In addition, both teachers explained their use of rubrics to the parents as the most fair and objective form of grading. When the teachers of core academic classes were interviewed, some also mentioned that teachers of elective classes do not have the same pressures as they do to change grades. The perception of the teachers contradicts reality.

Conclusions

Using the proposed research questions, a number of conclusions can be made. For example, consider the first research question:

1. To what extent do high school GPAs and SAT scores relate?

At South High School there is a strong correlation between GPAs and SAT scores, which means that not only do students who receive high grades earn high scores on the SAT, but that students with low GPAs earn low scores on the SAT as well. While the GPA is considered a reflection of classroom performance, the SAT is used to predict a student's ability to reason and analyze as an indicator of future performance. The student data suggest that grade inflation does not exist at South High School. However, not all students take the SAT. Their data were not used in this study. Only students who had EOCT scores and SAT scores were compared.

As Kohn (2002) stipulated, students from low-income families do not take the SAT as often as students from more affluent homes. These students also do not have as good attendance in school and thus are not necessarily in the classroom learning the same material on a daily basis. It is difficult to determine the correlation between their class performance and standardized testing without all components then. Thus, it may be a leap to say that no grades are inflated just based on a portion of the population—the "better" portion of the population. It is more appropriate to say that grade inflation is not evidenced by student data for students who have taken the SAT. With only 166 students reporting both SAT and EOCT scores, the administration, guidance counselors, and teachers need to do a better job of promoting the SAT test. If everyone had both reported SAT scores and EOCT scores, it may be easier to make a more informed analysis of grade inflation and derive a more conclusive answer to the first research question.

If teachers are inflating grades, then students would have higher GPAs. If the tests are watered down, then students with inflated grades would still be expected to perform well or match their performance on standardized tests. If a student had all of the hard teachers and earned slightly lower grades and did not perform well on standardized tests, then the correlation between the two may not show a significant difference. Likewise, if a student had all of the easy teachers and earned higher grades and performed well on the standardized tests, there would still not be a significant difference in the correlation between the two. As it stands, no grade inflation is evidenced at South High School based on such tests scores and GPAs, but this conclusion is problematic when considering the teacher survey responses and interviews, as well as the answers to the remaining research questions proposed.

2. To what extent do high school GPAs and EOCT scores relate?

According to the correlation tables, there is a strong relationship between the two variables. As GPAs increase, so, too, do the EOCT scores. A positive relationship was displayed for all students with virtually no differences due to race and/or gender. Thus, at South High School, the two variables were consistent.

Interestingly though, views on the importance of testing variables by teachers at South High School raised key points. Teachers being interviewed consistently complained about the quality of standardized tests being used and the frequency at which students are tested. One teacher felt that the graduation test had been watered down and another said that the different EOCT tests vary in difficulty levels. Most agreed that the graduation test was written at a level far below high school students and did not show mastery of skills or concepts. Thus, the quality of the tests assessing the students did not measure up to the quality of teacher assessment in the classroom according to these teachers. Comparing higher GPAs to equally high test scores then does not really show a sound or significant correlation if they are not measuring learning at the same level. Students at South High School earn high scores on these tests at the same rate they earn high GPAs, but if the test scores are not comparable, then basing grade inflation on this correlation is not beneficial. As Kohn (2002) stated, these tests are not proving anything. They are not truly measuring student learning if they are below grade level assessments. In addition, because Georgia does not currently have an EOCT test for every class, it is impossible to track their learning from year to year in each specific content area. For example, if a student took an English EOCT in the 9th grade, it would be beneficial to see if their scores increased each year.

3. To what extent does the relationship between high school GPAs and standardized test scores (SAT and EOCT) depend on race and gender?

South High School is not typical of the surrounding counties in southeastern Georgia. It has a very small minority population when compared to surrounding counties; yet, of the students reporting SAT scores, their GPAs did not vary significantly based on race. But, not all students took the SAT, and fewer minority students have chosen to take the test. Currently, 76% of the population is white, and the majority of these white students are from middle and upper-middle class homes with college educated parents. Students whose parents did not attend college score well below those from educated households, according to Kohn (2001). With more students growing up in educated families in this community, it is reasonable to expect SAT scores and grades to be above average at this high school. Yet, the school should not dismiss trying to reach the other 24% of the population--the minority students. All students should be encouraged not just to take the SAT, but to also take the most challenging classes. Minority students are very absent in the honors and AP classes at South High School. If more minority students took these rigorous classes, not only would learning increase, but so would the number of students taking the SAT. With more students taking these courses and taking the SAT, it would also improve the analysis of whether or not grade inflation exists at this school. The correlations would be more meaningful.

Gender did not change the significance levels when comparing standardized tests to GPAs either. At South High School, 46% of the population is female and 54% is male. Of the seniors taking the SAT, 48% were female and 52% were male. Thus, based on gender, very similar percentages took the SAT. Only slight differences in levels of significance resulted, but overall, males and females had very similar correlations between standardized tests and GPAs. Thus, gender is not a factor or an influence on either test scores or grades at this school. Grade inflation is not evident for any one group.

The findings based on teacher data in both the survey and the interviews suggest a different conclusion. Consider the final research question:

4. To what extent do teachers perceive that grade inflation exists?

Even though the student data suggest that grade inflation does not exist at South High School, teachers perceive that it does exist. Because teachers daily assess their students, the tendency is to believe what the teachers say. The level of grade inflation is what they disagree on, especially when considering whether or not grade inflation is intentional. The faculty survey revealed that teachers feel grades are inflated for a number of reasons and on a number of levels. The interviews revealed that school policy and administrative pressures play a major role is teachers' grading practices in particular at the end of a term. While ethically some do not want to believe that teachers blatantly change grades, some of these same teachers admit to changing grades themselves. It is interesting that everyone accuses others of changing grades because they do not openly admit to inflating grades, but they indirectly describe practices which in essence define grade inflation.

A teacher's intent almost becomes an excuse for ultimately having fewer students fail without anyone really being able to prove that grades were inflated. The example used by many teachers was bumping a graduating senior up from a 69% to a 70% in order to graduate. Not one teacher mentioned that adding 1% to a final grade is really a combination of many grades being tacked on to the final grade. If a teacher has 70 grades for the quarter, that 1% could really equate to seven or eight 100% test grades. Maybe the teachers are naïve, maybe they do not look at the grades in the same way, and maybe they just do not care. As the art teacher so eloquently put it, "It is a lot easier to pass a kid than fail a kid."

Such a laissez-faire attitude though creates descention in the faculty. What teachers perceive to already be happening is much easier to digest and to duplicate. If a teacher sees another teacher changing grades, lowering expectations, manipulating the weighting of assignments, or giving a ridiculous amount of extra credit every week, then it becomes tempting to not have to deal with the ramifications of a student failing that class. It can be frustrating to feel as if no one else worries about student learning, when too often the discussions in schools circle around test scores and local policies.

The contradictions between the quantitative and the qualitative data do still suggest that grade inflation is a problem at South High School, especially when taking

into consideration the comments from the teachers being interviewed. The commonality of low expectations and not pushing the students to succeed translates into grades being assigned that are not consistent with the effort required to receive top grades. When adding the evidence that teachers surveyed admitted to feeling pressured into changing grades, especially by parents and to avoid negative evaluations, then the researcher concludes that some amount of grade inflation exists at South High School. The complexity of over-testing students, the lack of consistent testing data because EOCT tests are not offered for every course, the small percentage of Minority students taking the SAT, and the atypical population of students at South High School, all lead to the conclusion that the relationship between test scores and GPAs may not be the best measurer of grade inflation. Yet, the teachers who daily assess learning honestly revealed changing low grades to higher grades; these comments combined ultimately serve as an admission of inflating grades.

Implications

A number of implications stem from this research study. Determining the existence of inflated grades at South High School requires creating a new definition of grade inflation, as the quantitative analysis contradicts the qualitative data. It is easy to see now why past researchers have had difficulty proving beyond a doubt that grade inflation is rampant in American schools. Yet, proving the existence of grade inflation was never the real purpose of this research study. What can be derived from this study has the potential to not only improve grading policies at South High School, but to also create more dialogue about over-testing high school students and finding better ways than traditional report cards and grades to communicate the successes achieved in the classroom through optimal learning.

The qualitative portion of this study produced rich information about what teachers see as strengths and weaknesses in schools today. Rarely are teachers asked for their input in major decisions in school; yet, teachers are best trained to gauge student learning. Teachers also know how to reach students individually. When teachers are told to teach one way and one way only, they may no longer be able to reach all students. Teachers also recognized the need though to create similar standards and assessments within departments to avoid dummying down the curriculum. Good teachers want all of their students to be successful, but they feel as if administrators are holding them back from being the best teachers on a daily basis.

Grading policies and pressures not to fail students make it difficult for teachers to feel as if they still have control. Administrators need to readdress the grading policies at South High School and give teachers back control of student grades. Instead of making a blanket policy that no grades of 69% can appear on a report cad, administrators need to discuss with teachers forms of intervention, such as remediation and acceleration, to be implemented before the student reaches the point of no return in a class. Instead of automatically bumping a student up to a 55%, administrators and teachers should be diligently working to ensure that no student drops to such a low grade by also involving the student and parents. The best way to avoid inflating grades is to ensure that grades do not warrant changes. Changing school policy will better prevent grade inflation by also eliminating the pressures teachers feel to change grades. Teachers should not have to

worry that they are being second guessed. Their time and energy should be devoted to teaching.

Another idea stemming from the teacher interviews came from the art teachers. Teachers of academic core courses should take note, as rubrics are not used as often in their classes. Giving students a rubric up front for major projects, presentations, and papers can circumvent complaints about grades later, as students know exactly what is expected of them to earn each grade before they even begin the work. Likewise, posting the standards to be covered in the classroom can help give students a mental picture of where each assignment is leading. Students who feel involved with the learning process complain less about grades. Another point made in passing was that the art teachers are very isolated. It would be beneficial for teachers to collaborate more at South High School. Getting students more involved by showing them the connection between disciplines could encourage an appreciation for a class or subject that a student had never thought about previously taking. Having teachers collaborate would also foster a stronger feeling of unity among teachers. When teachers can share ideas, just like students, they feed off each other and create even bigger ideas. Allowing teachers to have a sense of control could generate wonderful possibilities to better serve students at South High School.

Perhaps the best idea to stem from this study is to have everyone at South High School set high expectations. Encouraging students to take more challenging courses should coincide with setting high expectations for teachers, too. If all teachers used the same standards and worked as a department to create meaningful assessments, then students would begin to rise to the new standards and expectations. Students must be taught that learning and not the final grade in a class is the priority in school, and teachers must find a way to foster that love of learning, especially for students who struggle more than others. The traditional grading scale may now be obsolete. As schools in Georgia implement the new performance standards and switch the focus to utilizing more higher order thinking skills, teachers and administrators need to work together to best ascertain how student learning should be communicated to parents. The discrepancy between what the student data suggest and what teachers perceive to be true suggests that communication among teachers, administrators, and parents needs to improve. If the ultimate goal is for every student to receive the best education possible, then South High School should demand excellence out of students and teachers alike.

Recommendations

More research is needed in the area of grade inflation. The best way to assess grade inflation should involve a longitudinal study of a group of students as they move from high school into college. Analyzing high school GPAs and SAT scores in addition to college performance could offer a better conclusion about the quality of a student's high school grades. Maybe comparing SAT scores and GPAs is not even the best avenue for detecting grade inflation and a new instrument must be created to analyze the data. Maybe the very nature of the American education system promotes grade inflation by stressing the need for students to compete against each other to achieve the best class ranking. Maybe college admission requirements guilt teachers into giving one student an advantage over another. Maybe the Hope Scholarship has the right intentions but prevents the hardest working and most devoted learners from getting a college education because their teachers set higher standards. Yet, maybe more importantly, more research is needed in measuring the success of standardized testing and the quality of grading standards in American high schools.

A plethora of questions can be derived from this study. Are students being overtested? How are test scores being used locally and nationally? What alternatives exist to replace traditional grades? Is the report card truly displaying student learning? Will the state of Georgia eliminate the mandatory graduation test once an EOCT test is in place for every course in Georgia? How will GPS implementation increase student learning? What is the relationship between GPS implementation and test performance?

Dissemination

Teachers and administrators at South High School need to have an opportunity to review the findings of this research study. Through reading and discussing the discrepancies in the data generated through this study, a reaffirmation for providing a challenging and engaging curriculum and learning experience could result. The researcher hopes that by giving teachers the opportunity to voice their perceptions the administration at South High School will more readily listen and take teacher recommendations into consideration. The researcher also hopes that teachers realize that there is strength in numbers. Teachers need to advocate for changing the current grading policies which they feel contribute to grade inflation and are just plain problematic policies. Maybe the revelations gained through reading the research findings will spur all who educate today's youth into re-assessing the quality of daily instruction and assessment as it pertains to their individual roles in the most important job in America molding our future.

REFERENCES

ACT/SAT optional colleges list soars to 280. Fair Test Examiner, Summer 1997 (5).

- Basinger, D. (1997). Fighting grade inflation. [Electronic version]. *College Teaching*, 45(3), 88-91.
- Birk, L. (2000). Grade inflation: What's really behind all those A's? [Electronic version]. *Harvard Education Letter* (Jan/Feb).
- Bishop, J. H. (2003). Nerd harassment and grade inflation: Are college admissions policies partly responsible? Ithaca, NY: Cornell Higher Education Research Institute. (ERIC Document Reproduction Service No. ED481756)
- Camara, W. J. (1998). High school grading policies (The College Board Office of Research and Development RN-04).
- College Board, The (1997, August 26). *News from the College Board*. New York: Author.
- Ediger, M. (2001). *Grade inflation in higher education*. (ERIC Document Reproduction Service No. ED452263)
- Edwards, C. H. (2000). Grade inflation: The effects on educational quality and personal well being. *Education*, 120 (3), 538-546.
- Farley, B. (1995). A is for average: The grading crisis in today's colleges. Toms River, New Jersey: Princeton University Fellows Seminar. (ERIC Document Reproduction Service No. ED384384)

French, D. P. (2005). Grade inflation: Is ranking of students the answer? Journal of

College Science Teaching, 34 (6), 66-67.

- Gaultney, J. F. & Cann, A. (2001). Grade expectations. *Teaching Psychology*, 28(2), 84-87.
- Goodwin, D. H. & Holman, D. M. (2003, November). Accountability and Grade
 Inflation in a Rural School. Paper presented at the Annual Meeting of the Mid South Educational Research Association, Biloxi, MI.
- Hassel, H. & Lourey, J. (2004). The dea(r)th of student responsibility. *College Teaching*, 53(1), 2-13.
- Healy, P. (1997). HOPE scholarships transform the university of Georgia; Applicants have better credentials, but grade grubbing and grade inflation are growing.[Electronic version]. *The Chronicle of Higher Education*.
- Johnson, V. E. (2003). Grade inflation: A crisis in college education. New York: Springer Publishing.
- King, M. (2005). Voluntary conscription: Enlisting the children of lake woebegone in the battle against grade inflation. *College Literature*, 32(1), 127-146.
- Kobrin, J. L. & Michel, R. S. (2006). The SAT as a predictor of different levels of college performance (The College Board Research Report No. 2006-3). New York: The College Board.
- Kohn, A. (1998). What to look for in a classroom. San Francisco: Jossey-Bass Publishers.
- Kohn, A. (1999). From degrading to de-grading. [Electronic version]. High School Magazine, March 1999.
- Kohn, A. (2001). Two cheers for an end to the SAT. [Electronic version]. *Chronicle of Higher Education*, March 9, 2001.

- Kohn, A. (2002). The dangerous myth of grade inflation. [Electronic version]. *Chronicle of Higher Education*, 49(11).
- Koretz, D. & Berends, M. (2001). Changes in high school grading standards in mathematics, 1982-1992. RAND Corporation.
- Lawler, P. A. (2001). Grade inflation, democracy, and the ivy league. *Perspectives on Political Science*, 30(3), 133-136.
- Mansfield, H. C. (2001). Grade inflation: It's time to face the facts. [Electronic version]. *The Chronicle of Higher Education: The Chronicle Review*, (April).
- Martinson, D. L. (date?). A perhaps "politically incorrect" solution to the very real problem of grade inflation. *College Teaching*, 52(2), 47-51.
- Marzano, R. J. (2000). Transforming classroom grading. Alexandria, VA: Association for Supervision and Curriculum Development.
- Mathies, C., Bauer, K. W., & Allen, M. (2005). An Exploratory Examination of Grade Inflation at the University of Georgia. Paper presented at the 2005 AIR Forum, San Diego, CA.
- Milton, O.; Pollio, H. R.; & Eison, J. (1986). *Making sense of college grades*. San Francisco: Jossey-Bass.
- Mullen, R. (1995). *Indicators of grade inflation*. Paper presented at the Annual Forum of the Association for Institutional Research, Boston, MA.
- Perkins, R.; Kleiner, B.; Roey, S.; & Brown, J. (2004). The high school transcript study:
 A decade of change in curricula and achievement, 1990-2000. U. S. Department of Education, National Center for Education Statistics (NCES 2004-455).
 Washington DC: Institute of Education Sciences.

- Reeves, D. B. (2004). 101 questions & answers about standards, assessment, and accountability. Englewood, CO: Advanced Learning Press.
- Rosovsky, H. & Hartley, M. (2002). Evaluation and the academy: Are we doing the right thing? Cambridge, MA: American Academy of Arts & Sciences.
- Schilling, K. M., & Schilling, K. L. (1999). Increasing expectations for student effort. *About Campus*, (May/June).
- Sonner, B. S. (2000, September/October). A is for "adjunct": Examining grade inflation in higher education. *Journal of Education for Business*, 5-8.
- Stanley, G. & Baines, L. (2001). No more shopping for grades at B-mart: Re-establishing grades as indicators of academic performance. *The Clearing House*, 74(4), 227-230.
- Stone, J. E. (1995). Grade inflation and the need for research. [Electronic version]. Educational Policy Analysis Archives, 3 (11).
- U. S. Department of Education, Office of Educational Research and Improvement.
 (1994). What do student grades mean? Differences across schools (Office of Research Rep. OR 94-3401). Washington DC: Office of Research.
- Vale, D. (1993). 1991-1993: Grade inflation hurts best stanford students. [Electronic version]. *The Stanford Review*, 11(4).

Wood, A. L.; Ridley, D. R.; & Summerville, R. M. (1999). University Grade Inflation through Twenty Years: An Analytical and Empirical Investigation. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Antonio, TX.

Woodruff, D. J. & Ziomek, R. L. (2004). High school grade inflation from 1991 to 2003

(ACT Research Report Series 2004-4). Iowa City, IA: ACT Program.

Ziomek, R. L. & Svec, J. C. (1995). *High school grades and achievement: Evidence of grade inflation* (ACT Research Report Series 95-3). Iowa City, IA: ACT Program.

APPENDICES

APPENDIX A

LETTER TO SUPERINTENDENT TO CONDUCT RESEARCH

42 Teal Lake Drive Richmond Hill, GA 31324

February 23, 2007

Dr. Sallie Brewer Bryan County Board of Education 66 South Industrial BLVD Pembroke, GA 31321

Dear Dr. Brewer:

As you may know, I am currently working on my doctorate in Educational Administration with an emphasis in Teacher Leadership through Georgia Southern University. In my dissertation, I am examining the relationship between standardized test scores and grade point averages. In addition to the numerous research studies I have cited, I would also like to use information from Richmond Hill High School, including standardized test scores and teacher perceptions. Thus, I am asking your permission to conduct a faculty survey about traditional grading standards, forms of assessment, standardized testing, etc. I would also like to conduct a series of short interviews with at least eight teachers. Participation would be voluntary and anonymous. In addition, I would like to report the testing data for RHHS. No where in my reporting of data will I provide the name of the school or school system, nor will I use any information which may lead to the identification of Richmond Hill High School. Instead, I am simply relating the information derived from the survey, interviews, and testing data as such information pertains to my previous research. Again, I will not utilize student names, teacher names, or any other distinguishing information.

I truly believe this research study may lead to some valuable in-depth information to assist us in our endeavor of always striving to provide the best education for our students at RHHS.

Please feel free to contact me with any questions you may have. I look forward to hearing from you.

Sincerely,

Aimée Claire Taylor

APPENDIX B

IRB PROPOSAL

Application for: Aimée Claire Taylor

Personnel. Only I and my academic advisor will be participating in the research portion of this study. Only I will conduct the research and have access to the data, but I will consult with my advisor about using SPSS when I do my analysis.

Purpose. 1. The researcher's purpose of this study is to examine if grade inflation exists as evidenced by test scores and teacher perception at one southeastern Georgia high school. 2. The following research questions guide the study:

- To what extent do high school GPAs and SAT scores relate?
- To what extent do high school GPAs and EOCT scores relate?
- To what extent does the relationship between high school GPAs and standardized test scores depend on race and gender?
- To what extent do teachers perceive that grade inflation exists?

The data collected and the results of the data analysis may assist educators in identifying the existence of grade inflation as well as the contributions to and ramifications from grade inflation. Such insight may help reform current grading and testing procedures. 3. Current literature regarding grade inflation both supports and refutes its existence in American high schools. The research is evenly split in how to prove or deny the existence of grade inflation. None of the studies read included teacher perception, and this study will combine quantitative and qualitative research to more fully study grade inflation at a local level.

Outcome. The researcher expects to discover whether or not grade inflation exists at this one high school and what teachers perceive to be the causes of grade inflation if it is found to exist. Administrators, teachers, and most importantly students may benefit from the final analysis of this study. Improving student learning is the best result of educational research.

Describe your subjects. This is a case study to be conducted using data from Richmond Hill High School, although the identity of the school will be kept confidential and anonymous in the final dissertation. Currently, I serve as the Curriculum Resource Teacher and was a former English Teacher at this same school. The researcher has obtained permission form the school's administration to utilize testing data and to conduct faculty survey and interviews. Test scores and GPA data will be derived from existing student records without using any names of the students. Instead, the researcher will number students and not look at any identifying information other than race and gender. The researcher will include data on 299 students. The researcher has access to such information due to her leadership position at this high school. The researcher uses the said information as part of daily job duties and responsibilities. The researcher will secure the identity of the students by assigning a number to each student. Only the researcher has access to the list of corresponding names and numbers, which will be kept secure in a locked filing cabinet in the researcher's personal office. In addition, the researcher will distribute a survey to 76 classroom teachers to assess their perceptions of grade inflation. The surveys will be numbered and anonymous so that teachers will be as honest as possible in their responses. Volunteers from the faculty will be asked to participate in short interviews about their perceptions of grading standards, standardized testing, and grade inflation. The researcher will interview between 8 and 14 teachers, with 2 teachers from each main content area. As this research study is not intended to generalize about grade inflation across the nation but the study is intended to offer an in-depth

analysis at this one high school, the study is limited to only students and faculty members at this school.

Risk. The researcher intends for there to be no risks to anyone involved, but keeping participants identities anonymous may help ensure that no one worries about their answers being used for anything other than research. If participants do feel anxious about answering questions, then they may be exempt from any further participation and their surveys will be immediately destroyed. The study has the potential to serve as a catalyst for educational reform at the local level, benefiting students, teachers, and others.

Methodology (Procedures). A survey will be distributed to the faculty. A copy is attached. A number of interview questions will also be administered to volunteers. The data from the survey will be analyzed using statistical software (SPSS). The researcher will code the open-ended question as well as the answers to the interview questions to search for common themes. The interviews will be recorded using a digital recorder and then transcribed. All of the data, including student testing scores, GPAs, faculty surveys, and interview transcripts will be kept in a locked filing cabinet in my home where I am the only person with access to such information. I will keep the data for at least three years before destroying the information by mechanically shredding it unless advised by the IRB to destroy data sconer.

No additional risks are involved.

APPENDIX C

GRADE INFLATION SURVEY

Instructions

The purpose of this questionnaire is to ascertain teacher perception of student learning, grades, standardized test scores, and grade inflation. Your honest responses will provide an in-depth understanding of the relationships between grade point averages and standardized test scores at this one school.

The following 20 statements refer to both grades and testing. There is no right or wrong answer, so please answer as honestly as possible. Your responses are anonymous and will only be used for research purposes.

Use the scale below to respond to each statement. If you think the statement is very true, circle 5; if the statement is not true at all, circle 1. If the statement is more or less true, circle the most appropriate number.

	<u>not true</u>	not true at all			very true		
1.	Your school's report card accurately displays student learning.	1	2	3	4	5	
2.	Students today are producing better work than in years past because they are self-motivated.	1	2	3	4	5	
3.	Students today are producing better work than in years past because of technology.	1	2	3	4	5	
4.	Students today are producing better work than in years past because of improved teacher training.	1	2	3	4	5	
5.	Students today are earning higher grades than students in the past.	1	2	3	4	5	
6.	Students today are earning higher scores on standardized tests than students in the past.	1	2	3	4	5	
7.	Teachers today are just as tough on students when it comes to grading as they were in years past.		2	3	4	5	
8.	End of Course Tests accurately assess specified content learning.	1	2	3	4	5	
9.	Minority students' grades are equally comparable to white students' grades.	1	2	3	4	5	
10. Boys and girls earn equally comparable grades.1234			5				

not tru	rue at all			very true	
11. The SAT accurately predicts a student's ability to do well in college.	1	2	3	4	5
12. The SAT accurately assesses learning.	1	2	3	4	5
13. Students from affluent homes earn higher grades than students from economically disadvantaged homes.	1	2	3	4	5
14. Teachers give higher grades to help motivate a student and/or to build self-esteem.	1	2	3	4	5
15. With the HOPE Scholarship available to students, teachers feel it necessary to "bump" up students to the B range.	1	2	3	4	5
16. Teachers are pressured into changing low grades to higher grades by students.	1	2	3	4	5
17. Teachers are pressured into changing low grades to higher grades by parents.	1	2	3	4	5
 Teachers are pressured into changing low grades to higher grades by administrators. 	1	2	3	4	5
19. Teachers change grades to avoid parent-teacher conferences.	1	2	3	4	5
20. Teachers assign higher grades to improve their failure rates.	1	2	3	4	5
21. Teachers assign higher grades to improve their yearly evaluations.	1	2	3	4	5
22. Grade inflation exists at this school as evidenced by GPAs being higher than standardized test scores (SAT and/or EOCT).	1	2	3	4	5

Please feel free to clarify or elaborate on any of your responses:

Demographics

23. Sex _____female ____male

- 24. Number of years teaching ____0-5 ___6-10 ___11-15 ___16-20 ___21-25 ____25+
- 25. Teaching content area _____ Math _____ Science _____ Social Studies _____ English _____ Physical Education _____ Fine Arts _____ Vocational/Business _____ Foreign Language _____Other
- 26. Race/Ethnicity _____ Asian _____ Black _____ Hispanic _____ White ____Other
- 27. Would you be willing to participate in a short interview about grading and testing in your school? _____Yes ____No

If Yes, please provide your name: _____

Thank you for participating in this research survey.

APPENDIX D

INFORMED CONSENT LETTER

COLLEGE OF EDUCATION

DEPARTMENT OF LEADERSHIP, TECHNOLOGY, AND HUMAN DEVELOPMENT

Dear Participant,

My name is Aimée Claire Taylor, and I am a doctoral candidate at Georgia Southern University. I am currently working on my dissertation analyzing grade inflation. My dissertation title is "Grade Inflation: An Analysis of Teacher Perception, Grade Point Average, and Test Scores in One Southeastern Georgia High School." Previous studies on grade inflation have been strictly quantitative and none have involved the most influential component in the grade inflation scenario--teachers. Teachers have the greatest impact on student achievement as they daily instruct and assess academic performance, applying grading standards and measuring content knowledge, and thus influence both GPAs and standardized test scores in a variety of ways. Therefore, the researcher's purpose of this study is to examine if grade inflation exists as evidenced by test scores and teacher perception.

As a volunteer in this study, you will be asked a series of questions concerning testing, GPAs, and grade inflation, as well as your personal feelings about these topics. The interview will last between 20 and 40 minutes. Your responses will be digitally recorded and transcribed for the researcher to analyze; your identity will be protected, as you will be assigned a pseudonym. In addition, you will be allowed the opportunity to review the transcripts of the interview and make any necessary adjustments or comments before the researcher uses the information. At any time during the interview you may choose to stop. You may also at any time before, during, or after elect not to participate and/or have your interviews destroyed.

The benefits to participants include being part of an in-depth research study which may lead to educational reform at the local level. In addition, the participant has a voice in the study on grade inflation. The benefits to society may extend beyond this school in that any contributions to existing research and literature on the topic may serve as a foundation for future studies and educational reform.

You have the right to ask questions and have those questions answered. If you have questions about this study, please contact the researcher named above or the researcher's faculty advisor, whose contact information is located at the end of the informed consent. For questions concerning your rights as a research participant, contact Georgia Southern University Office of Research Services and Sponsored Programs at 912-486-7758.

Your participation is strictly voluntary. You may end your participation at any time by telling the person in charge or by not participating in the interview. You do not have to answer any questions you do not want to answer. There is no penalty for deciding not to participate in the study.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

You will be given a copy of this consent form to keep for your records.

Title of Project: Grade Inflation: An Analysis of Teacher Perception, Grade Point Average, and Test Scores in One Southeastern Georgia High School

Principal Investigator:	Aimée Claire Taylor 42 Teal Lake Drive Richmond Hill, GA 31324 (912)756-6476 ataylor@bryan.k12.ga.us
Faculty Advisor:	Dr. A. Tekleselassie P.O. Box 8131 GSU Statesboro, GA 30460 atekleselassie@georgiasouthern.edu

128

Participant Signature

Date

I, the undersigned, verify that the above informed consent procedure has been followed.

Investigator Signature

Date

APPENDIX E

GRADE INFLATION INTERVIEW QUESTIONS

- 1. What classes do you teach?
- 2. What form of assessment do you believe most accurately reflects student learning? Class grades? EOCT scores? SAT scores?
- 3. If you could change the grading system or the report card, what would you change? How? Why?
- Have you ever felt pressured by anyone to change a student's grade? If so, explain.
- 5. When would changing a student's grade be acceptable to you as a classroom teacher?
- 6. How do you feel about extra credit assignments? Do you think extra credit is a means of inflating grades?
- Do you think some teachers at this school inflate grades for any reason? If so, explain.
- 8. Are students today learning just as much as students 10-15 years ago? Explain.
- 9. What has changed the most about education in the last 10-15 years? Explain.
- 10. Would you like to add anything to this interview that I have not asked you today?