iEnglish: The Effective Integration of Technologies in the Secondary English Classroom

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Abstract

The education system in the United States is rapidly demanding more integration of technology into classrooms. The transition of instruction to be more inclusive of meaningful technologies in the secondary English classroom is one that has started, but also can be much more effective. In this study, the researcher surveyed area administrators on school-wide usage and did his own analysis of the integration of technologies such as iPads and Chromebooks. These were explored as methods to assist secondary English classrooms in the transition to a technology-based learning experience. This study explains how technology can be integrated as a tool to help educators meet the standards set in front of them more effectively than with traditional instruction. The results of this study show technology is not nearly where it should be in terms of integration into the classroom, and provide applications of how this integration can be improved.
Technologies are becoming a point of emphasis in the educational world, so much so that the use of technologies in the classroom is integrated into the Common Core State Standards, which has been adopted by 44 of the 50 states (English Language Arts Standards, 2015). Technologies are digital tools that can be utilized in the classroom, such as digital reading and writing (Kist, 2013). The educational world is in a digital age, one that began with the use of typewriters, advanced with calculators, and even more so with computers in a computer lab or library. However, the digital age is in a state of rapid development in education, and the transition to a more technologies-focused classroom can be difficult for educators to make. This study aims to analyze how 1:1 districts are currently using technology, and will specifically be focused on the secondary English classroom. The intent of this piece is to look at many of the available technologies, and determine applications that will effectively integrate these technologies into the secondary English classroom. Applications and uses of technologies have been readily made available in education, but there is more to be done, and there is more to discuss specifically in terms of the English classroom where not much literature exists on the subject. The applications discussed in the following study will not only be targeted to actively engage students with technologies and learning, but also meet Common Core State Standards, and meet distinguished ratings in Charlotte Danielson’s Framework for teaching.¹

This thesis aims to discuss how effectively educators are integrating technologies into the secondary English classroom. However, the word “technologies” in itself is a vague term. When a high school principal goes to a teacher and asks him or her how technologies are being implemented in the classroom, what exactly does the principal mean, and how can the teacher

¹ Both the Common Core State Standards and Charlotte Danielson’s Framework for Teaching are described in Appendix A.
effectively answer this question? Technologies can have a plethora of definitions, so this study remains focused on those technologies associated with iPads, laptops, Chromebooks, and Smart Phones. The reasoning for focusing on these specific technologies is that these were the technologies used by the educators I surveyed. The ways in which these technologies were discussed pertained to how they granted access to the internet, specific digital applications, digital texts, and new ways of thinking about and accessing content.

This thesis is ordered in stages. The first section following this introduction is a review of the literature that has impacted and influenced this study. This review is a focused study on literature conducted on the topic of technologies in education. The major themes that have developed through this literature review are student engagement, video production, adolescent use of technologies outside of school, how technologies are intertwined with Charlotte Danielson’s Framework for teaching, technologies’ influence on the Common Core State Standards, and educator resistance to using technologies. Following the literature review, I will provide my research methods. My research outside of the literature is qualitative and comes from the results of ten surveys I conducted with administrators, technology specialists, an English department chair, and English teachers\(^2\). These were surveys conducted over e-mail, Google Docs, the phone, or face to face in which the educators answered a series of questions asking about the integration of technologies in the English classroom in their school.

The next section after methods are the findings and analysis gathered from this research, where common themes that emerged from the research are explored. The focus of these themes is what they mean for where education stands in terms of technologies in the English classroom, and how the results connect to the literature on the subject. Finally, I explore how to use

\(^2\) See Appendix B.
technologies to improve learning in the secondary English classroom. The focus is on creating effective learning with integrated technologies. Related to this work is meeting the standards of the Common Core. Also discussed is the importance of being a distinguished teacher under Danielson’s Framework, and how the uptake of technologies can influence distinguished teaching. By providing relevant examples of technologies in instruction, I aim to assist educators in meeting distinguished levels.

Literature Review
Technologies have become a major focus in the educational world. Common themes emerged in the literature reviewed on technologies in education. The conversation of technologies in education focuses on the new developments in classroom technologies, which technologies are available, and how—even though technologies are being utilized in the classroom—teachers are not using these technological educational advancements frequently. The focus of technologies in the literature came down to the same as in the surveys: Chromebooks, iPads, laptops, smartphones, and general online applications. Prior theory and research helps build the foundation for the conversation of how technologies are being utilized, how they could improve, and what technologies are prevalent in the classroom today.

**SAMR**

With the conversion of education moving toward integrating technologies, it is necessary to know the different methods of how technologies can be used in education. Arguably the most important model is Ruben Puentedura’s SAMR model\(^3\), which is an acronym for Substitution, Augmentation, Modification, and Redefinition. According to Kirkland (2014) substitution and augmentation both serve as enhancement to instruction, and modification and redefinition function as transformation to instruction (p. 16). The levels of SAMR can be easily explained. Substitution is when technologies are serving as a direct replacement of traditional instruction. Augmentation occurs when technologies are serving as a replacement, but there is a functional improvement to its purpose. In both of these levels, instruction is enhanced, but not significantly modified. Modification happens when the technologies allow for significant redesign, where the task is similar to what it previously was, but technologies have altered the instruction to make it more effective. Finally, redefinition transpires when technologies allow for the creation of new

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\(^3\) See Appendix A.
tasks that would not have been possible without technologies. The level of intricacy and complication increases as the technologies move from substitution to redefinition, as “A Substitution or Augmentation task may serve a particular purpose, but chances are it does not leverage technologies for richer learning experiences” (p. 16). Substitution can be represented by uploading a paper worksheet online, and making it a digital worksheet. An example of augmentation would be students taking a quiz as a Google Form instead of on paper, as teachers can get immediate data. Modification occurs in tasks such as students writing a book report, and then turning that report into a recorded video to present for the class. An example of redefinition is a group of students sharing a Google Doc and writing a paper collaboratively, something they could not do without technologies. Hence, while substitution and augmentation can enrich instruction, the significant impacts will be made through modification and redefinition.

Engagement

One main theme that spreads across the literature, is that technologies usage increases student engagement. Student engagement in the classroom is a constant struggle for educators, as students will come to class generally unprepared or disinterested in the same perceived monotonous learning to which they have become accustomed through their educational life. Godzicki and colleagues (2013) explain that students will lack interest in class activities and will tune out in many ways, such as asking to leave the classroom, putting their heads down, or simply not completing homework or instructional materials (p. 3). The reason for this disengagement is simple, at least in the minds of the students. One-third of the students feel as though the instruction does not relate or have a place in their lives outside of school (Godzicki 2013, p. 3). Outside of school there is an abundance of technologies available to students, and
they are constantly on the internet at home (Rafool et al., 2012). Technologies help bridge the gap between student interests outside of school and their engagement in the classroom.

Utilizing technologies more in the classroom allows for students to feel connected to the activities and instruction. Rafool and colleagues (2012) affirm that students are often technologies experts outside of school. This expertise allows them to take advantage of social networking websites, electronic games, and locating information of all kinds in the classroom (p. 57). It also breaks from what they view as the boring, traditional method of instruction that does not involve much, if any, technologies. Rafool and colleagues (2012) go on to explain that instruction becomes attractive to students when technologies are used creatively and integrated fully into the curriculum. Technologies can be used to improve the overall learning environment, and enhance the engagement of students and help them to feel more connected to the school (p. 58). Students find engagement easier when technologies are being utilized because it connects to their lives. Thus, technologies provide more opportunities for students to engage in their learning.

Students want to interact with technologies. Students will respond more positively to activities that utilize interactive technologies, and Godzicki and colleagues provide data that suggests student involvement went up nearly ten percent when technologies are used in instruction (p. 105). If we want to create student-centered classrooms that involve all students and all kinds of learners, utilizing technologies in the secondary English classroom is of the utmost importance; technologies are what reach the students of today.

Multimodal Production and Consumption
The internet is an engine of educational opportunities, providing numerous applications and websites with which students can learn, create, and collaborate. Traditionally, students read and write print texts and produce traditional papers as assessments. Multimodal production, such as videos, audio recordings, or other digital forms of texts, and consumption affords students with more opportunities. While there are constraints to using technologies to consume and produce text, more benefits exist as students can use multimodal resources to engage further in their learning. One such resource that can be utilized in the classroom is video production software. As Younger (2013) details, these production tools are viable options “as a means of modeling strategies and assessing student learning through student-created videos” (p. 4).

Student autonomy in learning is something that education today craves. Along with autonomy, student creation is a primary goal of education everywhere, aligned with the Common Core State Standards and Charlotte Danielson’s Framework for teaching. To provide opportunities for student creation, “Online learning is a solution for engaging 21st century learners, and for preparing them for the classroom where they are expected to be technologically savvy” (p. 4). Online opportunities for assessing student learning fit into the new wave of educational practices. Students should be creating their own learning and taking charge in the classroom, not passively listening to a teacher’s instruction. Traditional practices consist of multiple-choice exams, or essays written according to a specific format. However, to truly engage all students “effective assessment of student learning must incorporate multiple formats” (p. 3). This is where video creation platforms and software such as YouTube, iMovie, and Windows Movie Maker come into play for educators. Teachers develop a model video, create a rubric for students to follow, and students then take charge and create and upload their videos. Students can collaborate, or work individually, and the assessments can be formative or summative.
Video productions do more than just create an opportunity for learning. They “can also be used by instructors to build learning communities where the students become engaged in the constructive learning process through problem solving, the development of higher order thinking skills and the engagement of collaborative work” (p. 5). The planning that goes into modeling and developing assessments for student-created videos demonstrates a knowledge of resources available, and the ability to design student assessments. It demonstrates the ability to grow pedagogically as an educator, engage students in learning, and use assessment in instruction.

Technologies give students the opportunity to consume information in new, multimodal ways. Hill (2014) describes Project-Based Learning, which is an instructional method that allows students to have an extended opportunity to respond to a complex question, problem, or challenge, which can be accessed through technologies (p. 451). Technologies can be utilized to advance beyond traditional student-produced work. Hill goes on to suggest that the failure of students to develop academic reading and writing skills is due to the disconnect between their socially digitized environment and their non-digitized academic environment in which they are educated and measured (p. 451). In order to engage students in their learning and connect them to their education, technologies need to serve as tools of enhancement or replacement.

Adolescent Use

Technologies are here, and they are here to stay. Students are using it for large portions of their day outside of the classroom, and the educational world has to adjust to maintain interest and prepare students for life after high school with a knowledge of how to effectively utilize technologies as college and career ready individuals. For students who are under-resourced, they may need technologies at school because they might not have access to these technologies at home. In order to succeed in the world outside of education, technological skills will be needed.
As Rafool and colleagues (2012) declare, the distance between schools and society is increasing because of technologies since workplaces are moving rapidly toward extensive information, continuous communication, and complex multi-tasking while schools are still focused on traditional pencil and paper work (p. 57). At one of the suburban high schools from which I collected data, that of Teacher A⁴, there are a significant number of students who do not have access to the technologies they have at school, and without the engagement they receive at school, they would not have a chance to learn the skills needed to succeed in technology-driven colleges and workplaces.

Students can utilize technologies for incredibly important instruction in the secondary English classroom. Students can research an author, that author’s biography, how the author relates to his or her book, and how the author portrays him or herself in the text in collaboration on Google Drive from Chromebooks in the classroom. The process is simpler, and more exciting to the students than a traditional group project that requires them to work separately at home on the project. In Google Drive the teacher can see each individual’s input into work, so it is easier to gather data on student understanding of the concepts, and how much work each student put into the project. Also, as pointed out by Anthony (2012) students are more likely to go straight to their laptops for work during class than they are to utilize text sources and pencil and paper (p. 345). Students deserve the best possible instruction to suit them in the classroom. As the world continues to adjust to becoming more technology-based, the secondary English classroom must as well.

When students go home, they are using technologies to complete their homework. Armstrong (2014) points out that while 39 percent of students use smartphones and 31 percent of

⁴ See Appendix B.
students use tablets for homework outside of school, only six percent of students report using smartphones and 18 percent report using tablets during school for instruction (p. 40).

Technologies are changing the way students are learning and thinking. Students have access to limitless information with a few strokes of the keyboard and the click of a button. Students can research, collaborate, and most importantly, as Shaltry (2013) explains, students can use technologies to create in class like they never could before (p. 22).

**Standards Guiding Practice**

Technologies serve as tools that can assist educators in meeting Charlotte Danielson’s standards in her “Framework for Teaching.” Danielson’s model is the premier mode of evaluating teachers, and part of educators’ job security is intertwined with meeting Danielson’s standards. Danielson (2007) details that distinguished teachers have a classroom in which “Students demonstrate through their active participation, curiosity, and taking initiative that they value the importance of the content” (p. 69). Further distinguished scores call for students to be well organized and on task during group work, to take pride in their finished product, and for the teacher to know student interests and take how they learn into account. To create the classroom environment that scores the teacher as distinguished, technologies become wonderful tools. Obviously it is not all about the score for the teachers, but there is a reason these marks qualify teachers as distinguished. The students are central to learning and actively engaging in their own education: every educator’s dream. Technologies create engagement for students, it allows students to access information, participate with ease, and create with their own learning in mind.
Technologies also play an integral role in the Illinois Professional Teaching Standards\(^5\). Technologies are a vital component of 14 standard indicators, including standard 2F which states that competent teacher “knows how to access the tools and knowledge related to latest findings (e.g., research, practice, methodologies) and technologies in the discipline” (Illinois Professional Teaching Standards, 2013). Teachers are expected to be knowledgeable and be able to integrate technologies into instruction. The standards with which educators need to operate guide the instruction in the classroom daily. The standards are clearly guiding education toward learning with technologies, and educators are expected to comply with these standards in order to effectively teach students.

Technologies integration is also central to the Common Core State Standards, as it resonates throughout the literacy standards. RL.9-10.7 explicitly states, “Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment” (English Language Arts Standards, 2015). Technologies open up the possibility to compare a literature scene to a number of mediums, including radio performances and films. The other literacy standards, from citing evidence to determining central ideas, can be approached using technologies as enhancement of material, both for giving students more access to useful information, the power to easily collaborate, or simply motivating students with the possibility of using technologies. The standards that drive education incorporate technologies in a multitude of ways. The very core of education is transitioning to one that is based in technologies, and educators have to learn to modify their instruction to effectively teach their students.

**Educator Resistance**

\(^5\) See Appendix A.
Despite all of the benefits that technologies offer in activating student interest and knowledge, there is still some reluctance on the educator side to fully integrate technologies into the classroom. This could, as Hicks (2011) states, partially be due to teachers fearing that they will “look stupid” in front of their tech-savvy students (p. 189). Teachers are the ones thought of as the masters, and the students are the pupils—learning from their instructors. This constructed paradigm is potentially hard for teachers to break away from, as the balance may be tipping toward the students in a subject they know more about. However, teachers are life-long learners, and there is no harm in learning from the students. It is a duty as an educator to make sure that the students are being educated. The frequent availability and focus on technologies has shifted the paradigm of learning. Students crave the visualization now, as they have become more visual learners (p. 189). It may be frustrating as an English teacher to try to effectively integrate technologies into the classroom, but this study has been formulated in order to assist with this predicament. Students will learn better, and be more motivated by technologies in the classroom, and the teacher needs to transition into this tech-savvy educational world and attend to the students’ learning needs.

There are factions of educators that resist the transition to using technologies as tools for instruction, but research shows that the use of technologies is a way of moving forward. As Hill (2014) states, using multimedia in the classroom will have a positive effect on learning and understanding new material. This is because these new literacies are created and shaped by the adolescents’ social context (p. 452). Technologies are tools of enhancement in instruction, but they can also redefine how teachers instruct altogether (Kirkland 2014). Looking at the SAMR model, there are many opportunities for technologies to have a positive influence on instruction, from enhancing instruction to transforming instruction to levels previously unthinkable in
education. As technologies continue to improve education, educators need to modify their instruction to effectively integrate technologies into their instruction.

Education is transitioning to a state in which technologies are a focal point of instruction. According to the SAMR model, educators should be striving for modifying or redefining instruction by utilizing technologies. The integration of these technologies into instruction is intended to increase student engagement. With technologies in the classroom that are familiar to the students, they can connect with the instruction and materials better than they do with traditional instruction. Students can engage with and create multimodal productions, and students can take ownership of their learning by utilizing the technologies with which they are familiar. Furthermore, the Common Core State Standards, the Illinois Professional Learning Standards, and Charlotte Danielson’s “Framework for Teaching” all have aspects for which technologies are a focal point. While some educators are resistant to technologies having a major influence in the classroom, the future is inevitably leading to a digital classroom. Educators need to learn sooner rather than later how to effectively integrate technologies into the secondary English classroom.

Methods and Methodology
I performed my research in a qualitative fashion, reaching out to ten individuals from eight local school districts that implement technologies in all of their classrooms in order to gather specific data and understand how 1:1 schools—schools with one electronic device per student—or schools close to 1:1 are utilizing technologies in the secondary English classrooms. This study is limited given the small sample of schools that I contacted. I performed my research in a qualitative method because the research was about getting a sample of schools in an area in which technologies are a focal point of education. I was looking for in-depth answers and specifics from educators, and an opportunity to gather data on the schools located in my area to begin my research. The scope of my research is focused this way so I can determine what the next steps in my research will be, such as looking at technologies from a national point of view, and comparing the impact of technologies between schools in more affluent areas and those in areas that have more needs. I conducted surveys in a variety of modes depending on what was most practical for the participant. The modes used were: email, Google Docs, over the telephone, and face to face. The breakdown of my survey participants is as follows: three administrators (principal, superintendent, and associate principal), two technology specialists, one English department chair, and four English Language Arts teachers. One of the criteria for selecting the subjects for surveys was the availability of technologies in their district. These are educators from districts in the Northern and Western suburbs of Chicago, engaged in having 1:1 classrooms for at least a full year, and it was important to collect data from sources that are familiar with technologies and how they can be utilized in the classroom. The next criterion was the district needed to align its standards with the Common Core State Standards. Technologies can be utilized to meet the highest standards for students, and the Common Core State Standards work across the nation, not just in Illinois, so this study can be applicable to any school in the

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6 See Appendix B.
United States. A final criterion is the district must be preparing students for the PARCC assessment\(^7\), which usurped the ACT in 2015 as the college and career readiness test of choice. The PARCC assessment is administered digitally, and thus becomes of interest in a study regarding the effective integration of technologies in a high school classroom.

### Selection Criteria

A couple key factors went into deciding which educators were selected to be participants in this study. The districts needed to be 1:1 in order to discuss the integration of technologies in schools in which the classrooms are expected to be fully immersed in technologies. Furthermore, participants needed to be a mix of administrators, department chairs, and English teachers to get a perspective on the integration of technologies in the English classroom from all levels in the schools.

### District Selection

Districts with the resources of a 1:1 classroom were researched, and potential target schools were identified. This research was done partially online, and partially through word of mouth conversations—asking connections if they knew of 1:1 districts, and if they had contacts in that district. Potential survey participants were then contacted and asked preliminary questions, such as if the district truly is 1:1, if they utilize the Common Core State Standards, and if they have begun student preparation for the PARCC assessment. The districts needed to fit all of these criteria in order to qualify for the study. In total, eight districts qualified for the study. Then, once the potential survey participants passed the initial screening, they were asked if they were willing to complete a survey on the utilization of technologies in their district, school, or

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\(^7\) See Appendix A.
classroom depending on the person being asked. A total of 14 people were initially screened, with ten qualifying and consenting to surveys.

**Participant Selection**

The process of identifying potential survey candidates came through a series of preliminary, informal surveys. Afterwards, the educators were surveyed and asked eleven questions on the effective integration of technologies in the secondary English classroom. I selected teachers, department chairs, principals, and superintendents to survey to get different perspectives. Teachers have more direct access to the technologies in the classroom. They see how the students are interacting with the technologies and how often they being implemented in their personal classes. Department chairs are more aware of how often technologies are being utilized by the whole department of teachers, and the collective data on the integration of technologies. Principals and superintendents are more aware of the technologies initiatives of the schools and districts, and the logic behind implementing technologies. The different types of educators give the study multiple perspectives, but all the educators have the common purpose of effectively integrating technologies in the secondary English classroom.

**Survey**

The method utilized for this research was a survey with eleven questions that I asked educators. For the most part, these questions asked for in-depth explanation. The only one that did not was when I asked educators to rate their district’s integration of technologies on a scale of one through ten. As mentioned above, I contacted the educators in a multitude of ways to send out the survey. Some educators requested for the survey to be done over the phone, some were done face to face, and others were contacted and surveyed online through emails and Google
Supporting and Enhancing through Technologies

The survey participants were asked 11 questions specifically relating to the overarching theme of this study: technologies in the secondary English classroom. The first question asked survey participants how often technologies, be it laptops, Chromebooks, iPads—are used to support and enhance learning in the classroom. This is a question designed to determine whether or not the schools are using their available technologies to their maximum potential in the English classroom, and set the tone for the rest of the survey. As technologies have a positive impact on learning for adolescents (Hill, 2014), knowing how educators use technologies to support and enhance instruction is crucial to understanding how effectively educators are integrating technologies in the secondary English classroom.

Assessment and Feedback through Technologies

The second question asked the survey participants how technologies are used by teachers to assess students and provide students with feedback. Technologies are incredibly accessible to students in this day and age. Students know how to activate their thinking with technologies, so assessing work online, and/or providing feedback online may resonate more with a student. If a school or district is trying to fully move away from pencil and paper and go all-digital, teachers will need to assess and provide feedback digitally. With new technologies, students can be assessed in many modes (Younger, 2013). Technologies allow for new methods of assessment and new opportunities to provide feedback that were not previously available. How educators are
utilizing technologies for assessments and feedback and how effective they feel doing this is for their students was what educators were asked about.

**Technologies Integrated into Curriculum**

The third question gets into how well the district supports technologies, asking if the curriculum has technologies built into it from the start. Efficiently utilizing technologies requires the support of the entire district; but sometimes those districts just tell teachers they need to utilize technologies and leave it at that. There are different levels of technologies integration into the curriculum, and districts could have no district-level requirements of technologies use, or they could have specific classes for technologies, or the technologies are integrated into the everyday classroom for all subjects to use. There is a significant disparity in research between how much students are using technologies for homework and how often they are using it in school (Armstrong, 2014). Education is rapidly advancing in how much technologies are integrated into the classroom. Rafool and colleagues (2012) express that students become interested in instruction when technologies involved relate to their lives. If English teachers are going to be integrating technologies into their personal classrooms, the support of the district could make or break their effectiveness.

**Challenges of Utilizing Technologies**

The fourth question focused on potential setbacks that come from utilizing technologies in the English Language Arts classroom, asking what challenges are presented when using technologies in the secondary English classroom. While technologies are wonderful resources to utilize, it is important to know possible limitations and issues. There is no one perfect way to approach education, and the point of effectively integrating technologies is to improve education
and make learning tasks more meaningful to the students today, but knowing what issues there are can help a teacher be aware of them, and address them in the classroom. As discussed above, SAMR can put this issue in perspective. Educators have to determine how much of their technologies integration should be substitution, how much should be augmentation, how much should be modification, and how much should be redefinition. Educators need to consider whether or not the technologies they are using are meaningful or not.

**Impact of Technologies on Meeting the Common Core State Standards**

The fifth survey question asked if the district or school is implementing the Common Core State Standards yet, and—if the district or school is implementing them—if the survey participant felt technologies help them meet the standards. One of the purposes of this study is to demonstrate that technologies can have a purpose as a method of increasing the ability of English Language Arts teachers to help their students reach the standards. Technologies are intertwined into many of the Common Core State Standards. A demand of the Common Core State Standards is that students will “employ technologies thoughtfully to enhance their reading, writing, speaking, listening, and language use” (English Language Arts Standards, 2015). Technologies are expected to make a significant impact on meeting the standards by the creators of said standards.

**Collaboration through Technologies**

Question six asks about collaboration, and if collaboration is seen and done more by both teachers and students in the schools of the survey participants. Collaboration is an important tool for educators, as departments are all expected to meet the same standards. The Common Core State Standards are universal, and collaboration between educators is incredibly beneficial to
help to meet the standards. Collaboration is also expected of students, and is an important academic and social skill for them. Technologies are tools that can allow for more collaboration between students (Younger, 2013). Educators can use digital tools to create project-based learning, engaging students in technologies and in content (Hill, 2014). Students can work on these projects together and accomplish group work to develop their social skills as well as their academic skills. The focus of asking the educators in this survey was to see if they believed collaboration became easier with technologies as tools and how technologies were utilized to foster effective group work.

The Impact of Technologies on Time Management

Question seven is simple, and asks the educators whether or not they believe technologies help the students and themselves in saving time. Technologies have the opportunity to save instructional time in many ways, but they also have the opportunity to deter from the focus of assignments and instruction and misuse time in the classroom. Rafool and colleagues (2012) point out that the workplace is transitioning to more of a multi-tasking environment (p. 57). Students need to learn how to adapt to and excel in this environment during school so they can find success outside of school. Given that multitasking is supposed to assist people in time management, it was an interesting observation to make on whether or not the educators were using technologies specifically to save time, or if they felt it was helping just having the technologies available, or if they did not feel it was helping.

Technologies as a Benefit to Students
The topic of the eighth question is the major benefits of technologies, and it inquires about what the educators personally found to be the major benefits of having technologies available. Godzicki and colleagues (2013) explain that students will lack interest in class activities and will tune out in many ways, such as asking to leave the classroom, putting their heads down, or simply not completing homework or instructional materials (p. 3). However, technologies allow students to feel more connected to their academic work (Rafool et al., 2012, p. 58). Students are positively engaging with curriculum as a result of technologies being present in the classroom, and so the educators surveyed were asked about what they believe the benefits of technologies in the classroom are for students. This question is subject to personal belief and bias, as all educators have personal preferences. Still, consistent themes emerge in what educators believe to be the most beneficial aspects of having technologies readily available in the classroom.

**Using Technologies to Prepare for PARCC**

The PARCC assessment is the subject for question number nine, asking educators if they are currently utilizing technologies specifically to prepare for PARCC. The PARCC assessment is brand new, replacing the ACT. Students often spend significant time preparing for the ACT in class, through practice exams, writings, and general instruction, so with the PARCC being digital, it was interesting to note if schools were making a digital transition in preparation as well. For the PARCC assessment, 1:1 schools are at an immense benefit. Districts that are not 1:1 may not have enough computers in their schools for all the students to take the exam online. Schools can pay to have paper copies of the exam, but having 1:1 technologies to prepare for the PARCC assessment is an immense benefit. However, this does not necessarily mean the schools are adequately preparing for PARCC.
The Impact of Digital Reading

Question ten specifically addresses reading on a digital screen and how the educators feel about the amount of time students spend looking at a screen. A sub question of question ten was how the educators feel about students reading articles and novels on a screen. One of the biggest concerns that has emerged in the discussion of technologies in education has been students staring at screens even longer, and how they will transition to digital texts. The question becomes is reading on a screen instead of text considered substitution, or is it something more? It is possible that digital reading can extend into augmentation, or even one of the transformation stages as outlined by Kirkland (2014). Students might respond better to reading digitally instead of with traditional text. As Anthony (2012) demonstrates, students are more likely to go straight to their laptops for work during class than they are to utilize text sources and pencil and paper (p. 345). Digital reading could serve as a deterrent, distracting students from the task at hand, or it could engage students further in their reading. Getting the responses from educators with experience with technologies in the classroom helped put the issues in perspective.

The Integration of Technologies

The final question asked educators to rate their schools on a scale from one to ten on how effectively they integrate technologies into the classroom. Students become more engaged as technologies are integrated into the classroom; Godzicki and colleagues provide data that suggests student involvement went up nearly ten percent when technologies are used in instruction (p. 105). But there are different levels of integration. As Armstrong (2014) reports, a much higher percentage of students use cell phones and tablets for homework outside of school than they do during school for instruction. This is a large difference, and demonstrates that technologies can be better integrated in the secondary English classroom. No matter where the
school is in terms of technologies integration, there are always ways to become more effective. The data collected from the survey participants, and the next level section of this thesis will seek to help educators close the gap in terms of effectively integrating technologies in the secondary English classroom.

Findings and Analysis
Technologies have become a crucial aspect of instruction and student engagement in the education world today. I observed a junior English class at a suburban high school outside of Chicago. This particular school is 1:1 with Chromebooks for all of their students, and the administrator I surveyed from the school raved about the instructional benefits and capabilities of the Chromebooks. I found these assertions to be pleasantly justified through my observation with the junior English class that I observed.

The interactive whiteboard was displaying directions for students immediately as they walked in to take out their Chromebooks and go to their class’ Google Drive folder. Students simultaneously opened the link to a newspaper article about social inequality and the American dream. The teacher flipped slides on the whiteboard, and read the instructions being displayed that the students were to read this article with F. Scott Fitzgerald’s *The Great Gatsby* in mind. They were to look for similar depictions of both social inequality and the American dream between the nonfiction news article and Fitzgerald’s fictional text.

After the students read the online article, they accessed a graphic organizer comparing and contrasting the news article with *The Great Gatsby* on Google Drive. One student at a pod of tables would open the document, then share it with his or her fellow tablemates, and they then collaborated to answer the questions on the graphic organizer. The students discussed out loud, but the work they were doing together was done online on the Chromebooks. A student would type a statement, and another student would follow that directly by typing in evidence from the article or book. A different student would highlight another student’s answer to a question and write a comment asking him or her what evidence from the text is available to support the claim.

After collaborating on the graphic organizer, the groups shared their work with the teacher. She asked for volunteers to share, projected their graphic organizers on the whiteboard,
and the groups would explain their answers. The period ended with students submitting a few sentences about how their knowledge of social inequality and the American dream in real life has been affected by the news article they read, and how they can apply their newfound knowledge to Fitzgerald’s fictional book. The teacher did not need to print out the news article for every single student. She did not need to hand out paper copies of the graphic organizer to all of her students. The students did not need to tear out their own notebook paper to turn in their exit slips. Not only was paper saved, but student ability to read digital texts improved with practice. Furthermore, the teacher could monitor student involvement during group work by checking the revision history of the document, and students were able to respond to social inequality and the American dream in writing. Nothing was lost due to utilizing the Chromebooks and technologies. Students seemed to be very engaged due to the use of the technologies with which they are familiar, and for which they have a passion, and student collaboration seemed to be facilitated smoothly, as students were working with one another with their Chromebooks, and every student was contributing to the work being done. Technologies were not just used as a substitution, as it was with replacing the print news article with a digital copy, but it allowed the class to hit the redefinition level of SAMR. The collaborative work between the students and being able to research simultaneously would be inconceivable without technologies available.

The entire class period was focused on and constructed with technologies, and the class served as an example for the direction of the rapidly changing world of education. Technologies are finding their way into the secondary English classroom, and teachers cannot fight the shift toward the digital world of instruction. Teachers need to embrace the transition, and in order to do so, English teachers need to have an idea of what is going on in the schools and districts focusing on technologies right now. Only with knowledge of what is being done and what works
can the secondary English classroom begin to effectively integrate technologies into instruction. The answers from the teachers, a department chair, and administrators I surveyed can serve as a starting point as we scaffold to being able to effectively integrate technologies in the secondary English classroom, and go beyond even what is happening right now in education. The overarching theme that maintains consistency throughout the answers is that technologies are highly valued, but even the schools making it a focal point currently feel they are underutilizing them.

**Enhancing through Technologies**

A perfect example of the schools focusing on technologies integration but not fully utilizing the tools to the best of their ability comes from survey participant answers to the very first question I asked about how often technologies are used to support and enhance instruction. Five out of ten of the answers resulted in teachers utilizing technologies daily in the classroom to either support or enhance instruction, or to do both. Another two answers stated that technologies are utilized almost every single day, often—but in the educators’ own words—not often enough. Three of the survey participants stated their schools are using technologies every single day to support and enhance instruction, and gave specific evidence to back up their claims. This data comes from ten educators, which is important to consider, but seven in ten educators not being able to specifically provide evidence of how they use their various technologies creates the concern that the technologies integration may not be meaningful. Schools can be focusing on integrating technologies in the secondary English classroom, but without the knowledge of what technologies best serve students, and for what they should be using the technologies, technology use is going to mostly fall under the substitution category of SAMR.
Department Chairperson A\textsuperscript{8} provided me with three questions she has all of her English teachers ask themselves before they utilize the technologies they are thinking of using. Question one is “does the technology make things easier or more efficient?” Question two is “does the technology alter a past learning experience?” Question three states “does the technology create a learning experience otherwise not possible?” If the teachers are able to answer yes to one or more of those questions, the technologies application makes sense. If the technology application does not allow for those questions to be answered with a yes, then it needs to be adjusted in order to meet the requirements. By asking questions about the overall effectiveness of the technologies being used, English teachers can better determine if the technologies application is worth utilizing and will help foster student learning and engagement. Setting criteria that needs to be met is a crucial aspect in making sure the technologies being used support and enhance instruction.

There is a strong link between assessment and technologies to the survey participants. Nine out of the ten educators gave specific evidence for how they utilize technologies to assess student work and provide students with feedback. Only Administrator B\textsuperscript{9} was not certain of how teachers were using technologies to assess students and give feedback, though he did state that the school certainly uses technologies for assessment as it is one of the school’s goals to transition to fully using technologies to provide feedback and grade students.

**Assessment and Feedback through Technologies**

A focal point that was stated by eight educators in surveys was providing students with formative feedback as they develop during the quarter. Beyond just giving online grades,

\textsuperscript{8} See Appendix B.
\textsuperscript{9} See Appendix B.
frequent checks for understanding are done utilizing technologies to make sure students are learning and to collect data on where the students are, and what supports they need for their learning. Many of the survey participants cited actual examples of websites they use to check for understanding and complete these formative checks. Nearpod, Socrative, Schoology, and Canvas\textsuperscript{10} were some of the main examples that were cited multiple times.

Formative assessments allow the teachers to better prepare for the summative assessments at the end of quarters, and for state-wide testing such as the ACT, and the PARCC assessment. Since the PARCC assessment is a test that is done online, student ability to use technologies for assessment purposes is more crucial than ever. Teachers are utilizing these formative assessments to ensure that students are prepared to take their summative evaluations. In the English classroom, many of the summative evaluations will be in essay form, or done via other technological means—such as videos or presentations. These evaluations will also be completed with technologies, and technologies have allowed for these summative assessments to be enhanced and improved. It is crucial for the preparation for these summative assessments and the PARCC assessment to be done with technologies, because that is where the education world is going. Duncan (2013) states that students today will be entering careers that will last them well into the 21\textsuperscript{st} century, and the professional world they will enter will have even more technologies than we do today (p. 69). The educators I surveyed overwhelmingly acknowledge this and have started preparing and transitioning to technology-based assessments, but they still know there is more for them to do.

Technologies Integrated into Curriculum

\textsuperscript{10} For more on Nearpod, Socrative, Schoology, and Canvas see Appendix A.
The educators surveyed have started to integrate technologies specifically into their curriculum. Six of the ten educators surveyed have transitioned their classrooms to using primarily Google-based applications, and have adjusted their curriculum accordingly. For nine out of the ten educators, texts have transitioned to e-books instead of print. The other educator, Administrator C\textsuperscript{11} in a district that utilized iPads, has e-books available for students for most books, but the option of print is still available and utilized. The districts that are now Google-based have converted their paper worksheets and articles to Google Sheets and Docs. These districts have started integrating these Google Apps into their curricula, and the framework of the instruction in the English classroom is being based off this Google-driven curriculum.

The other four educators I surveyed have started to implement technologies into their curricula, but acknowledged they are still in the process of transitioning. One main function of technologies in the curriculum that these educators, along with the six using Google Apps, have already been utilizing is technologies as a means for collecting Response to Intervention data\textsuperscript{12}. The RTI programs are working through either the Google Apps or other online applications stated above to collect data to determine if Response to Intervention is needed for students. Since the data can be collected digitally, and sorted through tools such as Google Sheets to determine where individual students stand in comparison to their peers, and where they should be in terms of meeting the curriculum, it is easy for educators to gather data for RTI. The inclusive classroom relies on this data to ensure that students get the supports they require to meet the standards of the curriculum, so the technologies are crucial in best supporting the students and also acclimating the students to the use of technologies in the classroom.

### Challenges of Utilizing Technologies

\textsuperscript{11} See Appendix B.
\textsuperscript{12} See Appendix A.
In terms of challenges faced when incorporating technologies into the secondary English classroom, the educators varied in many aspects of their responses. For the two districts utilizing iPads and smartphones instead of Chromebooks or laptops one major issue was the availability of online books instead of print texts. They have attempted to get the e-book versions of the books they use in their curriculum, but not all of those books are available in digital form. As both educators emphasized, this is crucial in the transition to a classroom that effectively integrates technologies. However, if the texts are not available online, it does not mean that educators cannot utilize assignments and assessments digitally. Some teachers are still fighting the transition to digital texts, as evidenced by Administrator C and Department Chairperson A. These educators stated it was difficult getting teachers to buy in to having students read on a digital screen instead of the printed pages the teachers prefer. Educators also fear looking inadequate in front of their students who know technologies well (Hicks, 2011). This resistance can actually be calmed by going through a transition period in which some print books are still utilized. As important as scaffolding is for students during instruction, teachers need assistance to build up to a mastery of technologies in the English classroom.

Starting teachers with print books and the utilization of technologies such as Socrative for checks for understanding, and Google Slides for student collaboration on presentations can give them a nice base to take the next step and teach texts digitally. Annotating can still be accomplished thanks to applications such as Notability, and teachers can learn to adjust to this if given the opportunity to take steps into integrating technologies. While not having all books for class available digitally may be viewed as a negative because it does not fully assist the transition to the technology-based classroom, if some of the texts are only available in print,

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13 See Appendix B.
14 See Appendix A.
teachers can use it as a learning experience and adjustment phase—still utilizing technologies for—and work their way toward the fully technologies-integrated classroom.

The other main challenge referenced by eight out of ten educators was the distractibility of students. This comes forth as an issue because—while the internet provides many wonderful tools for instruction and student engagement—computers, iPads, and smartphones have many distracting elements to them. Games and other applications are readily available on all of these technologies, and even tools that can be beneficial in education—such as YouTube—can also be harmful and distracting to schoolwork. Some methods for managing students being distracted are putting time limits on activities, periodically checking in on students with smartphones to ensure they are on topic, utilizing screen sharing software on iPads or Chromebooks to monitor student activities, or simply by establishing classroom rules and expectations when using technologies in the classroom at the start of the semester.

**Impact of Technologies on Meeting the Common Core State Standards**

The Common Core State Standards are of the utmost importance for schools because they are the standards for education in 44 out of the 50 states—including Illinois—and technologies run through the standards (English Language Arts Standards, 2015). From multimodal themes that require audio or video technologies (Speaking and Listening standard 5), to writing with graphics and multimedia (Writing standard 2A), to completing shared writings explicitly using the internet (Writing standard 6), the Common Core State Standards require the integration of technologies. Outside of the standards that specifically call for technologies use, technologies serve as tools to help teachers meet the standards in their classes. The ability to project assignments, and utilize digital tools for collaboration and instructional activities help engage students and allow them to better reach the standards of the Common Core. Unfortunately, seven
out of the ten educators currently do not see technologies as a tool to assist them in meeting the Common Core State Standards, and see their Common Core initiative and their technologies initiative as completely separate.

Administrator C simply stated that technologies serve as tools to help his school meet the standards, demonstrating a surface understanding of the connection between the Common Core State Standards and technologies and the benefits technologies can contribute to meeting the standards. Technology specialist B\textsuperscript{15} also stated technologies serves as a tool to help her school meet standards, and gave a couple examples of how technologies help the students meet the standards, such as teachers projecting visuals for lessons, and giving students resources they could not otherwise access with just literary books and textbooks. Teacher D\textsuperscript{16} gave more specific examples. He specifically pointed to collecting data and determining with this data which students need further assistance in meeting standards. He also mentioned online applications that formatively quiz or assess students on skills so they can continue to build their skills while enjoying a method of practicing that engages and interests them.

While it is understandable that administrators and technology specialists may not be completely in tune with how technologies can help English teachers meet the Common Core State Standards, the biggest concern in the results was that three out of the four English teachers did not see technologies as a means to further assist their students in meeting the standards. Not only are standards directly infused with technologies, but research for writing is a large portion of the writing standards, and technologies make this research easier—technologies are sometimes the only way research is possible as some libraries have completely converted to being online—with online journals and search engines such as Google Scholar. Technologies can

\textsuperscript{15} See Appendix B.
\textsuperscript{16} See Appendix B.
also assist students in learning the skills required to master the standards. Students can partake in activities on websites or other digital applications with technologies that are similar to the uses they make of technologies already. According to Drew (2012), the Common Core State Standards provide an opportunity for teachers to prepare students for literacy demands of the 21st century. Students need to be prepared as readers, writers, and communicators in online environments (p. 322). Technologies can make a large impact in terms of meeting the Common Core State Standards if teachers implement technologies into their curriculum with the standards in mind.

Collaboration through Technologies

The world of collaboration in education is Google Drive, and this was emphasized by the participants. All ten educators referenced Google Drive as the means with which they have seen collaboration improve between students. Google Drive allows for documents, slideshows, forms, drawings, and more to be created and shared between students. Students can be simultaneously plugging information into a Google Application while doing research and finding information for their group projects online. Gone are the self and partner evaluations to see how everyone in the group contributed. Now educators can see the revision history of the Google Docs or Slides and determine how each student contributed. Schoology is another website with which collaboration is made possible, and teachers can easily collaborate with Schoology. Teacher collaboration is important for finding the best instructional activities and methods to engage students, and Google Drive and Schoology can be utilized for Professional Learning Communities, team meetings, and simply sharing lesson ideas with fellow teachers.

The Impact of Technologies on Time Management
In terms of technologies in the classroom saving educators time, most survey participants stated technologies actually make the job more time consuming. Eight out of the ten educators explicitly stated that technologies take up more time because teachers have to adjust their lessons and curriculum to incorporate technologies. The department chair I surveyed in particular stated that she worries about burnout with her English teachers trying to take considerable time to implement technologies. Technology specialist A stated that her belief is technologies both save and consume time depending on how you view it. Creating and modifying instructional materials is easier to do with technologies, but adjusting already-made materials is taxing and time consuming. Teacher B stated\textsuperscript{17} believed technologies only saved time, and this makes sense with the other educator responses because she is a newer teacher. She is still creating her own lessons and resources and was exposed to more training in terms of creating materials, products, and instruction with technologies.

**Technologies as a Benefit to Students**

Students encounter many benefits through the use of technologies in the English classroom. Educator answers reflect an understanding that students benefit in a plethora of ways. One major theme in terms of benefits was student engagement, as seven out of ten educators referenced students being more engaged due to technologies. This engagement is crucial for keeping students on topic and excited to learn. Students generally enjoy being on computers more than they like traditional lessons. Students become more likely to engage with one another.

\textsuperscript{17} See Appendix B.
in collaboration with technologies, and they are able to access many more resources online than they would be able to in a traditional classroom without technologies available. Another main benefit for students that came up in four surveys is student choice, which encourages students to be more engaged in their own learning. Students have the opportunities with technologies to create their own learning and their own projects to demonstrate their knowledge. Student creation and students leading their own education are important functions outlined in evaluations of successful teaching through the Charlotte Danielson Framework for teaching. For students who may be lost with traditional instruction and assessment, technologies allow for the students to be more engaged in class, and more involved with demonstrating their learning.

Using Technologies to Prepare for PARCC

The PARCC assessment is now being utilized by schools as a standardized test. PARCC is a test to be taken electronically; students answer questions on the computer and demonstrate their knowledge digitally. At the time of the surveys, all ten educators stated their schools were not preparing specifically for the PARCC assessment. One reason for these educators not preparing students for PARCC is how new the PARCC assessment is. Schools were not entirely sure what to expect besides knowing that the PARCC assessment is done online. What the schools do know is that since the PARCC assessment is digital, utilizing technologies in the classroom is already helping students prepare. In order to prepare for PARCC, there are practice tests and activities available online for teachers to introduce to their students. Furthermore, utilizing technologies in the classroom every day for English Language Arts will give the students practice and preparation for the assessment without teaching directly to the test. There is

18 The PARCC assessment began to be administered after the time of the interviews. More resources are most likely available now, so they may have provided different answers if the interviews were completed after the PARCC was utilized for the first time.
a reason PARCC is online, as the world around education is continuing to become more and more digital. The PARCC assessment gives students an enhanced assessment with avenues for articulating their work.

1:1 school districts are at a distinct advantage for preparing for the PARCC assessment. As PARCC is a test to be taken digitally, students that are not in a 1:1 district do not get the same benefit of being able to practice utilizing technologies in the classroom every single day. The fact that none of the educators surveyed are currently doing anything in particular to prepare for the PARCC assessment was alarming. I anticipated that they would be utilizing the resources available to prepare. This could be data limited by the scope of the survey, as it could be that the schools surveyed are exceptions to the rule, and other 1:1 schools are preparing, and this is a note to consider for future studies. Also, the schools in the study may be preparing more now that the PARCC assessment has been officially rolled out in Illinois. Students need to be exposed to these technologies to prepare themselves for the PARCC assessment as well as life after high school.

The Impact of Digital Reading

Reading on a digital screen is one of the main challenges used against e-books and reading with technologies instead of printed text. I assumed this would be a hot-button issue, as educators expressed preferring the printed text instead of digital text. I also assumed that the educators would feel uncomfortable with their students retaining information from reading on a digital screen. However, the educators surveyed showed that students seem comfortable with reading on a digital screen and do not lose content as a result. Two of the survey participants did express concern with student attention spans, stating that their attention spans are not as long as attention spans once were, and technologies are partially to blame. Jutras (2009) states that the average attention span is nine seconds while online, roughly that of a goldfish (p. 4). Although
the research demonstrates a small attention span while online, the study does not indicate the
data was collected while participants were attempting to complete focused activities. Perhaps
students can maintain their focus longer when they have a purpose rather than when they are
aimlessly surfing the internet, but more research would need to be collected on that topic.
Another potential issue identified by Teacher C\textsuperscript{19} was annotations while reading. While there are
differences between annotating on paper and annotating digitally, the results are similar.
Annotating applications such as Notability allow for annotations by students while reading, and,
while annotating digitally, students can go back and edit their annotations or add to them. In
general, students are technology experts outside of the classroom, and they can connect more to
material when technologies are integrated (Rafool et al., 2012). Students may feel even more
compelled to partake in annotating with the digital screen over the printed book because of their
higher likelihood to engage with the technologies than traditional text.

The Integration of Technologies

The educators rated their schools’ integration of technologies in the secondary English
classroom on a scale of one to ten. In these schools—schools which utilize technologies every
day for every student—the average score given was a 6.2 out of 10. The highest score given was
an 8, and the lowest rating was a 5, which was given twice. The conclusion to be made about this
average is that there is still effective integration of technologies to be done in the secondary
English classroom. Schools are integrating technologies into the curriculum, and technologies
are being utilized to collect data on and assess students. Overall, teachers see the benefits of
technologies being integrated in the classroom for their students. However, educators still are not
effectively integrating technologies and reaching the potential these technologies bring to the

\textsuperscript{19} See Appendix B.
table. Technologies can assist students in meeting the Common Core State Standards, and educators have yet to fully realize that, with three out of the four English teachers not believing technologies can assist the meeting of the standards. There are still tools and strategies to be utilized to better focus instruction with technologies and improve student engagement. While education has started the transition into the world of technologies, the transformation of the educational world is just beginning. Educators need to remain on the cutting edge of these technologies in order to truly utilize technologies as an effective support for students.

Implications

The big question becomes how we can, as educators, integrate technologies into our secondary English classrooms to engage students and enhance instruction. Educators are utilizing technologies to support and enhance instruction, but only three from the study were able to provide specific examples of technologies being used in the classroom. Eight participants in total did state that technologies are being used daily, and the other two participants stated technologies are being utilized almost every single day. Eight out the ten participants also use technologies to formatively assess their students. All of the educators surveyed recognize that assessments are moving toward a digital focus, and they are beginning to adapt to that. Six out of the ten educators have transitioned their curricula to being based in Google Apps, and all of the educators have started collecting RTI data. The texts in the curriculum have transitioned to being mostly digital, as nine out of ten educators have e-books available, supplementing textbooks.
Teachers are making the transition, but more steps need to be taken. Challenges have emerged for the participants, most significantly student distractibility. Eight out of the ten participants expressed concerns over students being distracted with technologies.

Educators did not see a direct connection between technologies being integrated in the classroom and meeting the Common Core State Standards. Three out of the four English teachers even stated they do not see the link, which is problematic given how intertwined technologies are in the Common Core. Google Drive is at the center of the conversation for collaboration in education. All ten educators referred to Google Drive as an emphasis for collaboration in the classroom, and collaborating through technologies is a point of importance for the districts covered in the survey. Currently, educators view technologies as taking up more time than instruction took without technologies. Eight out of the ten educators viewed technologies in this manner, but they were looking at the issue from a planning and preparation standpoint. A next step in this research would be to explicitly ask educators if technologies help save time in classroom activities, or in the long-term for planning instead of the impact on planning and preparation during the transition period. The participants all found students to be more engaged due to technologies, with four educators specifically pointing to student choice as a reason. Student choice gives the students a better sense of control, purpose, and success in the classroom (Perks, 2010). Students get the benefit of the flexibility in assignment and assessment options technologies create. None of the participants are currently using technologies to prepare for the PARCC assessment, which was surprising given the schools are 1:1 and have the resources available to truly prepare their students. However, just working on the digital devices in some ways makes the students more comfortable with the way in which the test will be administered. The participants of the survey did not find much of an issue with digital reading, although two
expressed concerns about student attention spans. While data shows the average internet
attention span is nine seconds (Jutras, 2009) students may have a better grasp of attention when
tasks are focused and in a structured environment such as class, though more research would
need to be done on the subject. Overall, the participants’ ratings of their schools’ integrations of
technologies demonstrated there is much more to be done to make the integration of technologies
effective. An average rating of 6.2 out of 10 shows that technologies are starting to be integrated
into the classroom, but educators need to take the technologies available and truly commit to
utilizing them with a purpose in the classroom.

**More to be done**

The tools are readily available, it just takes committing to utilizing these tools on the part
of teachers. It is important to recognize that these results only include 1:1 schools. The 1:1
schools studied have the expectation of being fully immersed in technologies as Administrator A
and C20 communicated, and they still are not meeting expectations. It then needs to be
considered how effectively schools that are not 1:1 can integrate technologies in the classroom.
The English classrooms surveyed have started the transition to integrating technologies, but as
evidenced by the survey results, there is more to be done. Given that students are frequently
utilizing technologies in their everyday lives, spending considerable time integrating
technologies in the secondary English classroom is not just a way to keep up with the constantly
evolving world of education, but a method of inspiring students to learn through methods they
are passionate about. The transition to 1:1 classrooms, and extensive digital activities is not a
trend that can just be ignored until it goes away because it will not go away, the trend will only
grow (Duncan, p. 69). Furthermore, integrating technologies into the secondary English

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20 See Appendix B.
classroom is not satisfied by simply uploading worksheets previously done on paper onto Google
Docs. Educators are charged with the duty to give students meaningful opportunities to construct
learning. Integrating technologies effectively in the secondary English classroom can be the
difference between further motivating students to engage in learning and losing students with
poor usage of the technologies available. There are many different methods of effectively
integrating technologies; educators need to create the opportunities to utilize them. Educators
need to consider how to go beyond substitution in SAMR to truly enhance instruction in the
English classroom. How do we redefine assessment and instruction? If technologies are available
in the classroom on a daily basis for all students, educators should be striving to reach the upper
levels of SAMR, modification and redefinition.

Through the survey results, it can be implied that more needs to be done for technologies
to be effectively integrated in the secondary English classroom. Student learning can be
enhanced and supported effectively with technologies. While educators are already beginning
this process simply by utilizing technologies in the classroom, they admit they do not utilize
them enough. When teachers are considering utilizing technologies for an activity or assignment,
they must ask themselves if the technologies make the task more meaningful. However, it is not
enough to ask this question. If the answer is no, the educator must find a way to make the task
more meaningful through technologies in order to enhance the instruction the students are
receiving. As Godzicki (2013) points out, one-third of students feel as though the instruction they
are receiving does not relate to their lives. Furthermore, student involvement increases 10
percent when technologies are integrated in the instruction, and that number might increase if
this technologies integration is sustained. This means educators not just utilizing technologies
when it is easy, not simply replacing paper assignments with digital copies, and not accepting
integrating technologies only every once in a while in the classroom. The secondary English classroom is one in which technologies can be integrated daily, and in which technologies should be utilized every day in order to connect students to the material, and engage them in their learning.

**Students Connecting with Technologies**

Because students are experts in the digital world outside of school (Rafool et al., 2012), the connection needs to follow in a classroom that is transitioning to a digital focus. For example, the PARCC assessment, which students have already started taking, is taken digitally. Students have to sit at a computer screen for hours to take the test, and while that sounds like a dream come true for students—Armstrong (2014) reports students utilize technologies for homework far more often than they have the opportunity to in the classroom—they need to be able to adjust to doing academic work for that long utilizing technologies. Technologies should be used in the classroom to stretch the minds of students and engage their critical thinking skills, and assessments should be linked to utilizing the technologies available. The professional world outside of the classroom is rapidly advancing to one in which technologies are a focal point (Rafool et al., 2012), and educators need to be preparing students for this 21st century world. Formative checks for understanding should be occurring regularly in the classroom as it is. English Language Arts deals with many complex topics, and students need to be constantly keeping up with their skills such as analyzing and inferring, as well as their understanding of the texts or topics being discussed in class. To be judged as a distinguished teacher in Charlotte Danielson’s (2007) component 3d—using assessment in instruction—all students need to be aware of assessment criteria, and the educator needs to monitor the progress of all students (p.
This can be accomplished with a plethora of tools. Educators are already beginning to utilize these tools, but they have the potential for daily use in the classroom.

**Assessment through Technologies**

Students will be learning new material, or practicing already learned material every day in the classroom, and educators need to collect data on how students are grasping this material. Constantly assessing where the students are in terms of their understanding of the skills and concepts can help immensely in determining what future lessons need to cover, and which students may require extra assistance. Using a website such as Socrative for daily formative assessments allows for teachers to gather data on the students as a class, as well as individually. The formative checks for understanding can be done through multiple choice questions, short-answer questions, or a combination of both. The data gathered can be quickly analyzed on the website, and the teacher can make note about where students are struggling, or where more instruction needs to occur. Students can also answer specific questions about what they learned in a journal on Google Docs. The teacher can set out a question or two for the end of every class, and students answer the question(s) online rather than filling out a traditional exit slip.

Assessing students and having them assess their own learning daily gives educators the data they need to best serve the students. Completing these assessments digitally appeals to student interest, as students are more likely to do work digitally than they are to do work with a pencil and paper (Anthony, 2012). Technologies also make the collection of data simpler for the educator, as applications such as Socrative consolidate the data and sort it instantly. Furthermore, assessing students daily with technologies prepares them for the PARCC assessment without taking time away from instruction to do so. Students will already be working on answering

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21 Tools such as Nearpod, Socrative, Schoology, and Canvas as seen in appendix A.
questions correctly online, thus giving them practice for PARCC while still focusing on the content and skills being taught according to the curriculum of the school. Constant preparation for standardized testing while still concentrating on the unit at hand is a win-win for educators, and can easily be accomplished through utilizing technologies as a means of assessment daily.

**Challenges in the Classroom**

One of the major challenges for English educators is the transition to e-books as print has sustained for such a long time as the primary form of reading. This is a process, but e-books can be much more beneficial than print books if utilized correctly. Through applications like Notability, annotating is still possible on iPads, and with Chromebooks, annotations can simply be typed in the margins of the text instead of written. Students typically also prefer doing work digitally rather than through text and pencil and paper (Anthony, 2012). Students will be more engaged in their reading due to the digital aspect, and this engrossment is crucial to get students to actively participate in their learning. Although, as Hicks (2011) points out, teachers do not want to “look stupid” in front of their students, getting students engaged is one of the ultimate goals of education, and as more and more e-books become available and are being utilized in the classroom, teachers should start reading and working with these digital texts. This transition is still just beginning for education, so being proactive and learning how to utilize these technologies are crucial for English teachers.

Distraction is another main concern of utilizing technologies frequently in the English classroom. Educators need to take a proactive approach to ensure a culture of compliance is established in terms of staying on-task. Administrators must make this clear immediately when the school is going to be 1:1. Administrators should give teachers instruction to set the standard right away with the students that the technologies are a privilege; they must use it responsibly in
order to continue the utilization of technologies in the classroom. Administrators also must make certain supports are in place to allow teachers to know what is happening on student screens during class time to ensure they are on task. Services like Netop\textsuperscript{22} allow teachers to monitor student screens during class, ensuring that work time is actually spent working. Teachers then need to set this standard immediately in the classroom. Including students in setting the standards for technologies use will lead to students taking ownership of their behaviors and holding one another accountable—especially in collaborative situations where students need to be engaged and working together. Knowing the teacher can see everything they do while they are in class is another motivating factor to stay on topic. There are many distractions with technologies, but creating a positive environment from the beginning, and creating a culture of compliance will allow for these distractions to be negated, or at least minimized. Teachers can also see revision history on applications such as Google Docs, so if work has to be accomplished at home for group projects, teachers can still ensure each student did his or her correct share of the workload. Technologies can be distracting, but they can be effectively used as positive tools with the right supports in place.

**Technologies and Standards**

Educators need to be able to make the connections between the Common Core State Standards and the effective integration of technologies in the classroom. Standard RL.9-10.7 reads, “Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment” (English Language Arts Standards, 2015). This standard implies a need for technologies, such as an audio reading of a book or a movie. The connection between Common Core and technologies extends into the writing

\textsuperscript{22} See Appendix A.
standards, as W.9-10.2a states, “Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.” The ability to add multimedia requires technologies, and formatting and graphics are more seamlessly integrated into writing utilizing technologies. Google Docs allows for all of these elements, and while writing, students can easily search for and integrate multimedia into their writing. The speaking and listening section of Common Core also have technologies as a key method of meeting the standards. An example being SL.9-10.5, “Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.” Technologies are explicitly referenced in many Common Core State Standards, and educators have a duty to assist students in meeting these standards. YouTube is one of many ways to help students meet this standard, but there are also many online applications such as Google Slides or Prezi. Animoto helps students create engaging, interactive presentations as well. There are a plethora of methods of meeting these standards.

Effective integration of technologies can assist educators in better helping their students meet all the Common Core State Standards, even the ones that do not specifically address technologies. Students will generally be more engaged in their learning while using technologies, and if student engagement goes up 10 percent when technologies are utilized now, where—as Armstrong (2014) points out—technologies are barely being used in the classroom, student engagement could increase exponentially if technologies are utilized more often in the classroom. For example, if the focus standard is Reading Informational Texts standard 3,

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23 See Appendix A.
“Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them” (English Language Arts Standards, 2015), students can create a timeline on a website as simple as timeline.org, and place the key events on the line, incorporate pictures, and point to where the evidence in the text is found. Perhaps the goal is meeting Reading Informational Texts standard 4, “Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone” (English Language Arts Standards, 2015). If the students do not understand the words they are reading, a definition is just a Google search away. Sometimes the reading programs being utilized to read texts digitally have a dictionary built in. If the programs do not have a dictionary built in, there are other applications available to serve as dictionaries. By utilizing these dictionaries, students can better develop their vocabularies and understanding of the texts being read through the simple act of highlighting the word to understand it.

**Collaboration with Technologies**

Collaboration is an important life skill for students to be learning in school. The English classroom provides an excellent environment for students to practice these collaborative skills. Students learning to work together and create together are skills they will require to excel as members of the community and later on in careers in which they will be working on teams. Group projects can be more effective when technologies are utilized, as student input can be tracked through revision history and monitoring during class. English teachers can assign group projects—videos, presentations, papers—and differentiate the groups based on the data collected.

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24 Kobo and Moon Plus are two such applications that can be utilized.
daily through the formative checks for understanding. The teacher can assign roles, or have students select from roles as appropriate, having each focused on one skill in common, and one skill each they may need more practice in. Teachers can monitor screens during class time while groups are creating their projects, ensuring that students are doing their respective jobs for the work. If the teacher desires, it is also possible to see revision history on applications such as Google Docs or Google Slides so each individual student’s input can be accounted for in order to properly assess both individual student work and collaborative work. Collaboration becomes easier with technologies (Younger, 2013), and as administrators continue to desire more collaborative skills to be developed, and Charlotte Danielson’s Framework continues to call for students to take control of their own learning, utilizing Google Applications to create authentic collaborative assignments is necessary to engage students in instruction.

The Integration of Technologies

Technologies have started to be integrated in the secondary English classroom, but there is much more to be done. The educators surveyed gave their schools an average score of 6.2 out of 10 for integrating technologies—which is unsatisfactory. However, there are a plethora of methods of effectively integrating technologies further into the classroom. Reading in class can be accomplished with e-books, but it can also go a step further. Students can annotate with Notability but also utilize online dictionary services to better understand the text being read. Students can take evidence directly from the digital text to Google Docs or another digital application to support arguments and make claims for an assignment. Students can read with an objective in mind, such as finding how author claims are being defined by sentences, or other segments of the text. When the students find these sentences or paragraphs, they can immediately transfer them over to a Google Doc or a digital graphic organizer to demonstrate their ability to
find these examples that support author claims. Maybe the rating does not get to a full 10 right away, but educators should consciously be working toward making the integration of technologies more effective in the English classroom. Working toward the modification and redefinition levels of SAMR and finding meaningful uses for technologies will help educators improve their practice.

Though it may take extra time for teachers to transition their English classrooms to integrating extensive technologies, a school-wide effort to do so will make the transition easier and more effective, as educators working toward a shared meaning can share and refine their craft (Knowlton et al., 2015). Administrators should have an understanding of the technologies available and how they can benefit the classroom in order to foster the effective integration of technologies in the secondary English classroom. If the administrators show a commitment to the initiative, teachers can be inspired and follow as an example. Administrators should be committed to being part of the process of ensuring the technologies are effectively integrated in the classroom. One main way to do so is providing time for professional development for the teachers in an effort to educate the teachers on how to best utilize technologies. Simply giving teachers the tools and expecting them to understand how to succeed will most likely not see results.

**Benefits of Technologies**

For teachers, the benefit of utilizing technologies have hopefully been outlined sufficiently in this thesis. Student engagement will improve, and students will feel as though instruction is being connected to their real lives, where they are already experts in technologies (Rafool, 2012). Teachers can collect data from every class in order to continuously assess the students and better understand which students may need further help, and determine the progress
students are making on the objectives of the class. More can be accomplished during instruction time while students are working with technologies, and teachers can continuously monitor what the students are doing to ensure everyone in the class stays on task. To effectively integrate technologies in the English classroom, teachers must consistently be looking for methods of incorporating technologies into instruction. This technologies integration will continuously prepare students for the PARCC assessment, support teachers in helping their students meet the Common Core State Standards, and assist teachers in hitting the distinguished marks in Charlotte Danielson’s Framework for teaching.

The utilization of technologies in the secondary English classroom benefits the students immensely. The students not only feel connected and engaged in their learning, but they are beginning to create their own learning like they never could prior to technologies being available (Shaltry, 2013). Giving students the ability to actively participate in their learning and construct their own meaning in the classroom is made more possible with the integration of technologies. Students finding their own research online, completing assessments through digital applications, and reading and annotating through e-books are methods of integrating technologies to better engage students than traditional instruction. The collaborative tools technologies offer will enhance student group work, and give students more opportunities to create meaningful learning in ways never possible before.

**Conclusion**

The effective integration of technologies in the secondary English classroom is beneficial for all parties involved with education. Instruction is enhanced, and student work becomes more meaningful to the 21st century world outside of the classroom. All administrators see enhancements in the instruction of their teachers. As the world outside of education rapidly
improves in the use of technologies (Duncan, 2013), administrators should hope their schools are preparing students to best succeed in college and careers. Teachers get the benefit of more engagement on behalf of students. Student engagement improves by ten percent when technologies are utilized in the classroom (Godzicki et. al, 2013), and teachers can engage students with these technologies to help them meet Common Core initiatives. Students connect to their learning, as they are already experts in technologies outside of the classroom (Rafool et. al, 2012), and create meaningful knowledge while taking ownership of their education. Technologies create access to an enhanced educational world, and if these technologies are effectively integrated in the secondary English classroom, administrators, teachers, and students all benefit immensely.
Appendix A: Educational Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Animoto</td>
<td>Animoto is a video producing and sharing software that is easy to understand and access. Animoto allows students to create presentations, edit them with ease, and present them to the class or share them with the teacher.</td>
</tr>
<tr>
<td>Canvas</td>
<td>An interactive website which is full of different apps teachers can use. The website can be used for student engaging activities such as discussions during class or creating on the website. Obviously a main use is for formative checks. Grades can be entered on the site, but audio and video recording can be used while grading—if a teacher needs or wants to explain his or her grading, the recording adds a unique aspect. The website is also accessible from all devices able to access the internet.</td>
</tr>
<tr>
<td>Charlotte Danielson’s Framework for Teaching</td>
<td>Charlotte Danielson created a framework for teaching which sets standards for teachers in four domains: Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities. Teachers are expected to at least be proficient in each of these domains, and the highest standard possible is distinguished.</td>
</tr>
<tr>
<td><strong>Common Core State Standards</strong></td>
<td>The Common Core State Standards are standards that have been developed to determine what all students should know and be able to do in each grade. They are in place in 44 out of the 50 states in an attempt to set universal, high achievement standards for America’s students.</td>
</tr>
<tr>
<td><strong>Illinois Professional Teaching Standards</strong></td>
<td>The Illinois Professional Teaching Standards are in place to reflect the expectations and standards that have been established for the students in Illinois. There are nine standards set to reflect a competent teacher in the state of Illinois.</td>
</tr>
<tr>
<td><strong>Nearpod</strong></td>
<td>An online tool that allows for teachers to create and download presentations, and allow access to those presentations for students. The students can interact and engage with these presentations via any mobile device or computer—essentially if it is possible to access the internet, it is possible to engage with Nearpod. Formative checks are also easy to complete with Nearpod, as teachers can give immediate, real-time feedback to students, and gather detailed data on how the students are performing.</td>
</tr>
<tr>
<td><strong>Netop</strong></td>
<td>Netop gives educators access to web-based assessments and the ability to control laptops from an iPad. However, the primary use of Netop is that it allows teachers to monitor the screens of their students during class time to ensure all students are on topic.</td>
</tr>
<tr>
<td><strong>Notability</strong></td>
<td>Notability is an application that allows one to highlight and take notes on digital texts. These notes will stay saved, they can be revised, and students can have all of the benefits of annotating typically associated with a print text. Notes can even be recorded through voice to go beyond what traditional text annotating is capable of doing.</td>
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<tr>
<td><strong>PARCC</strong></td>
<td>The Partnership for Assessment of Readiness for College and Careers is an assessment</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>developed to usurp the ACT as a standardized test designed to measure a student’s overall academic performance and capabilities. PARCC was introduced to students for the first time in 2015.</td>
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<tr>
<td><strong>Response to Intervention</strong></td>
<td>Response to Intervention (RTI) is an approach to assisting students academically and behaviorally depending on their needs. There are three tiers of RTI. The first tier takes place at the general classroom level. The second tier occurs when students are lagging behind their peers and intervention through smaller groups of students will take place. The third and final tier is when students are lagging significantly behind their peers and need extensive individual support.</td>
</tr>
<tr>
<td><strong>SAMR</strong></td>
<td>SAMR, developed by Ruben Puentedura, is the premier model of technologies integration in education. Technologies can be used as Substitution, Augmentation, Modification, or Redefinition. The goal is to strive toward using technologies as Redefinition to enhance instruction.</td>
</tr>
<tr>
<td><strong>Schoology</strong></td>
<td>A website that allows teachers to integrate other online tools like Moodle and Google Apps. Schoology makes it easy to connect with other teachers as well as engage students and manage the classroom. Teachers can submit grades and formative feedback to students on Schoology as well, as they can with Nearpod and Socrative.</td>
</tr>
<tr>
<td><strong>Socrative</strong></td>
<td>Another website on which teachers can create assessments easily and have students access them from any device. Socrative tracks student answers and collects data in real-time as well, and then gathers that data into instant class and student level reports. Socrative makes it easy to collect data on students and give them formative feedback, making it a wonderful tool to utilize.</td>
</tr>
</tbody>
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Appendix B: Survey Participants

<table>
<thead>
<tr>
<th>Educator Pseudonym</th>
<th>School District</th>
<th>Educator Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator A</td>
<td>A north suburban, high school district in which the students are 1:1 with Chromebooks.</td>
<td>Superintendent</td>
</tr>
<tr>
<td>Administrator B</td>
<td>A north suburban, high school district in which the students are 1:1 with Chromebooks.</td>
<td>Principal</td>
</tr>
<tr>
<td>Administrator C</td>
<td>A west suburban, high school district in which the students are 1:1 with iPads.</td>
<td>Associate Principal</td>
</tr>
<tr>
<td>Technology specialist A</td>
<td>A north suburban, middle school district in which the students are 1:1 with iPads.</td>
<td>Instructional Technologies Coordinator</td>
</tr>
<tr>
<td>Technology specialist B</td>
<td>A north suburban, high school district in which the students are 1:1 with Chromebooks.</td>
<td>Technologies Coach</td>
</tr>
<tr>
<td>Department Chairperson A</td>
<td>A north suburban, high school district in which the students are 1:1 with Chromebooks.</td>
<td>Department Chair</td>
</tr>
<tr>
<td>Teacher A</td>
<td>A north suburban, high school district in which</td>
<td>English Teacher</td>
</tr>
</tbody>
</table>
the students are 1:1 with Chromebooks.

<table>
<thead>
<tr>
<th>Teacher B</th>
<th>A north suburban, middle school district in which the students are 1:1 with Chromebooks.</th>
<th>English Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher C</td>
<td>A north suburban, high school district in which the students are 1:1 with iPads.</td>
<td>English Teacher</td>
</tr>
<tr>
<td>Teacher D</td>
<td>A west suburban, high school district in which the students are 1:1 with iPads.</td>
<td>English Teacher</td>
</tr>
</tbody>
</table>

References


