# ABSTRACT OF AN ANALYSIS OF TEACHER AND STUDENT PERCEPTIONS ON THE USE OF TECHNOLOGY IN THE ENGLISH CLASSROOM.

By Joe Student

Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in English Education at Xavier University, Cincinnati, Ohio May 2018

## ABSTRACT

Has the introduction of technology in the English classroom been used as effectively as teachers believe it to be? In the last few years, technology has played an increasingly larger role in our everyday lives. As this technology starts to dominate our everyday lives, we see it make its way into the educational realm. Students with access to smart phones, free online games, and social media websites have begun to become a larger problem than ever. But the reaction to these new technologies has not always been negative. Teachers have discovered new tools and ways to teach their students, but has this new technology been used by teachers in ways that they believe? One concern is that there is a disconnect between the way technology is supposed to be used, and the way it actually is being used. A one-page survey was distributed to an all-male and all-female school, where senior students and faculty were asked to participate. The survey was intended to gather the general opinions on the use of technology in the English classroom for that institution. Overall, technology was being used in the ways teachers believed it was, but there were differences in use between students of the different schools and different academic class levels.

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# CHAPTER I INTRODUCTION AND STATEMENT OF PROBLEM

Educators today see Technological change as inevitable (Webster, p. 28). The introduction of new technology into the classroom has given teachers and students the opportunity to use it to improve their learning and teaching. Are teachers and seniors at an all-male and all-female high school in agreement on the effectiveness of the use of technology on student achievement in the English classroom?

# PURPOSE OF STUDY

The purpose of this study was to determine the perceived effectiveness of the use of technology on student achievement in the English classroom at two Catholic single gender schools. Specifically, this study:

- Compared seniors at a single gender all male school to seniors at a single gender all female school relative to their perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- 2. Compared male senior student perceptions to the perceptions of their faculty on the effectiveness of the use of technology on student achievement in the English classroom.
- 3. Compared female senior student perceptions to the perceptions of their faculty on the effectiveness of the use of technology on student achievement in the English classroom.
- Compared male Advanced Placement (AP), advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

 Compared female Advanced Placement (AP), advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

#### THE PROBLEM AND HYPOTHESIS

The Problem: Is the introduction of new technologies into the English classroom at a Catholic all-female high school and a Catholic all-male high school being used in ways that their teachers perceive as effective? This problem examines two different schools in the Greater Cincinnati area and how students and their faculty view the use of technology in the classroom. Hypothesis: Most teachers at the two Catholic schools being studied believe that the introduction of technology into the classroom is a good thing and believe that it has had a positive impact on the learning of students, but also believe that there are distractions which technology can cause. It is hypothesized that students will have a more positive view of technology in the classroom than their teachers.

## SIGNIFICANCE OF THE STUDY

This study is significant in the following ways:

- 1. It determines the extent to which technology is being used in the English classroom.
- 2. It examines the relationship between students and technology.
- It provides information to English teachers on the effectiveness of student technology usage.
- 4. It provides information to administrators on the student and teacher perceptions of the effectiveness of technology in the English classroom.

### ASSUMPTIONS OF THE STUDY

The following were assumptions of this study:

- 1. Participants answered all survey questions honestly, and to the best of their ability.
- 2. The survey actually measured the perception of the effectiveness of technology usage for teachers and students.
- 3. Survey participants have mixed opinions regarding the effectiveness of technology usage.

### LIMITATIONS OF THE STUDY

The following were limitations of this study:

- 1. The data collected was from the class of 2018 only.
- 2. Overall teacher morale was not considered.
- 3. Overall student morale was not considered.
- 4. This study did not take into consideration individual teachers, but rather the English programs as a whole.
- 5. Surveys were administered by the teachers leading to potential misassumptions by the students.

## DEFINITIONS

- 1. Technology Machinery and technology developed for another purpose.
- 2. Sparknotes A website dedicated to literature summary and analysis. This contains a detailed explanation of a novels plot, characters, and themes.
- 3. Writing apps Applications and websites that allow for the quick checking of spelling and grammar mistakes. Examples of this may be Hemmingwayapp and Grammarly.

- 4. Internet A global network that allows for virtual communication and the easy access of information.
- 5. Social Media Sites Websites that allow for people to share personal information, such as pictures, and gain a virtual connection with others.
- 6. Games Games or activities which can be played on an electronic device.

# CHAPTER II REVIEW OF RELATED LITERATURE

# EXPANSION OF TECHNOLOGY IN OUR DAILY LIVES

In the past few years we have seen an increase in the level of reliance on technology in our daily lives. Technology has become more available to use than ever before. This new technology has given us greater access to educational resources. Poole and Bates estimate that 90% of children between the ages of 5 and 17 use a computer, and 75% use the internet (p. 255). Mobile computing through cell phones has also increased, as data plans have become more readily available, and cheaper, and cell phones have become more widely available. Technology has now invaded every facet of our lives, and most people have become reliant on it. This new increase in available technology has brought with it new challenges and new opportunities for educators.

#### EXPANSION OF TECHNOLOGY USE IN THE GENERAL CLASSROOM

We have also seen a big shift in new technologies being introduced into the classroom. Research work for papers has become easier than ever, but this new found information, also brings with it a new set of distractions. In 2009 the National Center for Education Statistics found that 97% of teachers had at least one computer in their classrooms, and 54% could bring in additional computers if needed (Gray, Thomas, Lewis, & Tice, 2009). With the introduction of technology, educators have widely viewed it as a tool to be used in the classroom (Webster, p. 27). The survey also found that more teachers were being asked to participate in activities to prepare them to make effective use of educational technology. In the 12 months prior to completing this survey, 13 percent had not spent any time in professional development activities for educational technology, 53 percent spent one to eight hours, 18 percent spent nine to 16 hours, nine percent spent 17 to 32 hours, and seven percent spent 33 or more hours (Gray, Thomas, Lewis, & Tice, 2009). Technology has not only affected school teaching methods, but it has also increased the communication between faculty and their students. Ninety-seven percent of teachers have remote access to school email, and of the 97 percent, 85 percent reported as using this remote access sometimes or often (Gray, Thomas, Lewis, & Tice, 2009). Schools have also seen the introduction of student and teacher portals, places where students are able to remotely access school materials, as well as to submit papers. Portals have been widely adopted by most universities, and could be introduced to high school as well. Whether it is through the introduction of computers or communication tools, technology has changed the ways teachers teach and interact with their students. Teachers now have new tools and techniques they are able to use when teaching.

#### EFFECTIVE TEACHING METHODS WITH TECHNOLOGY

The introduction of technology can be a good thing, but there also needs to be an effective use for it the classroom. There are different methods for effectively using technological resources in teaching, and A.W. Bates and Gary Poole laid out a guide of how to successfully use technology in the classroom. They discuss basic methods, such as using projectors and PowerPoint. They also say that online class discussion forums and e-packs are great ways for students to get involved outside of the classroom (p. 114). They indicate that the greatest advantage to using new technology is allowing colleges and universities to reach a new market (p. 130). Online classes will allow colleges and universities to teach international students, lifelong learners, or other potential markets. As of today, there is a successful formula or method teachers can use. Teachers must try different methods and see which ones work best for their

classroom and students. Poole and Bates state that using this new technology will require a lot of planning and revision (p. 151). Teachers must see what works best and make adjustments based upon feedback from the students. Different students and different classrooms will require different methods, but many of these methods seem to be effective in involving students in learning material outside of the classroom.

#### EDUCATIONAL VIEWS OF TECHNOLOGY

With the introduction of technology there has been a wide range of new tools students and teachers are able to utilize in the classroom. The internet has increased the accessibility of sources, as well as increased opportunities for students to cheat. With the introduction of today's new technology there is a need for people to understand the ethical implication of its use (Webster p. 27). Educator's views on technology play an important role in the way technology is used in the classroom. With availability of technology playing an important factor in the integration of technology into the classroom, it is up to educational leaders and administrators to decide the role that technology will play. Webster states "The technology leaders participating in the study were generally optimistic about the potential for technology to improve education and the world, and they embraced its possibilities. Technological optimism was found to be a prevalent philosophy associated with 28 of 31 participants" (p. 28). The study also indicated that most believed that "technological change is inevitable: and that they must adopt there new methods or be left behind" (p. 32). Educational goals will drive technology usage forward, and these goals must also keep up with new technology as it is introduced (p. 33). Participants stated that it is important to embrace and not resist technological change. Most of these leaders do not want to be left behind when it comes to technological change, and will do what they can to keep up. But these ideas could carry a negative effect as well. If keeping up is emphasized

over integrating the goals of the curriculum, this could pose future problems, and future resistance to new technologies. These results show the further readiness for using new technology and integrating it into the curriculum.

#### TEACHER PERCEPTIONS OF TECHNOLOGY

Teacher perception of the usefulness of technology tends to fluctuate greatly. Fethi A. Inan and Deborah L. Lowther have identified age, years of teaching, computer proficiency, and computer availability as important to the integration of technology into classrooms (p. 141). All of these variables are linked and some variables affect the others. Fethi A. Inan and Deborah L. Lowthe indicated the most important factors in the integration of technology into schools, were teachers' beliefs and readiness, and school-level factors such as: availability of computers, technical support, and overall support. School environment and teacher perception are the two most important factors in technological integration (p. 147). This study also found that age and years of teaching negatively affected a teacher's computer proficiency. This means that age and years of teaching experience indirectly affected a teacher's beliefs and readiness to integrate technology into the classroom (p. 147). With more computers available to teachers, the study predicts that the usage of technology will increase, as teachers get younger and more computers become available. This means that educational institutions will play a larger role in expanding technological use in classroom than teachers. Teachers who have computers and new technologies available to them will be more likely to use them. In general the usage of technology will increase, but with school budgets currently in flux, the general availability of technology may decrease or stagnate.

## CHAPTER III METHODOLOGY

#### PURPOSE OF STUDY

The purpose of this study was to determine the perceived effectiveness of the use of technology on student achievement in the English classroom at two Catholic single gender schools. Specifically, this study:

- Compared seniors at a single gender all male school to seniors at a single gender all female school relative to their perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- 2. Compared male senior student perceptions to the perceptions of their faculty on the effectiveness of the use of technology on student achievement in the English classroom.
- 3. Compared female senior student perceptions to the perceptions of their faculty on the effectiveness of the use of technology on student achievement in the English classroom.
- 4. Compared male AP, advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- 5. Compared female AP, advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

The Problem: Is the introduction of new technologies into the English classroom at a Catholic all-female high school and a Catholic all-male high school being used in ways that their teachers perceive as effective? This problem examines two different schools in the Greater Cincinnati area and how students and their faculty view the use of technology in the classroom. Hypothesis: Most teachers at the two Catholic schools being studied believe that the introduction of technology into the classroom is a good thing and believe that it has had a positive impact on the learning of students, but also believe that there are distractions which technology can cause. It is hypothesized that students will have a more positive view of technology in the classroom than their teachers.

### SETTING AND POPULATION

The study took place at two private Catholic high schools in the Greater Cincinnati area. The first school where the survey was administered was an all-male school in the Archdiocese of Cincinnati, Ohio. The school has a rich tradition, and was founded in the early twentieth century; it has since graduated over 22,000 young men. It currently services 796 students in grades nine through twelve. There are 104 faculty and staff. Among the faculty, forty of them hold master's degrees and three hold doctorates. The teacher to student ratio is 13:1. The school services students of varying ability, but it is classified as a college preparatory school. Freshman and sophomore year classes range from general level to honors level. Junior and senior year classes are offered on the college preparatory level, advanced college preparatory level, honors level, advanced placement level, and as dual credit. Eighteen classes are offered as advanced placement requiring a test at the end of the course to obtain college credit. Three classes are dual credit, whereby a student takes the actual college level course for college credit awarded by a specific neighboring college. This school is highly rated for academics, teachers, extracurricular activities, and sports. In most recent years, it has been 82% commitment to a fouryear college by the end of the senior year. The 18% who are not will be headed to two yearcolleges, trade-schools, military or full-time employment.

The other school was an all-girls catholic school located in the Diocese of Covington. The enrollment of the school was about 575 students. The school serves students of varying ability, but it is classified as a college preparatory school. There is a 14:1 student-teacher ratio. The school has 45 faculty and 72 staff members with 88% having a Master's degree or higher.

The schools offers a total of 13 AP classes, as well as a dual credit program with local Colleges and Universities. The class of 2017 had a 100% graduation rate, and performed 11,000 hours of service in their four years. The average ACT Composite score for the class of 2017 was a 25.6. The class of 2017 has three National Merit Finalists and one Semi-Finalist, and four students were National Merit Commended Students. In the outgoing senior class 98% received a college scholarship offer. In 2012 and 1996 the school was deemed a United States Blue Ribbon School of Excellence.

This study focused on students in their senior year only. It also only focused on the students within the English classroom. It examined all academic levels for senior students and most will be headed to a four-year college program.

#### DATA COLLECTION

A one page survey was constructed and given to teachers to distribute to the senior students during their English class. All of the English instructors in the school were also given surveys to gauge their opinions. Participants gave their opinions on the questions by selecting one of the following options: strongly disagree; disagree; no opinion; agree; strongly agree. Each instructor was given a packet of surveys to distribute to his class, as well as instructions explaining to them how to distribute the surveys. Consent was obtained by the respective administrator prior to distributing the surveys.

The following procedure was used by English instructors for administering the survey to their students (copies of the instructions can be found in the appendix):

- 1. Teachers were asked to complete the instructor survey.
- 2. Student surveys were distributed to the English class.
- 3. Students were asked to respond to the survey items as honestly as possible.

- 4. Students were told that they were assisting with a research project for a Xavier University student who was completing his graduate degree.
- 5. Completed surveys were collected and returned to the building administrator.

## DATA COMPILATION AND ANALYSIS

The following steps were taken to analyze the data.

- 1. Raw data was assembled into a table (see the appendix).
- 2. A two-sample t-test was performed on each of the survey items comparing the male and female senior student perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- A two-sample t-test was performed on comparable survey items comparing the male senior students and faculty perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- 4. A two-sample t-test was performed on comparable survey items comparing the female senior student perceptions of the effectiveness of the use of technology on student achievement in the English classroom to their faculty.
- 5. An analysis of variance (ANOVA) was performed on each of the survey items to compare the differences between the AP, advanced, and college preparatory male senior students' perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- 6. An analysis of variance (ANOVA) was performed on each of the survey items to compare the differences between the AP, advanced, and college preparatory female

senior students' perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

7. Conclusions were drawn from the statistical tests.

## SUMMARY

The purpose of this study was to determine the perceived effectiveness of the use of technology on student achievement in the English classroom at two Catholic single gender schools. Both teacher and student opinions were surveyed using two different surveys, one given to students and the other given to teachers of English classes. The survey was administered by the classroom English teachers who were given instructions on the procedure for survey administration.

## CHAPTER IV FINDINGS AND RESULTS

#### INTRODUCTION

The purpose of this study was to determine the perceived effectiveness of the use of technology on student achievement in the English classroom at two Catholic single gender schools. Specifically, this study:

- Compared seniors at a single gender all male school to seniors at a single gender all female school relative to their perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- 2. Compared male senior student perceptions to the perceptions of their faculty on the effectiveness of the use of technology on student achievement in the English classroom.
- 3. Compared female senior student perceptions to the perceptions of their faculty on the effectiveness of the use of technology on student achievement in the English classroom.
- Compared male Advanced Placement (AP), advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.
- Compared female Advanced Placement (AP), advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

All the English instructors in the school were given surveys as well in order to gauge their opinions. Participants gave their opinions on the questions by selecting one of the following options: strongly disagree; disagree; no opinion; agree; strongly agree. Each instructor was given a packet of surveys to distribute to his class, as well as instructions explaining to them how

to distribute the surveys. Consent was obtained by the respective administrator prior to distributing the surveys.

# PRESENTATION OF DATA COMPARING STUDENT OPINIONS BY GENDER ON THE USE OF TECHNOLOGY IN THE ENGLISH CLASSROOM

There were eight questions used to determine whether there were differences in opinion between boys and girls of the two different schools. A two-sample t-test was performed on each of the eight survey questions, and the results determined whether there were significant differences between the male and female students at the two different schools. See Table One.

Question	Mean	Mean	Variance	Variance	df	t-Stat	t-Critical	Significance
	All-	All-	All-	All-			Two-Tail	
	Male	Female	Male	Female				
	High	High	High	High				
	School	School	School	School				
1	2.264	1.57	0.885	0.346	336	8.381	1.967	Yes
2	1.876	1.33	0.749	0.237	316	7.412	1.967	Yes
3	3.144	3.528	1.374	1.187	316	-3.114	1.967	Yes
4	4.129	3.88	1.023	1.212	287	2.133	1.968	Yes
5	3.144	4.169	1.414	0.737	340	-9.267	1.966	Yes
6	2.478	3.317	1.491	1,425	306	-6.319	1.968	Yes
7	2.582	2.486	1.384	0.932	333	0.829	1.967	No
8	3.647	3.148	0.92	1.01	295	4.62	1.97	Yes

**Table 1: Male and Female Opinions** 

# PRESENTATION OF DATA COMPARING MALE STUDENT PERCEPTION TO THEIR TEACHERS ON THE USE OF TECNOLOGY IN THE ENGLISH CLASSROOM

There were six questions used to determine whether there were differences in opinion between students and teachers at the all-male school. A two-sample t-test was performed on each of the six survey questions, and the results determined whether there were significant differences between the students and teachers. See Table Two.

Question	Mean	Mean	Variance	Variance	df	t-Stat	t Critical	Significance
	All -	Teachers	All- Male	Teachers			Two-Tail	
	Male	All-	High	All-				
	High	Male	School	Male				
	School	High		High				
		School		School				
1	2.264	2.667	0.885	1.75	8	-0.904	2.306	No
2	1.876	3.112	0.749	2.611	8	-2.279	2.306	No
3	3.144	4.556	1.374	1.027	8	-4.056	2.306	Yes
4	2.478	3.111	1.491	2.611	8	-1.161	2.306	no
5	2.582	2.333	1.384	1.75	8	0.554	2.306	no
6	3.647	3.222	0.92	1.944	8	0.903	2.306	no

Table 2: Boy's School Student and Teacher Opinions

# PRESENTATION OF DATA COMPARING FEMALE STUDENT PERCEPTION TO THEIR TEACHERS ON THE USE OF TECNOLOGY IN THE ENGLISH CLASSROOM

There were six questions used to determine whether there were differences in opinion between students and teachers of the female school. A two-sample t-test was performed on each of the six survey questions, and the results determined whether there were significant differences between the students and teachers. See Table Three.

Question	Mean	Mean	Variance	Variance	df	t-Stat	t-Critical	Significance
	All-	Teachers	All-	Teachers			Two-Tail	
	Female	All-	Female	All-				
	High	Female	High	Female				
	School	High	School	High				
		School		School				
1	1.57	1.714	0.346	0.238	6	-0.754	2.447	No
2	1.33	2.000	0.237	1.000	6	-1.76	2.45	No
3	3.528	4.429	1.187	1.290	6	-2.055	2.447	No
4	2.217	1.714	1.452	0.238	10	7.619	2.228	Yes
5	2.486	1.857	0.932	0.476	7	2.302	2.365	No
6	3.148	2.571	1.006	0.619	6	1.865	2.447	No

Table 3: Girl's School Student and Teacher Opinions

# PRESENTATION OF DATA COMPARING MALE STUDENT OPINIONS ON THE USE OF TECHNOLOGY BASED UPON ACADEMIC LEVEL

There were eight questions used to determine whether there were differences in opinion between academic levels at the Boy's school. An ANOVA was performed on each of the eight survey questions, and the results determined whether there were significant differences between the academic levels at the all-boys school. See Table Four.

Mean Mean F Q Mean Variance Variance Variance df Significance f-stat L1 L2 L3 L1 L2 L3 1 2.741 0.892 2 3.042 2.169 2.218 0.664 1.050 4.184 Yes 2 1.921 1.835 1.852 0.619 0.782 1.131 2 0.225 3.042 No 2.685 3.459 1.538 2 14.221 3.042 3 3.667 1.286 1.037 Yes 3.764 2 12.156 4 4.365 4.593 1.160 0.806 0.481 3.042 Yes 2 5 1.685 1.818 2.037 0.806 2.038 3.042 0.536 0.726 No 6 3.136 3.417 2.230 1.383 1.330 0.745 2 10.916 3.042 Yes 2 7 2.596 2.588 2.519 1.380 1.364 1.567 0.046 3.042 No 8 3.416 3.788 3.963 0.669 0.729 2 5.184 3.042 Yes 1.132

Table 4: Boy's School Class Type

# PRESENTATION OF DATA COMPARING FEMALE STUDENT OPINIONS ON THE USE OF TECHNOLOGY BASED UPON ACADEMIC LEVEL

There were eight questions used to determine whether there were differences in opinion between academic levels at the Girl's school. An ANOVA was performed on each of the eight survey questions, and the results determined whether there were significant differences between the academic levels at the all-female school. See Table Five.

Q	Mean L1	Mean L2	Mean L3	Variance L1	Variance L2	Variance L3	df	F	f-stat	Significance
1	1.507	1.647	1.625	0.307	0.393	0.383	2	0.941	3.061	No
2	1.267	1.353	1.563	0.198	0.273	0.263	2	2.570	3.061	No
3	3.280	3.569	4.563	1.150	1.130	0.263	2	10.418	3.061	Yes
4	3.747	3.882	4.500	1.327	1.106	1.106	2	3.182	3.061	Yes
5	1.333	1.333	1.438	0.279	0.227	0.263	2	0.298	3.061	No
6	3.440	3.137	3.313	1.358	1.561	1.563	2	0.958	3.061	No
7	2.520	2.451	2.438	1.010	0.933	0.663	2	0.099	3.061	No
8	3.040	3.255	3.313	1.174	0.714	1.163	2	0.939	0.394	Yes

Table 5: Girl's School Class Type

# CHAPTER V SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH SUMMARY

The purpose of my study was to determine what the perceived effectiveness of the use of technology on student achievement was in the English classroom an all-male and all-female high school. A one-page survey was constructed and given to teachers to distribute to the senior students during their English class. All of the English instructors in the school were given surveys as well in order to gauge their opinions. Participants gave their opinions on the questions by selecting one of the following options: strongly disagree; disagree; no opinion; agree; strongly agree. Each instructor was given a packet of surveys to distribute to their class, as well as instructions explaining to them how to distribute the surveys. Consent was obtained by the respective administrator prior to distributing the surveys (consent copies are in the appendix).

A two-sample t-test was conducted to compare male and female senior student perceptions of the effectiveness of the use of technology on student achievement in the English classroom. The tests showed significance between the male and female students.

A two-sample t-test was conducted to compare the male high school senior student perceptions to their faculty perceptions of the effectiveness of the use of technology on student achievement in the English classroom. The tests showed no significance between the two groups..

A two-sample t-test was conducted to compare female high school senior student perceptions to their faculty perceptions of the effectiveness of the use of technology on student achievement in the English classroom. The test showed no significance between the two groups.

An ANOVA was performed to compare the male high school Advanced Placement, advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

An ANOVA was performed to compare the female high school Advanced Placement, advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

An ANOVA was performed to compare overall AP, advanced, and college preparatory perceptions of the effectiveness of the use of technology on student achievement in the English classroom.

### STATISITICAL CONCLUSIONS

Statistical analysis was performed on the data collected, and a number of tests were run, comparing the different groups. The following statistical conclusions were results of the analysis.

- 1. Teachers are aware of the use of prohibited social media during class time.
- 2. Teachers and Students disagree on the use of SparkNotes and other literary summaries as a substitute for reading.
- 3. Gender seems to play a role as male high school and female high school students disagree on the effectiveness of technology on student achievement in the English classroom.
- 4. Teachers and Students agree on the effectiveness of technology on student achievement in the English classroom.
- Students at the all-male school are more likely to access restricted websites than their female counterparts.
- 6. Students at the all-female school are more likely to play games or use social media than their male counterparts.

- 7. The teachers at the all-male high school are more likely to believe that students have been able to gain access to blocked websites.
- Both male and female students in the lower level English classes are more likely to view SparkNotes as a substitute for reading.
- 9. Both teachers and students believe that the internet is an effective research tool.

### GENERAL CONCLUSIONS

Teachers at both the all-male and all-female high school are aware of the perceptions of technology usage by the students. Students at both schools have used social media or have accessed prohibited websites that the school has attempted to block and it seems that teachers are aware of this. Students in lower level reading classes are more likely to use SparkNotes or other literature summary sites as a substitute for readings. Students at both schools believe that technology is being used effectively. However, students at the all-girls school more strongly agree that technology is being used effectively in their English class.

The hypothesis that both students and teachers believed that technology was being used effectively in the English classroom was supported by this study. Teachers were also aware of their students using social media and games during class time and having access to restricted websites. The hypothesis that students would have a more positive outlook than teachers on the use of technology in the English classroom was not supported by this study. Both students and teachers had a similar outlook on technology in the English classroom.

#### **RECOMMENDATIONS FOR FURTHER RESEARCH**

The following are recommendations for further research.

1. Expand the study to include students at the collegiate level and university level.

- 2. Test the perceptions of technology on education for online learning.
- 3. Expand the study to schools nationally.
- 4. Expand the study to include more grade levels.
- 5. Expand the study to compare perceptions between teachers of different schools.
- 6. Conduct a study to compare perceptions of parochial and public schools.

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# APPENDICES

Surveys

Raw Data



My name is Joe Student and I am completing a research project for my Master of Arts degree. Thank you for completing this survey.

Which of the following best describes your English class? (check one)							
College Prep Advanced AP/ College Credit							
Thinking back to your 7th and 8th grade experience, did your school provide any technological devices such as a Laptop or Tablet (Chromebook, Ipad, or Macbook) for your academic use?							
YesNo							
Do you have internet access at home?							
YesNo							
Type of Grade School you attended for 7 <sup>th</sup> and 8 <sup>th</sup> grade?							
Catholic Public							

Statement	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
I believe technology is being used effectively by my teacher in my English class.					
I think web sources such as Sparknotes, Shmoop, and Litcharts are effective tools in helping me to <u>understand</u> literature.					
I think web sources such as Sparknotes, Shmoop, and Litcharts can be a substitute for reading an actual book.					
I frequently use writing apps (like Grammarly, Hemingway, ect) to improve the quality of my essays.					
The internet is an important tool that I use to research material and content for my writing.					
I do not use technology often for my English class.					
My school allows access to all websites (No Blocking).					
I have found ways around the blocking of access to certain websites.					
I have played games or used social media sites (like Facebook) during class time.					
During school hours, the internet should never be used for non- educational purposes.					



My name is Joe Student and I am completing a research project for my Master of Arts degree. Thank you for completing this survey.

Which of the following best describes your English classes? (check all that apply)							
College Prep Advanced	AP/ College Credit						
I have been an educator for years.							

Statement	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
I try to use technology as much as possible in my classroom.					
I think web sources such as Sparknotes, Shmoop, and Litcharts are effective tools in helping students <i>understand</i> literature					
I think web sources such as Sparknotes, Shmoop, and Litcharts can be a substitute for reading an actual book.					
I encourage my student to use writing apps (like Grammarly, Hemingway, ect) to improve their essays.					
The internet is an important tool which my students can use to research material for their writing.					
English is best taught in more traditional teaching methods that do not involve daily use of technology.					
I often use videos (like YouTube) and movies (like DVD or DV) to help my students better understand the English and literature.					
I believe my students have found ways around the blocking of access to certain websites within the school.					
I believe my students have played games or used social media sites (like facebook) during class time.					
During school hours students should never use the internet for non- educational purposes.					

# RAW DATA: All-Male High School

Number	-	1	2	2	4	5	6	7	ø
Number	English Class Type	1	2	3	4		6	7	8
1	2	1	1	5	5	1	2	2	4
2	1	2	2	3	4	2	3	2	4
3	1	2	2	4	5	3	4	3	4
4	1	2	3	4	2	2	2	2	2
5	2	2	1	1	4	1	3	2	4
6	2	4	1	2	4	2	1	1	4
7	2	2	2	4	4	1	2	4	4
8	2	2	2		4	1		2	3
				4			2		
9	2	1	3	4	5	2	1	1	4
10	2	2	2	3	4	2	4	2	4
11	2	2	1	4	5	2	2	3	3
12	2	1	1	3	5	1	2	2	4
13	2	2	1	2	5	1	1	1	5
14	2	2	2	4	4	2	2	2	4
15	2	1	1	3	2	1	2	2	5
16	1	2	3	4	4	1	3	2	2
17	2	1	2	4	5	1	1	1	2
18	1	2	2	3	2	1	4	3	3
19	1	2	2	4	4	2	2	2	3
20	2	2	2	4	5	2	2	2	3
21	2	1	2	4	5	1	2	3	4
22	2	2	2	2	5	1	1	2	3
23	2	2	2	3	4	2	2	2	4
24	2	1	2	4	4	2	2	2	4
25	2	4	1	5	5	2	2	2	4
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27	2	2	2	4	5	2	3	3	3
28	2	3	3	2	5	1	5	3	4
29 20	2	3	1	4 4	1	2	4	2	5 4
30 31	2 1	3 3	1 4	4	5 5	1 2	2 3	2 3	4
31	2	2	4	4	5	2	2	2	4
32	2	2	1	2	5	2	2	3	4
33	2	2	2	3	4	2	2	2	3
35	2	3	3	4	4	3	2	4	3
36	2	2	4	5	5	3	5	5	4
37	2	2	2	4	4	1	2	2	2
38	1	1	3	1	5	1	5	5	5
39	2	1	4	3	4	2	2	4	4
40	2	1	2	4	5	3	5	5	4
41	2	1	1	2	5	5	2	3	4
42	2	1	1	3	4	1	1	2	3
43	2	2	1	4	5	2	4	2	5
44	2	2	1	4	5	2	2	2	4

Number	English Class Type	1	2	3	4	5	6	7	8
45	2	3	3	5	5	2	3	2	4
46	2	2	1	4	5	1	1	5	4
47	2	2	2	3	3	2	3	3	3
48	2	1	1	2	5	4	2	2	3
49	2	2	2	4	5	3	1	5	4
50	2	2	2	4	5	1	4	3	4
51	2	4	2	2	5	1	1	5	4
52	2	2	1	2	5	2	2	2	4
53	2	4	4	4	4	1	5	3	3
54	2	2	2	4	4	2	4	2	4
55	2	4	2	5	5	1	2	5	4
56	2	2	3	4	5	2	1	3	5
57	2	2	2	4	5	3	1	4	3
58	2	2	3	2	2	1	3	5	4
59	2	4	2	2	4	1	2	2	4
60	2	2	2	3	5	2	2	2	4
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69	2	3	3	5	4	1	2	2	4
70	2	1	2	4	4	2	1	2	4
71	1	2	1	1	4	1	1	1	4
72	2	2	2	4	5	2	2	4	3
73	2	2	2	4	4	2	3	2	5
74	2	5	1	2	4	1	2	2	4
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76	1	4	2	2	3	2	1	1	5
77	2	2	1	5	5	2	5	2	2
78	2	2	1	4	5	2	4	2	4
79	2	4	1	4	5	2	1	1	5
80	2	2	2	3	5	1	1	1	5
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90	2	4	1	2	4	1	2	2	5
91	2	2	1	4	4	1	3	3	2
92	1	2	2	3	3	2	3	3	2
93	1	3	1	1	5	1	1	1	5
		-			-				-

Number	English Class Type	1	2	3	4	5	6	7	8
94	1	1	1	1	5	1	5	5	3
95	1	3	2	3	3	2	3	2	3
96	1	1	2	2	4	1	2	1	5
97	1	2	3	4	3	2	2	3	3
98	1	3	2	3	4	1	5	4	3
99	1	2	2	2	3	2	2	2	3
100	1	2	2	3	2	2	4	2	4
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113	3	2	2	4	5	1	2	5	4
114	3	2	2	4	4	3	2	2	4
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116	3	3	3	5	5	3	3	5	3
117	3	1	5	4	5	2	1	2	3
118	3	2	1	3	4	2	3	3	3
119	3	4	1	2	4	1	2	2	4
120	3	4	1	1	5	2	1	1	5
121	3	2	1	4	5	2	5	5	5
122	3	4	1	5	5	1	2	2	3
123	3	3	1	2	4	3	1	2	4
124	3	4	3	1	5	1	2	1	5
125	3	3	1	1 4	4	2 4	1	4	4
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127	3	2	3 3	5	5	4	5	3	2
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129	1	2 2	2 2	4 3	3 4	2 1	4 2	4	2 3
130	1 1	2	2	3	4	1	2	2	5 2
131	1	2 4	2 1	2	4	1	1	3	2 4
132	1	4 2	1	2	4 5	2	3	1	4
133	1	5	3	3	5	2	3	3	3
134	1	2	1	2	4	2	3	2	3
135	1	4	1	1	3	1	2	2	3
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137	1	1 2	2	4	5 5	2	2	5 2	2
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140 141	2	2	3 2	2 2	3 4	5 2	3 3	5 4	3
141	1	2	2 1	1	4 5	2 1	5 1	4	5 5
142	1	L	1	1	3	1	1	1	3

1432213221114412224242145321452111471233443414825535435149131142222150133242331511223311415312242434153122442421571311111115612133551611222443416012333551611222411116212333551611222422316411111111116621133223164111111111166<	Number	English Class Type	1	2	3	4	5	6	7	8
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146142351111471233443414825553542221501311422233151122231141531223322315412213312215612133122157131532351581224341601233335516112243412163122434234166111111111166211111111166111111111166111111111166111111111166111111111166 <t< td=""><td>144</td><td>1</td><td>2</td><td>2</td><td>2</td><td>4</td><td>2</td><td>4</td><td>2</td><td>4</td></t<>	144	1	2	2	2	4	2	4	2	4
14712334434 $148$ 25535435 $149$ 13324222 $150$ 13324233 $151$ 122233224 $153$ 12233223 $154$ 12244243 $155$ 13111111 $156$ 12133122 $157$ 13153235 $166$ 12224434 $160$ 1233355 $161$ 12224133 $164$ 111111112 $167$ 1222434234 $166$ 1111111111 $166$ 11111111112 $163$ 1222223333233 $166$ 1111	145	3	2	1	4	5	2	1	2	4
148255354351491311422221501332423315112223311315214242424315312224424315513111111115612244335158122443341591125513331621233112216312224433162111111111662111111116621111111166211133223169141252121661213322317013332233171122 <t< td=""><td>146</td><td>1</td><td>4</td><td>2</td><td>3</td><td>5</td><td>1</td><td>1</td><td>1</td><td>4</td></t<>	146	1	4	2	3	5	1	1	1	4
1491311422215013324233151122311315214242424153122332231541224424315513111111156121331221571315323316012333355161122441316212331121631224434166111111116621111111662111111166121112221671222333331691412521217013332233174122331<	147	1	2	3	3	4	4	3	4	3
15013324233 $151$ 12223113 $152$ 14242414 $153$ 1223111 $154$ 12244243 $155$ 131111111 $156$ 12133235 $157$ 131532334 $160$ 1233355 $161$ 12224133 $162$ 12323112 $163$ 12224323 $164$ 11111111 $166$ 2111111 $166$ 21112222 $166$ 12213342 $170$ 13334255 $171$ 12234133 $172$ 12233444 $175$ 1411524 <t< td=""><td>148</td><td>2</td><td>5</td><td>5</td><td>3</td><td>5</td><td>4</td><td>3</td><td>5</td><td>4</td></t<>	148	2	5	5	3	5	4	3	5	4
15112223113152142424141531223322315412244243155131111111561213312215713153235158122443316012333551611222411222432331621222411116312224234165111111111662111222316712224323316812115212170133342551711223311117212233144175141 <td< td=""><td>149</td><td>1</td><td>3</td><td>1</td><td>1</td><td>4</td><td>2</td><td>2</td><td>2</td><td>5</td></td<>	149	1	3	1	1	4	2	2	2	5
15214242414 $153$ 12233223 $154$ 12244243 $155$ 1311111 $156$ 12133122 $157$ 13153235 $158$ 1224434 $160$ 1233355 $161$ 12224133 $162$ 12323112 $163$ 12243233 $164$ 1111112 $163$ 1222422 $166$ 11111111 $166$ 21112222 $167$ 122233333 $169$ 14125212 $170$ 13332233 $174$ 12233111 $176$ 12123223 $177$ <td>150</td> <td>1</td> <td>3</td> <td>3</td> <td>2</td> <td>4</td> <td>2</td> <td>3</td> <td>3</td> <td>3</td>	150	1	3	3	2	4	2	3	3	3
15312233223 $154$ 12244243 $155$ 13111111 $156$ 12133122 $157$ 13153235 $158$ 12244344 $159$ 11255133 $161$ 12224133 $162$ 12323112 $163$ 12243233 $164$ 111111111 $166$ 21111111 $166$ 21111111 $166$ 21112222 $167$ 122234255 $171$ 12234133333 $169$ 1412521223 $177$ 12133223311 $176$ 1223214	151	1	2	2	2	3	1	1	3	3
15412244243 $155$ 1311111111 $156$ 12133122 $157$ 13153235 $158$ 1224434 $159$ 11255133 $160$ 12323112 $163$ 12243233 $164$ 11111111 $166$ 21111111 $166$ 21111111 $166$ 21111111 $166$ 21115223 $169$ 141255122 $170$ 13332233 $174$ 12233111 $176$ 12233223 $177$ 12125111 $176$ 12233223 $177$ 1212 <t< td=""><td>152</td><td>1</td><td>4</td><td>2</td><td>4</td><td>2</td><td>4</td><td>1</td><td>4</td><td>3</td></t<>	152	1	4	2	4	2	4	1	4	3
1551311111115612133122157131532351581244341591125513416012333355161122241331621232311216312243233164111111111662111111116621115223167122243251711222432216812115212170133342551711223111176122331117612322311761232311181111111<	153	1	2	2	3	3	2	2	3	3
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15713153235 $158$ 12244344 $159$ 11255134 $160$ 12333355 $161$ 12224133 $162$ 12323112 $163$ 12243233 $164$ 11111111 $166$ 2111222 $167$ 1222423 $166$ 12115223 $166$ 12115223 $167$ 12243223 $169$ 14125242 $170$ 13334255 $171$ 1223144 $175$ 14115311 $176$ 12233222 $180$ 12124231 $177$ 12325144 <td< td=""><td>155</td><td>1</td><td>3</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>5</td></td<>	155	1	3	1	1	1	1	1	1	5
15812244344 $159$ 11255134 $160$ 1233355 $161$ 12224133 $162$ 122243233 $164$ 111134234 $165$ 11111111 $166$ 21112222 $167$ 12243233 $169$ 14125212 $170$ 13334255 $171$ 12234133 $172$ 12234133 $174$ 1223144 $175$ 14115311 $176$ 12232231 $176$ 12232222 $180$ 12124222 $180$ 121242231 $183$ 11124 <t< td=""><td>156</td><td>1</td><td>2</td><td>1</td><td>3</td><td>3</td><td>1</td><td>2</td><td>2</td><td>3</td></t<>	156	1	2	1	3	3	1	2	2	3
15911255134 $160$ 12333355 $161$ 12224133 $162$ 12323112 $163$ 12243233 $164$ 11111111 $165$ 11111111 $166$ 21115222 $167$ 12224323 $169$ 14125212 $170$ 13334223 $172$ 12234133 $174$ 12233223 $177$ 12125144 $175$ 14115244 $176$ 12232231 $176$ 12124231 $177$ 12124231 $176$ 12232231 $176$ 121245 <t< td=""><td>157</td><td>1</td><td>3</td><td>1</td><td>5</td><td>3</td><td>2</td><td>3</td><td>5</td><td>3</td></t<>	157	1	3	1	5	3	2	3	5	3
16012333355 $161$ 12224133 $162$ 12323112 $163$ 12243233 $164$ 111111111 $166$ 21111111 $166$ 21115222 $167$ 12224242 $168$ 12115223 $169$ 14125212 $170$ 13334255 $171$ 12234133 $172$ 12135242 $173$ 12233223 $177$ 121245244 $176$ 12325111 $177$ 12124231 $177$ 12322311 $183$ 11245144 $179$ 1232 <t< td=""><td>158</td><td>1</td><td>2</td><td>2</td><td>4</td><td>4</td><td>3</td><td>4</td><td>4</td><td>5</td></t<>	158	1	2	2	4	4	3	4	4	5
16112224133 $162$ 12323112 $163$ 12243233 $164$ 111134234 $165$ 111111111 $166$ 211112222 $167$ 12224242 $168$ 12115223 $169$ 14125212 $170$ 13334255 $171$ 12223412 $173$ 1223314 $175$ 14115311 $176$ 12233223 $177$ 121245244 $178$ 11245244 $179$ 12124222 $180$ 121241111 $183$ 111242244 $186$ 1 <t< td=""><td>159</td><td>1</td><td>1</td><td>2</td><td>5</td><td>5</td><td>1</td><td>3</td><td>4</td><td>4</td></t<>	159	1	1	2	5	5	1	3	4	4
16212323112 $163$ 12243233 $164$ 111134234 $165$ 1111111111 $166$ 2111111111 $166$ 21115222 $167$ 12224242 $168$ 12115212 $169$ 1412555 $171$ 12234133 $172$ 12135242 $173$ 1223311 $176$ 12233223 $177$ 12125144 $176$ 1212444 $178$ 11245244 $179$ 12124422 $180$ 121244111 $181$ 12441111 $184$ 111 <t< td=""><td>160</td><td>1</td><td>2</td><td>3</td><td>3</td><td>3</td><td>3</td><td>5</td><td>5</td><td>5</td></t<>	160	1	2	3	3	3	3	5	5	5
16312243233 $164$ 111134234 $165$ 111111111 $166$ 211111111 $166$ 211122222 $167$ 122224242 $168$ 12115223 $169$ 14125212 $170$ 13334255 $171$ 12234133 $172$ 12234133 $174$ 12223144 $175$ 14115311 $176$ 12232231 $176$ 1212444 $178$ 11245144 $179$ 122321422 $180$ 1111111111 $183$ 111245114	161	1	2	2	2	4	1	3	3	5
1641113 $4$ $2$ $3$ $4$ $165$ 111111111 $166$ 21112 $2$ $2$ $2$ $2$ $167$ 1 $2$ $2$ $2$ $4$ $2$ $4$ $2$ $168$ 1 $2$ $1$ $1$ $5$ $2$ $2$ $3$ $169$ 1 $4$ $1$ $2$ $5$ $2$ $1$ $2$ $170$ 1 $3$ $3$ $3$ $4$ $2$ $5$ $5$ $171$ 1 $2$ $2$ $4$ $3$ $2$ $2$ $3$ $172$ 1 $2$ $1$ $3$ $5$ $2$ $4$ $4$ $173$ 1 $2$ $2$ $3$ $1$ $4$ $4$ $175$ 1 $4$ $1$ $1$ $5$ $3$ $1$ $1$ $176$ 1 $2$ $2$ $3$ $3$ $2$ $2$ $3$ $177$ $1$ $2$ $1$ $2$ $5$ $1$ $4$ $4$ $178$ $1$ $1$ $2$ $3$ $2$ $2$ $3$ $1$ $181$ $1$ $2$ $1$ $2$ $4$ $2$ $2$ $2$ $180$ $1$ $2$ $1$ $2$ $4$ $2$ $2$ $4$ $4$ $183$ $1$ $1$ $1$ $2$ $4$ $4$ $2$ $2$ $4$ $4$ $188$ <t< td=""><td>162</td><td>1</td><td>2</td><td>3</td><td>2</td><td>3</td><td>1</td><td>1</td><td>2</td><td>3</td></t<>	162	1	2	3	2	3	1	1	2	3
1651111111111 $166$ 21111111111 $167$ 122224242 $168$ 12115223 $169$ 14125212 $170$ 13334255 $171$ 12243223 $172$ 12234133 $174$ 1223144 $175$ 1411531 $176$ 12233223 $177$ 12125144 $175$ 14115244 $176$ 12325122 $180$ 121245244 $181$ 122321422 $180$ 121241111 $183$ 111242244 $185$ 121244224	163	1	2	2	4	3	2	3	3	2
166211122222 $167$ 12224242 $168$ 12115223 $169$ 14125212 $170$ 13334255 $171$ 12243223 $172$ 12234133 $174$ 12223144 $175$ 14115311 $176$ 12233223 $177$ 12125144 $178$ 11245244 $179$ 12325122 $180$ 12124222 $181$ 12232222 $184$ 11124422 $188$ 12244224 $187$ 11125111 $188$ 12244254 $189$ 12244 <t< td=""><td>164</td><td>1</td><td>1</td><td>1</td><td>3</td><td>4</td><td>2</td><td>3</td><td>4</td><td>3</td></t<>	164	1	1	1	3	4	2	3	4	3
16712224242 $168$ 12115223 $169$ 14125212 $170$ 13334255 $171$ 12243223 $172$ 12135242 $173$ 12234133 $174$ 12233223 $176$ 12233223 $177$ 12125144 $176$ 12233223 $177$ 12125144 $178$ 11245244 $179$ 12325122 $180$ 12232142 $181$ 12441111 $183$ 11124422 $184$ 122442244 $185$ 122442541 $188$ 1224 <t< td=""><td>165</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></t<>	165	1	1	1	1	1	1	1	1	1
16812115223 $169$ 14125212 $170$ 13334255 $171$ 12243223 $172$ 12135242 $173$ 12234133 $174$ 12233223 $174$ 12233223 $176$ 12233223 $177$ 12125144 $178$ 1124524 $179$ 12325122 $180$ 12124222 $180$ 12114111 $183$ 11124122 $184$ 112442244 $186$ 12442244 $186$ 12244254 $188$ 12244254 $189$ 122342 <t< td=""><td>166</td><td>2</td><td>1</td><td>1</td><td>1</td><td>2</td><td>2</td><td>2</td><td>2</td><td>3</td></t<>	166	2	1	1	1	2	2	2	2	3
1691 $4$ 1 $2$ $5$ $2$ 1 $2$ $170$ 1 $3$ $3$ $3$ $4$ $2$ $5$ $5$ $171$ 1 $2$ $2$ $4$ $3$ $2$ $2$ $3$ $172$ 1 $2$ $1$ $3$ $5$ $2$ $4$ $2$ $173$ 1 $2$ $2$ $3$ $4$ $1$ $3$ $3$ $174$ 1 $2$ $2$ $2$ $3$ $1$ $4$ $4$ $175$ 1 $4$ $1$ $1$ $5$ $3$ $1$ $1$ $176$ 1 $2$ $2$ $3$ $3$ $2$ $2$ $3$ $177$ 1 $2$ $1$ $2$ $5$ $1$ $4$ $4$ $178$ 1 $1$ $2$ $4$ $5$ $2$ $4$ $4$ $179$ $1$ $2$ $1$ $2$ $4$ $2$ $2$ $3$ $1$ $181$ $1$ $2$ $1$ $2$ $4$ $2$ $2$ $1$ $4$ $2$ $182$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $183$ $1$ $1$ $2$ $1$ $2$ $4$ $4$ $2$ $2$ $4$ $4$ $185$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $188$ $1$ $2$ $2$ $4$ $4$ $2$ $5$ $4$ $4$ $189$ $1$	167	1	2	2	2	4	2	4	2	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	168	1	2	1	1	5	2	2	3	5
17112243223 $172$ 12135242 $173$ 12234133 $174$ 12223144 $175$ 14115311 $176$ 12233223 $177$ 12125144 $178$ 11245244 $179$ 12325122 $180$ 12232142 $181$ 1223221 $183$ 11124122 $184$ 11124224 $185$ 12442244 $186$ 12442244 $186$ 12244254 $188$ 122442244 $189$ 12234222 $190$ 12234222	169	1	4	1	2	5	2	1	2	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	170	1	3	3	3	4	2	5	5	2
17312234133 $174$ 12223144 $175$ 14115311 $176$ 12233223 $177$ 12125144 $178$ 11245244 $179$ 12325122 $180$ 12124231 $181$ 12232142 $182$ 12114111 $183$ 11242244 $185$ 12124224 $186$ 12442244 $187$ 11125111 $188$ 12244254 $189$ 12234222 $190$ 12234222	171	1	2	2	4	3	2	2	3	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	172	1	2	1	3	5	2	4	2	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1	2		3	4	1	3	3	3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1		2	2			4	4	3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	175	1	4	1			3	1	1	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1	2	2			2	2	3	2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1	2	1	2	5	1	4	4	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1				5	2	4	4	3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1		3		5	1		2	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1				4	2	3		3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	181	1	2	2	3	2	1	4	2	3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1	2	1	1	4	1	1	1	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	183	1	1	1	2	4	1	2	2	2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	184	1	1	2	4	5	1	1	4	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1		1		4		4	4	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	186	1	2	4	4	2	2	4	4	4
189 1 2 1 2 4 1 2 2   190 1 2 2 3 4 2 2 2		1	1	1	2	5	1	1	1	5
190 1 2 2 3 4 2 2 2		1	2	2	4	4	2	5	4	3
	189	1	2	1	2	4	1	2	2	5
191 1 2 1 1 2 1 2 1	190	1	2	2	3	4	2	2	2	4
	191	1	2	1	1	2	1	2	1	4

Number	English Class Type	1	2	3	4	5	6	7	8
192	1	3	2	4	4	4	2	2	2
193	1	1	1	3	3	1	5	5	3
194	1	2	4	5	5	1	2	4	3
195	1	1	3	1	5	1	2	2	1
196	1	2	2	2	5	1	2	2	4
197	1	2	2	4	4	2	2	2	2
198	1	2	2	2	2	2	5	2	4
199	1	2	2	2	4	2	2	2	4
200	1	2	2	2	4	1	4	2	3
201	1	3	3	4	2	2	2	2	2

## KEY:

<u>Class Level</u>: 1- College Prep; 2 – Advanced; 3 – Advanced Placement/ College Credit <u>Questions</u>:

1 - I believe Technology is being used effectively by my teacher in my English class

- 2- I think web sources such as Sparknotes, Shmoop, and Litcharts are effective tools in helping me to understand Literature.
- 3- I think web sources such as Sparknotes, Shmoop, and Litcharts can be a substitute for reading.

4- I frequently use writing apps (like Grammarly, Hemingway, ect...) to improve my essays.

5- The internet is an important tool which students can use to research material for my writing.

6- I have found ways around the blocking of access to certain websites.

7- I have played games on technology during class time.

8- During school hours, the internet should never be used for non-educational purposes.

# RAW DATA: All-Female High School

	English Class Ture	1	2	2	4	=	(	-	0
Student	English Class Type	1	2	3	4	5	<u>6</u>	7	<u>8</u>
1	2	2	2	4	4	1	5	2	5
2	2	1	1	1	2	1	2	3	3
3	2	4	2	4	1	2	4	4	4
4	2	2	3	4	5	1	3	3	2
5	2	1	1	2	3	1	2	2	5
6	2	2	1	4	4	1	4	2	3
7	2	2	1	4	5	1	2	1	3
8	2	2	1	2	4	1	3	2	4
9	2	2	1	4	5	2	5	2	3
10	2	2	1	2	3	1	3	2	2
11	2	2	1	2	5	1	5	3	4
12	2	2	1	4	5	1	5	2	2
13	2	2	1	3	4	1	2	2	4
14	2	2	2	4	4	1	4	4	4
15	2	2	2	4	4	1	2	4	4
16	2	2	1	4	2	2	2	2	2
17	2	1	2	5	4	1	3	2	2
18	2	1	1	2	3	2	3	2	4
19	2	2	1	3	1	1	5	2	3
20	2	2	1	2	4	1	2	2	2
21	1	2	1	2	4	2	4	3	2
22	1	2	2	2	5	1	4	2	3
23	1	1	1	3	5	2	3	3	3
24	1	2	2	4	2	1	4	3	3
25	1	1	1	4	4	1	2	2	1
26	1	1	1	4	2	1	4	2	2
27	1	1	1	2	5	2	2	2	3
28	1	2	1	2	4	1	2	1	5
20 29	1	2	2	4	4	2	4	3	3
30	1	2	1	1	1	1	3	2	5
31	1	1	1	2	5	1	5	5	1
31	1	2	1	3	5	1	3	3	4
32	1	2	1	3	2		5 4	3	4
33 34	1	2	2	4	2	2 2	4 5	2	2
34	1	1	1	3	4	1	3	2 5	2
35 36		1	1		4	1	3	3	
	1			3					3
37	1	2	1	3	3	1	3	3	3
38	1	3	1	1	5	1	3	3	5
39	1	1	1	5	5	1	3	3	3
40	1	1	1	5	5	1	5	5	1
41	1	3	1	4	5	1	5	1	3
42	1	2	1	2	4	2	3	3	3
43	1	2	2	4	2	1	4	2	3
44	1	2	1	3	4	1	2	2	3
45	1	1	1	4	5	1	5	2	2
46	1	2	1	4	3	1	5	4	4
47	1	2	1	3	4	2	3	2	3

Student	English Class Type	1	2	3	4	5	6	7	8
48	1	2	2	3	5	2	3	2	3
49	1	2	1	4	2	1	2	2	4
50	1	2	1	4	5	1	5	2	3
51	1	2	1	3	4	1	2	2	3
52	1	1	1	2	5	1	4	2	5
53	1	1	2	3	2	1	2	2	3
54	1	2	1	4	4	1	1	2	5
55	1	2	2	4	4	2	4	2	2
56	1	2	1	4	4	1	5	2	4
57	1	1	1	4	5	1	5	2	4
58	1	2	2	4	2	1	4	2	2
59	1	1	1	4	4	2	4	2	4
60	1	1	1	2	3	1	1	1	1
61	1	1	1	2	5	1	2	1	5
62	1	2	2	3	3	1	4	2	4
63	1	1	1	4	5	1	5	5	2
64	1	2	2	3	2	2	3	2	3
65	1	1	1	4	4	1	4	2	2
66	1	1	2	2	4	2	2	2	4
67	1	2	2	5	5	1	5	2	4
68	1	2	1	1	5	2	2	2	5
69	1	2	2	2	5	1	2	2	3
70	1	1	1	3	4	1	3	2	3
71	1	1	2	4	4	3	4	4	3
72	1	1	1	3	5	2	5	2	4
73	1	2	2	3	4	2	4	3	3
74	1	1	1	2	4	2	2	2	4
75	1	2	1	2	3	1	3	2	3
76	1	1	1	1	3	1	2	2	4
77	1	1	1	4	4	2	4	4	2
78	1	1	1	4	2	1	2	4	1
79	1	2	1	2	5	1	5	2	3
80	1	1	1	4	5	1	5	5	1
81	1	1	2	5	5	3	4	4	2
82	3	1	1	5	5	1	2	2	5
83	3	1	2	4	4	1	2	2	4
84	3	2	2	5	5	2	4	2	3
85	3	2	2	5	2	1	4	2	3
86	3	1	2	5	5	2	4	2	4
87	3	2	1	4	5	1	4	2	3
88	3	1	1	5	5	1	1	2	3
89	3	2	1	4	5	2	4	4	2
90	3	3	1	4	5	2	2	2	5
91	3	1	2	5	5	2	4	2	2
92	3	2	2	4	4	1	5	3	4
93	3	2	1	4	4	1	2	2	4
94	3	1	1	5	5	1	4	2	4
95	3	2	2	4	4	2	2	2	3
96	3	2	2	5	5	2	5	4	1
				-	-		-		

Studen	t English Class Ty	pe 1	2	3	4	5	6	7	8
	7 3	1	2	5	4	1	4	4	3
9	8 2	2	2	4	4	1	2	4	3
9		1	1	2	5	2	5	2	3
10		2	1	4	3	1	3	2	3
10		1	1	2	4	1	5	5	4
10		2	2	- 3	3	2	2	2	4
10		3	1	2	4	2	3	3	3
104		1	1	4	5	1	2	2	4
10		2	2	4	5	2	5	4	3
10		1	1	2	5	1	2	1	4
10		1	2	4	4	2	2	2	4
10		1	1	4	3	1	3	2	3
10		2	2	5	5	1	2	4	4
11		1	1	5	4	1	1	2	+ 2
11		2	1	5	4	2	4	4	4
11		2	1	4	4	2	4	4	4
11			1		4 5	2 1	2 5	2	4
11.		1		4 4	3		3 4	2 4	2
11		1 2	1 2	4		1 2	4	4	3
					3				
11		1	1	5	5	1	2	2	4
11		2	1	4	4	1	3	2	2
11		2	2	4	5	2	2	2	3
119		1	2	4	4	1	4	2	4
12		2	1	4	3	2	3	2	3
12		1	1	3	4	1	5	2	3
12		2	2	4	4	2	4	4	2
12		2	2	4	2	1	1	4	3
12-		1	2	5	5	2	2	2	4
12		1	1	5	5	1	5	1	4
12		1	1	5	5	2	4	2	2
12		2	1	4	4	1	2	1	4
12		1	2	4	3	1	4	3	3
12		1	1	3	3	2	4	4	4
13		1	1	5	5	1	5	5	2
13		1	1	5	1	1	3	2	2
13		2	1	3	2	1	5	2	4
13		2	2	4	5	2	2	2	2
13-		1	1	5	2	1	3	2	5
13		1	1	2	3	1	2	2	3
13		1	2	4	3	1	4	2	2
13		1	1	3	3	1	5	2	3
13		1	1	2	3	1	2	2	2
13		1	1	5	3	1	2	2	2
14		2	1	3	3	1	2	2	4
14		1	1	4	3	2	3	2	3
14	2 1	1	1	4	4	1	4	2	3

# KEY:

<u>Class Level</u>: 1- College Prep; 2 – Advanced; 3 – Advanced Placement/ College Credit <u>Questions</u>:

- 1 I believe Technology is being used effectively by my teacher in my English class
- 2- I think web sources such as Sparknotes, Shmoop, and Litcharts are effective tools in helping me to understand Literature.
- 3- I think web sources such as Sparknotes, Shmoop, and Litcharts can be a substitute for reading.
- 4- I frequently use writing apps (like Grammarly, Hemingway, ect...) to improve my essays.
- 5- The internet is an important tool which students can use to research material for my writing.
- 6- I have found ways around the blocking of access to certain websites.
- 7- I have played games on technology during class time.
- 8- During school hours, the internet should never be used for non-educational purposes.

All-Male S	chool Faculty						
Number	English Class Type	1	2	3	4	5	6
1	2	4	5	5	3	2	5
2	1.5	4	5	5	1	4	1
3	1	1	1	2	1	1	4
4	1	1	2	5	2	2	3
5	2	4	5	5	3	2	5
6	2	4	2	5	1	5	3
7	1.5	2	2	4	2	2	2
8	1	2	2	5	1	2	2
9	1	2	4	5	1	1	4

# RAW DATA: All-Male School Faculty

# **All-Female School Faculty**

Number	English Class Type	1	2	3	4	5	6
1	3	2	2	5	1	1	3
2	1.5	2	4	2	2	2	4
3	1.5	2	2	5	2	2	2
4	2.5	2	1	5	2	2	2
5	1	1	2	4	2	2	3
6	1	2	2	5	1	1	2
7	1	1	1	5	2	3	2

# KEY:

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Class Level: 1- College Prep; 2 – Advanced; 3 – Advanced Placement/ College Credit

## Questions:

- 1 I try to use technology as much as possible in my classroom
- 2- I think web sources such as Sparknotes, Shmoop, and Litcharts are effective tools in helping students understand Literature
- 3- I think web sources such as Sparknotes, Shmoop, and Litcharts can be a substitute for reading.
- 4- I believe my students have found ways around the blocking of access to certain websites.
- 5- I believe my students have played games on technology during class time.
- 6- During school hours students should never use the internet for non-educational purposes.