The Relationship Between Teacher Classroom Practices and 21st Century Students' Academic Dishonesty at the Secondary Level

Marguerite Beth Bellipanni

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THE RELATIONSHIP BETWEEN TEACHER CLASSROOM PRACTICES 
AND 21ST CENTURY STUDENTS’ ACADEMIC DISHONESTY 
AT THE SECONDARY LEVEL 

by 

Marguerite Beth Bellipanni 

Abstract of a Dissertation 
Submitted to the Graduate School 
of The University of Southern Mississippi 
in Partial Fulfillment of the Requirements 
for the Degree of Doctor of Philosophy 

December 2012
ABSTRACT

THE RELATIONSHIP BETWEEN TEACHER CLASSROOM PRACTICES AND 21ST CENTURY STUDENTS’ ACADEMIC DISHONESTY AT THE SECONDARY LEVEL

by Marguerite Beth Bellipanni

December 2012

With the rise in the number of high schools students admitting to academic dishonesty on national surveys, educators must examine what is happening in the classroom to determine a cause for this increase. Past research has shown that students cheat for a variety of reasons. Much of it has shown that students are able to neutralize their cheating to external reasons such blaming the teacher, competition for good grades, or not understanding the task at hand. The literature has also revealed that students cheat because they feel that there is no enforcement of consequences for academic dishonesty.

The purpose of this study was to determine what factors contribute to academic dishonesty among 21st century students. Specifically, the researcher examined teachers’ use of engaging classroom practices and engagement with technology to find out if there was a relationship to academic dishonesty in their classes. In addition, the researcher examined teachers’ explanations of academic dishonesty to determine if these were related to the number of incidences of cheating that occurred in their classrooms. Lastly, the researcher
looked at teachers’ enforcement of consequences for academic dishonesty to see if it related to the amount of reported cheating.

This quantitative study included 193 high school teachers from four school districts along the Mississippi Gulf Coast. These respondents completed a survey that asked about their classroom practices, including the use of technology, and cheating that occurs in their classes. Additionally, it asked about their explanations of academic dishonesty and enforcement of consequences for cheating. A Pearson’s correlation revealed a statistically significant relationship between teachers’ classroom practices and academic dishonesty and between the use of technology and academic dishonesty. An independent sample *t*-test showed that teachers who enforce their schools’ academic dishonesty policies have less incidences of cheating than those who do not. A Pearson’s correlation indicated that the explanation of academic dishonesty was not related to the number of incidences.
The University of Southern Mississippi

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CHAPTER I

INTRODUCTION

The way the Millennial Generation of students learns is steadily changing as the world around them changes. Twenty-first century students do not learn best by sitting in their desks and being handed information from their teachers. These Millennial students are accustomed to seeking and finding answers to their questions by using a variety of mobile technologies or high-speed Internet computers. They are also accustomed to communicating and collaborating with their peers through these same technologies. According to a survey by Project Tomorrow (2011), the 21st century students' “preference is for learning environments that are socially-based, un-tethered and digitally rich” (p. 2). The way these students are being taught should be shifting to accommodate their needs and learning styles. Based on interviews Marc Prensky (2010) conducted with nearly a thousand digital native students found the following:

1. They do not want to be lectured to.
2. They want to be respected, to be trusted, and to have their opinions valued and counted.
3. They want to follow their own interests and passions.
4. They want to create, using the tools of their time.
5. They want to work with their peers on group work and projects (and prevent slackers from getting a free ride).
6. They want to make decisions and share control.
7. They want to connect with their peers to express and share their
opinions, in class and around the world.

8. They want to cooperate and compete with each other.
9. They want an education that is not just relevant, but real. (Prensky, 2010, pp 2-3)

Teachers should no longer just be the givers of information but the facilitators of learning. It is essential that their classrooms be technology rich as well as engaging to their students. Twenty-first century teachers’ assignments and assessments need to allow students to demonstrate knowledge that they have acquired rather than to merely regurgitate of facts information. They should be preparing students not only for college, but also preparing them to work and live in a global economy. However, many 21st century students are not actively engaged in the learning process and, as a result, are tuned out at school. Lent (2006) states that “too many of our high school students are disengaged from and even contemptuous of learning as though learning were something inflicted on them rather than a joyful natural part of life” (p. 69). Additionally, recent research and national surveys have shown that a large majority of high school students cheat in school (Josephson Institute of Ethics, 2010). Wilson (2004) warns that, even though the Millennials are not the first and last generation to cheat, all the technological advancements that make cheating easy for them present a new challenge for teachers.

While academic dishonesty is nothing new, the number of students cheating on tests and assignments is increasing (Josephson Institute of Ethics, 2008). In the Josephson Institute of Ethics’s report (2008), the number of
students admitting to cheating on tests rose from 60% in 2006 to 64% in 2008. McCabe with the Center for Academic Integrity (CAI) in 2005 reported that more than 70% of students he surveyed admitted to cheating, and 85% of students surveyed by CAI in 2007 admitted to cheating at least once. The availability of the various technological advances has made it easier for 21st century students to be academically dishonest. According to a national poll by Common Sense Media (2009), 35% of students reported cheating with their cell phone, and 52% admitted to using the Internet to cheat in some way. Students use their phones to text a friend for answers or the Internet to copy and paste information for school assignments. The Josephson Institute (2010) reported that 66% of students admitted to copying a document from the Internet and using it for a classroom assignment. This was up from their 2008 report where 36% of students admitted to plagiarizing from the Internet (Josephson Institute of Ethics, 2008). Stephens, Young, and Calabrese (2007), in their study of 1,305 college undergraduates, state that all the digital technologies have helped enhance education; “however, these technologies may also make it easier to perpetrate a wide range of dishonest behaviors” (p. 237).

Studies have found that students cheat for many reasons but largely because the classroom context, including tests and assignments, is not geared for demonstrating mastery (Anderman & Midgley, 2004; Anderman, Cupp, & Lane, 2009; Murdock, Miller, & Goetzinger, 2007; Murdock, Miller, & Kohlhardt, 2004). Many of these classrooms are performance based and students are likely to justify cheating in these types of classes (Anderman & Midgley, 2004;
Anderman et al., 2009; Murdock et al., 2004; Murdock et al., 2007). Teachers today must realize that educating the 21st century student demands the incorporation of technology, communication and collaboration with peers, and assessments that truly assess knowledge. The research has also revealed that students will cheat if they perceive the teacher’s pedagogy as poor (Murdock et al., 2007; Murdock et al., 2004) or if they find the teacher not to be very credible (Anderman et al., 2009; Murdock et al., 2008). In addition, teachers must be clear with their students on what academic dishonesty is and what their expectations are (Colnerud & Rossander, 2009; Ma, Lu, Turner, & Wan, 2007; Schmelkin, Gilbert, & Silva, 2010; Sisti, 2007; Stephens & Nicholson, 2008; Taylor, Pogrebin, & Dodge, 2002). They must have clear cheating policies and consequences in place and actively enforce the consequences when academic dishonesty has been committed (Ma et al., 2007; McCabe, 1993; McCabe, Trevino, & Butterfield, 2001; Schmelkin et al., 2010; Vinski & Tyron, 2009).

The Problem

With the number of high school students reporting that they have cheated or do cheat on homework assignments at 80.6% and on tests at 59.4% (Josephson Institute of Ethics, 2010), the way that they are being taught and assessed has to change. In a study conducted with high achieving students, 75% of them reported that they had cheated on exams and homework, and 90% of them admitted to copying another person’s homework (Geddes, 2011). Vinski and Tyron (2009) reported that 90% of the students they did a qualitative study
with admitted to cheating. Teachers need to assess what they are doing in the classroom to actively engage their students in the learning process.

Research has shown that some students cheat because their teachers are not explaining what constitutes cheating and, therefore, are unclear about what exactly academic dishonesty is (Colnerud & Rossander, 2009; Ma et al., 2007; Schmelkin et al., 2010; Sisti, 2007; Stephens & Nicholson, 2008; Taylor et al., 2002). If teachers are unclear then often times student are unintentionally cheating. Furthermore, students, teachers, and administrators can have different definitions of cheating. Students report having varying degrees of cheating from mild to severe as opposed to teachers and/or administrators who may view cheating as cut and dry.

Teachers are not always enforcing consequences for cheating in their classes (Ma et al., 2007; McCabe, 1993; McCabe et al., 2001; Schmelkin et al., 2010; Vinski & Tyron, 2009). This lack of enforcement is not deterring academic dishonesty among their students. Student will continue to cheat because they know they can get away with it and that teachers will not deal with it too harshly.

Academic dishonesty compromises the whole educational system. “It dissolves the integrity of students’ academic work and undermines the honest relationship between the teacher and the student” (Zito, 2009, p. 1). Academic dishonesty makes it difficult for teachers to be able to accurately assess student learning. Lupton and Chapman (2002) stated that when students cheat their grades are a misrepresentation of what they have learned and what they may actually be able to do when they graduate. Likewise, Murkdock et al., (2007)
stated “student cheating results in the unfair assignment of grades and undermines a professor’s ability to use assessment data to make informed decisions about what material has and has not been mastered” (p. 141).

Students who cheat have grades that are a false representation of what they have learned or have not learned. Because of this teachers cannot accurately determined what gaps may exist in student learning and go back and re-teach or provide remediation for students (Passow, Mayhew, Finelli, Harding, & Carpenter, 2006).

This study looked at teachers’ classroom practices and examined whether the engagement level of students and use of technology impacted the amount of academic dishonesty reported in teachers’ classrooms. It also examined the effects that explanations of cheating and enforcement of consequences for cheating had on reported academic dishonesty.

Purpose for the Study

Quantitative results from this study supplement the small amount of literature that exists in the area of assisting high school educators to understand how to not unintentionally enable academic dishonesty in their classrooms. It yielded valuable information for both teachers and administrators at the high school level. The purpose was to determine if teachers could be fostering academic dishonesty through their classroom practices. The results from this study could help teachers and administrators deter cheating among their students and enhance student achievement and learning. Understanding the role that teachers may or may not play in academic dishonesty for 21st century
high school students should assist teachers and administrators in the development of school and classroom environments, assignments, and lessons that are engaging and technology rich. Based on the findings of this study, recommendations will be made to help teachers engage their 21st century learners and to discourage academic dishonesty in their classes. This study is beneficial because it contributes to ensuring that the education and achievement level of the students in the United States is not compromised. In addition, the data collected from this study broadens the understanding of the teacher’s role in engaging 21st century learners in their education to prepare them for college and the work force that lies ahead.

Research Questions

The researcher attempted to answer the following questions:

1. Do teachers who have less engaging classes and assignments report higher incidences of cheating?
2. Do teachers who regularly engage their students in class and have engaging assignments report fewer incidences of cheating in their classes?
3. Do teachers who technologically engage their students report fewer incidences of cheating?
4. Are teachers explaining to their students what academic dishonesty is?
5. Do teachers regularly enforce predetermined consequences for cheating?
Hypotheses

Based on the research questions the researcher made the following hypotheses:

H0₁: There is not a statistically significant relationship between academic dishonesty and classroom engagement.

H0₂: There is not a statistically significant relationship between academic dishonesty and technological engagement.

H0₃: Explanation of academic dishonesty is not related to academic dishonesty incidences.

H0₄: Enforcement of consequences for academic dishonesty is not related to academic dishonesty incidences.

Definition of Terms

The following terms will appear throughout this study. Because some terms can have different meanings in the educational setting the researcher will define them as they are intended to be understood in this study.

*Academic Dishonesty:* In this study, this term will be applied only to students and their behaviors in and out of the classroom. Academic dishonesty is a broad term that encompasses any type of cheating as it relates to scholastic work. Academic dishonesty can include cheating on tests, quizzes, or assignments, plagiarizing, or any other type of unauthorized assistance used to complete schoolwork (Schmelkin et al., 2010). In this study, academic dishonesty will be used interchangeably with the term cheating.
Cheating: According to the Oxford English Dictionaries Online (2005), to cheat is to “act dishonestly or unfairly in order to gain an advantage” (def. 1). Finn and Frone (2004) state that, “cheating behavior ranges from unauthorized collaboration on all assignments to falsifying a bibliography to using crib notes or copying from another student during an examination” (p. 115). The terms cheating and academic dishonesty will be used interchangeably in this study.

Collaboration: In the educational setting, collaboration is students working together to accomplish a task. However, there is authorized collaboration when the teacher is encouraging or allowing students to work together and unauthorized collaboration when students are working together on an assignment or test that is meant to be individual work (Leonard & LeBrasseur, 2008).

Copy-paste plagiarism: This is a type of cheating behavior. Copy-paste plagiarism is when students copy text from digital sources, including the Internet, and paste it into some kind of school assignment without using proper citations or giving credit to the source (Ma et al., 2007; Stephens et al., 2007).

Engaging Classrooms: Classrooms that are engaging employ a variety of techniques to actively involve the student in the learning process. Engaging classrooms for the Millennial student can involve the use of technology, collaboration with peers, and problem based learning (Errey & Wood, 2011). They are less teacher-centered and more student-centered.

Digital Native: A term that Marc Prensky is generally credited with coining. He states, “our students today are all ‘native speakers’ of the digital language of
computers, video games, and the Internet” (2001, p. 1). He describes the digital 
natives as the first generation of students to have grown up in this technologically 
rich environment. These students have not known a world without computers, 
cell phones, digital music players, video games, etc. (Prensky, 2001).

*Digitally Rich:* This term can apply to the classroom setting, as well as to 
schoolwork assigned to students. Classrooms that are digitally rich include a 
variety of technology resources such as videos, blogs, online games, wikis, 
social networks and virtual labs, online textbooks, and real time data. These 
types of resources are more engaging to the 21st century learners and are what 
they desire in their education (Smith & Evans, 2010).

*Mastery Goal Classrooms:* Sometimes called mastery oriented 
classrooms, these classrooms are more focused on improvement and the efforts 
of the students, self-comparison, and actually learning the material or skills at 
hand (Anderman et al., 2009; Murdock et al., 2007). This type of classroom 
structure is the opposite of performance goal classrooms.

*Millennial Students:* These are students that were born roughly between 
1980-2000. There is not an agreed upon age range or exact years for when this 
generation starts and ends. They are also sometimes referred to in literature as 
Generation Y, the Net Generation, or Next Generation. They are described as 
being “special, sheltered, confident, team oriented, achieving, pressured, and 
conventional” (Schrum & Levin, 2009, p. 33). The Millennial Student is also a 
21st century student and a digital native.
**Pedagogy:** This term simply means teachers' instructional methods or classroom practices. Teachers’ pedagogy can be good or poor and have an impact on student behavior in their classes, including the decision to cheat or not to cheat (Murdock et al., 2007).

**Plagiarism:** This is a type of cheating behavior. The Oxford English Dictionaries Online (2005) defines plagiarism as “the practice of taking someone else’s work or ideas and passing them off as one’s own”. In his study of Internet plagiarism, Sisti (2007) explains “plagiarism may also refer to a continuum of activities in which a person lifts texts verbatim or ideas without proper reference to the source of the material” (p. 218).

**Performance Goal Classrooms:** These types of classrooms are structured so that teachers and especially students are more focused on grades, rewards, peer comparison, and competition (Anderman et al., 2009; Murdock et al., 2007). This type of classroom structure is the opposite of mastery goal classrooms.

**Web 2.0:** This is the second generation of the Internet. The term was first used in 2004. Drexler, Baralt, and Dawson (2008) describe it as “a collaborative, interactive Internet where individuals can easily share, create, and contribute to global conversations. This next generation Web offers unique opportunities for educational application in inquiry practice, collaboration, communication and individual expression, and literacy” (p. 272).

**21st Century Student:** The 21st century student is in the Millennial Generation and also is a digital native. Schrum and Levin (2009) describe them as students who are:
using the Internet as their preferred tool for learning outside of school, getting RSS feeds from multiple sources, participating in live chats, using instant messaging, creating and posting online videos, reading and writing blogs, using and contributing to wikis, modding, creating mashups, and joining smart mobs. (p. 28)

21st Century Learning: According to the Partnership for 21st Century Skills (2009) there are skills and knowledge that students today should possess in order to be successful in their careers and lives. They developed the Framework for 21st Century Learning to outline those skills and knowledge. The key learning elements include the following:

1. Mastery of core subjects and themes.
2. Learning and innovation skills, which include creative thinking, critical thinking and problem solving, communication and collaboration skills.
3. Information, media, and technology skills.
4. Life and career skills which include flexibility and adaptability, initiative and self-direction, social and cross-culture skills, productivity and accountability, and leadership and responsibility. (pp. 2-7)

Delimitations

There are delimitations that may affect the results of this study:

1. The study was conducted only with certain high schools along the Mississippi Gulf Coast.
2. Teachers may have responded in a way as to not implicate themselves or how they thought the researcher wanted them to respond.
Assumptions

The researcher assumed that the participants answered the questions on the survey honestly.

Summary

The 21st century or Millennial student is different than the typical student of past generations. This generation of student has never known a world without computers, Internet, and the multitude of technologies that exist. The way that these students are being taught has to meet their needs and engage them in the learning process. These digital natives should be instructed using the digitally rich tools that they are accustomed to using daily. If students are disengaged from learning, they might commit acts of academic dishonesty because of the irrelevance of and lack of interest in assignments and assessments that teachers are giving. Additionally, the classroom context, performance or mastery, could contribute to academic dishonesty. Technologies such as cell phones and the Internet that could be used to enhance learning and 21st century student engagement can easily be used for cheating practices. If teachers are not discussing academic honesty with their students, they may cheat and not realize what they are doing. Furthermore, teachers must enforce consequences for any type of cheating in order for students to understand the implications of being academically dishonest.

This study examined teachers’ classroom practices in order to discover if they are enabling academic dishonesty in their classes. It attempted to determine if classroom engagement and technological engagement were related
to academic dishonesty among high school students. Moreover, this study examined whether teacher explanations of cheating and enforcement of consequences for cheating were related to incidences of cheating.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

This chapter examines the research that has been conducted in the area of academic dishonesty. Much of the research done on academic dishonesty has been concentrated at the college level; however, there is a substantial amount done at the high school level. This review of the literature will look at studies conducted with both college and high schools students, as well as studies done with middle school students. The majority of this research investigates students’ self-reported cheating behaviors or how they responded to hypothetical vignettes that are manipulated by the researchers.

The Josephson Institute of Ethics administered a survey to over 40,000 high school students in 2010 in which nearly 60% of the respondents reported cheating on an exam in the past year. From 2001 to 2005 Don McCabe (2005), with the Center for Academic Integrity, conducted a survey of 18,000 students where 60% of high school students admitted to plagiarism. Anderman and Midgley (2004) reported that students’ self-reported amount of cheating increased at the high school level as compared to what was self-reported at the middle school level. Their study showed that the increase occurred at the end of the eighth grade and the beginning of the ninth grade. As students moved into high school they were more likely to cheat (Anderman & Midgley, 2004). With the amount of student cheating increasing educators must attempt to understand why in order to stop it. This chapter will discuss what the research says about
why students cheat. These reasons include students using neutralization techniques, classroom structures, teacher credibility and pedagogy, uncertainty of what exactly constitutes cheating, teachers’ attitudes towards cheating behaviors, and penalties for cheating and school policy on cheating.

Additionally, this chapter will discuss what the literature says about teaching the 21st century generation of students that are currently populating our schools, the Millennials. The way the Millennials learn is different from the way that previous generations did. The literature suggests ways for teaching these students to maximize their learning and meet their educational needs. Also, the literature discusses some inadequacies that teachers today may have in meeting the needs of their students that include incorporating technology in a sophisticated manner.

Theoretical Framework: Reasons Students Cheat

Neutralizing Attitudes

Neutralizing attitudes among students is a reason they engage in cheating. Rettinger and Kramer (2009) stated, “neutralizing attitudes allow students to rationalize behavior that is contrary to their ethical codes” (p. 295). With this attitude students justify their cheating behaviors by placing their reasons for cheating on external factors. The external factors can include students blaming others, such as the teacher, for their cheating behaviors or by rationalizing that nobody gets “hurt” by their cheating. Students also place blame on external factors such as assignments being too hard or that their peers are doing it as well. According to Murdock et al. (2008):
Students typically report that cheating is morally wrong. In the abstract, they believe it is ‘not ok,’ but when pressed to make judgments about specific incidents about cheating, they find many ways to neutralize, rationalize or justify the behavior and these rationalizations are more correlated with cheating than are one’s moral judgments about the behavior. (p. 478)

McCabe (1992), in furthering and challenging a prior study, conducted research with 6,096 college students from 31 universities in the United States. He wanted to examine the neutralization techniques they employed. Based on how the students responded McCabe classified their neutralization techniques into the five categories developed by Sykes and Matza (1957):

1. denial of responsibility
2. denial of injury
3. denial of victim
4. condemnation of the condemners
5. to higher loyalties (pp. 667-669).

Denial of responsibility can be described as students blaming their cheating on external situational factors (McCabe, 1992; Pulvers & Diekhoff, 1999). These external factors can include blaming the teacher, classroom context, or not understanding assignments. With the neutralization technique of denial of injury students feel as if their cheating is hurting no one and therefore they justify their cheating (McCabe, 1992; Pulvers & Diekhoff, 1999). Denial of victim is when students use cheating as a way to retaliate or punish a larger
establishment and not so much a teacher (McCabe, 1992). In other words, there is not one person such as a teacher who is the victim of their cheating behavior but an entire institution. When students “attack the motives and behaviors of those would who disapprove of the cheating” they are condemning the condemner (Pulvers & Diekhoff, 1999, p. 489). Lastly, when students show loyalty to a social group such as a sorority or fraternity rather than the adhering to certain norms of the larger society they are appealing to higher loyalties (McCabe, 1992; Pulvers & Diekhoff, 1999).

The results of McCabe’s (1992) study showed that 67% of the respondents admitted to cheating. That 67% were then asked about the reasons that contributed to their decisions to cheat. Based on how the students justified their cheating, McCabe (1992) placed their reasons into one of the neutralization techniques. Of these five categories, 61% of the students reported denial of responsibility as the most frequently used neutralization technique. The students gave reasons such as too much of a workload or not understanding the material. Next, 28% of students cited condemnation of the condemner to justify their cheating. They claimed that professors were uncaring, negligent in their behavior, or showed favoritism to other students. Almost 7% of the students justified cheating as appealing to higher loyalties or helping friends cheat rather than following academic polices set forth by their universities. Only 4.2% of the student surveys reported using the neutralization technique of denial of injury. These students claimed that what they cheated on was not an important test.
assignment and that no one was hurt by their behavior. Less than 1%, or a total of four students, justified cheating by denial of victim.

Taylor et al. (2002) did a qualitative study with 32 high school students in Advanced Placement or International Baccalaureate classes in order to better understand the pressures they face from self, parents, teachers, and peers to succeed. More importantly, the researchers were interested in determining if these pressures caused the students to cheat and what types of neutralizing techniques the students used to justify their academic dishonesty.

The students did, in fact, admit to cheating due to the academic pressures to be successful. The researchers reported that they observed the process, as identified by Sykes and Matza (1957), by which the students justified or neutralized their cheating behaviors. Mostly the students blamed their cheating on external factors and felt that these factors justified their behaviors. The students in this study did not feel guilty for cheating and did not think that cheating made them untrustworthy, immoral, or unethical. Taylor et al. (2002) concluded that this was because the high school students felt justified for being academically dishonest based on the external situational factors that cause them to engage in such behaviors.

Performance vs. Mastery Classrooms

In high mastery goal classrooms there is an importance and stress given to actually developing skills, improving oneself, and actually learning, whereas the performance goal classroom structure is more concerned with grades and how the student compares to the other students in that class. In other words,
competition with classmates is emphasized in the performance goal classrooms. The performance goal classroom does not focus on the retention of knowledge. Anderman and Midgley (2004) state that there are “negative academic outcomes” (p. 501) associated with performance goal structured classrooms and positive academic outcomes attached to mastery goal structured classrooms. Research suggests that cheating is more likely to occur in classes that are performance goal oriented than in mastery goal classrooms. Furthermore, students are more likely to justify cheating behaviors in classes that are performance goal structured. According to Anderman et al., (2009), “goal structures are communicated to students via interactions with teachers and instructional practices used by teachers in classrooms” (p. 136); therefore, students may or may not be more likely to cheat based on what teachers are communicating to students by how they conduct their classes.

Anderman and Midgley (2004) conducted a longitudinal study with middle school students transitioning to high school to examine if cheating increased as students moved from middle school to high school. Additionally, they wanted to see if cheating was positively related to classrooms that were performance based and negatively related to classes that were mastery goal related. In the fall of eighth grade, 341 students participated in their study, and 586 students participated in the spring data collection. When they collected data during the ninth grade year there was a total of 507 participants from the original eighth grade students. Students completed surveys twice in the eighth grade, once in
the fall and once in the spring, and they completed another survey at the end of their ninth grade year.

Anderman and Midgley’s (2004) study revealed that cheating did, in fact, increase as students moved from middle school to high school and that “higher levels of cheating were associated with a perceived performance goal structure, and lower levels of cheating were associated with a perceived mastery goal structure” (p. 513). Moreover, Anderman and Midgley (2004) found that the incidence of cheating increased when students went from a class that was considered high mastery to a low mastery class and decreased when they moved to a class that had high mastery goals from a class that was considered low mastery.

Murdock et al. (2004) conducted a two-part study to examine classroom context variables and cheating with high school students. In the first part of their study they used vignettes to manipulate classroom structure to mastery goal and to performance goal to see if one or the other would affect students’ justifications to cheat. Murdock et al. (2004) stated, “in performance-oriented versus mastery-oriented classrooms students may see themselves as having less control over their grades because their high effort can be out performed by students with other advantages, such as high ability” (p. 767). Therefore, they hypothesized that cheating would be more accepted and more likely to occur in classes that were performance goal oriented rather than in the mastery oriented ones. They conducted this part of their study with 204 ninth and tenth graders from a Midwestern semi-urban middle class high school. Their results showed that
students justified cheating in classes that they saw as more performance based rather than focused on mastery.

In 2007, Murdock et al. replicated and extended their 2004 research by conducting a two-part study using both undergraduate and graduate students. As part of this study, they wanted to determine if the goal structure, mastery or performance, of the class would affect the likelihood of student cheating. They hypothesized that students, based on vignettes that they had read, would blame the teacher more for their cheating in performance goal structure classes and blame the teacher less in mastery goal structured classes. Two hundred and twenty four undergraduate students participated in the first study and 195 graduate students participated in the second study of this research.

As Murdock et al. (2007) had hypothesized, the undergraduate students demonstrated that cheating was more acceptable in classes that were performance based rather that mastery goal structured. The students were more likely to blame the teacher for cheating in the performance based classes. Graduate students responded similarly to the hypothetical scenarios. They too blamed the teacher and the classroom goal structure for academic dishonesty.

The findings of this 2007 Murdock et al. study with undergraduate and graduate students were consistent with the 2004 Murdock et al. research conducted with high school students. Students were more likely to justify cheating in classrooms that were performance based rather than mastery goal oriented. Murdock et al. (2007) stated, “levels of blame for cheating shifted
toward the teacher and away from the student who cheated when the classroom was portrayed as having a performance versus mastery goal structure” (p. 162).

Anderman et al. (2009), conducted a study with high school students to examine whether or not academic dishonesty was related to students impulsivity, while also taking into consideration the classroom structure, mastery or performance goal oriented. One of their four hypotheses was that students would cheat less in classes that were perceived as mastery goal structured. Their study consisted of 583 high school students enrolled in health education classes in five different high schools in two Midwestern cities.

Anderman et al.’s (2009) hypothesis was confirmed. They found that students who reported cheating frequently were less likely to cheat in mastery goal structured classes. However, their examination of the interaction between students’ impulsivity and the perception of a mastery goal structure classroom did not yield a significant result. This showed that students who were impulsive were more likely to cheat, but the level of impulsivity was not significant in reducing or increasing the likelihood of cheating in the mastery goal classroom. The reduction of cheating in the mastery classroom was “constant across all levels of impulsivity” (Anderman et al., 2009, p.145).

Teacher Credibility and Pedagogy

Studies have shown that students will externalize the blame for cheating to their teacher. Often, their decisions to cheat or not to cheat are based on whether they perceive their teachers to be credible. Research has shown that students are more likely to cheat in classes where they do not perceive their
teacher as credible. Additionally, students will justify cheating based on the
teacher’s pedagogy or classroom practices. If the teacher has poor pedagogical
skills, –students, both high school and college– will rate cheating as more
justifiable than if the teacher has good pedagogical skills. According to Murdock
et al. (2008), “teachers’ policies and practices are among the most frequently
used justification of dishonest behavior” (p. 478).

As a second part of their study, Murdock et al. (2004) used hypothetical
vignettes to examine the effect of teacher pedagogy on high school student
cheating and their justifications for it. The researchers used the vignettes to
manipulate teacher competence. It was their belief that “students would be more
likely to see cheating as okay when they could externalize the responsibility for
cheating as being due to something related to teachers not fulfilling their part of
the teaching-learning contract” (Murdock et al., 2004, p. 766). Therefore, they
hypothesized that students would project more blame for cheating on the
teachers that were perceived as having poor pedagogical skills. Additionally, the
students would feel less blame for cheating in classes where teachers’
pedagogical skills were poor. They believed that this shift in blame to the teacher
rather than to the student would occur because students that worked hard in
classes with teachers with poor pedagogical methods would find it more difficult
to be academically successful; therefore, the students felt justified to be
academically dishonest. As reported previously, this part of their study was
conducted with 204 ninth and tenth graders from a Midwestern semi-urban
middle class high school.
Murdock et al. (2004) found that students did, in fact, blame teachers more for cheating when their pedagogy was poor. Students rated cheating as more justifiable with teachers with poor versus good pedagogy. Furthermore, the researchers found that the students in this study viewed cheating to occur the least in classrooms where the teacher not only used good pedagogy but also had a mastery goal structured class.

The Murdock et al. (2007) study with 224 college undergraduate and 195 graduate students not only examined the classroom goal structure and its effect on cheating, but also how teacher pedagogy, good versus poor, affected student cheating and their justification of it. As in their 2004 study with high school students, the college students in this study were given hypothetical vignettes portraying teachers with both good and poor pedagogical skills. They hypothesized that students would assign more blame for cheating to the teacher rather than to themselves when the teachers' pedagogy was poor. They also hypothesized that the likelihood and acceptability of cheating would increase with poor pedagogy.

The results with both the undergraduate and graduate students were consistent. Both groups of students rated cheating as more acceptable and more likely in classes where the teacher's pedagogy was poor. The level of blame for cheating was shifted to the teacher with the poor pedagogy rather than to the student. Both the undergraduate and graduate students both viewed cheating as more justifiable when the teacher was to blame. Murdock et al. (2007) concluded, based on their findings, that students have expectations of
how a teacher should behave, and when the teacher does not live up to these expectations then this justifies their cheating behaviors. Murdock et al. (2007) stated, “a teacher’s failure to behave in ways that are consistent with these expectations may legitimize students’ engaging in behavior that would otherwise not be viewed as appropriate” (p. 164).

Murdock et al (2008) wanted to study the effect that classroom and individual influences had on students and their attributions of blame for cheating. They also wanted to look at the relationship between actual student cheating based on the students’ attributions of blame. Murdock et al. (2008) conducted this study with 444 high school students who were enrolled in 48 different math and science classes. They hypothesized that students who externalized blame would find teachers more responsible for hypothetical cheating, and students would blame the teachers for cheating if they saw them as incompetent or disrespectful. The data was collected at two different times in the year. The first data collection was done in September and did not ask about the students’ actual cheating behaviors but, rather, about specific teachers’ competence levels and their respect for students. They were asked about the amount of blame that should be assigned to teachers and to students based on hypothetical cheating done in specific teachers’ classes. At the second data collection done in April, students were asked about their own cheating behaviors in those classes and if they had actually cheated, and their attributions for it.

Murdock et al. (2008) found that students assigned less blame for hypothetical cheating to teachers when they saw them to be competent and
respectful. In the second data collection, students that actually had cheated assigned higher levels of blame to their teacher when they reported them to have poor pedagogy competence in the fall data collection. Whether the cheating was hypothetical or actual, students assign more of the blame for it to teachers who had inferior classroom competence. Based on the data from this study, Murdock et al. (2007) concluded that “teacher practices do make a difference in how students reason about the acceptability of cheating, and that they may influence students’ actual tendency to cheat” (p. 486).

In addition to studying academic dishonesty and impulsivity as it related to the goal structure of the classroom, Anderman et al. (2009) examined how it relates to perceived teacher credibility. They define teacher credibility as “students’ perceptions of teachers’ competence, trustworthiness, and caring,” (Anderman et al., 2009, p.138). In addition to hypothesizing that the students who were impulsive would cheat more than those who were not, they hypothesized that cheating would not occur as often when students saw their teachers as credible. Conversely, they believed cheating would increase when students viewed their teachers as not being very credible. In this study, the researchers surveyed 583 students enrolled in health classes from five different high schools in the Midwest. The students were instructed to think about that particular health class when answering the questions on the survey.

They found that teacher credibility was related to whether the students cheated. Whether the students were identified as impulsive as an extensive or moderate cheater they reported that they were not as likely to cheat in the health
classes where they viewed their teacher as credible. Anderman et al. (2009) deduced that “when teachers are perceived as credible, students may perceive the information as being more valuable, and they may actually learn the material more effectively and may not feel as much of a need to cheat” (p. 145).

Uncertainty of What Constitutes Cheating

Many students in this day and age are unclear as to what exactly cheating is. We live in a culture where cutting and pasting from the Internet is second nature to many students. In a survey conducted by Common Sense Media (2009) with 1,013 students within the age range of 13-18, 23% of students surveyed did not think that storing answers in a cell phone to use during tests was cheating. In this same survey, 20% of students did not think texting a friend for answers during a test was cheating (Common Sense Media, 2009). When Common Sense Media (2009) surveyed them about downloading a paper from the Internet to turn in as their own, 19% indicated that it was not cheating and an additional 36% did not think that it was a serious offence. Some students believe that it is not considered cheating if they give information to aid another student. Haines, Diekhoff, LaBeff, and Clark (1986) found that students could neutralize giving information to another student easier than receiving information. Taylor et al. (2002) reported that the students in their study did not think that letting another student copy their homework was cheating as long as they tried to help the copier understand the material. Sometimes this lack of a clear definition of academic honesty or concept of what cheating is can cause students to unintentionally cheat or to cheat without realizing that is what they are doing.
Schmelkin et al. (2010) conducted a study with 56 high school students in Advanced Placement classes to investigate their perceptions of academic dishonesty. Schmelkin et al. (2010) maintain that there is no clear classification of the different levels of seriousness of academic dishonesty like, cheating on a test versus cheating on homework. In 1989 McLaughlin and Ross as cited by Schmelkin et al. 2010 explained that, whereas students could easily identify certain behaviors exhibited during a test as cheating, the level of seriousness assigned to those behaviors was rated as middle to low by the students. Moreover, Schmelkin et al. stated that students, teachers, and administrators all have differing views of what cheating actually is and, because of this lack of understanding, students unintentionally cheat. The students in this study looked at 30 different academic behaviors and either sorted them into cheating categories or rated them in terms of seriousness.

Analyzing their results, Schmelkin et al. (2010) found that the students had different levels of seriousness of academic dishonesty from severe to mild based on the type cheating that was committed. Students perceived that working with other students to complete an assignment was not as serious as cheating on a test or writing a paper for another student. Teachers, administrators, and students do not always perceive cheating in the same way. For many teachers and administrators cheating of any type is cut and dry. There are not levels of cheating or grey areas. Additionally, Schmelkin et al.’s (2010), results showed the importance of not only establishing a standardized definition of what constitutes academic dishonesty, but they highlight the importance of
maintaining a fluid understanding of cheating...as the Internet changes
and students have more technology at their disposal, it will become
important for teachers to explain the parameters of academic dishonesty
(p. 163).

Ma et al. (2007) conducted a qualitative study with a total of 36 middle
school participants from three different schools. Because cheating, with the
plethora of technology that exists now, can be pervasive in schools, they
examined the middle school students' attitudes toward plagiarism and digital
cheating. Ma et al. (2007) conducted interviews and had focus groups with these
students in order to collect their data. In addition, they interviewed these
students’ parents, teachers, and librarians in an attempt to understand their
attitudes and perceptions of student cheating.

The students discussed how much they loved using the Internet to find
information and help them with their schoolwork. However, two-thirds of the
students said they saw their peers copy and paste from the Internet for a school
assignment and 25% of them admitted to doing it as well. Ma et al. (2007) found
that the students did not have a clear idea of what exactly constitutes plagiarism.
Even though their teacher reported that they went over what plagiarism is, the
students discussed copying and pasting from the Internet as though it was not a
serious offense.

Sisti (2007) conducted a study with 160 high school students to better
understand and describe how they use the Internet to do their school
assignments. Particularly the study sought to understand how students justify
copy-paste plagiarism and/or buying prewritten papers from Internet websites. Sisti argues that sometimes plagiarism is intentional and, other times, unintentional or represents “cryptomnesia—the unconscious appropriation of another author’s work by a plagiarist who thinks the work they are producing is original,” (Sisti, 2007, p. 218). Because of how easy it is for students to merely copy and paste from the Internet, Sisti believed cryptomnesia or unintentional plagiarism happens; therefore, students do not realize that they are cheating.

Sisti’s (2007) results showed that over a third of the students admitted to copying and pasting information from the Internet into a school assignment without a citation. Of those students, only 46% thought that it was plagiarizing. The justifications that the students gave for copy-paste plagiarism were broad neutralization categories. Most of the students stated that they did not have enough time to complete the assignment. Furthermore, students revealed that their peers had an impact on them and their decision to cheat by claiming that everyone does it. Lastly, the students indicated that the school did not have a clear policy on copy-paste plagiarism. Of the 160 students surveyed, only 2% of them had bought and turned in a paper from the Internet. The students indicated that they did not buy papers because they knew that it was cheating. With the number of students copying and pasting being higher than the number of students actually buying papers from the Internet show that within a high school there are discrepancies among students in what they consider cheating. Also, this difference shows what cheating behaviors are acceptable or not acceptable among them.
Similarly, Colnerud and Rosander (2009) did a study with 325 Swedish students. The students were given a questionnaire with 23 different situations and asked whether they thought the situations were cheating. Their results showed that the students considered certain situations as definite cheating such as having another student take a test for them or plagiarizing from a book. The researchers believed that students considered these situations as cheating because they involved little or no work by the perpetrator. Conversely, when the cheater actually had to put forth some effort, certain situations were not seen as cheating, like looking at an old exam to prepare for a test or to refer to a book or an article without actually having read it. This study shows that students have grey areas in regard to academic dishonesty and can be confused by what behaviors are considered cheating.

In order to understand high school students’ belief-behavior incongruity, Stephens and Nicholson (2008) conducted a qualitative study with 15 high school students. These students were purposefully chosen to participate based on interviews that revealed that they did not cheat or believed cheating was wrong but did so anyway. After subsequent interviews, the 15 students were narrowed down to four that presented the best representation of belief-behavior incongruity. Even though these students thought cheating was wrong, they did not think homework cheating was wrong or even see it as cheating. Stephens and Nicholson (2008) found that the students perceived different levels of cheating. Test cheating, although justified by these students, was viewed as the most severe type of cheating, and plagiarism was seen as a medium offense.
Teacher Attitudes towards Cheating Behaviors

Some of the research done in determining why students cheat has examined teachers’ attitudes towards it and whether their attitudes prevent or contribute to cheating. Donald McCabe (1999) led four focus group discussions with 32 high school students in an attempt to understand students’ attitudes towards cheating. The students shared with him that the teachers rarely discussed cheating. They stated that teachers might mention cheating only on the first day of school. McCabe (1999) asserts that in high school one of the most influential factors on students’ decisions to cheat is the teacher. He determined, based on the students’ responses “that teachers are simply not concerned about cheating” (p. 685).

Dant (1986) conducted a study with 309 college freshmen to understand their high school teachers’ roles in either encouraging or discouraging plagiarism in their high school classes. Students in this study indicated that 17% of teachers encouraged them to directly copy from a source to complete an assignment. Additionally, only 34% of all their high school teachers instructed them to properly quote and cite sources. Based on the data collected, Dant (1986) concluded that many teachers themselves are confused about what exactly plagiarism is and, therefore, their perceptions and attitudes influence their students cheating behaviors. Therefore, the students in this study unintentionally cheated.

In the aforementioned study conducted by Sisti (2007), he expanded on the findings of Dant (1986) and contended that many teachers nowadays with the
expansive amount of digital content may themselves be confused about what digital plagiarism really is; therefore, the attitudes they convey to students might not be discouraging their students plagiarizing or encouraging academically honest behaviors like properly citing and quoting sources.

Penalties for Cheating and School Policy

Research has shown that students are more likely to cheat when there is not a clear academic dishonesty policy or honor code in place; however, the mere existence of a cheating policy or honor code will not prevent students from cheating. Teachers and school officials have to enforce the policies and follow through on the predetermined consequences for academic dishonesty.

In Ma et al.’s study (2007), middle school students reported that “there was no immediate consequence for them if they cheat occasionally” (p. 77) and that there was no punishment for digital cheating. They determined that this lack of penalty for cheating had contributed to the increase in copy-paste plagiarism. In addition, they emphasized that schools must have a clear definition as to what plagiarism is and enforce punishment for students who plagiarize. Similarly, the high school students in Sisti’s (2007) research indicated that the school lacked a clear policy regarding copy-paste plagiarism. Clearly, the absence of a policy does not discourage students from cheating.

Vinski and Tryon (2009) conducted a qualitative study with 45 high school students to understand their cheating behaviors and to determine if an intervention would deter students from cheating. Ninety percent of these students confessed to cheating in school. They revealed that they had not been
punished for their cheating. The majority of them, two-thirds, claimed to have never been caught cheating and did not feel they would ever be caught. This lack of consequences encouraged students to continue with their academically dishonest behaviors. Schmelkin et al. (2010) reported that teachers do not always report cheating that occurs in their classes and are, thus, “inadvertently contributing to this process [cheating] by not consistently reporting transgressions and thereby not helping students learn from their mistakes” (p. 163).

McCabe (1993) did a study with 800 faculty members from colleges across the United States to determine if an honor code affected the amount of reported student cheating. He found that faculty at colleges both with and without an honor code were reluctant to report cheating. Faculty reported that they preferred to deal with cheating on their own rather than report it. McCabe (1993) reported that the faculty responses substantiated students’ perceptions in that teachers are not very strict or diligent in their dealings with cheating. Based on the results of this study, McCabe et al. (2001) stated, because of this lack of enforcement of honor codes, “it is hard to convince students that an ethic of integrity exists on campus and cheating can easily become the campus norm” (p. 226). Students are more likely to cheat when they perceive that there will not be consequences for their behaviors.

Student Engagement

The National Research Council (2003) reports that educators have been unsuccessful at effectively engaging their students and that “40 to 60 percent of
high school students are chronically disengaged” (p. 18). Positive outcomes are associated with student engagement, and educators must understand what engaging students entails.

Thijs and Verkuyten (2009) state, “student engagement can be considered as the tendency to be behaviorally, emotionally, and cognitively involved in academic activities” (p. 268). Fredricks, Blumenfeld, and Paris (2004) simply describe behavioral engagement as the students being participatory in their academics and emotional engagement as the students’ feelings towards teachers, other students, and assignments. They explain that cognitive engagement is when the student is willing to put forth the effort to learn the subject matter at hand no matter how difficult. Students who are engaged in their learning process will have more positive educational outcomes (Fredricks et al. 2004; Thijs et al., 2009). When talking about behavioral engagement, Fredricks et al. (2004) stated that studies have cited it as being more linked to achievement. This is due to the fact that students are using “superficial learning strategies,” which are seen in the typical classroom, rather than exerting critical thinking skills to obtain deep understanding, which are qualities of cognitive engagement. With cognitive engagement students are putting forth more effort in their learning and real student learning takes place. Harlow, DeBacker, and Crowson (2011) explain that when a student uses deep processing of information they are more engaged, and this is seen in more mastery goal oriented classes. However, they also express that the performance goal classrooms are associated with repetition and memorization, which are less engaging.
Teaching the 21st Century Millennial Student

The Millennial student is drastically different than the students of the past. According to Cramer (2007), the Millennials may be “more challenging to teach, as they were seemingly born with technology in their hand and are most accustomed to using it throughout the day” (p. 129). This can be challenging for teachers who are not technologically savvy and do not use it in their classrooms or in assignments. In a Pew Study, Levin and Arafeh (2002) explain how students are dissatisfied with how technology is used in their classes. “Students report that there is a substantial disconnect between how they use the Internet for school and how they use the Internet during the school day and under teacher direction” (Levin et al., 2002, p. iii). In other words, the way that teachers are employing technology in their assignments and classroom instruction is “a waste of time or boring” (Levin et al., 2002, p. 16). The Pew Study (Levin et. al., 2002) stressed that these Millennial students desire digitally rich assignments that are both engaging and relevant to their lives. Lent (2006) echoes this in her discussion of engaging high school students by stating that students “must believe that their new learning is relevant to their lives” (p. 69). However, Cramer (2007) goes on to explain that the Millennials, in some ways, are actually easier to teach because they value being smart. Wilson (2004) explains that, because they were raised to achieve goals, they will push themselves to meet high expectations.

Teachers have to understand how to instruct Millennials. Because they are generally team oriented, group work and collaboration is vital in their
education (Werth & Werth, 2011, p. 14). Similarly, Wilson (2004) describes them as “cooperative team players” and recommends that, for these students to learn better, they need to be engaged and involved in their learning. In addition, Wilson (2004) explains that these students need less teacher-centered lecture and more class discussions and collaboration to be more engaged in learning. Werth and Werth (2011) contend that instruction in educational settings is too teacher-centered and there needs to be a shift to more student-centered instruction. They go on to say that an important step in restructuring education for the Millennial student is incorporating and effectively using technology and deemphasizing teacher-centered lectures (Werth & Werth, 2011).

Smith and Evans (2010) in their report of the findings of the Speak Up 2009 national survey conducted with Kindergarten through 12th grade students identify three elements that students surveyed identified as being essential for 21st century learning: social-based, untethered, and digitally rich. However, the Speak Up 2010 survey (Project Tomorrow, 2011) found that not many teachers reported using digitally rich technologies. For example, of the high school teachers surveyed only 10% used real time data, 11% used virtual field trips, and 11% used virtual labs. Additionally, Smith and Evans (2010) reported that the types of digital technologies that teachers report using are low-level, such as test prep software or websites. Despite the fact that students, as they expressed in the Speak Up 2009 survey, desire engaging digital technologies in their learning environments, the actual teacher implementation of these technologies is lacking.
In their discussion of different variables that either help or prevent teachers from integrating technology into their classes, Ertmer and Ottenbriet-Leftwich (2010) assert that the types of technologies that teachers report using are low-level. They explain that this low-level implementation is not sufficient enough to meet the needs of 21st century students. Ertmer et al. (2010) state “teachers need to understand how to use technology to facilitate meaningful learning, defined as that which enables students to construct deep and connected knowledge, which can be applied to real situations” (p. 257). In order for this change to happen to positively impact 21st century learning, Ertmer et al. (2010) identify four key teacher variables: knowledge, self-efficacy, pedagogical beliefs, and school culture, which need to be addressed. Teachers need to have knowledge of the technologies that exist and how to fully implement them to engage their Millennials. Next, more than just knowing about the technology, teachers need to have confidence in their abilities to incorporate it into their classrooms. Ertmer et al. (2010) state that a teacher’s pedagogical beliefs influence the way that he or she implements technology in the classroom, and those teachers with more traditional pedagogical belief will implement more low-level types of technology. Lastly, they describe how the school culture must be one that supports the use of various technologies and supports teachers in their endeavors to try out new technological practices (Ertmer et al., 2010).

Clark, Logan, Luckin, Mee, and Oliver (2009) conducted a study with Millennial students between the ages of 11 and 16 to explore their use of Web 2.0 technologies in and out of school. They found that the students have a wide
variety of technologies such as cell phones, computers with Internet, and iPods and that they use many Web 2.0 sites for social networking, file sharing, and gaming. However, the students did not report using these engaging technologies in formal school settings. Clark et al. (2009) reported that, based on their findings students would like to use the Web 2.0 technologies to enhance their learning in the formal school context. Teachers must understand the needs of this generation of students and learn how to incorporate what students are doing outside of school in their classroom instruction.

Roehling, Kooi, Dykema, Quisenberry, and Vandlen (2011) conducted interviews with six focus groups of college sophomores and juniors in order to understand how to effectively engage Millennials in classroom discussions. They contend that Millennials “are easily bored, expect variety, are self-directed, are collaborative, are ethnically diverse and crave interactivity” (Roehling et al., 2011, p. 1) and that engaging them in classroom discussions is different than in previous generations. Roehling et al. (2011) found that these students value class discussions because they are active, keep them engaged, and help them have a deeper understand the content being taught. The students preferred class discussions teacher-centered lectures.

His, (2007) in her discussion on “digital kids” (p. 1509) or Millennials, argues the need for educators to use technologies in sophisticated ways to enhance student learning and engage them in interactive learning. She explains that digital kids:

1. build on their own skills and knowledge
2. take on different identities and multiple roles
3. voluntarily spend time working on a set of technology-based skills and becoming fluent in them over time.
4. are co-constructing a social reality and establishing norms for participation
5. take ownership of media creations and online expressions
6. consume multimedia that was created by others and created by themselves, engaging in 'two-way literacies' in cultural production of knowledge
7. demonstrate fluency by simultaneously operating and managing multiple devices and multiple media types including cell phones, the Internet, and television
8. work on complex problems that require distributive teams to solve (Hsi 2007, pp. 1513-1514).

Educators must determine how to harness the use of the multitudes of technologies so that students can employ their out-of-school skills in the classroom, thus creating an engaging environment for the 21st century student. Hsi (2007) also explains that with the vast amount of technologies available and the Millennial students' fluency with them, teachers' educational responsibility is vital. According to His (2007), students still need teacher guidance in order to understand the implications of posting personal information when using blogs or other public Web 2.0 tools.
Use of Technology in the Classroom

According to the International Society for Technology in Education (ISTE) (2008), when technology is implemented and integrated effectively in the classroom, student achievement is positively affected. In addition, ISTE stated that when technology is used in instruction and in the classroom, it provides students with the necessary 21st century skills that are needed to prepare them for the future. The ISTE (2008) defines seven factors that are necessary for the effective implementation of technology:

1. Effective professional development for teachers in the integration of technology into instruction is necessary to support student learning.
2. Teachers’ direct application of technology must be aligned to local and/or state curriculum standards.
3. Technology must be incorporated into the daily learning schedule.
4. Programs and applications must provide individualized feedback to students and teachers and must have the ability to tailor lessons to individual student needs.
5. Student collaboration in the use of technology is more effective in influencing student achievement than strictly individual use.
6. Project-based learning and real-world simulations are more effective in changing student motivation and achievement than drill-and-practice applications.
7. Effective technology integration requires leadership, support, and modeling from teachers, administrators, and the community/parents. (pp. 7-8)

The Common Core State Standard’s (CCSS) writing Standard six for 9th and 10th graders (W.9-10.6) states that students should “use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010). With these standards, adopted by 45 states, teachers have to understand how to integrate and implement technology effectively in their classrooms.

Herrington and Kervin (2007) argue that it is essential that teachers incorporate technology into instruction so that students will be challenged to solve authentic and complex problems. They stress that technology is effective when it is employed in authentic contexts and activities. Herrington et al. (2007) explain, “context needs to be all-embracing, to provide the purpose and motivation for learning, and to provide a sustained and complex learning environment that can be explored at length” (p. 222). The use of technology helps bring authentic contexts to students that otherwise would not be available to them. For example, they could take virtual field trips via the Internet to places such as the Mississippi Gulf Coast to investigate and find solutions to an oil spill. Students would be able to see images, video, read different sources, and investigate ways to resolve various problems associated with the spill, all from
within their classroom. Herrington et al. (2007) also explain that through technology students need to be able to reflect on their learning process. This can be done through blogs, online journals, wikis, or word-processing tools and does not have to be a traditional written type of reflection. They could include videos, graphics, pictures, audio clips, or other digital media.

Lenhart, Ling, Campbell, Purcell, and Pew Internet and American Life Research (2010), found that 75% of 12 to 17 years old have cell phones (p.14). Cell phones can be a powerful technology if incorporated effectively in the classroom. Kolb (2011) articulates that 21st century students do not want their learning to be confined to the classroom, and with cell phones they can conduct research, collaborate with peers, or catch up on current events anywhere and anytime. She believes that educators should harness this use within schools so that students can use their phones as educational tools that enhance their learning. Kolb (2011) provides activities in which teachers can incorporate cell phones into the classroom. Kolb (2011) suggests using them to make podcasts or oral recordings of homework assignments or answers to a quiz that students are prompted to take via a text message. In addition, students can create digital storybooks by taking pictures and uploading to Yodio, a website that allows students to create and collaborate on digital stories (Kolb, 2011). Cell phones can be utilized as a class response system for taking quizzes or instant polls (Kolb 2011). Results from these can be displayed immediately for instant feedback. There are several free websites that offer this type of polling capability to teachers. Kolb (2011) explains that cell phones can also be used as an
information-gathering tool as well that can be employed in a variety of assignments as research projects. Cell phones are a simple but important technology tool for teachers to take advantage of to engage their digital native students.

Assignments and Assessments for the 21st Century Millennial Students

Because the 21st century student is not the same student that attended our schools ten or more years ago, the way that they are assessed should not be the same multiple-choice, fill-in-the blank, or true-false assessment that has been given over the years. Additionally, with 45 states plus the District of Columbia adopting the Common Core State Standards and agreeing to full implementation by the 2013-2014 school year (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010), the way students are assessed is going to have to transform. The reading and language arts section of these standards require that students collaborate and communicate with peers and produce multimedia presentations (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010). The two testing consortia for the CCSS, Partnership for Assessment of Readiness for College and Careers (PARCC) and SMARTER Balanced Assessment Consortium (SBAC), have begun the process of developing assessments for the Common Core State Standards. The 45 states have either joined the PARCC consortium or the SBAC, with a few states belonging to both. The assessments that both PARCC and SBAC are proposing may require students to demonstrate higher levels of thinking with more open ended and performance-based questions and
less multiple choice questions than traditionally appear on state tests 
(Partnership for Assessment of Readiness for College and Careers, 2012; Smarter Balanced Assessment Consortium, 2012). When describing performance-based tasks the SBAC states:

Performance tasks challenge students to apply their knowledge and skills to respond to real-world problems. They can best be described as collections of questions and activities that are coherently connected to a single theme or scenario. These activities are meant to measure capacities such as depth of understanding, research skills, and complex analysis, which cannot be adequately assessed with selected- or constructed-response items. (Smarter Balanced Assessment Consortium, 2012)

According to Regan (2008), “assessment of 21st-century skills can be challenging and is too multifaceted to be captured by a simple multiple-choice test” (p.14). Students should be able to demonstrate what they can do and what they learned. Besides the standard multiple-choice tests that are mostly performance-based, Regan (2010) asserts that educators have to allow students to demonstrate what they have learned through nontraditional ways. These ways include a variety of multimedia technologies. Regan (2010) also explains that as the level and quality of students’ work increases, the way in which teachers evaluate it must change. Regan (2010) suggests using electronic portfolio-based assessments, which could incorporate written work, videos, recordings, etc.
According to Bell (2010) standardized tests only measure one kind of achievement, usually in a specific content area. These standardized tests do not measure the Millennial student’s ability to be able to think critically (Bell, 2010) or solve problems. However, project-based learning is one way to measure critical thinking. Bell (2010) contends that students who are taught using project-based learning are more proficient with critical thinking skills. Bell (2010) explains that project-based learning should be student-driven arising from his or her own natural curiosity and guided by the teacher who is more of a facilitator.

Summary

Twenty-first century students desire to be actively engaged in their learning. They are accustomed to working with and collaborating with their peers through the use of various technologies. These Millennials are technologically savvy and crave using the technologies they use outside of school inside their classrooms. However, the implementation of technology in schools is lacking, and students report feeling a disconnect (Ertmer & Ottenbriet-Leftwich, 2010; Smith & Evans, 2010) between what they do in and out of the classroom. The literature has shown that the number of students cheating is increasing, and it also explains that students justify this academic dishonesty through various external factors, including the classroom structure and the teacher having poor pedagogical skills. Students do not necessarily see that their cheating is wrong because they feel justified in doing so. Additionally, the literature has shown that students may cheat because teachers are not explaining what constitutes cheating. This explanation is imperative for these digital natives who see nothing
wrong with copy-paste plagiarism. Teachers must also consistently enforce consequences for cheating so that students will understand that is wrong.

Teachers have to design assessments and assignments that allow students to demonstrate higher order thinking skills. These assessments should be more than the low mastery assessments that have been given in the past and include project-based tasks. It is essential that teachers examine their classroom practices to determine if they are enabling or fostering academic dishonesty so that the education of our students is not compromised.
CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to examine high school teachers’ classroom practices to determine whether these practices are contributing to students cheating in their classes. These practices included having engaging classrooms and assignments, incorporating engaging technology, explaining academic dishonesty, and enforcing consequences for cheating. This methodology section will explain the design of the study and review the Research Questions and Hypotheses made by the researcher. Additionally, the researcher will give a detailed explanation of the instrumentation including how it was reviewed for validity and internal consistency.

Research Design

The research design of this study was quantitative and employed the survey method. Five Research Questions, described below, guided this study. The four Hypotheses were devised from the guiding Research Questions to help the researcher determine if teachers’ classroom practices were related to academic dishonesty in their classes. Participants from four high schools along the Mississippi Gulf Coast were selected to participate in this study. They answered Likert-style questions on a survey instrument developed by the researcher. Once the data collection was complete, it was coded and entered into the statistical SPSS program and analyzed by the researcher.
Participants

The researcher solicited permission from nine school district superintendents along the Mississippi Gulf Coast to allow questionnaires to be distributed to their high school teachers (Appendix A). Out of the nine superintendents, the researcher gained permission to conduct this study from six of them (Appendix A). The researcher then chose four of those six schools from which to collect data. Once permission was granted from the school district superintendent, the researcher made contact with the high school principals in three of those high schools and, in one district per the superintendent made contact with the district’s federal programs director to set up a date to distribute and collect the questionnaires from the participants. All four of these individuals preferred that the researcher give them the questionnaire and they distribute and collect them. At three of the schools the questionnaire was distributed at a faculty meeting, and the building principal collected them as soon as the participants had completed them. The fourth school district’s federal programs director passed the questionnaires out on a Monday and requested that teachers complete them by Friday of that same week.

Research Questions

In order to better understand teacher classroom practice and student academic dishonesty, the researcher attempted to answer the following questions:

1. Do teachers who have less engaging classes and assignments report higher incidences of cheating?
2. Do teachers who regularly engage their students in class and have engaging assignments report fewer incidences of cheating in their classes?

3. Do teachers who technologically engage their students report fewer incidences of cheating?

4. Are teachers explaining to their students what academic dishonesty is?

5. Do teachers regularly enforce predetermined consequences for cheating?

Hypotheses

Based on the Research Questions the researcher made the following hypotheses:

H0₁: There is not a statistically significant relationship between academic dishonesty and classroom engagement.

H0₂: There is not a statistically significant relationship between academic dishonesty and technological engagement.

H0₃: Explanation of academic dishonesty is not related to academic dishonesty incidences.

H0₄: Enforcement of consequences for academic dishonesty is not related to academic dishonesty incidences.

Instrumentation

The researcher developed a survey instrument called 21st Century Teaching Survey for high school teachers (Appendix B). This survey instrument asked three demographic questions: gender, age, and years of teaching.
experience. This portion of the survey helped the researcher understand the demographic makeup of the participants in this study.

The first section of the survey, Classroom Practices, consisted of 22 questions, which surveyed the teachers on their classroom practices ranging from the type of assignments and tests they give to whether students are allowed collaboration and communication time. The purpose of this first section of the survey was to give the researcher the necessary data to determine whether the teachers’ classrooms are engaging or not. More engaging classrooms were indicated by the participant selecting the following choices: 1) allow students to work with a classmate, 4) use problem-based learning, 8) allow students to collaborate to complete an assignment, 9) use classroom discussion, 10) use performance based assessments, 11) assign writing assignments, 13) use project-based learning, 14) use open ended assessment questions, 15) differentiate instruction, 16) allow students to work in groups, 18) assign student presentations, 19) use hands on activities, and 21) use cooperative learning groups. The more frequently the teacher indicated on the survey performing these more engaging practices denoted the levels of engagement in the classroom. For these engaging classroom practices the participant received a score of zero to four based on their responses. A score of zero was assigned to responses of never and a score of four was assigned to daily. Also included in this section of the instrument were items that indicated a less engaging classroom: 2) assign worksheets as class work, 3) use lecture to teach your content, 5) use a textbook to teach your content, 6) give multiple-choice tests, 7)
assign worksheets as homework, 12) assign students reading to teach your content, 17) assign worksheets to assess for learning, 20) use whole group instruction, 22) use fill-in-the-blank type assessments. For these questions of the instrument the participant received a score of zero to four based on their responses. A score of zero will was assigned to responses of daily and a score of four was assigned to responses of never. This section of the survey had an other category and based on the participants’ responses other was designated to mean less than weekly.

The second section of the survey, Technology Classroom Practices, was made up of 18 questions. It focused on technological engagement in the classroom. How the participants responded to these questions described how often teachers were using technology in their classes to engage their Millennial students, employing the tools of their generation. The more technologies used and the frequency of their use indicated the level that teachers were engaging their students in their learning process. For these technologically engaging classroom practices the participant received a score of zero to four based on their responses for each question. A score of zero was assigned to responses of never and a score of four was assigned to daily. At the end of this section a box was added asking the participants to indicate what technologies their students have access to inside and outside the classroom. These technologies include cell phones, Internet, iPod, iPad, laptop computer, gaming system, tablet, e-reader, desktop computer. An other was included so that teachers could write in
any other technology not listed. For each technology selected a score of one was given, and for each one not selected a score of zero was given.

The third section of the survey, Student Behaviors, asked a series of questions about students’ academic dishonesty in participants’ classes. There were a total of 11 questions in this section. The questions ranged from whether they suspect students of cheating in their classes to the types of cheating they see to how often they have caught their students using different methods of cheating. The responses here revealed whether cheating was a problem in the participants’ classroom. The responses were measured in two subscales: the amount of cheating and the incidences or frequency of cheating. For the amount of cheating the researcher counted the number of times the participant selected yes. This amount varied from zero to 11 based on how many times the participant selected yes. The more the participant selected yes indicated a greater amount of cheating. The incidences of academic dishonesty received a score of one to five. Based on the responses of the participants, other was designated to mean once a year. One was assigned to once a year, and five was assigned to daily.

The last section of the survey, Academic Dishonesty, was comprised of five questions. Three questions surveyed teachers on how they enforce academic dishonesty that occurs in their classrooms. These questions are: 2) If you catch a student cheating, do you warn the student before administering consequences?, 3) If you catch a student cheating, do you follow the school academic dishonesty policy immediately?, 4) If you suspect a student is cheating
but are uncertain, do you ignore it? Additionally, question three in this section provided some data on why teachers do not report cheating or enforce consequences for cheating. If the participant selected that they do not report cheating, they were asked why not and could select from the following responses: too much work, difficult to prove, lack of administrative support, empathy for student, or they had the option to write in their own reason.

The other two questions in this last section pertained to whether the teacher explains what academic dishonesty is and how often they explain it to their students. This section revealed whether teachers’ discussing academic dishonesty affected the amount of cheating by their students. These questions are: 1) Do you discuss academic dishonesty with your students? and 5) Do you discuss plagiarism with your students? The amount of explanation of academic dishonesty received a score of one to five. Based on the responses of the participants, other was designated to mean once a year. One was assigned to once a year, and five was assigned to daily.

After the development of the survey, the researcher gathered a panel of three experts to check for face validity and content validity of the instrument. The panel of experts consisted of a school district director of curriculum and instruction with 20 years of experience, a school district math curriculum specialist for a with 22 of experience, and a high school assistant principal in charge of the English department and a former English teacher with 19 years of experience. The researcher refined the instrument based on the panel members’ suggestions.
Procedures

A permission request from the Institutional Review Board (IRB) was submitted to conduct the study and a pilot study of the survey instrument (Appendix C). The names and letters of consent of school districts agreeing to participate were included in an Institutional Review Board (IRB) application. Once permission was granted a pilot test was conducted with approximately 14 participants. These participants were teachers from a middle school along the Gulf Coast. After the pilot test, the researcher examined the Cronbach’s alphas to determine the internal consistency of the instrument. The researcher used a reliability coefficient score of .70 or higher to indicate reliability of the survey instrument. The Cronbach’s alpha for *Classroom Practices* was .907. The technology section did not have a Cronbach’s alpha due to the fact that many items had no variability. The participants in the pilot study mostly indicated that they never used technologies in their classroom instruction. This analysis indicated that the instrument had the necessary internal consistency to proceed with data collection.

With the pilot study indicating that the instrument had the internal consistency to continue, the researcher made contact with the four selected high schools to set up dates and times to administer the survey. The researcher hand delivered the survey to three of the high schools’ principals and to the federal programs director at one of the school districts. The three high schools’ administrators distributed the survey at a regularly scheduled faculty meeting. The researcher returned to the schools the next day to retrieve the completed
surveys. The federal programs director distributed the survey at the high school in her district on a Monday and allowed the teachers a week to complete them. She collected the surveys on Friday, and the researcher picked them up from her the following Monday.

The survey included a cover letter stating that no identifying information was included on the survey and that any identifying information incidentally obtained through the survey would remain completely confidential (Appendix D). Upon completion, teachers placed their surveys in manila envelopes that were collected by the researcher. Once all participating schools’ surveys were complete, the data was coded, entered into the statistical SPSS program and analyzed by the researcher.

Data Analysis

The researcher ran descriptive statistics for all variables. The means and standard deviations for the descriptive data were analyzed. The descriptive statistics allowed the researcher to understand and examine the participants’ demographics and their responses to the questions on the survey. All Hypotheses were tested using Pearson’s correlation techniques. An additional independent sample t-test was used to test Hypothesis Four.

Summary

This quantitative study examined teachers’ reported classroom practices in instructing 21st century students. It also looked at how teachers are using technology in their classes and the frequency of its use. In addition to classroom practices and technology use, participants in this study reported whether or they
experience academic dishonesty in their classes and the frequency of it. They also revealed whether they explain academic dishonesty to their students and enforce consequences for it. This study attempted to determine if teachers’ classroom practices are contributing to academic dishonesty in their classes.
CHAPTER IV
RESULTS

Introduction

This chapter presents the descriptive and statistical findings of this study. The purpose of this study was to examine teachers’ classroom practices in regard to student classroom engagement and student engagement with technology in order to determine if these practices had a relationship to student academic dishonesty. Additionally, this study examined teachers’ explanations of academic dishonesty and enforcement of academic dishonesty policies to see if these practices were related to cheating behaviors in their classes.

A total of 260 surveys were distributed to four high schools in public school districts along the Mississippi Gulf Coast. The researcher received 199 surveys from these schools for a return rate of 76.53%. Of these 199 returned surveys, six were not usable due to the number of skipped items or failure of the participant to complete the last page. There were a total of 193 usable surveys analyzed for this study.

Descriptive Data

The 193 respondents in this study were secondary high school classroom teachers. Table 1 illustrates the frequencies and percentages of the gender, age, and years of teaching experience of the respondents. The majority of the respondents were female (74.1%). The age range of the respondents was closely distributed between three groups, 31 to 40 years old (26.9%), 41 to 50 years old (26.4%), and 51 to 60 years old (23.3%). The number of years of
teaching experience was well distributed among all the groups, with teachers having zero to five years of teaching experience being the majority (25.4%) of the respondents.

Table 1

*Demographics of Respondents  N=193*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50</td>
<td>29.5</td>
</tr>
<tr>
<td>Female</td>
<td>143</td>
<td>74.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-30</td>
<td>38</td>
<td>19.7</td>
</tr>
<tr>
<td>31-40</td>
<td>52</td>
<td>26.9</td>
</tr>
<tr>
<td>41-50</td>
<td>51</td>
<td>26.4</td>
</tr>
<tr>
<td>51-60</td>
<td>45</td>
<td>23.3</td>
</tr>
<tr>
<td>61+</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>No Response</td>
<td>3</td>
<td>1.6</td>
</tr>
</tbody>
</table>
Table 1 (continued).  

<table>
<thead>
<tr>
<th>Years Teaching Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>49</td>
<td>25.4</td>
</tr>
<tr>
<td>6-10</td>
<td>31</td>
<td>16.1</td>
</tr>
<tr>
<td>11-15</td>
<td>37</td>
<td>19.2</td>
</tr>
<tr>
<td>16-20</td>
<td>21</td>
<td>10.9</td>
</tr>
<tr>
<td>21-25</td>
<td>25</td>
<td>13.0</td>
</tr>
<tr>
<td>26+</td>
<td>21</td>
<td>10.3</td>
</tr>
<tr>
<td>No Response</td>
<td>9</td>
<td>4.7</td>
</tr>
</tbody>
</table>

The first section of the survey as represented in Table 2 and Table 3 was comprised of 22 Likert-style questions. Table 2 displays the means and standard deviations of the questions that indicate less engaging teacher practices, and Table 3 displays the means and standard deviations of the questions that indicate more engaging classroom practices. For Table 2, a lower mean score indicates a higher use of less engaging practices. The respondents revealed that they used whole group instruction most often \((M=1.19)\), followed by using lecture to teach their content \((M=1.34)\) and then assigning worksheets for class work \((M=1.87)\). The respondents indicated that they use fill-in-the-blank type assessments the least \((M=2.77)\). For Table 3, a higher mean score represents a higher use of more engaging classroom practices. Table 3 shows that the respondents use classroom discussion most \((M=3.12)\), followed by differentiating
instruction ($M=2.88$) and problem-based learning ($M=2.63$). Table 3 also shows that the respondents used student presentations ($M=1.26$) and project-base learning ($M=1.66$) only about once a week.

Table 2

*Means and Standard Deviations of Non-engaging Practices N= 193*

<table>
<thead>
<tr>
<th>Practice</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign worksheets as class work</td>
<td>1.87</td>
<td>1.17</td>
</tr>
<tr>
<td>Use lecture to teach your content</td>
<td>1.34</td>
<td>1.00</td>
</tr>
<tr>
<td>Use a textbook to teach your content</td>
<td>2.24</td>
<td>1.35</td>
</tr>
<tr>
<td>Give multiple-choice tests</td>
<td>2.35</td>
<td>.81</td>
</tr>
<tr>
<td>Assign worksheet as homework</td>
<td>2.71</td>
<td>1.25</td>
</tr>
<tr>
<td>Assign student reading to teach your content</td>
<td>2.14</td>
<td>1.31</td>
</tr>
<tr>
<td>Assign worksheets to assess for learning</td>
<td>2.24</td>
<td>1.19</td>
</tr>
<tr>
<td>Use whole group instruction</td>
<td>1.19</td>
<td>1.14</td>
</tr>
<tr>
<td>Use fill in the blank type assessments</td>
<td>2.77</td>
<td>1.03</td>
</tr>
</tbody>
</table>

*Note: Non-engagement questions: 5 = never, 3 = less than once a week, 2 = 1-2 times a week, 1 = 3-4 times a week, 0 = daily*
Table 3

*Means and Standard Deviations of Engaging Practices  N= 193*

<table>
<thead>
<tr>
<th>Practice</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow students to work with a classmate</td>
<td>2.57</td>
<td>1.01</td>
</tr>
<tr>
<td>Use problem-based learning</td>
<td>2.63</td>
<td>1.07</td>
</tr>
<tr>
<td>Allow students to collaborate to complete an assignment</td>
<td>2.25</td>
<td>1.02</td>
</tr>
<tr>
<td>Use classroom discussion</td>
<td>3.12</td>
<td>.88</td>
</tr>
<tr>
<td>Use performance-based assessments</td>
<td>2.26</td>
<td>1.14</td>
</tr>
<tr>
<td>Assign writing assignments</td>
<td>1.85</td>
<td>1.15</td>
</tr>
<tr>
<td>Use project-based learning</td>
<td>1.66</td>
<td>1.10</td>
</tr>
<tr>
<td>Use open ended assessment questions</td>
<td>2.16</td>
<td>1.14</td>
</tr>
<tr>
<td>Differentiate instruction</td>
<td>2.88</td>
<td>1.06</td>
</tr>
<tr>
<td>Allow students to work in groups</td>
<td>2.26</td>
<td>1.06</td>
</tr>
<tr>
<td>Assign student presentations</td>
<td>1.26</td>
<td>.89</td>
</tr>
<tr>
<td>Use hands on activities</td>
<td>1.98</td>
<td>1.24</td>
</tr>
<tr>
<td>Use cooperative learning groups</td>
<td>2.11</td>
<td>1.10</td>
</tr>
</tbody>
</table>

*Note: Engagement questions: 0 = never, 1 = less than once a week, 2 = 1-2 times a week, 3 = 3-4 times a week, 4 = daily*

The second section of the survey, as represented in Table 4, was comprised of 18 Likert-style questions. Table 4 displays the means and standard deviations of the technologically engaging teacher practices. The higher the mean score in Table 4 represents a higher use technologically engaging classroom practices. This table reveals a very low use of technology in the
classroom. The majority of the questions have a mean of less than one, indicating that the respondents never use the technologically engaging practices listed on the survey. However, they used interactive smart boards or Promethean boards the most ($M=2.50$), followed by using the Internet to help teach their content ($M=2.39$).

Table 4

*Means and Standard Deviations of Technology Engagement*  $N= 193$

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the Internet to help teach your content</td>
<td>2.39</td>
<td>1.25</td>
</tr>
<tr>
<td>Allow students to use cell phones to enhance learning</td>
<td>.72</td>
<td>1.15</td>
</tr>
<tr>
<td>Use wikis</td>
<td>.33</td>
<td>.82</td>
</tr>
<tr>
<td>Assign multimedia presentations</td>
<td>1.18</td>
<td>1.15</td>
</tr>
<tr>
<td>Allow students to use laptops in class</td>
<td>.58</td>
<td>1.14</td>
</tr>
<tr>
<td>Allow students to collaborate with other students outside your class using online collaboration tools</td>
<td>.74</td>
<td>1.20</td>
</tr>
<tr>
<td>Use interactive smart boards or Promethean boards</td>
<td>2.50</td>
<td>1.62</td>
</tr>
<tr>
<td>Use web or podcasts to help teach your content</td>
<td>.75</td>
<td>1.18</td>
</tr>
<tr>
<td>Use iPods to enhance learning</td>
<td>.28</td>
<td>.76</td>
</tr>
<tr>
<td>Allow students to use cameras or video recorders to demonstrate content mastery</td>
<td>.51</td>
<td>.86</td>
</tr>
<tr>
<td>Show a YouTube video to help teach your content</td>
<td>.69</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 4 (continued).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use electronic student portfolios</td>
<td>.27</td>
<td>.69</td>
</tr>
<tr>
<td>Use iPads to enhance learning</td>
<td>.09</td>
<td>.41</td>
</tr>
<tr>
<td>Allow students to make creative videos</td>
<td>.53</td>
<td>.74</td>
</tr>
<tr>
<td>Use a Ning or other class social network</td>
<td>.07</td>
<td>.37</td>
</tr>
<tr>
<td>Use blogs</td>
<td>.16</td>
<td>.53</td>
</tr>
<tr>
<td>Use Google Docs for collaborative assignments</td>
<td>.36</td>
<td>.74</td>
</tr>
<tr>
<td>Use any type of WebQuests</td>
<td>.32</td>
<td>.62</td>
</tr>
</tbody>
</table>

Note: Technology engagement questions: 0 = never, 1 = less than once a week, 2 = 1-2 times a week, 3 = 3-4 times a week, 4 = daily

At the end of the second section of the survey the respondents were asked to indicate which technologies their students had available to them inside and outside the classroom. Table 5 displays the results of this section. The respondents reported that the majority of their students had the Internet (98.4%) and a cell phone (94.6%). The respondents revealed that only 29% of their students had a tablet and only 29.6% had an E-reader.
Table 5

*Frequency of Student Available Technology Reported by Teacher*

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Phone</td>
<td>94.6%</td>
</tr>
<tr>
<td>Internet</td>
<td>98.4%</td>
</tr>
<tr>
<td>iPod</td>
<td>59.1%</td>
</tr>
<tr>
<td>iPad</td>
<td>44.1%</td>
</tr>
<tr>
<td>Laptop</td>
<td>60.2%</td>
</tr>
<tr>
<td>Gaming System</td>
<td>54.3%</td>
</tr>
<tr>
<td>Tablet</td>
<td>29.0%</td>
</tr>
<tr>
<td>E-Reader</td>
<td>29.6%</td>
</tr>
<tr>
<td>Desktop</td>
<td>87.6%</td>
</tr>
</tbody>
</table>

Table 6 displays the means and standard deviations of the overall use of engaging practices and technology in the classroom. Overall, engagement with technology (M=.70) was incorporated less than daily. Engaging practices (M=2.16) were used in the classroom a little more than one to two times a week.
Table 6

Levels of Engaging Practices

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>2.16</td>
<td>.44</td>
</tr>
<tr>
<td>Technology</td>
<td>.70</td>
<td>.49</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td></td>
</tr>
</tbody>
</table>

Note: Engagement questions: 0 = never, 1 = less than once a week, 2 = 1-2 times a week, 3 = 3-4 times a week, 4 = daily; Non-engagement questions: 5 = never, 3 = less than once a week, 2 = 1-2 times a week, 1 = 3-4 times a week, 0 = daily; Technology engagement questions: 0 = never, 1 = less than once a week, 2 = 1-2 times a week, 3 = 3-4 times a week, 4 = daily

The third section of the survey asked teachers about student cheating in their classes. It consisted of 11 questions that were measured in two subscales: the amount of cheating and the incidences or frequency of cheating. The results of this section are displayed in Table 7 through Table 16.

The respondents’ perceptions of student cheating occurring in their classrooms are shown in Table 7. More than two-thirds (67.9%) of the respondents reported that they suspected student cheating in their classes. Only 36.3% of the respondents indicated that cheating was a problem in their classes.
Almost 80% of the respondents reported catching their students cheating on assignments (Table 8), and 65% reported catching students cheating on tests (Table 9). Catching students cheating occurred most frequently two to three times a semester for both assignments (35.2%) and tests (38.8%). In Table 8 and Table 9 *Not Observed* represents the number of participants that answered *no* to the corresponding question.

Table 7

*Frequency of Student Cheating*  *N=193*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>62</td>
<td>32.1</td>
</tr>
<tr>
<td>Yes</td>
<td>131</td>
<td>67.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>121</td>
<td>62.7</td>
</tr>
<tr>
<td>Yes</td>
<td>70</td>
<td>36.3</td>
</tr>
</tbody>
</table>

Table 8

*Frequency of Catching Students Cheating on Assignments*  *N=193*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>39</td>
<td>20.2</td>
</tr>
<tr>
<td>Yes</td>
<td>154</td>
<td>79.8</td>
</tr>
</tbody>
</table>
Table 8 (continued).

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>16</td>
<td>8.3</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>68</td>
<td>35.2</td>
</tr>
<tr>
<td>Monthly</td>
<td>33</td>
<td>17.1</td>
</tr>
<tr>
<td>Weekly</td>
<td>31</td>
<td>16.1</td>
</tr>
<tr>
<td>Daily</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>Not Observed</td>
<td>39</td>
<td>20.2</td>
</tr>
</tbody>
</table>

Table 9

*Frequency of Catching Students Cheating on Tests  N=193*

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>67</td>
<td>34.7</td>
</tr>
<tr>
<td>Yes</td>
<td>126</td>
<td>65.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3 times a semester</td>
<td>73</td>
<td>38.8</td>
</tr>
<tr>
<td>Monthly</td>
<td>12</td>
<td>6.2</td>
</tr>
<tr>
<td>Weekly</td>
<td>14</td>
<td>7.3</td>
</tr>
<tr>
<td>Daily</td>
<td>3</td>
<td>1.6</td>
</tr>
<tr>
<td>Not Observed</td>
<td>67</td>
<td>34.7</td>
</tr>
</tbody>
</table>
Table 10 shows that almost 82% of teachers reported seeing students copying each other's work. The rate of occurrence for this behavior is closely distributed between two to three times a semester (24.9%), monthly (21.2%), and weekly (20.2%). In Table 10 Not Observed represents the number of participants that answered no to the corresponding question.

Table 10

<table>
<thead>
<tr>
<th>Frequency of Observing Students Copying Each Other's Work</th>
<th>N=193</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>No</td>
<td>34</td>
</tr>
<tr>
<td>Yes</td>
<td>158</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
</tr>
</tbody>
</table>

Rate of Occurrence

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>22</td>
<td>11.4</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>48</td>
<td>24.9</td>
</tr>
<tr>
<td>Monthly</td>
<td>41</td>
<td>21.2</td>
</tr>
<tr>
<td>Weekly</td>
<td>39</td>
<td>20.2</td>
</tr>
<tr>
<td>Daily</td>
<td>8</td>
<td>4.1</td>
</tr>
<tr>
<td>Not Observed</td>
<td>3</td>
<td>17.6</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.5</td>
</tr>
</tbody>
</table>

More than 56% of the respondents indicated that they observed students giving answers (Table 11) and receiving answers (Table 12) on tests or assignments. Both Tables 11 and 12 indicate that the respondents observed this
behavior most often two to three times a semester. In Table 11 and Table 12 *Not Observed* represents the number of participants that answered *no* to the corresponding question.

Table 11

*Frequency of Observing Students Giving Answers on Tests or Assignments N=193*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>78</td>
<td>40.4</td>
</tr>
<tr>
<td>Yes</td>
<td>114</td>
<td>59.1</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.5</td>
</tr>
</tbody>
</table>

Rate of Occurrence

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>13</td>
<td>6.7</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>47</td>
<td>24.4</td>
</tr>
<tr>
<td>Monthly</td>
<td>22</td>
<td>11.4</td>
</tr>
<tr>
<td>Weekly</td>
<td>28</td>
<td>14.5</td>
</tr>
<tr>
<td>Daily</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Not Observed</td>
<td>78</td>
<td>40.4</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Frequency of Observing Students Receiving Answers on Tests or Assignments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=193</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>No</td>
<td>83</td>
<td>43.0</td>
</tr>
<tr>
<td>Yes</td>
<td>109</td>
<td>56.5</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
</tr>
<tr>
<td>2-3 times a semester</td>
</tr>
<tr>
<td>Monthly</td>
</tr>
<tr>
<td>Weekly</td>
</tr>
<tr>
<td>Daily</td>
</tr>
<tr>
<td>Not Observed</td>
</tr>
</tbody>
</table>

Almost 50% of the respondents reported catching students using cheat sheets (Table 13), and 33.1% caught students using cells phones to cheat (Table 14). Catching students with cheat sheets occurred most often two to three times a semester (24.4%), and catching students using cell phones to cheat mostly occurred about once a year (16.6%). In Table 12 and Table 13 Not Observed represents the number of participants that answered no to the corresponding question.
Table 13

*Frequency of Catching Students with Cheat Sheets  N=193*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>100</td>
</tr>
<tr>
<td>Yes</td>
<td>93</td>
</tr>
</tbody>
</table>

Rate of Occurrence

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>35</td>
<td>18.1</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>47</td>
<td>24.4</td>
</tr>
<tr>
<td>Monthly</td>
<td>7</td>
<td>3.6</td>
</tr>
<tr>
<td>Weekly</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Daily</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not Observed</td>
<td>100</td>
<td>51.8</td>
</tr>
</tbody>
</table>

Table 14

*Frequency of Catching Students Using Cell Phones to Cheat  N=193*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>129</td>
</tr>
<tr>
<td>Yes</td>
<td>64</td>
</tr>
</tbody>
</table>
Table 14 (continued).

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>32</td>
<td>16.6</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>19</td>
<td>9.8</td>
</tr>
<tr>
<td>Monthly</td>
<td>8</td>
<td>4.1</td>
</tr>
<tr>
<td>Weekly</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Daily</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Not Observed</td>
<td>129</td>
<td>66.8</td>
</tr>
</tbody>
</table>

Table 15 displays that 47.2% of the respondents caught their students plagiarizing. It also indicates that catching students plagiarizing most frequently happened two to three times a semester (38.8%). In Table 15 Not Observed represents the number of participants that answered no to the corresponding question.

Table 15

Frequency of Catching Students Plagiarizing  N=193

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>102</td>
</tr>
<tr>
<td>Yes</td>
<td>91</td>
</tr>
</tbody>
</table>
Table 15 (continued).

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>19</td>
<td>12.4</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>54</td>
<td>38.8</td>
</tr>
<tr>
<td>Monthly</td>
<td>9</td>
<td>6.2</td>
</tr>
<tr>
<td>Weekly</td>
<td>9</td>
<td>7.3</td>
</tr>
<tr>
<td>Daily</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not Observed</td>
<td>102</td>
<td>52.8</td>
</tr>
</tbody>
</table>

Nearly 78% revealed that they caught students with other students’ assignments or work (Table 16). This occurred most often two to three times a semester (36.3%) followed by monthly (20.2%). In Table 16 *Not Observed* represents the number of participants that answered *no* to the corresponding question.

Table 16

*Frequency of Catching Students with Other Students’ Assignments or Work*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>43</td>
<td>22.3</td>
</tr>
<tr>
<td>Yes</td>
<td>150</td>
<td>77.7</td>
</tr>
</tbody>
</table>
Table 16 (continued).

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>15</td>
<td>7.8</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>70</td>
<td>36.3</td>
</tr>
<tr>
<td>Monthly</td>
<td>39</td>
<td>20.2</td>
</tr>
<tr>
<td>Weekly</td>
<td>21</td>
<td>10.9</td>
</tr>
<tr>
<td>Daily</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>Not Observed</td>
<td>43</td>
<td>22.3</td>
</tr>
</tbody>
</table>

The last section of the instrument surveyed the respondents about their explanations of academic dishonesty with their students and their enforcement of consequences for cheating. Table 17 through Table 20 illustrates the results of this section. Table 17 shows that 47.2% of the respondents warn students before administering consequences when they catch a student cheating. It also shows that almost 85% do not ignore cheating if they are uncertain that the student is actually cheating. In this table *Not Observed* represents the number of participants that answered *no* to the corresponding question.
Table 17

Frequency of Teachers' Response to Student Academic Dishonesty  N=193

If you catch a student cheating, do you warn the student before administering consequences?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>98</td>
</tr>
<tr>
<td>Yes</td>
<td>91</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 17 (continued)

If you suspect a student is cheating but are uncertain, do you ignore it?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>163</td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 18 shows that the majority of the respondents (95.3%) reported discussing academic dishonesty with their students at least once a year. A little more than 25% discuss it only once a year, while 32.5% discuss it two to three times a semester. Only 5.7% of the respondents reported discussing academic dishonestly daily.
Table 18

Frequency of Discussing Academic Dishonesty with Students  N=193

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>9</td>
</tr>
<tr>
<td>Yes</td>
<td>184</td>
</tr>
</tbody>
</table>

Rate of Occurrence

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>49</td>
<td>25.4</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>66</td>
<td>34.2</td>
</tr>
<tr>
<td>Monthly</td>
<td>28</td>
<td>14.5</td>
</tr>
<tr>
<td>Weekly</td>
<td>31</td>
<td>16.1</td>
</tr>
<tr>
<td>Daily</td>
<td>11</td>
<td>5.7</td>
</tr>
<tr>
<td>Not Discussed</td>
<td>8</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Nearly three-fourths (74.6%) of the teachers surveyed reported that they follow the school’s academic dishonesty policy when they catch students cheating (Table 19). The respondents that said they did not follow the policy most often cited empathy for the student (12.2%) as the reason for not doing so. Another 11.9% reported that cheating was difficult to prove as their reason for not following the policy. In this table Not Discussed represents the number of participants that answered no to the corresponding question.
Table 19

*Frequency of Following School Academic Dishonesty Policy N=193*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>48</td>
<td>24.9</td>
</tr>
<tr>
<td>Yes</td>
<td>144</td>
<td>74.6</td>
</tr>
</tbody>
</table>

Reasons for not following school academic dishonesty policy

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too much work</td>
<td>9</td>
<td>4.7</td>
</tr>
<tr>
<td>Difficult to prove</td>
<td>23</td>
<td>11.9</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Empathy for student</td>
<td>24</td>
<td>12.2</td>
</tr>
</tbody>
</table>

As illustrated in Table 20, more than 19% of the teachers surveyed revealed that they did not discuss plagiarism with their students. Of the more than 80% of the respondents that reported discussing plagiarism, most did so two to three times a semester (38.9%). In this table *Not Discussed* represents the number of participants that answered *no* to the corresponding question.
Table 20

*Frequency of Discussing Plagiarism with Students  N=193*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>37</td>
<td>19.2</td>
</tr>
<tr>
<td>Yes</td>
<td>155</td>
<td>80.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rate of Occurrence</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>33</td>
<td>17.1</td>
</tr>
<tr>
<td>2-3 times a semester</td>
<td>75</td>
<td>38.9</td>
</tr>
<tr>
<td>Monthly</td>
<td>26</td>
<td>13.5</td>
</tr>
<tr>
<td>Weekly</td>
<td>18</td>
<td>9.3</td>
</tr>
<tr>
<td>Daily</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Not Discussed</td>
<td>37</td>
<td>19.2</td>
</tr>
</tbody>
</table>

Tests of the Hypotheses

Pearson’s correlations were used to measure Hypotheses One, Two, Three and Four to determine if there was a correlation between teachers’ use of engaging classroom practices and student cheating in their classes, teachers’ engagement with technology and student cheating in their classes, teachers’ explanation of academic dishonesty and student cheating in their classes, and teachers’ enforcement of consequences and student cheating in their classes. In addition, an independent sample *t* test was used to measure Hypothesis Four.

*Classroom Engagement*

A Pearson’s correlation measured H01: There is not a statistically significant relationship between academic dishonesty and classroom
engagement. The Pearson’s correlation indicated that there was a significant moderate negative correlation between classroom engagement and academic dishonesty \( r(191) = -.525, p < .001 \). This indicates that the more engaged the students were in the class the less cheating there was. Based on the results of this Pearson’s correlation the null Hypothesis One was rejected. There is, in fact, a statistically significant relationship between academic dishonesty and classroom engagement.

Technological Engagement

A Pearson’s correlation measured \( H_0^2 \): There is not a statistically significant relationship between academic dishonesty and technological engagement. The Pearson’s correlation indicated that there was a significant weak negative correlation between classroom engagement and academic dishonesty \( r(191) = -.230, p < .001 \). The results show that the more technologically engaged the students were the less academic dishonesty occurred. The strength of the correlation is weak due to the fact that teachers are not using a technology much in their instruction (Table 4). Based on this Pearson’s correlation the null Hypothesis Two was rejected. There is a statistically significant relationship between academic dishonesty and technological engagement.

Explanation of Academic Dishonesty

A Pearson’s correlation measured \( H_0^3 \): Explanation of academic dishonesty is not related to academic dishonesty incidences. The Pearson’s correlation indicated that there was not significant correlation between classroom
engagement and academic dishonesty ($r(191) = .305, p > .05$). Explanation of academic dishonesty is not related to the incidences of cheating. Due to the results of this Pearson's correlation indicating that there was not a statically significant relationship between academic dishonesty and incidences of it, the researcher failed to reject the null Hypothesis Three.

*Enforcement of Consequences for Academic Dishonesty*

A Pearson's correlation and an independent sample *t*-test measured $H_0$: Enforcement of consequences for academic dishonesty is not related to academic dishonesty incidences. The Pearson's correlation indicated that there was not a statistically significant correlation between classroom engagement and academic dishonesty ($r(191) = -.096, p > .001$). Teacher enforcement of consequences is not related to the number of incidences of cheating.

Additionally, an independent sample *t*-test was used to compare the means of the teachers who do follow their school academic dishonesty policy immediately when they catch a student cheating and teachers who do not. The independent sample *t*-test showed that on average teachers who enforced their schools' academic dishonesty policy ($M = 2.31, SD = .711$) had fewer incidences of cheating than teachers who did not follow the school academic dishonesty policy ($M = 2.57, SD = .800$). The differences in incidents of cheating between teachers who followed the policy and those who did not follow it was significant ($t(190) = 2.12, p < .05$). Based on the results of the Pearson's correlation and the independent sample *t*-test the null hypothesis Four was partially rejected.
Summary

There were 193 teachers from four high schools along the Mississippi Gulf Coast who participated in this study. The purpose was to determine if classroom engagement, technological engagement, explanation of academic dishonesty, and enforcement of academic dishonesty consequences were related to students cheating in their classes. The results of the statistical analysis require that null Hypotheses One and Two be rejected, and Four to be partially rejected. The respondents indicated that classroom engagement and technological engagement is related to cheating in their classes. They also revealed that enforcement of the school academic dishonesty policy led to lower incidences of cheating as compared to those who do not. The researcher failed to reject the null Hypothesis Three. Based on the teachers’ responses in this study the explanation of academic dishonesty was not related to the number of incidences of cheating in their classes.
CHAPTER V
SUMMARY

Introduction

National surveys (Center for Academic Integrity, 2007; Josephson Institute of Ethics, 2010) report that the number of students cheating in school is increasing. Other studies report high incidences of student cheating. Geddes (2011), in his study with high achieving students, found that 75% of them had cheated on homework and exams. Viniski and Tyron (2009) cited that 90% of the students in their study admitted to cheating. Because cheating is so prevalent, teachers today are challenged with engaging 21st century students in their learning while not fostering academic dishonesty. This is essential so that the integrity of the educational system is not compromised.

The purpose of this quantitative study was to determine if a relationship existed between teachers’ classroom practices, including technological engagement, and academic dishonesty in their classes. Additionally, it sought to conclude if the enforcement of consequences for academic dishonesty and explanation of academic dishonesty were related to incidences of cheating. Results from this study will help educators understand the vital role teachers play in engaging their Millennial students in their learning process so that they do not enable academic dishonesty. This chapter will provide a brief summary of the procedures used in the study and will include a discussion of the study’s findings and conclusions. In addition, the researcher will discuss the limitations of the
study and give recommendations for policy and practice. Lastly, the researcher will provide recommendations for future research.

Summary of Procedures

Permission to conduct this study was solicited (Appendix A) from several school districts along the Mississippi Gulf Coast. Six superintendents granted permission for the researcher to conduct the study (Appendix B). After receiving approval from the Institutional Review Board (IRB) of the University of Southern Mississippi (Appendix C), the researcher chose four school districts to participate in the study. A pilot study was conducted in one of the four school district’s middle schools. Next, a total of 260 surveys were sent out to high school teachers and 193 usable surveys were returned. Once all surveys were received, the data was coded and analyzed using SPSS version 20.0.

Summary of Major Findings

In order to determine if teachers are fostering academic dishonesty in their classes the researcher developed the following Research Questions:

1. Do teachers who have less engaging classes and assignments report higher incidences of cheating?
2. Do teachers who regularly engage their students in class and have engaging assignments report fewer incidences of cheating in their classes?
3. Do teachers who technologically engage their students report fewer incidences of cheating?
4. Are teachers explaining to their students what academic dishonesty is?
5. Do teachers regularly enforce predetermined consequences for cheating?

Based on the Research Questions the researcher made the following Hypotheses as noted below. Pearson’s correlations were used to measure the results of Hypotheses One, Two, Three, and Four in order to determine in a correlation existed between the variables. An additional statistical test, an independent t-test, was used to test hypothesis four (4) to determine if there was a significant relationship between variables.

H0₁: There is not a statistically significant relationship between academic dishonesty and classroom engagement.

Results: Based on the participants’ responses and the analysis of the results, there was a significant relationship between engaging classroom practices and academic dishonesty. The more engaging practices the teachers reported using, the less cheating they observed in their classes. Therefore, the researcher rejected the null Hypothesis.

H0₂: There is not a statistically significant relationship between academic dishonesty and technological engagement.

Results: The participants’ responses shown in the statistical analysis indicate that there was a significant relationship between engaging students technologically and the amount of cheating reported. The teachers who use more technology report less cheating in their classes. This was a weak correlation due to the fact that the majority of the respondents did not indicate
using a great deal of technology in their classroom instruction. The null Hypothesis was rejected.

\( H_0_3 \): Explanation of academic dishonesty is not related to academic dishonesty incidences.

**Results:** Based on the analysis of the participants’ responses, there was not a significant relationship between the explanation of academic dishonesty and the amount of incidences of cheating reported. The researcher failed to reject the null Hypothesis.

\( H_0_4 \): Enforcement of consequences for academic dishonesty is not related to academic dishonesty incidences.

**Results:** The results of the Pearson’s correlation of the participants’ responses indicated that there was not a significant relationship between the enforcement of consequences for cheating and the incidences of it. However, an independent sample \( t \)-test of the question, “If you catch a student cheating, do you follow school academic dishonesty policy immediately?” was significant. This indicated that teachers who do immediately enforce the school policy reported less incidences of cheating. Based on these statistical analyses the null Hypothesis was partially rejected.

**Conclusions and Discussion**

The four Hypotheses guided this study to determine if teachers’ classroom practices were fostering academic dishonesty in their classes. In this section, the conclusions and discussion of the findings are explained.
The results of null Hypothesis One indicated that the more engaging practices teachers used in their classes the less cheating they reported. The literature in this specific type of investigation is limited. Therefore, this particular type of study, looking at student engagement as it relates to academic dishonesty, creates another area for researchers to examine.

However, research focusing on performance verses mastery goal classes shows that less cheating occurs in the latter (Anderman et al., 2009; Anderman & Midgley, 2004; Murdock et al., 2007; Murdock et al., 2004). This research showed that students justified cheating and were more likely to cheat in classes with performance goal structures. With performance goal structured classes, the emphasis is not on deep understanding or the retention of knowledge, but more on grades and comparison with others (Anderman & Midgley, 2004). Mastery classes are focused on deep understanding and higher order thinking skills, which are representative of a more engaging classroom. Performance goal structured classes have the characteristics of a less engaging type of class. The results of null Hypothesis One are consistent with the literature. Teachers who do not engage their students will have more student academic dishonesty in their classes.

The results of the second null Hypothesis showed that teachers who use technology in their classes to engage their 21st century students reported fewer incidences of cheating. The literature focusing on technology and cheating is more centered on students using technology to cheat, rather than using it to deter cheating by engaging students with it. The researcher’s extensive search
for this type of study did not yield any results. The results from this study present another reason that students cheat, teachers are not technologically engaging there students.

As with null Hypothesis One, teachers who are engaging students by using technology have classes that are more mastery goal oriented rather than performance goal oriented. In this aspect, the results of null Hypothesis Two are consistent with the literature (Anderman et al., 2009; Anderman & Midgley, 2004; Murdock et al., 2007; Murdock et al., 2004). It can be argued that teachers who are not using the tools of this Millennial generation in their instruction have poor pedagogy. They are not using classroom practices that meet the needs of their students. From this standpoint, the results of this Hypothesis are in line with the research. Murdock et al., (2004), found that high school students justified cheating more in classes with teachers with poor pedagogy. Likewise, the results from Murdock et al., (2007) showed that the acceptability and likelihood of cheating in teachers’ classes with poor pedagogy was higher than those with good pedagogy.

It is interesting to note that the teachers in this study reported that the majority of their students had access to a wide array of technologies both inside and outside the school; however, teachers are not using this technology in their classroom instruction, or on their assignments, or they are not allowing student to use technology to demonstrate content mastery. This statistic is consistent with the literature on teachers’ use of technology. Students want teachers to effectively use technology in the classroom.
The findings for null Hypothesis Three, stating that the explanation of academic dishonesty was not related to the incidences of it, were inconsistent with the literature. Research has shown that a majority of students cheat because they are uncertain about what exactly academic dishonesty is. Schmelkin et al., (2010) found that students cheated because they did not understand that what they were doing was, in fact, cheating. Students in Ma et al.’s, (2007) study reported that they did not think copying and pasting from the Internet to complete assignment was plagiarism. Similarly, Sisti (2007) reported that because of the ease of copying and pasting from the Internet, students did not realize that it was plagiarism.

Almost all the teachers in this study indicated that they discussed academic dishonesty with their students. More than a third said they discussed it two to three times a semester. However, the amount of cheating reported was rampant. According to the literature, the explanation of academic dishonesty should have reduced or had a negative effect on the amount of cheating. Possibly, this could be because teachers are only discussing traditional methods of cheating and not clarifying what constitutes cheating with technology. As the literature shows, many teachers are uncertain themselves what digital plagiarism is (Sisti, 2007).

The Pearson’s correlation of null Hypothesis Four indicated that teacher enforcement of academic dishonesty was not related to incidences of cheating. This correlation is not consistent with the literature, which has shown that students cheat because teachers are not always consistent in their enforcement
of consequences for academic dishonesty. However, an additional t-test found that teachers who immediately followed the school academic dishonesty policy reported fewer incidences of cheating than those who did not. This result is consistent with and supports what other studies have found.

Vinski and Tyron (2009) found that students in their study cheated because they had not been punished for it and did not think they ever would be. They concluded that this lack of consequences did not discourage students from cheating. McCabe (1993) found that merely having an honor code was not enough to discourage students from cheating. He discovered that many teachers preferred to deal with incidences of cheating on their own. This behavior communicated to students that the school’s consequences for cheating did not apply to them or would not be followed through and, therefore, students would be more likely to cheat. McCabe (1993) stated that teachers must enforce the honor code in order have an impact on academic dishonesty.

In this study, almost half of the teachers warned their students when they caught them cheating rather than reporting it right away. It is the researcher’s opinion that this warning sends the message to students that it is not a big deal to cheat. If students get a warning every time they are caught, then they are not discouraged from cheating on the next test or assignment.

It is interesting to the researcher that almost 80% of the teachers in this study reported catching students cheating on assignments, and 65% reported catching students cheating on tests. However, 62% did not think cheating was a
problem in their class. One must speculate on how this perception affects the amount cheating that takes place in their classrooms.

Limitations

The researcher recognizes that there were limitations to this study. First of all, the study was conducted along the Mississippi Gulf Coast, and, therefore the ability generalize the results may not extend to other areas. In addition, the majority of the respondents were female, and the researcher did not try to balance the participants in this demographic category. Therefore, the applicability to male teachers may be limited. This study was only conducted with high school teachers and the results may not be able to generalized to other grade levels. Another limitation is that the respondents’ schools may have only limited technologies available for teachers to use or there may be firewalls in place. This may affect the availability and accessibility of using technology. An additional limitation is that teachers in this study reported only cheating that they saw or caught. The amount of actual cheating may be higher than what was reported. The researcher considered these limitations while evaluating the data.

Recommendations for Practice and Policy

Twenty-first century students are a different breed of students, and they will continue to grow and change as the society in which we live changes, particularly in the world of technology. As the use and accessibility of technology increases, so does the rate at which students utilize this technology to assist their academic endeavors. Students have technology readily available to them at any given time during the day. The majority high of schoolers have a cell phone that
is able to connect to the Internet at a high speed, communicate with peers via text messages and email, take photos and shoot video. In this study, 95% of teachers reported their students have cell phones and 98% reported that their students have Internet access. In addition to cell phones, most reported that their students have laptops, desktop computers, and iPods, all of which can assist them in their schoolwork and assignments. These types of technological devices can also connect them to Internet and the vast amount of information that exists on the web and via global communication. This technology can either enhance education and educational practices or serve as a detriment to the education of the 21st century student.

Furthermore, the 21st century student demands a different type of education than students in previous years. Their assignments need to not only incorporate technology, but also be engaging. Additionally, they should encompass communication and collaboration with peers. Assignments should require students to use a variety of skills and challenge them to gain deep understanding. Assessment of knowledge must also transform so that students are able to demonstrate what they have learned using higher order thinking skills, mastery goal oriented, rather than the mere regurgitation of facts that are mostly performance goal oriented.

Learning does not happen merely with textbooks, chalkboards, and lectures. There can no longer be just non-engaging paper-pencil assessments and assignments. There is no limit to the accessibility of information to the 21st century students. Teachers are not the major source of knowledge for these
students, and teachers today realize that their role has changed. They need to see themselves more as facilitators of knowledge than mere lecturers. Technology should be incorporated into the classroom in instruction, assignments, and assignments. The use of technology will not only enhance learning, but will also prepare students to thrive in the future and work in a global economy. Moreover, embracing and using technology will result in assignments that are geared toward mastery of goals and reduce the amount of academic dishonesty that exists in our schools today. For this to happen there needs to be a reshaping of how teachers view their students and design their lessons and classrooms. Similarly, the manner in which teachers assess student knowledge must be revamped to include technology such as multimedia presentations, student videos, or digital storytelling. Teachers should be provided with the necessary professional development for this to happen. Additionally, they must be held accountable for incorporating technology in their classrooms.

The use of technology in classrooms and in schoolwork and assessments is just one of the means of reducing the amount of academic dishonesty. Students must also be able to work collaboratively and communicate effectively with their peers on larger, more engaging project-based assignments that encompass various methods of demonstrating knowledge. According to Cox (2009), "collaboration is one of the defining characteristics of the 21st century, but many educators are still searching for ways to embrace this idea in their schools" (p. 10). Again, it is up to teachers and administrators to obtain the
necessary professional development to meet the needs of the Millennial student and to effectively integrate these communication and collaboration skills.

There are a variety of methods that teachers can use to foster communication and collaboration, as outlined by the Partnership for 21st Century Skills (2009). First of all, teachers must make an assessment of themselves and educate themselves on different technologies and communication tools.

Communication for the 21st century student goes way beyond emailing. In fact, they are using text messages, webcam chats, Skype, blogs, and other media to stay in constant communication with one another. Twenty-first century students still need to be able to have this type of communication with their classmates while in school. Martinez (2010) writes: “social media are a communication channel that opens a world of possibilities and, in many ways, will become the operating DNA of incoming teachers and some of our current teachers” (p. 74).

Next, teachers need to restructure the way they are going to teach and/or present their subject and make it more engaging and relevant to the 21st century learner. One of the best ways to do this is to allow the students to collaborate on project-based learning tasks. Lent (2006) promotes the use of study groups in schools. She describes how the students in these groups work together in the exploration of information and knowledge in a variety of subjects. Lent explains that study groups work so well because they are “inherently engaging” (p. 69) and that “students whose teachers incorporate collaborative learning or study groups into the classroom will have more opportunities to think reflectively as they apply new knowledge” (p. 69). Schools in several states have set up virtual
schools where students can work in virtual study groups with other student from all over the world (Regan, 2008). This opens up numerous possibilities. Students in a Spanish class can have the opportunity to partner up with a class in Spain or any other Spanish speaking country and communicate with each other in the target language. The students could work together to learn about the different cultures, governments, or histories of the other country and then present what they have learned to their classmates. This could be done using a multimedia presentation where clips of the Spanish student describing his/her culture, showing his/her country, etc. is embedded within it. This type of knowledge quest is not one in which students are likely to cheat, particularly since it would be difficult to do so. The goal of this type of learning is an acquisition of information and understanding versus the rote memorization of vocabulary words or facts.

Assessment of students and student knowledge has to be transformed in order to decease the likelihood of cheating or temptation to cheat. Students need feedback during their learning process. According to Hersh (2009), “final and midterm tests are not enough; nor are standardized tests helpful as learning tools,” (p. 53). Students need continual reinforcement and guidance during the learning process. Additionally, students need correction as soon as possible when they are uncertain or unclear about something. Waiting to give a test to find out if students have mastered an objective may be too late and incorrect information make have to be unlearned. Furthermore, assessment should be used to provide teachers with the necessary information to show them how to
improve instruction and instructional practices. Multiple-choice type assessments give only a small picture of what this may be. If students are cheating on these low mastery tests, teachers will not have an accurate assessment of what students know or do not know. If teachers are catering to the needs of the 21st century learner, for whom learning takes place through project-based activities, then assessment needs to be a reflection of that.

Assessment of 21st century skills can also be performance-based. Performance-based assessments require the students to demonstrate what they have learned by applying what they have learned. The performance type demonstrations can be approached in diverse ways. The students can be given open ended questions or situations to which they respond either orally or in writing. The performance-based assessment can also be a presentation of what they have learned and how the 21st century student should incorporate the use of technology. If students worked collaboratively on a project then the presentation should include all members of that group. The students should be allowed to assess their own performance, as well as one another, when they have worked together in a project-based learning assignment.

Administrators need to look at schools' needs and assess whether their current school structure or environment is helping or hindering teachers in their endeavors to meet the needs of the Millennial student. Of course, the problem of funding the types of technology that meet the needs of today’s student is large, especially in the current economy and with frequent educational budget cuts. However, if schools can obtain adequate computers they will find
most of the online collaborative technology is free. One main area that they should assess is if they are using their technology to its fullest potential. Their school may have the best, the newest, and the fastest computer coupled with high-speed Internet access, but if the school district has firewalls in place all is for naught. Some kind of reform needs to take place so that both students and teachers are not blocked in their pursuits and acquisitions of information.

Another step in reducing the occurrence of academic dishonesty is for schools and teachers to have clearly laid out what they expect of their students. They need to have plainly spelled out what academic dishonesty is and have well-defined consequences for it. Moreover, teachers must take a proactive role in enforcing school cheating policies and not overlook cheating in their classes. McCabe and Katz (2009) assert that teachers can promote academic integrity in their classrooms, but “they can also negate school wide initiatives if they do not support them in their classroom” (p. 18).

The future of the 21st century student is in the hands of today’s educators. If they do not start assessing their teaching and teaching practices and making changes they will not meet the needs of their current and forthcoming today. Academic dishonesty will continue to increase if teachers do not create assignments in which students are truly engaged and are geared toward mastery rather than rote memorization. The 21st century student has to be able to collaborate with classmates on project-based assignments and use the available technology to demonstrate what they have learned. Assessment must also reflect the acquisition of knowledge and should move beyond the traditional
multiple-choice test. As Helm, Turckes, and Hinton (2010) state, “today’s graduate will likely spend time in a workplace where they will multitask, work on interdisciplinary teams, collaborate with consultants far and near, deal with disparate and conflicting information, and work with ever-changing technologies” (p. 66). It is the job of educators to prepare students to work in the 21st century workplace. Moreover, teachers need to clearly explain what academic dishonesty is and create a culture of academic integrity in their classrooms. They must have clear cheating policies and consequences in place, and they must actively enforce the consequences when academic dishonesty has been committed.

Recommendations for Future Research

Additional research could help educators understand why students are cheating and what they can do to help prevent it and to improve the education of 21st century students.

1. Future research should include middle school teachers to determine if the results at that level are consistent with the results from high school teachers. It might be interesting to see if middle schoolers are cheating at the same rate as high school students. Additionally, it would be useful to determine if middle school teachers are engaging their students and using technology at a higher rate than high school teachers.

2. Future research should extend to the higher education level to determine if the results at this level are consistent with the results from
high school. It would be intriguing to determine if the amount of student cheating reported by college professors is consistent at this level. Also, the results from this study would be beneficial to see if college professors are engaging 21st century learners in their classroom instruction and by using technology.

3. Future research should include determining what exactly teachers are discussing with their students concerning academic dishonesty. Do teachers give specific examples of what constitutes academic dishonesty? Do teachers explain what digital or copy-paste plagiarism is to their students? When teachers say they are discussing academic dishonesty, it may be that they are only giving warnings to students and not actually giving students a detailed explanation.

4. Future research should examine teachers’ understandings of plagiarism, both traditional and digital. Do teachers themselves understand how to properly credit sources and cite references?

5. Future research should include surveying both teachers’ and their students. The results from such a study would be fascinating. It would be interesting to see if the student responses matched those of their teachers. Would the students’ perceptions of the level of engagement they receive equal what the teachers are reporting? Would the amount of actual cheating reported by students be higher than what the teachers report?
Summary

The literature has shown that students cheat for many reasons: neutralizing attitudes, more performance goal structured classrooms, teacher credibility, poor teaching pedagogy, uncertainty of what constitutes cheating, teachers’ attitudes towards cheating behaviors and lack of penalties or the lack of enforcement of penalties for cheating. The purpose of this study was to examine teachers’ classroom practices and determine if they were related to 21st century student academic dishonesty. The researcher looked specifically at teachers’ engaging or non-engaging practices, engagement with technology, explanation of academic dishonesty, and enforcement of consequences for cheating. A total of 193 teachers participated in this study. The results showed that teachers who reported using more engaging practices reported less academic dishonesty in their classes. Moreover, teachers who engaged their students with technology reported fewer incidences of academic dishonesty. The amount of cheating reported was alarmingly high, with 80% of teachers reporting catching students cheating on assignments and 67% reporting catching students cheating on tests. The results show that teachers’ explanations of cheating were not related to students cheating in their classes. However, the results showed that if teachers follow school policy immediately after catching students then they have a lower incidence of cheating.

Teachers need to examine their classroom practices and evaluate whether those practices are contributing to students cheating in their classes. Teachers must engage their student with more collaborative problem-based
assignments and with the multitudes of technology that the Millennials are accustomed to using on a regular basis outside of the classroom. This is vitally important so that our students are adequately prepared to go to college and, more importantly, to live and work in the global economy that is ahead of them.
February 21, 2012

Dear Superintendent,

My name is Beth Bellipanni, and I am a doctoral student at The University of Southern Mississippi. I have completed my coursework and will be conducting research to fulfill the requirements to complete my degree. I am working on a research project titled, *The Relationship Between Teacher Classroom Practices and 21st Century Students’ Academic Dishonesty at the Secondary Level*. The purpose of this study is to examine high school teachers’ classroom practices to determine whether these practices are contributing to student academic dishonesty in their classes.

I am writing to request your permission to conduct this research in your high school(s) with your classroom teachers by means of a questionnaire. With your permission, I will coordinate a date and time with your high school principal(s) to distribute and collect the questionnaires. The questionnaire should take no more than 15-20 minutes to complete. All responses will remain completely anonymous and confidential, and no individual participants or schools will be identified. Once the research is complete, I would be happy to share the findings of this project with you.

This study will be reviewed by the Institutional Review Board (IRB), which ensures that research using human subjects follows federal regulations. Any questions or concerns about rights as a research respondent should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-001, (601) 266-6820.

If you choose to grant me permission to survey your teachers, please sign the attached form and fax it back to me as soon as possible. If you have any questions, please feel free to call or email me. I appreciate your time and assistance in this academic endeavor.

Thank you,

Beth Bellipanni
bethbellipanni@gmail.com

(228) 326-8278 (cell)
(228) 865-4718 (fax)
Permission to Conduct the Study

By signing and returnning this form, I give Beth Bellipanni permission to conduct the research study titled *The Relationship Between Teacher Classroom Practices and 21st Century Students’ Academic Dishonesty at the Secondary Level* at ______________. Beth Bellipanni will contact each administrator and arrange dates and times for the questionnaires to be distributed and collected.

_____________________________________
Superintendent’s Signature
APPENDIX B

SURVEY INSTRUMENT

21st Century Teaching Survey

Demographic Information

Gender:  □ Male  □ Female

Age:  □ 23-30  □ 31-40  □ 41-50  □ 51-60  □ 61+

Years Teaching Experience:  □ 0-5  □ 6-10  □ 11-15  □ 16-20  □ 21-25  □ 26+

Classroom Practices

Please indicate how often you use the following classroom practices:

1. Allow students to work with a classmate
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

2. Assign worksheets as class work
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

3. Use lecture to teach your content
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

4. Use problem-based learning
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

5. Use a textbook to teach your content
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

6. Give multiple choice tests
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

7. Assign worksheet as homework
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

8. Allow students to collaborate to complete an assignment
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

9. Use classroom discussion
   □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

10. Use performance based assessments
    □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

11. Assign writing assignments
    □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

12. Assign students reading to teach your content
    □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

13. Use project-based learning
    □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

14. Use open ended assessment questions
    □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________

15. Differentiate instruction
    □ daily  □ 3-4 times a week  □ 1-2 times a week  □ never  □ other:__________
16. Allow students to work in groups
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

17. Assign worksheets to assess for learning
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

18. Assign student presentations
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

19. Use hands on activities
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

20. Use whole group instruction
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

21. Use cooperative learning groups
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

22. Use fill in the blank type assessments
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

Technology Classroom Practices
Please indicate how often you use the following technology classroom practices:

1. Use the Internet to help teach your content
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

2. Allow students to use cell phones to enhance learning
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

3. Use wikis
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

4. Assign multimedia presentations
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

5. Allow students to use laptops in class
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

6. Allow students to collaborate with other students outside your class using online collaboration tools
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

7. Use interactive smart boards or Promethean boards
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

8. Use web or podcasts to help teach your content
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

9. Use iPods to enhance learning
   - daily
   - 3-4 times a week
   - 1-2 times a week
   - never
   - other: __________

10. Allow students to use cameras or video recorders to demonstrate content mastery
    - daily
    - 3-4 times a week
    - 1-2 times a week
    - never
    - other: __________
11. Show a YouTube video to help teach your content
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

12. Use electronic student portfolios
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

13. Use iPads to enhance learning
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

14. Allow students to make creative videos
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

15. Use a Ning or other class social network
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

16. Use blogs
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

17. Use Google Docs for collaborative assignments
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

18. Use any type of WebQuests
   [ ] daily  [ ] 3-4 times a week  [ ] 1-2 times a week  [ ] never  [ ] other: [ ]

Please indicate what technologies your students have access to inside and outside of school:

| [ ] Cell phone   | [ ] Internet  | [ ] iPod    | [ ] iPad   | [ ] Laptop computer  |
| [ ] Gaming System | [ ] Tablet    | [ ] E-Reader | [ ] Desktop computer |
| [ ] Other: ____________________________ |

**Student Behaviors**

Please answer the following questions.

1. Do you suspect student cheating in your class?
   [ ] yes  [ ] no

2. Do you catch students cheating on assignments?
   [ ] yes  [ ] no
   **If yes, how often**
   [ ] daily  [ ] weekly  [ ] monthly  [ ] 2-3 times a semester  [ ] other: [ ]

3. Do you catch students cheating on tests?
   [ ] yes  [ ] no
   **If yes, how often**
   [ ] daily  [ ] weekly  [ ] monthly  [ ] 2-3 times a semester  [ ] other: [ ]

4. Is cheating a problem in your class?
   [ ] yes  [ ] no
5. Have you observed students copying each other’s work?
   □ yes  □ no
   **If yes, how often**
   □ daily  □ weekly  □ monthly  □ 2-3 times a semester  other:_____________

6. Have you observed students giving answers on tests or assignments?
   □ yes  □ no
   **If yes, how often**
   □ daily  □ weekly  □ monthly  □ 2-3 times a semester  other:_____________

7. Have you observed students receiving answers on tests or assignments?
   □ yes  □ no
   **If yes, how often**
   □ daily  □ weekly  □ monthly  □ 2-3 times a semester  other:_____________

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**Academic Dishonesty**

Please answer the following questions

1. Do you discuss academic dishonesty with your students?
   □ yes  □ no
   **If yes, how often**
   □ daily  □ weekly  □ monthly  □ 2-3 times a semester  other:_____________

2. If you catch a student cheating, do you warn the student before administering consequences?
   □ yes  □ no

3. If you catch a student cheating, do you follow the school academic dishonesty policy immediately?
   □ yes  □ no
   **If NOT, why?**
   □ too much work  □ difficult to prove  □ lack of administrative support  □ empathy for student  other:_____________

4. If you suspect a student is cheating but are uncertain, do you ignore it?
   □ yes  □ no  other:______________________

5. Do you discuss plagiarism with your students?
   □ yes  □ no
   **If yes, how often**
   □ daily  □ weekly  □ monthly  □ 2-3 times a semester  other:_____________
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 12032104
PROJECT TITLE: Is There a Relationship Between Teacher Classroom Practices and 21st Century Student Academic Dishonesty?
PROJECT TYPE: Dissertation
RESEARCHER/S: Marguerite Beth Bellipanni
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Leadership
FUNDING AGENCY: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF PROJECT APPROVAL: 03/27/2012 to 03/26/2013

Lawrence A. Hosman, Ph.D.
Institutional Review Board Chair
APPENDIX D

CONSENT FORM

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Dear Educator,

My name is Beth Bellipanni, and I am a doctoral student at the University of Southern Mississippi. I have completed my coursework and am working to fulfill the requirements to complete my degree. I am currently conducting research to examine teachers' classroom practices and 21st century student academic dishonesty.

The attached survey asks about your classroom practices and students in your classes. This survey should take no more than 15 minutes to complete. Completing and returning the questionnaire indicates your consent to participate in the research project that examines teacher classroom practices and student academic dishonesty in high schools. No known research-related risks (physical, psychological, social, or financial) can be expected from this survey.

Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential. No identifying information is included on the survey and any identifying information incidentally obtained through the survey will remain completely confidential.

By participating in this survey, respondents will have the opportunity to convey information about their classroom practices and student academic dishonesty. Once data compilation is complete, participating school districts' superintendents and principals may request the findings of this study. They will be encouraged to use these results to review instructional practices as they relate to educating the 21st century student and student academic dishonesty and to share results with their faculty. Respondents will also have the opportunity to request research results.

Once surveys are completed, the data will be coded and entered into the SPSS program to be analyzed by the researcher. All surveys will be securely stored in a locked file cabinet. The researcher will use the data to complete her dissertation in fulfillment of the requirements of a doctoral degree in Educational Leadership. The researcher may also choose to submit this study for presentation and/or publication. After the completion of this research project, the researcher will destroy and dispose of all surveys.

Questions concerning the research, at any time during or after the project, should be directed to Marguerite Beth Bellipanni at 228-326-8278. This project and this consent form have been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Thank You,

Beth Bellipanni
Doctoral Candidate
University of Southern Mississippi
REFERENCES


Lenhart, A., Ling, R., Campbell, S., Purcell, K., & Pew Internet & American Life Project. (2010). Teens and mobile phones: Text messaging explodes as teens embrace it as the centerpiece of their communication strategies with friends. Pew Internet & American Life Project.


