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CELL PHONES AT THE SCHOOL HOUSE: EXPECTATIONS OF PRIVACY,
INTERPRETATIONS OF PROTECTION AND THE RESPONSE OF SCHOOLS

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CELL PHONES AT THE SCHOOL HOUSE: EXPECTATIONS OF PRIVACY,
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A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

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By the grace of God, I find myself at a destination that, at times, seemed unattainable. I dedicate this work to those who made it all possible.

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Abstract

Through combined traditional legal and documentary research, in addition to a review of current social scientific academic literature on youth perception and behavior, this study sought to answer these questions:

1. What is a student's "reasonable expectation of privacy" in a handheld internet connected device as defined by the federal circuit and appellate courts?
2. What are students' expectations of privacy in handheld internet connected devices as identified by social science and evidenced in popular culture?
3. Do these expectations align?

The federal court cases identified in this research illustrate that courts have yet to interpret the application of the Fourth Amendment to student cell phones at schools with sufficient depth and uniformity to inform policymakers concerning a consistent, universally applicable expectation of privacy for student cell phones. Not only do the decisions in these cases give erratic guidance, almost all of them fail to fully contemplate the very strong, emotional expectations of privacy that many students evidence in their cell phones through social media.

A lack of clear direction from the courts, the absence of meaningful social scientific data, and limited legislative action leave schools and school leaders in the position of enacting and enforcing policy relying on information that is ambiguous and open to mixed interpretation. This investigation evidences a need for quality social science research to inform courts and policymakers about the actual privacy beliefs of

modern public-school students and how these beliefs may potentially inform future lawmaking and policy development.

Chapter 1: Introduction

Public schools must exact a delicate balance, preserving individual rights and exchange of ideas that are, to many, the greatest hallmarks of our national identity, while ensuring institutions are safe from modern society's greatest threats to students. To raise responsible citizens, schools must model respect for the rights of their students and an adherence to state and federal laws preserving those rights. All the while, public educators must be prepared to respond to minor infractions to the worst forms of human violence, yet ensure that these threats do not distract from the obligation to instill in children the most cherished values of an ordered society (Susswein, 2000).

Schools face enormous challenges when it comes to ensuring that the physical and digital spaces in which learning takes place are safe and that distractions and disruptions from their educational mission are minimized. Drugs, weapons and other contraband, various types of rule infractions, even cases of bullying and harassment in which students infringe on the rights of their peers are daily struggles for leaders in most American schools (Chen, 2017). The advent of new and economical technology has helped as schools continue to seek new ways to protect students and schools (Schwartz, 2016). Yet, the same technological advances that bring new opportunities to enhance instruction and access information have also become a pitfall. More often than not, the facts and evidence related to almost all modern security concerns are contained on one or many student cell phones (Smith, Mahdavi, Cavalho, Fisher, Russell, & Tippett, 2008).

Purpose of the Study

The courts tell us that privacy protections for students in public schools are determined by a twofold inquiry. First, did the individual have a legitimate expectation of privacy, and is that expectation one that society would recognize as reasonable? This potentially creates inherent tension. Between most teenagers and authority figures lies a historic chasm – one of mistrust and a feeling of misunderstanding. Beyond the stereotypical tension between teens and adults, neurobiological research shows that the brains of adolescents are different than those of adults (Yurgelun-Todd, 2007). The parts of their brains which deal with executive functions and emotional responses actually behave differently (Yergelun-Todd, 2002). Further distancing the two are their perceptions and use of handheld internet connected technologies. To put it bluntly, a group of white senior citizens who started their careers by advertising in the phonebook are now judicially defining the reasonable privacy expectations of teenagers who have never used one.

While principals and other school leaders are not held to the standards to which we hold law enforcement, students also don't shed their Constitutional rights at the schoolhouse gate (*Tinker v. Des Moines*, 1969). Modern Fourth Amendment jurisprudence dictates that the threshold question for whether searches and seizures of students and belongings are appropriate is whether the individual had a “reasonable expectation of privacy” in what is being searched (*TLO*, 1985). However, how are we to know whether the actual expectations of students align with what courts consider reasonable expectations of privacy for the smartphones they bring to school?

Through combined traditional legal and documentary research, in addition to a review of current social scientific academic literature on youth perception and behavior, this proposed study will seek to answer these questions:

4. What is a student's "reasonable expectation of privacy" in a handheld internet connected device as defined by the federal circuit and appellate courts?
5. What are students' expectations of privacy in handheld internet connected devices as identified by social science and evidenced in popular culture?
6. Do these expectations align?

Privacy: A Modern Construct

Privacy as we know it is a very modern construct, largely a creation of the nineteenth century (Friedman, 2002). It can be difficult to define, and is a murky subject at best, but in an increasingly interconnected, digital world where the line between public and private spaces are blurred, reasonable expectations of privacy are extremely difficult to define-- legally, sociologically, or psychologically. There are even some titans of online social media who would question the future of privacy as it was known at the close of the 20th Century. In an interview with a Facebook employee, Nick Bilton famously asked the employee how Facebook co-founder Mark Zuckerberg feels about privacy. "Me: How does Zuck feel about privacy? Response: {laughter} He doesn't believe in it" (Bilton, 2010).

There is no historical consensus, in philosophy, politics, or law, that privacy is a right or value to be protected by law (Negley, 1966), but the concerns that led to the

Fourth Amendment were arguably the flame that lit the fire of the American Revolution.

It is clear that the protections offered against unreasonable searches and seizures, particularly in one's home, were among the most important goals of United States independence. About the Fourth Amendment, Justice Frankfurter wrote, 'historically we are dealing with a provision of the Constitution which sought to guard against an abuse that more than any one single factor gave rise to American independence. (*Harris v. U.S.*, 1947)

The Fourth Amendment

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized. (U.S. Constitution, Amendment 4)

Origins and Overview

It could be said that the original intent of the Fourth Amendment was to protect against house searches (Steinberg, 2008). Further, the cases and circumstances that led our founders to its establishment were exclusively cases that involved political crimes and dissent rather than violent crimes (Clancy, 2004). The law that was designed to protect entire homes from broad searches by the federal government now protects pocket-sized devices with the capacity to carry digital effects far in excess of the documentary contents of the average home at the time of the United States Revolution.

At the time of the ratification of the Fourth Amendment, there was no professional police force, and the exclusionary rule, protection against the use of illegally obtained evidence in a criminal trial, did not exist (Smith et al., 2008). Reasonableness was not the standard used to assess the legality of searches or arrests in the framing-era, and there is also no persuasive evidence of such a standard during the framing of the state or federal constitutions" (Davies, 1999). "The founding fathers may

not have imagined communication systems beyond the Pony Express, but what they did foresee was the menace an omnipotent government poses. To curtail this danger, they created the Fourth Amendment.” (Navarro, 2003, p. 264).

For many years, the warrant requirement ensconced in the Fourth Amendment served as a tempering agent between the interest of government and the individual. Yet, this layer of protection also meant lost time for those investigating various crimes. Strict adherence to the warrant requirement was onerous when public safety and other special needs were involved. However, in a series of cases, the Supreme Court established exceptions to this requirement that shape the way the Fourth Amendment operates in public schools (to be reviewed and analyzed in a later chapter), and shed light on the future of jurisprudence as we contemplate how schools will manage the increasing presence and interference of internet compatible (information communication) technologies, or ICTs. “Just like time, technology waits for no one, and the Fourth Amendment must once again heed its call.” (Henderson, 2005).

A much-debated topic among Constitutional scholars is how laws should be interpreted. These tend to fall into two camps. Many Constitutional scholars are proponents of questioning the framers’ original intent when crafting the language of the law. The pragmatic natural law alternative allows for flexible interpretation of the Constitution as a living document (Graglia, 1992). As Judge Posner opined, “the originalist faces backwards, but steals frequent sideways glances at consequences. The pragmatist places the consequence of his decisions in the foreground.” (Graglia, 1992). However, handheld internet connected devices, particularly cell phones, present one of the greatest quandaries of all time in this regard. The founding fathers had no way to

anticipate the privacy concerns of modern America, and the jurists interpreting the Fourth Amendment even ten years ago could not have predicted the prevalence of these devices in society, nor could they have imagined the storage and connectivity capabilities of the devices today. Yet, the Fourth Amendment has never been changed from its form as adopted in 1791.

A Historical Look at Search and Seizure: The Reasonableness Standard

In essence, the Fourth Amendment seeks to protect individuals from unreasonable government intrusion (Clancy, 2004). The essential questions of what interests are protected by the Amendment become, first, who is the government, and, second, what is reasonable?

As early as 1943, the United States Supreme Court included public school boards and administrators as government actors and agents (Heder, 1999). Teachers and administrators are clearly government actors, even if their interests differ from criminal law enforcement. However, not until the decision in *Mapp v. Ohio* (1961) did the Supreme Court apply the protections of the federal law to state actors through the Fourteenth Amendment (Rossow, 1995). Thus, the issue of federal protections against unreasonable searches and seizures in the public school setting did not have its genesis until the 1960s.

Reasonableness is a much debated and constantly evolving construct.

‘Unreasonable’ is not to be determined with reference to a particular search and seizure considered in isolation. The ‘reason’ by which search and seizure is to be tested is the ‘reason’ that was written out of historic experience into the Fourth Amendment. This means that, with minor and severely confined exceptions, inferentially a part of the Amendment, every search and seizure is unreasonable when made without a magistrate’s authority expressed through a validly issued warrant *Harris v. U.S.* (1947). However, the types of privacy invasions contemplated by the framers of the Constitution were clearly very ‘low tech,’

and could not begin to be directly applied to the types of devices and content that exist today. In fact, private conversations were not a protected interest for much of the twentieth century and the government could electronically intercept such speech without implicating the Fourth Amendment. (Clancy, 2004, p. 1019)

Until the decision in *Warden v. Hayden* in 1967, the protections of the Fourth Amendment were chiefly property rights (Clancy, 2004). Privacy rights were limited to more or less that which is protected through common law trespass, the physical person and concrete effects – one’s home, personal property, papers, etc. However, with the emergence of *Hayden* and, more specifically in *Katz v. U.S.* (1967) the Court made clear that the law’s interest was in protecting people, not places, and that which a person seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected (Clancy, 2004). This changed the view of privacy from a governmental standpoint and largely shaped the debate concerning the government’s relationship with individuals’ telecommunications and will likely be of huge importance as our laws and courts continue to contemplate the societal changes brought about by the expanded role of handheld internet connected devices in the United States.

With the expansion of the Fourth Amendment’s protections to the states in the 1960s, courts found myriad new factual scenarios needing explanation. In particular, the lack of objective criteria to measure reasonableness resulted in the courts’ balancing the interests of the government against the rights of the individual citizen. This in turn resulted in a steady movement by the courts to expand the permissibility of governmental intrusion and the deprecation of individual freedoms (Clancy, 2004).

This “reasonable expectation of privacy” doctrine, first iterated in *Katz v. U.S.* (1967) casts a lasting shadow and continues throughout modern history of Fourth Amendment jurisprudence. “There is a fundamental need for objective criteria to

measure the reasonableness of a search or seizure.” (Clancy, 2004, p. 978). The absence of such criteria only increases the tension between individual liberty interests and the government’s burden of maintaining order.

There has arisen a hierarchy of protections – first, greater protection is provided where citizens have reasonable expectations of privacy that the government is prepared to recognize as legitimate, diminished expectations of privacy where the courts are more likely to allow government intrusion, and, finally, subjective expectations of privacy that society does not recognize as legitimate have no protection. (Clancy, 2004, p. 1005)

Further, the courts’ adherence to this doctrine as if it were in the plain reading of the Constitution feeds an argument of circularity. Are the courts protecting rights afforded by the Constitution or are they protecting rights created by the Supreme Court?

The ‘reasonable expectation of privacy’ test now governs modern Fourth Amendment law, and it is up to the courts to determine when an expectation of privacy is ‘reasonable.’ As a result, the courts must update and redefine the Fourth Amendment as technology evolves, creating and recreating reasonable rules that effectively regulate law enforcement and protect privacy in new technologies. (Kerr, 2004, p. 805)

Application of the Fourth Amendment to Warrantless Public School Searches

While many would argue that *New Jersey v. T.L.O.* (1985) was the genesis of suspicionless searches and the “special needs” doctrine of exempting certain searches from the warrant requirement in the school setting, the door was first opened by the United States Supreme Court in *Camara v. Municipal Court of San Francisco* (*Camara*) (1967). This doctrine essentially justifies search powers without warrants in cases where the government’s interest is beyond normal law enforcement, justifying administrative searches and inspections, and safety sensitive situations in which the government can establish an exigent need.

Though the Court first authorized a search without a warrant in *Weeks v. U.S.* (1914), *Camara* marked the first time that a non-criminal investigation was given the

power to conduct a warrantless search. In *Camara*, the Court, for the first time, authorized an administrative search without a showing of individualized suspicion (Butterfoss, 2007). In the case, which involved code enforcement inspections, traditional probable cause could not be established. The court redefined probable cause by equating it with “reasonableness” and developed a balancing test between the government’s interest and the individual’s expectation of privacy (Butterfoss, 2004). A long line of cases followed expanding the list of exemptions to the requirements for warrants and individualized specific probable cause.

For thirty years, the Court upheld virtually every government scheme of suspicionless searches and seizures that came before it, belying the Court’s description of the category as a ‘closely guarded’ exception to the general rule that individualized suspicion is required to undertake a search or seizure. (Butterfoss, 2007, pp. 420-21)

New Jersey v. T.L.O (1985)

The Supreme Court examined these warrantless searches in the public school context in 1985. In *TLO (New Jersey v. T.L.O., 1985)*, a student suspected of smoking in the bathroom was taken to the principal’s office where school staff demanded to search her purse. Whereas the search began as an administrative search to confirm suspected student code violations, evidence of illicit drug use and likely distribution was discovered. This created a situation where an administrative search turned up evidence of criminal activity and caused the school administration to turn the matter over to law enforcement.

The Court held that the legality of a search of a student should depend simply on the reasonableness, under all the circumstances, of the search. Determining the reasonableness of any search involves a twofold inquiry: first, one must consider "whether the . . . action was justified at its inception" (*Terry v. Ohio, 1968*); second, one

must determine whether the search as actually conducted "was reasonably related in scope to the circumstances which justified the interference in the first place" (*Terry v. Ohio*, 1968). Under ordinary circumstances, a search of a student by a teacher or other school official will be "justified at its inception" when there are reasonable grounds for suspecting that the search will turn up evidence that the student has violated or is violating either the law or the rules of the school. Such a search will be permissible in its scope when the measures adopted are reasonably related to the objectives of the search and not excessively intrusive in light of the age and sex of the student and the nature of the infraction. (*New Jersey v. TLO*, 1985).

Ultimately, the student faced sanctions from both the school and juvenile justice authorities. Notably for schools, *TLO* shifted the jurisprudence that previously held that schools were state actor *in loco parentis*, or in the surrogate role of the parent. Under this approach, schools had essentially every right to regulate students while in school, that would otherwise have been granted to the parents. This shift recognized that the schools served a governmental or quasi-governmental role with a duty to protect students, and must legally act accordingly. In *TLO*, the Court began to define its regulatory search and "special needs" doctrine (exemptions explained later) as it applied to schools, exempting some administrative action from the warrant requirement, but requiring a "balancing test" between the need to search and the level of invasion (Butterfoss, 2007; *New Jersey v. T.L.O.*, 1985).

...the accommodation of the privacy interests of schoolchildren with the substantial need of teachers and administrators for freedom to maintain order in the schools does not require strict adherence to the requirement that searches be based on probable cause to believe that the subject of the search has violated or is violating the law. (*New Jersey v. T.L.O.*, 1985, p. 742)

The Court recognized a need to balance between the schools' very clear need to maintain order and the individual liberty interests of minor students. This was the first of line of Supreme Court cases that would strive to achieve this balance, and echoed throughout the opinions of each justice. The unanimous Court agreed that the government had a strong interest in maintaining discipline in the classroom and on school grounds. (Blickenstaff, 2004). They also found that this need for supervision justified bypassing the warrant requirement, understanding that requiring teachers and administrators to obtain a warrant every time they needed to search a student would place an excessive burden on the schools. In essence, the Court held that school-based searches fall under the "special needs doctrine," the exception to the Warrant Clause that permits searches without a warrant where special needs, beyond the normal need for law enforcement, make the warrant and probable-cause requirement impracticable. (Blickenstaff, 2004).

According to the *T.L.O.* Court, students in the school setting enjoy a lesser expectation of privacy than the average citizen and administrative searches conducted by teachers or other school officials must be justified at inception and reasonably related to the scope of the circumstances that led to the search in the first place (*New Jersey v. T.L.O.*, 1985). Such a search would be justified at inception when there are reasonable grounds for suspecting that the search will turn up evidence that the student has violated or is violating either the law or the rules of the school and permissible in scope when the measures adopted are reasonable, related to the objectives of the search and not excessively intrusive in light of the age and sex of the student and nature of the infraction (*New Jersey v. T.L.O.*, 1985).

In essence, *T.L.O.* established the “special needs” doctrine, excusing not only the warrant requirement, but also the strict adherence to the probable cause requirement. Further, it soon seemed the Court’s interpretation of “special needs” was basically for non-law enforcement purposes.

Warrantless Searches in the Modern Era

A new question of privacy came to the Court shortly after *New Jersey v. T.L.O.* (1985). The war on drugs began a new debate about the special needs doctrine. Society as a whole began to critically consider the impact that illicit drugs were having on families, communities and schools. The purported need for greater regulation and the rapid growth of technology soon led school leaders to implement drug testing as a deterrent to drug related activity. Soon, courts were called to consider whether employers and schools could conduct suspicionless drug tests of employees and students. Under *T.L.O.*, it would seem that, if randomized urinalysis is a search, that individualized suspicion of a violation of law or policy would be prerequisite to administration. As it considered the application of the “special needs” doctrine in the case of public schools’ purportedly “non-criminal enforcement” drug testing policies, the Supreme Court opined that warrants and probable cause were not only unnecessary to establish the reasonableness of the search, individualized suspicion was also not required (*Vernonia v. Acton*, 1995).

In *Board of Education v. Earls*, 536 U.S. 822 (2002), the Supreme Court considered a public secondary school policy that provided for suspicionless drug testing of *all* students participating in extracurricular activities. It ultimately ruled the policy a

reasonable means of furthering the school district's important interest in preventing and deterring drug use among its schoolchildren.

Likewise, in *Safford v. Redding* (2009), the Court considered the strip search of a student suspected of possessing over-the-counter pain relief medication. While the drug was not illegal, student possession was a violation of rules of student conduct. In such cases, where a student's bodily integrity is called into question in a strip search, the Court opined they would be Constitutional only if, "the measures adopted are reasonably related to the objectives of the search and not excessively intrusive in light of the age and sex of the student and the nature of the infraction." (*Safford v. Redding*, 2009).

If drug testing was the hotbed issue for search and seizure, internet compatible technology and related devices likely pose the next frontier for school related search and seizure issues. "While Congress and state legislatures may have a limited role regulating government investigations involving new technologies, the real work must be done by judicial interpretations of the Fourth Amendment" (Kerr, 2004, p.802). However, to date, the Supreme Court has never ruled in a case involving a handheld internet connected device in the school setting.

The Supreme Court in the Digital Age: Riley v. California

The earliest arguments for recognition of privacy protection in law were largely related to expanding communication technology such as widely distributed newspapers and multiple printed reproductions of photographs. Likewise, Fourth Amendment protection against search and seizure was extended later in the twentieth century to cover telephone wiretaps and electronic surveillance (Stanford, 2013). These were all

concrete items, which could be quantified, with each article inhabiting a physical, albeit changeable, location. Not until *Katz v. U.S.* did the courts in the United States view the Fourth Amendment as protecting privacy rather than property (*Katz v. U.S.*, 1967).

This pivotal case involved a criminal gambling investigation in which the defendant was the subject of a warrantless wiretap of a public pay phone. Since there was no physical entrance into the area occupied by the defendant, the government claimed no Fourth Amendment violation. For the first time, the Supreme Court asserted that the Fourth Amendment protects people, not places (*Katz v. U.S.*, 1967).

As important as the holding in the case is Justice Harlan's concurrence, which has now become the bedrock of modern Fourth Amendment jurisprudence. In the concurrence, he not only states that a person has a constitutionally protected reasonable expectation of privacy, but also posits that "there is a twofold requirement, first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as 'reasonable'" (*Katz v. U.S.*, 1967). Further, and most aligned to the issues surrounding handheld internet connected devices, he stated reasonable expectations of privacy may be defeated by electronic as well as physical invasion (*Katz v. U.S.*, 1967).

The most comprehensive contemplation of this judicial approach in the handheld internet connected devices era came in 2015. In *Riley v. California* (2015), the crux of the case involved whether police have the right to search the digital contents of a cell phone seized incident to the arrest of its owner.

The Court considered the unique nature of cell phones, and how the evaluation of their search differs so manifestly from the pocket searches incident to arrest that had

been considered in previous cases, likening their search to raiding a suspect's home on the basis of their arrest. "They (cell phones) could just as easily be called cameras, video players, rolodexes, calendars, tape recorders, libraries, diaries, albums, televisions, maps, or newspapers." (*Riley v. California*, 2015).

As such, the unanimous Court determined that, "Our answer to the question of what police must do before searching a cell phone seized incident to an arrest is accordingly simple—get a warrant." (*Riley v. California*, 2015). However, in his concurrence, Justice Alito called for the need for legislatures to elaborate about what searches could be permissible in the context of arrest, and questioned the role of the Supreme Court in making determination in the absence of legislative directive. "Because of the role that these devices have come to play in contemporary life, searching their contents implicates very sensitive privacy interests that this Court is poorly positioned to understand and evaluate." (*Riley v. California*, 2015).

The Advent of the Handheld Internet Connected Device: An Application the Framers Could Never Contemplate

The handheld internet connected devices has turned traditional Fourth Amendment inquiry on its ear. If the constitutional framers had little notion of modern privacy, the digital world was surely beyond their comprehension. "Digital assets have produced the greatest amount of private individual information the world has ever seen, and we are still struggling to determine whether and to what extent the law should protect the privacy of these accounts." (Banta, 2016).

In the iPhone era, we no longer contemplate the search of simply a locker, a book bag, a purse or an address book that each take up their own physical space. These

internet connected digital devices, as the Riley Court noted, arguably contain, in digital form, address book, photo album, phone pin register, an archive of correspondence, bank records, health records, location tracking devices, diaries, calendars, and much, much more combined. Furthermore, these devices access not only information stored in their device memory, but also information stored on remote servers or “in the cloud,” whereby information can potentially be accessed from multiple physical locations by electronic means.

The Digital Divide

Net Gen in the Age of the iPhone

The digital divide in terms of Information and Communication Technologies (ICT) use and dependency has been much debated over the past decade. While there is some argument about whether a generational divide truly exists, it is becoming clear that the question is not whether there is a generational divide in teens and their parents use of handheld internet connected devices, but *how* that divide manifests itself in the way these groups use and perceive digital spaces and places. The importance of handheld internet connected devices in American society has sparked much discussion and research related to privacy in its various forms.

In 2001, Marc Prensky boldly postulated that the changes of slang, clothes, body adornments or styles that had marked the changes between previous generations were mere incremental changes compared to the radical changes that marked current students. He stated that “today’s students are no longer the people our educational system was designed to teach.” (Prensky, 2001, p. 1).

A really big discontinuity has taken place. One might even call it a “singularity” - an event which changes things so fundamentally that there is absolutely no

going back. This so-called “singularity” is the arrival and rapid dissemination of digital technology in the last decades of the 20th Century. (Prensky, 2001, p. 1)

This singularity, he said, caused students to think and process information fundamentally differently from students in previous generations. He called them “Digital Natives,” “native speakers” of the digital language of computers, video games, and the Internet. Carrying on this language analogy, he likened that these students took to digital technology and internalized it in much the same way one would their native tongue. Likewise, he called those not born into this digital world, but adapting to it “Digital Immigrants.” These immigrants may learn technology in the way that one may learn a new language later in life, but they would likely always carry the accent of their first language – or non-digital life – pointing out that language learned later in life is information stored in a different area of the brain than first language.

Just as the worldview and experience of previous generations were shaped by the advent of the steam locomotive, electric lighting, the automobile, and the telephone, those born into today’s digital landscape experience the interactions and milestones of their youth in a way that is technologically very different than the previous generation. As John Palfrey and Urs Gasser (2008) said in their book, *Born Digital*, “unlike those of us just a shade older, this new generation didn’t have to relearn anything to live lives of digital immersion. They learned in digital the first time around; they only know a world that is digital.” (Palfrey, 2008).

We are still learning and exploring how the technology shifts within the last 15 years have and will affect different aspects of society. For those born after the widespread use of horses and buggies as means of transportation, the daily navigable world is a much larger place. Likewise, how will notions of privacy be viewed by

individuals who never had phones with cords, or a world without the internet in the palm of their hand? “People who have never known a world without smartphones and social media likely have a very different sense of individuality than their ancestors who lived on the farm or frontier.” (Fogel, 2014).

Problem

Given that the Supreme Court has never weighed in on a case involving cell phones in a public school, and the rapid growth and change in these technologies, schools are in a constant scramble to stay ahead of their implicated security concerns and relatedly, student discipline issues. There is no clear directive as to how to frame policies to adequately protect student rights, nor to ensure that the federal courts’ interpretations represent the actual expectations of students. These gaps in knowledge present an important area for inquiry and the problem this dissertation will address through methods aimed at establishing a baseline of what the federal circuit and appellate courts deem reasonable, as well as to identify popularly held actual student expectations of privacy with cell phones at public schools.

Analytical Methods and Data

This study will undertake traditional legal methods to establish a baseline of what the courts consider a reasonable expectation of privacy for students possessing cell phones at public schools. This will involve explorations into primary sources of law at the case level in both state and federal courts, as well as secondary sources including journal and law review articles. This study will be limited to an examination of cases involving the search of a student possessed internet connected device in which Fourth Amendment protections have been invoked.

I will compare and contrast this current baseline expectation within the law with an empirical social science literature and additional forms of popular culture as expressed in broader journalistic and public readership materials. The legal analyses and related findings will be weighed against current knowledge in social science about contemporary youth perceptions and dispositions, as well as portrayals of related issues in popular culture, whether it be movies, magazines, blogs, or other texts.

The overarching design of the study will include a search of all state and federal cases in which a Fourth Amendment claim is made related to a student cell phone against public school actors in the pre-kindergarten through 12th grade context through Lexis Nexis. These cases will be analyzed to isolate court findings or assertions related to what expectation of privacy a student may consider reasonable. These statements will be considered based on whether they are a state or federal case and through any appeal, if applicable. This data will be organized and manipulated to identify any trends that may be revealed based on court type, date, contextual issues

Parallel to this inquiry, qualitative media content analysis of internet published news and magazine stories and public commentary in response to these stories, as well as public social media forums, and movies from 2006 to 2018 will be examined to describe substance characteristics of message content; determine whether any declarations or assumptions about student held or generally accepted expectations of privacy in cell phones may be identified. Published, peer-reviewed social science studies from the same time period will be examined to identify findings related to minors and conceptions of privacy related to cell phones as devices and their content.

Findings from case law will be compared and contrasted with the data from social science and media to determine whether current jurisprudentially-established expectations are in harmony with actual expectations of privacy for students with cell phones at public schools.

These analytical methods will be directed toward answering the three questions posed in the study:

1. What is a student's "reasonable expectation of privacy" in a handheld internet connected device as defined by the federal circuit and appellate courts?
2. What are students' expectations of privacy in handheld internet connected devices, from student and adult perspectives, as identified by social science and evidenced in popular culture?
3. Do these expectations align?

Organization of the Study

Chapter 1 has provided the purpose of this study and its related problem, providing a summary of the important legal and social science issues incumbent in a thoroughgoing legal examination of the current condition of public schools and the children who attend them.

Chapter 2 will provide a more in-depth look at the origins and overview of the Fourth Amendment. This will include a historical understanding of search and seizure in America, as well as an overview of major search and seizure opinions issued by the Supreme Court. The Supreme Court's most thorough examination of cell phone technologies will be addressed.

In Chapter 3, this work will explore the digital divide. Its content will provide an understanding of what is known as the Net Generation, and will address the application of this and similar distinctions to social science in terms of conceptions of privacy.

The application of the law to schools will be explained in Chapter 4. This will include a historical foundation of the application of the Fourth Amendment to public schools, the reasonableness standard, and warrantless searches in the public school context. Central to this chapter will be an examination of the landmark case of *New Jersey v. T.L.O.* (1985).

The design and conduct of this study with respect to the collection and analyses of pertinent social scientific research and popular culture as expressed in journalistic texts and related communication modalities is presented in Chapter 5. The procedures and analytical approach to these texts will be explained in light of the preceding chapters that provide for an in-depth coverage of germane legal issues. These will begin with broad keyword searches from the databases of Google and LexisNexis and will be refined as necessary to draw keywords in context to extract statements that can be inferred through qualitative ethnographic media content analysis to establish meaning for what the United States public outside of the legal profession considers privacy as it relates to student handheld internet connected devices in the public school setting.

Chapter 6 will present the findings of the research. This will include an index of cases addressing expectations of privacy for students possessing cell phones at public schools from 2006 to 2017. For each, statements establishing what the courts assert is a reasonable expectation of privacy in student possessed handheld internet connected devices in public school settings will be identified. If the cases have been appealed,

subsequent treatment of the issue will be tracked to determine if the courts' recognition of student rights are consistent throughout the appellate process. A sampling of excerpts from news media, social media, and popular culture depictions and a categorized synthetic review of what current social science research tells us about youth culture will also be presented.

A summary of findings, as well as conclusions and recommendations for practice will be presented in Chapter 7. This will include the significance of the study, implications of its findings, and recommendations for those serving in leadership roles in public schools. The chapter will provide suggested topics for further research before reaching its general conclusion.

Chapter 2: Origins and Overview of the Fourth Amendment

The true history of the Fourth Amendment requires an examination of centuries' worth of the English and American experience. The first documentary bases of what we know as the Fourth Amendment go back as far as the Magna Carta. Perhaps no tenet of the common law is more well-known than the belief that a man's home is his castle.

The initial codification of broad search and seizure powers in England went hand in hand with the introduction of the printing press, and the early use of those powers was largely used to restrain the distribution of seditious material (Landynski, 1966). It could be said that the earliest injustices against which the Fourth Amendment was designed to protect went hand in hand with the speech and press protections later embodied in the First Amendment. These powers, which had been used sporadically throughout history, were codified and enforced in England with fervor by Tudors, and grew over the following 150 years.

Initially, the restraints forced printers into compliance with censorship laws in order to gain mandatory state licensing. In this scheme, private guilds were given search and seizure rights to enforce laws against sedition. This separated the English government from enforcement and supported private monopolies in printing. Parliament passed a law in 1662 granting the power to issue warrants, from specific to general, and writs of assistance which allowed the holder to appoint any citizens they deemed necessary to assist them in the task. One, for example, granted the Surveyor of the Press the right to "seize all seditious books and libels and to apprehend the authors, contrivers, printers, publishers and dispersers of them," and to "search any house, shop, printing room, chamber, warehouse, etc. for seditious, scandalous or unlicensed

pictures, books, papers...” (Landynski, 1966, pg. 24). These general warrants and writs of assistance gave officials broad, almost *carte blanche*, powers to search at will without requiring them to establish the basis for suspicion, unrestricted as to time, place, or manner. In 1696 Parliament granted the authority for officials to apply for writs of assistance in the American colonies.

In the reign of James I, these powers expanded into something known as the writ of assistance. These general warrants for the search and seizure of purportedly smuggled goods, gave all officers of the Crown authority to *assist* in the execution of the searches, seizures, and enforcements. The first time that Parliament recognized that general warrants were an arbitrary exercise of government against which the public had a right to be protected was in 1685, when Parliament impeached a chief justice for misdeeds including his issuance of general warrants (Landynski, 1966).

In colonial America through the framing of the Constitution, there was no professional law enforcement as we know it. Those charged with the task were often unpaid, rotating laymen. Those executing general warrants and writs of assistance were not trained officers of the law, and not necessarily impartial in any way, therefore, the citizenry preferred searches be conducted upon specific warrants authorized by magistrates upon some showing of cause for their issuance. Colonists held much greater trust in magistrates issuing specific warrants rather than untrained and unsophisticated individuals acting on general warrants (Davies, 1999).

Further, citizens could resist what they believed to be unlawful searches, seizures or arrests, with the right to civil damages for trespass in the case of illegal searches and seizures. Rather than the information or belief held by the searcher, what

we might now call probable cause, these cases rested on whether the individual was actually convicted of the crime (Davies, 1999).

Whereas the earliest complaints about infringements of what we would now consider Fourth Amendment rights centered around searches for seditious materials, in colonial America these complaints centered around searches for smuggled goods and concealment of items to avoid revenue payments to the Crown (Davies, 1999). When misused, these warrants and writs could be used to damage business rivals, those with whom individuals had disputes, and those who may have political leanings that were disfavorable to the Crown. While warrantless searches and seizures were not uncommon in the case of individuals who may have committed acts of violence and the like, the historical record of prerevolutionary grievances shows no complaint about searches and seizures beyond those authorized by general warrants and writs of assistance (Davies, 1999). In general, the record suggests that the framers of the Constitution supported the processes associated with specific warrants (Davies, 1999).

“Reasonableness” was not the standard upon which searches or arrests were based during the framing era. Framers’ search and seizure complaints tend to center around the application of general warrants to support house searches.” (Davies, 1999).

The legality of writs of assistance were questioned in what history would come to know as the Writs of Assistance Case or Paxton’s Case. When called upon by Boston merchants to defend the legality of general warrants, Advocate General James Otis promptly resigned and took up the role of counsel for the merchants. In his five-hour argument, Otis stated, “It appears to me the worst instrument of arbitrary power, the

most destructive of English liberty and the fundamental principles of law, that ever was found in an English law-book.” (Constitution.org).

Among those inspired in the audience that day was John Adams. In fact, aside from the preamble of Otis’ speech, the contents of the oratory remain in history only in the Adams’ summary. His description of the content includes in its passages phrases such as, “he asserted that these rights were inherent and inalienable,” and, “he asserted that the security of these rights to life, liberty, and property had been the object of all those struggles against arbitrary power, temporal and spiritual, civil and political, military and ecclesiastical, in every age. He asserted that our ancestors, as British subjects, and we their descendants, as British subjects, were entitled to all those rights by the British constitution as well as by the law of nature and our provincial character as much as any inhabitant of London or Bristol or any part of England, and were not to be cheated out of them by any phantom of "virtual representation" or any other fiction of law or politics or any monkish trick of deceit and hypocrisy.” (Constitution.org).

When the writ was ultimately upheld, the spark grew into the flames of revolution, and Otis’ influence on John Adams would be evidenced by both the Declaration of Independence and the Fourth Amendment.

Alone among those constitutional provisions which set standards of fair conduct for the apprehension and trial of accused persons, the Fourth Amendment provides us with a rich historical background rooted in American, as well as English, Experience; it is the one procedural safeguard in the Constitution that grew directly out of the events which immediately preceded the revolutionary struggle with England. (Landynski, 1966, p. 19)

Throughout the drafting of the Constitution, and after its ratification in 1788, many argued that the document did not go far enough in protecting individual liberties. Almost immediately upon, if not before ratification, amendments were proposed to

avoid a second Constitutional Convention. During this time, nine different states enacted their own charters of individual rights including components reflecting what would be protected by the ultimate adoption of the Fourth Amendment. Of the state provisions enacted prior to the ratification of the Fourth Amendment in 1791, the idea of “reasonableness” was not incorporated until the seventh of nine different state versions of what would become the basis of the Fourth Amendment (Davies, 1999).

Therefore, in 1789, leaning heavily on a range of documents from the Magna Carta, to the Virginia Declaration of Rights, and even Adams’ recounting of Writs of Assistance Case, Congress approved 12 amendments to the Constitution. The first 10 of these became known as the Bill of Rights. The fourth of these states:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized. (U.S. Constitution, Amendment IV)

The Amendment can be viewed as two separate clauses. First, individuals are protected against “unreasonable” searches and seizures. Secondly, warrants must be issued based on probable cause and must be specific in what is to be searched and seized.

The structure of the Fourth Amendment has been much debated from a historical standpoint. There are those who would argue that it mandates that all searches and seizures must be predicated by a warrant. Any deviation from this must be an exception clearly stated in law. This is often referred to as a warrant preference.

On the other It has been argued that the Framers had little concern about the kinds of warrantless searches that were routinely conducted. Those on this side of the argument hold that the Framers’ opposition was to general warrants and wanted to

ensure that any warrants issued be done so with particularity. Rather than assuming that the choice of the word “unreasonable” was designed to protect against warrantless searches, those in this camp tend to argue that, when drafting the Fourth Amendment, John Adams used the word “unreasonable” to avoid potential misinterpretation of language such as that in the Pennsylvania provision which could be construed to ban all searches and seizures in houses (Davies, 1999).

The content of the Amendment on its face is one consideration, the other is how two and a half centuries of judicial interpretation have changed the character of the protections. Framers assumed common law would continue, but our jurisprudential history has proved them wrong.

The idea of a constitution implies permanence and continuity. Even though there is little consensus as to precisely how or how much the intended meaning of a constitutional text should matter in contemporary constitutional analysis, there is a widely shared sense that the Framers’ meaning should carry some weight, or matter in some way. Thus, discussion of the historical meaning of a constitutional provision almost inevitably leads to consideration of its implications for modern doctrinal issues. (Davies, 1999, p. 734)

In some ways, thoughts of the origins of the Fourth Amendment and how they were applied in the earliest days of the United States are very foreign. This is both a reflection of how the country has changed over the last two centuries and how the application of the Fourth Amendment has evolved through the courts and modern theories of policing. This story is complex, and must be considered in the context of much broader and institutional and doctrinal transformations shaping modern American Constitutional law (Davies, 1999).

Few federal cases dealt with the Fourth Amendment in the 19th Century. Those that did tended to center around the application of legislation authorizing novel uses of warrants. These were evaluated not based on reasonableness standards, but on whether

the warrants were authorized under the Fourth Amendment. Likewise, state courts were similarly silent on issues of reasonableness (Davies, 1999). With the dawn of Prohibition with the adoption of the 18th Amendment in 1919, came a new need for the courts to grapple with the Fourth Amendment (Landynski, 1966).

Warrantless searches actually took place in the United States for over 100 years before they were specifically authorized by law. Typically, these searches took place in spheres of law enforcement dealing with such wrongdoing that the general public had no complaint with them. Congress did not specifically authorize warrantless arrests until 1935, subject to reasonable grounds that the person has committed or is committing a federal felony.

The following is a timeline summary of the major cases and holdings of the Supreme Court related to the Fourth Amendment:

1868: The 14th Amendment was ratified, stating, in part,

No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws. (U.S. Const., Amend. XIV)

1886: The production of potentially incriminating papers requires the same warrant authority as if the government searched for them (*Boyd v. U.S.*, 1886).

1914: Evidence gathered illegally cannot be used against a criminal defendant. Often referred to as the exclusionary rule (*Weeks v. U.S.*, 1914). This case notably failed to recognize the incorporation of the Fourth Amendment to the states through the Fourteenth Amendment.

1925: The Court recognized an exception to the warrant requirement for roadside searches of a vehicle whereas the officer has probable cause that either

evidence will be destroyed or “lost” if the vehicle leaves the scene (*Carroll v. U.S.*, 1925).

1928: Viewing the Fourth Amendment from a property/trespass perspective, the Court upheld the validity of evidence obtained by a wiretap where officers did not physically trespass onto any private property (*Olmstead v. U.S.*, 1928).

1942: A wiretap was not considered a violation when no trespass was occurring at the time the message was intercepted- even though officers trespassed in order to plant the device (*Goldman v. U.S.*, 316 U.S. 129, 1942).

1949: The Fourteenth Amendment’s Due Process clause did not prohibit the admission of illegally obtained evidence in state court (once again, failing to incorporate the protections of the Fourth Amendment through the 14th Amendment) (*Wolf v. Colorado*, 1949).

1952: When a wired informant is willingly invited onto private property by the defendant, or person of interest, no trespass has occurred and any information gathered is admissible in court (*On Lee v. U.S.*, 1952).

1961: Recognizing the application of the Fourth Amendment to the States as incorporated by the 14th Amendment, the Court establishes for the first time that all evidence obtained through illegal searches and seizures is inadmissible into court, at both the federal and state levels (*Mapp v. Ohio*, 1961).

1967: *Katz v. U.S.* (see below).

1968: The Court authorized what is known in law enforcement as the “stop and frisk.” In doing so, the court noted the prohibition on unreasonable searches and seizures is not violated when a police officer stops a suspect on the street and frisks him

or her without probable cause to arrest, if the police officer has a reasonable suspicion that the person has committed, is committing, or is about to commit a crime and has a reasonable belief that the person may be armed and presently dangerous. (Terry v. Ohio, 1968).

1969: A warrantless search of a vehicle incident to arrest may be justified in the interest of officer safety or in order to preserve evidence. This warrantless search is only valid when “the arrestee is unsecured and is in reaching distance from the passenger compartment at the time of the search” (*Chimel v. California*, 1969).

1970: The warrantless search of a vehicle that had been moved from the original location of the traffic stop to a police station does not violate the Fourth Amendment if there is probable cause to believe the vehicle contains criminal evidence and there existed exigent circumstances where the vehicle could be removed from the jurisdiction (*Chambers v. Maroney*, 1970).

1971: The warrantless search of an arrestee’s vehicle parked in his driveway is not a legitimate application of the search incident to arrest. “Searches conducted outside the judicial process, without prior approval by judge or magistrate, are *per se* unreasonable under the Fourth Amendment – subject only to a few specifically established and well-defined exceptions” (*Coolidge v. New Hampshire*, 1971).

1973: A full search of a person conducted during lawful arrest is reasonable under the 4th Amendment (*U.S. v. Robinson*, 1973).

1978: Passengers in a car of which they did not own had no "legitimate expectation of privacy." The rights afforded by the Fourth Amendment are personal and cannot be claimed vicariously (*U.S. v. Leon* (1984)).

1983: Probable cause may be established based on the totality of the circumstances, and not solely on the veracity or reliability of all sources of knowledge, to establish a substantial basis that a search will uncover evidence of wrongdoing in order to gain a warrant (*Illinois v. Gates*, 1983).

1984: Evidence seized pursuant to a warrant issued based on mistaken information was permissible because of a "good faith" exception. The exclusionary rule is not a right but a remedy to deter illegal police conduct (*Nix v. Williams*, 1984).

1984: It is not a violation of the Fourth Amendment to plant a homing device into a container of materials to be used for an illegal narcotics operation in order to track its movement, as it does not interfere with an individual's property interest in the item. However, monitoring such a warrantless surveillance device within the home would likely be viewed as a violation (*U.S. v. Karo*, 1984).

1985: A motor home on a public roadway qualifies it as a vehicle subject to warrantless searches. However, if a motor home is not on public roadways, a warrant is required to search the vehicle because it is then considered a house (*California v. Carney*, 1985).

1985: Warrantless searches may be conducted by school officials in the public school setting when there is reasonable suspicion of an infraction, the search is justified at its inception and the scope of the search is reasonable and not excessively intrusive given the age and sex of the student and the nature of the infraction (*New Jersey v. T.L.O.*, 1985). *See detailed discussion in Chapter Four.*

1986: The Fourth Amendment is not violated if a search warrant is issued based on, or evidence is gathered through, the use of naked-eye aerial observation (*California v. Ciraolo*, 1986).

1988: A resident does not have a reasonable expectation of privacy in garbage or trash left outside of the curtilage of a home. It is considered abandoned by the inhabitants of the private residence and therefore, searchable without a warrant (*California v. Greenwood*, 1988).

1995: Given the diminished privacy expectations of student athletes, school districts' compelling interest in deterring drug use is sufficient to warrant random drug testing of student athletes (*Vernonia v. Acton*, 1995).

1999: A warrantless search of a passenger's personal belongings does not violate the Fourth Amendment if a law enforcement official has probable cause to conduct a warrantless vehicle search (*Wyoming v. Houghton*, 1999).

2001: Use of aerial thermal imaging to detect likely marijuana growing operations was unconstitutional because the "information from the thermal imaging was the product of a search" and a search warrant was not obtained by the officials before conducting the search (*Kyllo v. U. S.*, 2001).

2001: A policy requiring the random urinalysis of all students participating in co-curricular activities did not violate the Fourth Amendment (*Bd. of Educ. of Indep. Sch. Dist. No. 92 of Pottawatomie Cnty. v. Earls*, 2001).

2006: Warrantless searches can be conducted to prevent the imminent destruction of evidence. However, police cannot create the exigency through engaging

or threatening to engage in conduct violating the Fourth Amendment (*Brigham City v. Stuart*, 2006).

2009: A warrantless vehicle search is legal if it is “reasonable to believe that evidence related to the crime and/or arrest might be found in the vehicle,” and that the arrestee will have access to the compartments in the vehicle (*Arizona v. Gant*, 2009).

2009: Strip searching a public school student to find over the counter analgesic medication was excessive in scope and overly intrusive given the circumstances and constituted a Fourth Amendment violation (*Safford v. Redding*, 2009).

2012: Installation of a global positioning device on a vehicle in order to track its movements constitutes a search, and evidence obtained in exceeding the scope of a search warrant for this purpose is inadmissible (*U.S. v. Jones*, 2012).

2013: Swabbing an arrestee’s mouth for DNA analysis is not a constitutional violation when arrest was for a serious crime, and the DNA analysis did not disclose genetic or medical information, and no record was compiled in a database (*Maryland v. King*, 2013).

2013: Use of a police dog sniff in a constitutionally protected area like the curtilage of a home is unconstitutional without a warrant (*Florida v. Jardines*, 2013).

2014: Accessing the contents of a cell phone seized incident to an arrest requires a warrant (*Riley v. California*, 2014). (see below).

Pending: Does the Fourth Amendment allow evidence of geolocation obtained without a warrant through third party cell phone providers to be used against a defendant in a criminal case (*Carpenter v. U.S.*, 2017)?

Katz v. United States

Until the decision in *Warden v. Hayden* in 1967, the protections of the Fourth Amendment were chiefly property rights (Clancy, 2004). Privacy rights were limited to more or less that which is protected through common law trespass, the physical person and concrete effects – one’s home, personal property, papers, etc. However, with the emergence of Hayden and, more specifically in *Katz v. U.S.* (1967) the Court made clear that the law’s interest was in protecting people, not places, and that which a person seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected (Clancy, 2004).

In the case, Katz was convicted of a federal crime related to use of a telephone for illegal interstate gambling. The evidence upon which he was convicted consisted of telephone conversations obtained by FBI agents who, without a warrant, placed an electronic listening device outside a public telephone booth where they suspected Katz conducted his illegal operation. While the appeals court rejected the contention that the recordings had been obtained in violation of the Fourth Amendment because “there was no physical entrance into the area occupied” by the suspect, the Supreme Court, noted that the Fourth Amendment protects people and not places, and “cannot turn upon the presence or absence of a physical intrusion into any given enclosure.” (*Katz v. U.S.*, 1967, at 353). This changed the view of privacy from a governmental standpoint and largely shaped the debate concerning the government’s relationship with individuals’ telecommunications—noting the vital role that the public telephone had come to play in private communication. Likewise, this interpretation may be essential as our laws and

courts continue to contemplate the societal changes brought about by the expanded role of handheld internet connected devices in the United States.

In essence, Katz shifted the question of whether there had been a physical intrusion of a constitutionally protected space to Court repeatedly stating that the Fourth Amendment's principal concern is the protection of privacy (Clancy, 2014). Justice Harlan's concurrence in *Katz* established a two-part test of whether the search is protected by the Fourth Amendment that carries on through the jurisprudence of today. First, did the individual have a reasonable expectation of freedom from governmental intrusion in the invaded place? Justice Harlan famously noted that this subjective expectation has much diminished as a viable standard because "our expectations and the risks we assume, are in large part reflections of laws that translate into rules the customs and values of the past and present (*U.S. v. White*, 1971)." The second prong is the question of whether society finds that expectation of privacy as legitimate. The court later explained "legitimation of expectations of privacy by law must have a source outside the Fourth Amendment, either by reference to concepts of real or personal property law or to understandings that are recognized and permitted by society." (*Rakas v. Illinois*, 1978).

With the expansion of the Fourth Amendment's protections to the states in the 1960s, courts found myriad new factual scenarios needing explanation. In particular, the lack of objective criteria to measure reasonableness resulted in the courts' balancing the interests of the government against the rights of the individual citizen. This in turn resulted in a steady movement by the courts to expand the permissibility of governmental intrusion and the deprecation of individual freedoms (Clancy, 2004).

This “reasonable expectation of privacy” doctrine, first iterated in *Katz v. U.S.* (1967) casts a lasting shadow and continues throughout modern history of Fourth Amendment jurisprudence. “There is a fundamental need for objective criteria to measure the reasonableness of a search or seizure” (Clancy, 2004, p. 978). The absence of such criteria only increases the tension between individual liberty interests and the government’s burden of maintaining order.

There has arisen a hierarchy of protections – first, greater protection is provided where citizens have reasonable expectations of privacy that the government is prepared to recognize as legitimate, diminished expectations of privacy where the courts are more likely to allow government intrusion, and, finally, subjective expectations of privacy that society does not recognize as legitimate have no protection. (Clancy, 2004, p. 1005)

Further, the courts’ adherence to this doctrine as if it were in the plain reading of the Constitution feeds an argument of circularity. Are the courts protecting rights afforded by the Constitution or are they protecting rights created by the Supreme Court?

Riley v. California

In February of 2012, the United States Court of Appeals for the Seventh Circuit ruled that the search of a cell phone upon arrest did not violate the Fourth Amendment (*U.S. v. Flores-Lopez*, 2012). In its reasoning, the court likened the cell phone to any other container of information, whether that be a cigarette case or an address book. The cell phone and its electronic contents were treated like any other tangible item that might be found upon a person. The first real treatment of cell phones in the Supreme Court, as well as the first major case to recognize the modern scope of digital information they can access and or contain, came in 2014 with *Riley v. California*. The decision represented two separate cases on appeal. In both, the individuals had been arrested. As part of law enforcement searches incident to their arrest, defendants’ cell

phones (one of which was a flip phone) were seized. Officers then, without warrant, accessed information on the phones that either evidenced their involvement in a crime or led to the discovery of incriminating evidence.

The decision was narrow, focusing on warrantless searches incident to arrest. For those interested in how the decision could affect Fourth Amendment considerations in the school setting there were few answers. Further, while the case represented the Court's first real consideration of Fourth Amendment protections in a world where such a dearth of data is carried in a person's pocket, it may have created as many questions as it answered. Justice Alito's concurrence noted that these considerations ran the risk of protecting digital information that would not have been protected in a more traditional physical form.

Further, he questioned the Court's role in evaluating the privacy interests involved in this kind of technology, suggesting that legislatures are better positioned to respond to changes, presumably in both technology and privacy considerations, than courts.

(b)ecause of the role that these devices have come to play in contemporary life, searching their contents implicates very sensitive privacy interests that this Court is poorly positioned to understand and evaluate. Many forms of modern technology are making it easier and easier for both government and private entities to amass a wealth of information about the lives of ordinary Americans, and at the same time, many ordinary Americans are choosing to make public much information that was seldom revealed to outsiders just a few decades ago. (*Riley v. California*, 2014)

Carpenter v. United States

Now before the Court is the second major case to involve mobile phones. Four men were arrested in connection with a series of armed robberies in California. Upon confessing, one of the four turned over his cell phone and the cell phone numbers of the

three other arrestees to the FBI. This information was used to juridically gain access to transactional records from third parties –specifically cell phone carriers – to obtain the date, time, and parties to calls, as well as cell tower location data of the approximate location of the device at the beginning and ending of each call. Carpenter was criminally charged based on information obtained in these call records.

The question to be addressed is whether the warrantless search and or seizure of cell phone records including the location and movements of their users violate the Fourth Amendment. The case was argued November 29, 2017, and is pending at the time of this writing.

Chapter 3: The Digital Divide and Privacy

Digital Natives and the Digital Divide

There are many arguments about what might constitute a “digital divide.” Some may refer to divides in access to technology or broadband internet. Others may refer to access divides related to an individual’s country of citizenship, their race or gender, or those influenced by socio-economics, etc. In this research, any reference to a digital divide refers to a generational divide between those who have acquired internet connected technology as it has been introduced in their lifetime and those who were born at such a time as to develop the language and literacy of these technology synchronous to their acquisition of more traditional forms of language and literacy.

While analogizing these groups to digital natives and digital immigrants, Prensky (2001b) also likened the generational divide to social psychological phenomena in which people who grow up in different cultures do not only think *about* different things, they actually *think differently*. He (2001a) called for educators to confront the issues and challenges related to teaching this new breed of student, reconsidering both content and methodology. What began as a call to a crisis in education quickly became one of the biggest issues in American cultural discourse. In the early days of the internet there was a great deal of discussion about a digital divide- one which would separate those who did and did not have access to internet and then high-speed internet and what they could offer and those who could not. Quickly, the divide between digital natives and digital immigrants became a second digital divide. The characterization of these entities as polar rather than points on a continuum fueled the debate.

Later works sought to debunk Prensky (2001). In his 2009 piece, *The Digital Native- myth and reality*, Neil Selwyn suggested we reconsider the notions of “digital natives” and the “net generation” in light of young people’s actual use of digital technology and information.

The “commonsensical” notion of the digital native is fore-grounded increasingly in the thoughts and pronouncements of policymakers, technology vendors and opinion formers throughout the world. Yet whilst the idea of young people being notably different from previous generations in their technical aptitudes and abilities may well have a strong intuitive appeal, the ease with which these commonsensical “stories” of the digital native generation are being repeated and being “re-told” should be cause for some alarm. (Selwyn, 2009, p. 366)

Selwyn (2009) argued that many depictions of digital natives in literature “imply a profound disempowerment of older generations” (p. 369), and tend toward exaggeration and inconsistency. He was critical of much literature on the digital divide as relying on a so-called evidence base rooted in informal observation and anecdote, adopting a legalistic rather than social scientific notion of evidence in terms of helping establish a particular case or point of view regardless of contradictory findings. He argued that the debate needs to advance from “the perpetuation of ‘common sense’ assumptions that tend to inform public discourse about children and technology, and move beyond the theoretically weakened set of essentialist assumptions about children and technology that inform the current digital native commentary” (p.371).

He was not alone in his argument. Research showed vast differences between young and old that used the internet and those who did not, and exposed huge access issues across many demographic groups (Zickuhr & Smith, 2012). However, while demographics played a large role in these discrepancies in 2000, many have now significantly narrowed. Once again, we must question whether non-age demographic

divisions really have a role in the differences between digital natives and their immigrant counterparts.

The internet access gap closest to disappearing is that between whites and minorities. Differences in access persist, especially in terms of adults who have high-speed broadband at home, but they have become significantly less prominent over the year[s] and have disappeared entirely when other demographic factors (including language proficiency) are controlled for. (Zickurh & Smith, 2012 p. 6)

When the Pew Research Center began tracking tablet ownership in 2010, only 3% of Americans owned one. As of its most recent published data, the center reports that figure rose to over 51% in November 2016 (Pew, 2016). Roughly 77% of Americans own smartphones—a number that more than doubled over a mere five years, and among young adults that number has surged to 92% (Pew, 2016). There is also evidence that handheld internet connected devices may be leveling the playing field where other types of divides may have previously existed. “Groups that have traditionally been on the other side of the digital divide in basic internet access are using wireless connections to go online” (Zickurh & Smith, 2012).

David S. White and Alison Le Cornu (2011) revisited Prensky’s (2001) Natives/Immigrants typology, proposing the continuum of “visitors” and “residents” in their place. They joined the critique that questioned whether older learners are really as “handicapped” as Prensky seems to assume or that younger learners are as privileged as assumed. Specifically, they questioned whether there may be as much variation within generations as between them in that, just as almost every other subject area of discipline and content mastery, some individuals will inherently acquire skills at a much different rate than others, regardless of their age group.

White and Le Cornu (2011) sought to demonstrate that Prensky (2001) was,

over hasty in appropriating an analogy which cannot bear the weight required of it...imprecise in his combination of diverse elements (second-language learning, accent, habit and age, linking all these to brain development) which cannot be legitimately combined to make his case. (p. 7)

White and Le Cornu (2011) saw Internet users in a broader sense, but also drew their terms from the idea of the digital world as a place. Visitors are essentially users rather than members of the web who use the web as a “tool” and not as a “place,” and residents are those who see the web as a place where a proportion of their lives are lived and who do not make a clear distinction between concepts of content and of persona, were designed to be seen as a continuum and not in binary opposition (White & Le Cornu, 2011). They asserted that, in different contexts, individuals’ place along this continuum is likely to shift.

These post-Prensky (2001) authors all focused on perhaps the wrong group. It has been suggested that, in all likelihood, Prensky wasn’t *wrong*, he was just writing ten years ahead of his time (Waters, 2011). The students considered by Selwyn (2009), White & Le Cornu (2011) and others may not have been the true net-gen. Julie Evans, chief executive officer of Project Tomorrow, made the case in 2011 (Waters, 2011), “even though we’ve been talking about digital natives for 10 years, the first wave of true digital natives – kids who have been connected to the internet in school since kindergarten – are just now in middle school.” The groups now in high school and college likely did not have internet in their classrooms when they began school and may not have taken an online test until middle school. Some would argue that we are only now seeing the emergence of the true net-gen.

Consider that Facebook was founded in 2004, and until 2006 was only primarily available to students and limited groups with email addresses ending in .edu, .gov or

.mil (Facebook, 2012). The iPhone – arguably the most important technology innovation of the century thus far – has been on the market around 10 years. Given the impact this single ICT device has had on society, it is almost unimaginable to contemplate the issues we will be discussing 10 years from now. However, privacy, in its many forms, will almost certainly remain central to the discourse.

Conceptions of Privacy

Privacy is clearly difficult to define. However, like liberty and justice, this does not undermine its importance (Moore, 2008). Some semblance of what might commonly be called privacy is tied to one's rights and identity as they relate to their country, their home and most intimate aspects of life, and in some ways to their very notion of self. It has been noted to be a "right to control access to places, locations, and personal information along with use and control rights to these goods." (Moore, 2008).

Privacy is composed of both the physical and the mental (Soffer & Cohen, 2014). Further, the boundary between privacy and other moral concepts –for example, property rights, liberty, and self-ownership—is not always clear and distinct" (White, 2008). Almost everyone has a notion of what privacy is (Kuner, Cate, Millard, & Svantesson, 2011). Perhaps Justice Potter Stewart's approach to indefinable nature of obscenity in *Jacobellis v. Ohio* (1964) could equally be applied to invasions of privacy for most Americans, "I know it when I see it." It is a concept that has arguably broadened since the founding of our nation, and can be situational and contextual. In the quest to define privacy, it is inherently difficult to explain perceptions and behaviors across a range of contexts, and the pace of recent socio-technical development make such a notion a moving target (Vasalou, Joinson, & Houghton, 2013).

Nevertheless, there are those who would argue that such an elusive, subjective approach creates a new dilemma—can someone have a right to something that cannot be defined (Lee, 2002)? Does narrowly pinpointing privacy rights limit, rather than protect, individual rights (Lee, 2002)? “The Supreme Court itself appears reluctant to address privacy expectations involving new technologies, in part because of its own lack of understanding and discomfort with such technology” (Baxter, 2012, p. 630).

Commenting on Justice Sotomayor in *U.S. v. Jones* (2012), Microsoft Executive Vice President and General Counsel Brad Smith said,

she referred to the fact that traditionally in the United States, secrecy was considered a prerequisite to having a reasonable expectation of privacy...in other words, for many generations, if you said you wanted to keep something private, what you probably were saying is you wanted to keep it a secret. As Justice Sotomayor suggested in that opinion, perhaps that definition of privacy has changed. (Soper, 2014)

Smith went on to say,

In effect, I think the new definition of privacy means people don't want to keep information secret, but they do want to ensure that they control who they share information with...they want to control what those people use the information for. (Soper, 2014)

Privacy: Multiple Meanings, Multiple Perspectives

‘Privacy’ has become a powerful keyword, a shorthand tag that gets used to reference a constellation of public attitudes, technical affordances and legal arguments. Yet, the concept is so laden with multiple meanings that any use of the term begs for added specificity and context. (Madden, 2012, p. 4)

Privacy is an extremely complex issue. The same term, “privacy,” is used to describe numerous very distinct issues. Privacy is a set of rights afforded by law, but the invasions of individual privacy by governments that are protected by constitutional and regulatory law are different than those protected in the realm of tort law. Online privacy is usually a term that we use to talk about efforts to protect sensitive information rather

than a set of expectations. For most citizens, privacy has a different meaning in various contexts, whether they be the person, the home, personal property, personally identifiable information, and digital information. There are very real questions about whether these expectations are the same for youth and for adults, as well as whether the courts are responding to these groups' expectations, specifically as they relate to governmental search and seizure.

As we contemplate how ICTs are incorporated into youth culture and their expectations about the Fourth Amendment, it is important to deeply consider the ethnography of American teens today. There is perhaps no one in contemporary America who is providing greater ethnographic understanding of youth attitudes toward and practices related to social media, tensions between public and private, social network sites, and other intersections between technology and society than danah boyd, Ph.D. She points out that teenagers are no different today than they have ever been, they are just operating within different constructs. She has said,

Young people today are doing what young people have always done: trying to figure out who they are. By putting themselves in public for others to examine, teens are working through how others' impressions of them align with their self-perceptions. They adjust their behavior and attitudes based on the reactions they get from those they respect. Today's public impression management is taking place online. (boyd, 2007, p. 7)

Research on attitudes of teens toward digital spaces has been largely quantitative, but what emerges is what may seem a selective privacy. As boyd (2008) noted:

First and foremost, the notion of 'privacy' is about having a sense of control over how and when information flows to who ...As kids work to be invisible to people who hold direct power over them (parents, teacher, etc.), they happily expose themselves to audiences of peers. And they expose themselves to corporations.

However, boyd argued that these attitudes toward controlling one's privacy are not new, they are just operating in a new context. Groups that may have historically gone to the movies or the mall to "be private in public" and to occupy their own communal space may now be participating in a very similar activity by spending time in the digital environment. She has said (2008):

Generation gap and technology ruining everything stories will be forever more. These do sell and they are fun to read. Yet, for parents and teachers and other concerned folks wanting to get a clear perspective of what's going on, it's important to remember that at the end of the day, the intentions and desires aren't changing...it's just the architecture that makes the practices possible that is.

This was also observed by Palfrey & Gasser (2008). They said,

One of the big differences between what DN are doing in creating and experimenting with their identities and interacting with their peers online, and what their parents did as teens talking on the telephone, or hanging out at the local mall, is that the information that today's youth are placing into digital formats is easily accessed by anyone, including people whom they do not know. (p. 30)

One interesting issue is that teens and their parents are in many cases using the same or similar platforms and applications on the same devices, they are just using them differently. As of 2011, 90% of all parents of teens 12-17 owned a cell phone, as did 75% of all teens 12-17 (Madden, 2011). Online social networking (OSN) for teens and adults primarily occurs on Facebook. In 2011, over 93% of teen social media users and 87% of their adult counterparts had profiles on Facebook (Madden, 2011). However, while Facebook remains the world's most popular social media hangout, marketing experts caution about a youth exodus from the platform to more instant gratification platforms such as Snapchat and Instagram—predicting Facebook will lose 2 million users under 25 in 2018 (Guynn, 2018).

“Privacy expectations on OSNs seem to be overwhelmingly generation specific” (Abril, 2007, p. 4). Both groups claim to place a high priority on privacy, but are they all really talking about “privacy” in the same way? According to Abril (2007), the distinction between digital immigrants and natives frames the debate regarding the very existence of privacy online. “Digital native’s complex expectations of privacy on OSNs rest on a combination of technology, the anonymity of the multitude, and assumptions about the presence of their unintended audiences” (p. 5). And further Abril (2007) indicates, “There is a conception of privacy rooted in their perceived entitlement of selective *anonymity*” (p. 5).

Here Abril (2007) drew a very clear distinction between digital immigrants and digital natives.

Digital immigrants, on the other hand, grew up in a world where they had the luxury of control over the information. Their era gave them the opportunity to successfully rewrite their personal histories through legal and social mechanisms: criminal records could be expunged, foolish marriages could be annulled, shameful teenage pregnancies could be covered up by ‘moving away,’ and all was forgotten. (p. 5)

It would seem that for some, OSNs are a place to be public and exposed and for some they are a place of protection or seclusion from a society that keeps few of their secrets. “Disturbingly for the digital immigrants, the digital medium has eviscerated an individual’s control over her personal information” (Abril, 2007, p. 6). As legislative bodies work to keep up, technology is expanding and growing beyond their pace of capacity to employ protections. “Unfortunately, the privacy law, technology, and ethics have not caught up to the harms they purportedly protect and redress” (Abril, 2007, p. 6).

This problem may be complicated by the fact that digital immigrants are making laws to protect digital natives when they view the role of technology in somewhat different ways. “The primary difficulty for digital immigrants is that they’re fighting against their own instinct, which is to pull the trigger on the digital natives. The generation gap will continue to widen until the digital natives become CEOs and HR executives themselves.” (Palfrey, 2007, p. 5).

Privacy, in terms of the majority of research available, involves privacy control mechanisms in OSNs, protecting information from corporation or third party content providers, and protecting minors from exploitation. To my knowledge, no research has been done to determine the expectations of privacy that teens and their parents have concerning ICTs that intersect with public schools and their need to preserve order.

The best we can do is to infer or attempt to predict what these groups would consider reasonable in light of their attitudes toward other aspects of privacy. One area where there has been shown a divide in privacy behaviors is gender. “Women who maintain social media profiles are significantly more likely than men to keep their profiles private” (Madden, 2012, p. 5). There is also a gender and generational difference in attitudes toward previous posts.

Male profile owners are almost twice as likely as female profile owners to profess regret for posting content (15% vs. 8%). Young adults are also considerably more prone to regret; 15% of profile owners ages 18-29 say they have posted content they later regret, compared with just 5% of profile owners ages 50 and older. (Madden, 2012, p. 11)

An individual’s beliefs about privacy and actual privacy behaviors often do not necessarily align. This major disconnect has manifested to social scientists particularly in people’s attitudes and practices around information privacy online. “When asked, people say that privacy is important to them; when observed, people’s actions seem to

suggest otherwise (Madden, 2012, p. 4).” This clouds the issue of privacy, calls into question the reasonableness of articulated expectations of privacy, and could be a cause for concern for those working to ensure protection of privacy.

In small ways in what have become routine behaviors, NetGeners *are* eroding their privacy without being conscious of their choices— or understanding their consequences (Tapscott, 2009). “Digital Natives (Palfrey & Gasser, 2008) are much more willing than their grandparents were in their day to share personal information with others – both friends and people they haven’t met face to face – in a public forum, which for a Digital Native is the Internet (p. 23).” Recent controversies about how data from routinely used apps such as Facebook and Google Maps highlight the ways individuals are inadvertently granting access to their information to third parties who may have less than noble intentions.

The net generation is opening up to a degree that astounds their parents. Many Facebook enthusiasts post any scrap of information they have about themselves and others online, for all their friends to see – from digital displays of affection to revealing pictures. (Tapscott, 2009)

In his book *Grown Up Digital*, Tapscott (2009) references a 2007 Carnegie Mellon study that showed that “40 percent of those who expressed the highest possible concern about protecting their class schedule still posted it on Facebook and 47 percent of those concerned about political views still provided them.” (p. 66). In 2007, only 20% of Facebook users even bothered using the privacy features available on Facebook (Tapscott, 2009).

However, these users are not naïve to the potential immediate consequences, nor to the methods for insulating content. As early as 2005, researchers showed that seventh and eighth graders demonstrated an adult level of understanding of potential negative

consequences of internet use (Youn, 2009). In 2011, the Pew Research Center (PRC)'s Internet Project & American Life Spring Tracking Survey showed that over half of social networking site users over the age of 18 chose to make their online profile "private." This includes those of all ages, from 18 to over 65. At least 16% in every age category kept their data partially private (Madden, 2012).

In fact, usage patterns in social media suggest that age is of the strongest variables. Yet, while younger users of social media may be the most active users of applications and managers of their online reputations, privacy choices tend to be consistent among all users. How teens use the ICTs and OSNs may be different, but their methods of protection are very much the same. The choices routinely made by adults related to privacy settings are virtually identical to those made by teens using social media- regardless of whether they are a habitual user of social media or an occasional consumer, with no significant variation across age groups (Madden, 2012).

Matt Cohler, former Facebook strategy chief said:

in the past, privacy basically meant something was either visible to everybody or hidden from everybody...private meant it's a secret, or it's something that I don't share with other people. And I think what privacy is coming to mean today- for this generation that's kind of always plugged into this grid, and as more and more people in older generations also get plugged into the grid, I think the definition changed for them too—is less about kind of totally public versus totally hidden, and more about giving people the ability to control what information they're sharing with whom. (Tapscott, 2009, p. 69)

Legislatures and policymakers are scrambling to keep pace with the rapidly changing world of ICTs. There are very few statutes that are on point to outline privacy rights in ICTs and obligations and authority for schools beyond a basic notion of possession and limitations on use of mobile phones. Notably, in 2015, California passed SB 178 is the Electronic Communications Privacy Act. This law prevents state actors

from accessing electronic device information by means of physical interaction or electronic communication with the electronic device without a warrant, wiretap order, subpoena, or specific consent. Attempts to modify the law to grant schools more lenient access to search cell phones failed early in 2018. A less restrictive bill pending in the Connecticut legislature would limit searches of cell phones at schools to the power of administrators only, and only when the *T.L.O.* criteria are met.

In their famous article, *The Right to Privacy*, Justices Warren and Brandeis (1890) wrote,

That the individual shall have full protection in person and in property is a principle as old as the common law; but it has been found necessary from time to time to define anew the exact nature and extent of such protection. Political, social and economic changes entail the recognition of new rights, and the common law, in its eternal youth, grows to meet the new demands of society. (p. 193)

While their words were aimed at the common law, the explosion of use and expansion of capabilities of ICTs have come at such a pace that codified laws strain to grow to meet society's new demands. A complicating issue for the protection of privacy in a digital atmosphere is also made clear by this more than a century-old piece, "the right to privacy ceases upon the publication of the facts by the individual, or with his consent" (Warren & Brandeis, 1890, p. 218).

It is clear that ICTs are rapidly changing the way our society interacts and communicates. Much research has been done to expose privacy behaviors related to new digital domains, however, little research shows the expectations of teens and their adult counterparts as individuals or private citizens protected by the Constitution rather than consumers. There is a great opportunity to expand this research to ensure that law

and policymakers have the adequate information to create effective strategies to preserve freedoms and ensure order.

While many privacy behaviors related to chosen settings, etc., may be generalized across all ages, perceptions of the level that privacy is protected has been shown to vary between adults and youths. “Although some privacy concerns are consistent across age groups, research has shown that youth generally have significantly lower expectations of privacy than adults (Baxter, 2012, p. 610).” That is not to say that they do not have formed impressions about the issue, and perhaps how they view digital devices. Some research suggests that many adults treat digital contents the way they would a related physical depository decades ago- an address book, a photo album, a phone bill. In essence, the difference may be in how they treat the device – merely in a traditional property sense, or something more.

Parents commonly felt none of their children’s possessions should ethically be excluded from their right to monitoring, teens felt strongly that cell phones, especially text messages, were private and should not be monitored (Cranor, Durity, Marsh, & Ur, 2014). Though 48% of parents have looked through their teen’s phone call records or text messages (Pew, 2016) teens are more comfortable with their parents accessing more rarely used application like email or Facebook than text messages (Cranor, et al., 2014).

In the absence of technical expertise, parents make privacy decisions about teens by drawing false analogies to the physical world or outdated concepts (Cranor, et al., 2014). All the parents in the relatively small sample of parents and teens in a 2014 privacy study noted their view of teen privacy is different than that of their parents

when they (the now parents) were the same age (Cranor, et al., 2014). “A large part of the gap between parents’ and teens’ privacy decision making process appeared to be predicated on whether they thought similarly about privacy in the physical world” (Cranor, et al., 2014, p. 28). Things their parents would have hidden under a bed, the teens hid in their phones.

This difference in conception is particularly problematic given the role these digital devices play in the lives of students today. “Treating smart devices as any other chattel property fails to take into account the way these devices integrate in their owners’ private lives.” (Roux & Falgoust, 2013, p. 192).

There are also data to suggest that students value privacy in a much more situational sense, rather than to apply blanket rules. In communities in which socioeconomics limit youth access to devices, students may willingly share unprotected access to their friends on their own devices. Friends may share passwords with one another or loan devices to others without “logging out” of applications containing communications or data they would not willingly share with a parent. “Whereas they might like to keep things private from their parents, they may not feel the need to protect information from peers or strangers.” (Baxter, 2012, p. 612).

In another study, “(m)ore than half of the respondents shared their password with another person and over a third of them would use Facebook apps through which they know that personal data are passed on to third party developers.” (Soffer & Cohen, 2014, p. 155).

In their thought experiment, Brian Roux and Michael Falgoust (2013) explored how employing extended cognition and the cognitive role of smart devices affects the

expectations of privacy and potential for injury to owners of devices subject to search or seizure. “When we consider smart devices as cognitive extensions, we find that users have an interest in maintaining privacy over their devices congruent with the desire to maintain the privacy of the mind” (Roux & Falgost, 2013, p. 193).

There may be some disconnect between what an individual believes should be protected as private and what the law actually protects. This springs from the objective component of the way courts have interpreted the Fourth Amendment.

The objective part of the Fourth Amendment test asks whether ‘society’ is prepared to accept a given subjective expectation of privacy as reasonable. Since ‘society’ is presumably composed of people from all segments of the population, the answer may vary depending upon which group’s beliefs prevail. (Baxter, 2012, p. 621)

Whether protection applies may depend on whether the individual’s beliefs are shared by the larger population.

Privacy is an area in which one could argue that research is failing to adequately inform current practices. In a 2011 report, Smith, Dinev & Xu shared their findings of an evaluation of 320 privacy articles and 128 books and book sections. They argue that the volume of studies published in recent decades, regardless of their compelling theoretical frameworks or sound, rigorous, methodology, have resulted in very little cumulative contribution to knowledge. The findings and the theories that emerged have often relied on overlapping constructs nestled within loosely bounded nomological networks.” (Smith, Dinev & Xu, 2011, p. 990).

The report indicates that scholarship on privacy has cumulatively sought to answer one of three major questions: 1) what is (and is not) privacy; 2) what is the relationship between privacy and other constructs; and 3) to what extent does context matter in the relationships between privacy and other constructs (Smith, Dinev & Xu,

2011, p. 992)? In their criticism of the available research, they suggest that future inquiry would benefit from the consideration of actual outcomes rather than attempting to ascertain intent, and to reveal specific organizational outcomes and consequential decisions of breaches of understood privacy.

The stream of modern privacy research had its genesis in the 1970s. In the subsequent four decades, a number of useful studies have been conducted and published, but the overall research stream has been sub optimized because of its disjointed nature. (Smith, Dinev & Xu, 2011, 1008)

Minors can be particularly difficult to access in order to conduct large sample studies, so much of the research of this type are conducted outside the realm of traditional social science. As a result, much of the available data is tied to topics related to consumer usage and preferences, marketing issues and privacy as it related to sharing data with third party applications and in the context of online social networking. Little has been done to evaluate how student's view privacy in access to actual ICT devices, particularly in the school setting.

There remain many unanswered questions when it comes to how the Fourth Amendment applies when technology is at issue. "This uncertainty persists, in part, because courts often seem unwilling or unable to address how privacy rights are affected by technology." (Baxter, 2012, pgs. 629-30). These are waters that many school personnel are ill equipped to navigate.

Chapter 4: Searches in the Public Schools

Public education outside of specific programs funded by the federal government has historically been seen as a function of the individual states. While there were some public schools at the time of the framing of the Constitution, they were not widespread, and the content and context of their constituencies were very different than what we know today. Public schools with compulsory attendance, teaching academic curriculum that serves students of all genders and races are largely representative of changes taking place from the late 19th Century through the mid-20th Century.

There are four main cases in which the Supreme Court has ruled on aspects of Fourth Amendment rights of students in public schools. Two deal with searching of the person and possessions of students on suspicion of possession of drugs, and the other two deal with drug testing.

New Jersey v. T.L.O.

The first case in which the Supreme Court considered the Fourth Amendment rights of students in the public-school setting came in the 1985 case of *New Jersey v. T.L.O.* Prior to the landmark case, the public schools' relationship with students fell under the common law doctrine of *in loco parentis*, or "in place of the parents" (Rossow & Stefkovich, 2014). This meant that the authority of the parent was delegated to the student's teachers and authorities at the school in such measure of restraint and correction as might be necessary (Rossow & Stefkovich, 2014).

Upon being observed smoking in a lavatory (in violation of school policy), a student (T.L.O.) was called to the principal's office. She promptly denied having smoked at all. The principal searched her purse. As expected, a package of cigarettes

was observed. However, the principal also viewed a package of rolling papers that led them to believe T.L.O. might have used them in using marijuana. Upon closer inspection of the purse, the principal found a small amount of marijuana, a pipe, several empty plastic bags, a large amount of cash in small bills, an index card that appeared to be a list of students that owed money to T.L.O., and two letters which implicated her in dealing marijuana. The evidence was turned over to the local police.

In its evaluation the Court held that the search of a student at school must be based on a reasonableness standard. Any search must, first, be justified at its inception – meaning there are reasonable grounds upon which to suspect a search will yield evidence of a violation of school policy or law. Further, the search must be reasonably related in scope to the circumstances which justified the interference in the first place. Specifically, the measures adopted must be reasonable related to the objectives of the search and not excessively intrusive in light of the age and sex of the student and the nature of the infraction. Given the circumstances of the case, the Court found that the school’s actions did not run afoul of Fourth Amendment.

Vernonia v. Acton

The Court would not revisit Fourth Amendment issues in the public schools until ten years later in *Vernonia v. Acton* (1995). Based on widespread rumors of drug use among its high school student athletes, the Vernonia school district enacted a drug testing policy by which all student athletes and their parents were to sign a waiver agreeing to and submitting to urinalysis at the beginning of the season and randomly throughout the season. When their child was denied participation in their chosen

activity for their refusal to consent to the testing, the Actons filed suit against the district alleging the scheme amounted to an illegal search and seizure.

The Court held the program, designed as it were to curb district-wide issues related to drug use, did not violate the Fourth Amendment's protections against unreasonable searches and seizures. The Court stressed the "special needs" of enforcement of laws and regulations in public schools. It noted that students in general have a lessened expectation of privacy in the school setting, and given the routine physical examinations, shared locker rooms, and other circumstances that student athletes subject themselves to greater regulations and intrusions of privacy than the average student.

Earls v. Independent School District No. 2 of Pottawatomie County

By 2002, an Oklahoma battle over an expansion of the drug testing policy in Vernonia reached the Supreme Court. In *Board of Education v. Earls* (2002), the school district in Tecumseh, OK had established a suspicionless drug testing policy by which all students in any extra-curricular activity must submit to urinalysis drug testing as a condition in order to participate.

Again, the Court considered "special needs", viewing the policy as furthering the district's legitimate interest in protecting students against the dangers of drug use. However, it seemed to dismiss the notion that rumors of drug abuse substantiated the policy enacted in Vernonia, and focused on a general need to curb drug use among the student body.

It is a mistake... to think that the phrase 'compelling state interest,' in the Fourth Amendment context, describes a fixed, minimum quantum of governmental concern, so that one can dispose of a case by answering insolation the question: Is there a compelling state interest here? Rather, the phrase

describes an interest that appears important enough to justify the particular search at hand, in light of other factors that show the search to be relatively intrusive upon a genuine expectation of privacy (*Vernonia v. Acton*, 1995).”

As such, the Court found the random drug testing of high school athletes did not violate the reasonable search and seizure clause of the Fourth Amendment.

Safford v. Redding

The most recent Fourth Amendment case involving a school district to come before the Supreme Court dealt with the strip searching of a student. In *Safford v. Redding* (2009), a 13 year-old female student was suspected of distributing drugs at school. The use of the term “drugs” however was a bit of a misnomer. Rather than an illegal substance, the suspicion was that the student was distributing a common, over the counter pain reliever. While students were, by policy, supposed to turn over any medication to the school nurse, possession of the suspected substance would have been a rule violation, but not illegal under state or federal law.

When called to the office, the student denied the accusation and offered to let the assistant principal search her belongings. The assistant principal and an aide searched the student’s backpack and found nothing. The aide was then directed to take the student to the nurse’s office to search her clothing. The student was told to remove her outer clothing, shoes, and socks. Standing in her undergarments, the student was directed to pull out her bra and shake it, as well and to pull out on her underpants and shake them.

Perhaps shocked by the final elements of this series of events, the Court found the search to be excessively intrusive in scope in light of the age and sex of the student, as well as the nature of the suspected infraction. While the Court found the search violated the Fourth Amendment rights of the student, due to the disparate case

precedents at the lower court level, the school actors were granted qualified immunity against personal liability.

The Reasonableness Standard

New Jersey v. T.L.O. (1985) established that “(t)he accommodation of...the substantial need of teachers and administrators for freedom to maintain order in the schools does not require strict adherence to the requirement that searches be based on probable cause” (p. 341). In establishing this standard based on reason, the Court recognized that schools have very different missions and training components than law enforcement, and to hold them to the same standard would subject them to unreasonable obligations.

The downfall is that reasonableness can be a very subjective standard in general. This becomes more problematic when one considers the generational nature of these disputes in the school setting. What a judge, someone with decades of experience employed in public schools, and a student believe to be reasonable may very well be quite different, and likely so.

Warrantless Searches in Public Schools

In general, the Supreme Court has ruled many exceptions to the probable cause and warrant requirements in various law enforcement contexts over the years (see Chapter 2). Among these are investigatory detentions, warrantless arrests, searches incident to a valid arrest, seizure of items in plain view, exigent circumstances, consensual searches, vehicle searches, container searches, inventory searches, border searches, searches at sea, administrative searches, and searches in which the special needs of law enforcement make the probable cause and warrant requirements

impracticable (Rossow & Stefkovich, 2014). Among these are searches in the public-school setting, so long as they follow the guidelines set forth in *New Jersey v. T.L.O.* (1985), as refined by *Safford v. Redding* (2009).

Summary of Guidance Concerning Fourth Amendment Searches in Public Schools

While some of the pieces of the puzzled history of school searches may seem complex, the Fourth Amendment rights of students in public schools established by *T.L.O.* and its progeny can be summed up as follows. First, students do not leave their rights at the schoolhouse gates. The Fourteenth Amendment applies the strictures of the U.S. Constitution to the system of public schools established by the individual states. Students have Fourth Amendment rights in public schools, but the nature of the environment necessitates they have a lessened expectation of privacy in the public-school setting.

School officials need not have a warrant to conduct a search of a student or their belongings for infractions of school rules or illegal activity with a nexus to the school, nor do they need meet the law enforcement requirement of probable cause to search. Rather, they must have a reasonable suspicion that contraband or the evidence of wrongdoing will be unearthed in the search. These searches must meet reasonableness standards.

Whether a search has taken place depends on whether a school actor has caused an interruption to the bodily integrity of the student's person or their belongings in a context in which a student had an expectation of privacy, and whether that expectation was one society is prepared to recognize as reasonable. Whether such a search of a student or their belongings in the public school setting is reasonable under the Fourth

Amendment may be determined by an analysis of whether the search was justified at its inception (by reasonable individual suspicion), and reasonable in scope (reasonably related to the objectives of the search and not excessively intrusive in light of the age and sex of the student and the nature of the infraction). Random, suspicionless searches are generally prohibited, except in the case of generalized sweeps of school owned lockers or parking lots, metal detector and similar security procedures, or classroom searches that do not involve searching individual students.

Chapter 5: Procedures and Analytical Approach

The qualitative evaluation of Fourth Amendment law that precedes this chapter was conducted using traditional methods of legal inquiry incorporating primary and secondary sources of law as well as a variety of tools (Permuth & Mawdsley, 2006). While, as Russo (Permuth & Mawdsley, 2006) stated, “systematic inquiry in the law can be described as a form of historical-legal research that is neither qualitative nor quantitative” (p.6), the legal research in this inquiry operates most like a documentary form of qualitative research. “All qualitative research approaches employ an inductive approach, are naturalistic and holistic, are concerned with process, value subjective analysis, generalize from single or multiple instances, and search for meaning within experience” (Permuth & Mawdsley, 2006, p. 34).

According to Lee & Alder (Permuth & Mawdsley, 2006), qualitative research rests on three basic assumptions. First,

qualitative methods seek to understand phenomena in their entirety in order to develop a complete understanding of a person, program or situation; second, the researcher does not impose much of an organizing structure or make assumptions about the interrelationships among the data prior to making the observations; and, it is a discovery-oriented approach in the natural environment. (p. 34)

The qualitative analysis that follows in the subsequent chapter will apply Maxwell’s legitimation framework (Permuth & Mawdsley, 2006) to work toward descriptive, interpretive, theoretical and evaluative validity, and primarily internal, analytical generalizability.

The legal component of this study involved searching the Lexis/Nexis Academic database for federal cases including the terms “Fourth Amendment,” phone, and

student. Cases were then individually analyzed to isolate cases that included the following criteria:

1. The facts that gave rise to the complaint occurred at a public school or at a time and place that a student was in custody of the school at a sponsored or sanctioned event or activity.

2. The cause of action is one in which the plaintiff alleges a public-school district or its officers, administrators, employees, or related representatives infringed on the Fourth Amendment rights of a student.

3. The facts allege a search of a cell phone.

Upon identification, these cases were summarized based on their facts, holding, rationale, date and court. Of particular interest in the analysis were any statements that purported to describe the reasonable expectation of privacy as it relates to student rights.

After screening and refining a list of over 800 cases in the initial search, I identified what I believe to be all published or accessible federal court cases in the United States in which a Fourth Amendment claim was made against a public-school district or public-school employee where the complaint alleged an illegal search of a student's cell phone. A summary of these cases is outlined in the findings. Most cases of this nature involve a number of claims and parties, and are often muddled by procedural complications. While the general fact patterns are presented, this research attempts to show how the various courts represented demonstrate their view of the privacy rights of students in cell phones on campus and what expectations of privacy they deem reasonable in the text of their opinions. As such, complicated pleadings, the entire rulings and discussions of the courts are not presented, but rather the facts giving

rise to the applicable Fourth Amendment claim and an overview of the courts' discussions and decisions as they relate to the research questions are presented.

The second component of the study sought to give meaning and insight to students' expectations of privacy in cell phone devices through synthesizing both empirical social science research and cultural cues through ethnographic document analysis of a variety of texts ranging from peer reviewed journals and papers and other traditional scholarship, to samples of news articles and online social networks.

This component was conducted with both inductive and deductive approaches to content analysis. "Major shifts in research and theorizing in qualitative methods and media/communication studies have contributed to the intellectual foundation of document analysis." (Altheide, 2013, p.1.) In as qualitative content analysis is "a method for the subjective interpretation of the content of text data through the systematic classification of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, p. 1278), the method was employed to make meaning of the privacy expectations of students in cell phones through various lenses. As opposed to qualitative content analysis, this approach allows the researcher to "examine meanings, themes and patters that may be manifest or latent in a particular text. It allows researchers to understand social reality in a subjective but systematic scientific manner." (Zhang & Wildemuth, 2005). This approach allowed for analysis of the discursive construction of meaning related to student privacy expectations.

Qualitative researcher Johnny Saldana (2014) famously stated, "qualitative research is kinda like meat loaf: ever'body got their own way of makin' it". The rate of expansion of internet available texts and the proliferation of online social networks have

resulted in the employment of a variety of approaches to making meaning of this wealth of content. The current lack of quantitative research about the privacy beliefs of public school students in the United States led me to explore ethnographic content analysis as a way to make meaning of the potentially shared or differing expectations of students and the parents, school leaders, and tangential adults making and interpreting law and policy.

The development of ethnographic content analysis (a distinctive version of qualitative media analysis) and its use by researchers was influenced by an awareness by many researchers that simply studying the content of the mass media was not enough; it was also important to be aware of the process, meanings, and emphases reflected in the content, including discursive practices (Altheide, 2013).

In order to accomplish this aspect of the study, the following questions were formulated:

- a. What does the media say about the privacy of students as related to cell phones at school?
- b. Do these perspectives align with those outlined by the identified federal court cases?

The development the structures for seeking texts for this analysis was a reflexive process. Through trial initial phases of the searches, it was determined that the addition and removal of various search terms led to samples with the greatest potential to answer the research questions.

Ethnographic content analysis is used to document and understand the communication of meaning, as well as to verify theoretical relationships. Its

distinctive characteristic is the reflexive and highly interactive nature of the investigator, concepts, data collection and analysis (Altheide, 1987). As such, trends and themes were identified in order to narrow the focus of my research procedures, as well as to avoid explorations that were too far afield of this project. For example, there are many recent instances of teachers being recorded by students using cell phones in various school settings, resulting in much discussion about privacy rights of school employees. Many states and school districts are grappling with how to accommodate students who identify as transgender, particularly in regard to their right to gender specific bathrooms, invoking a robust privacy debate. While these and other topics leave much room for future research, they were beyond the scope of my research questions and search terms and deselection criteria were established to eliminate representation of research, commentary, or debate on these topics. Procedures for analysis are outlined in detail below.

Advanced online searches were conducted on search engines Lexis/Nexis Academic, Google Scholar and ProQuest social sciences database, as well as more mainstream media engines including RSS Reader Feedly, Google and Lexis/Nexis Newspaper and the online social network Twitter between the date of the *Riley* decision on June 25, 2014, and March of 2018. Search terms were reflexively modified and utilized in various combinations to elicit as many rich texts as possible to fit within the inclusion parameters. Texts were initially analyzed and identified for inclusion based on whether they purported to explore or in some way depict rights of students or perspectives on student rights related to cell phones and the Fourth Amendment. While these searches may not provide a full depiction of every mention of the research topic in

the time frame between the *Riley* decision and writing, they give a quality representative sample with as much commonality with the language employed by courts as was practicable.

Due to the novel nature of this research, certain delimitations were necessary. When modern school discipline and student rights are considered, it would show ignorance or deliberate indifference on the part of the researcher to neglect the potential contributions that critical race theory, gender and LGBTQ theories, sexual violence, the greater context of the school-to-prison pipeline and others might offer to the topic. While these frameworks are beyond the scope of the current research, the writer views these as ripe areas for future inquiry on this and related subjects.

For all texts analyzed, deselection based on a number of criteria greatly limited the samples. Since the focus of this research is Fourth Amendment protections in public schools in the United States, any text originating in or representing a perspective from outside the United States was eliminated. As were those dealing with subject matter related to private schools, colleges, universities and technical schools. Further, while privacy concerns of students related to their identification as LGBT or transsexual, and unauthorized recording of pictures, audio and video of students in bathrooms and locker rooms are prominently represented in much current rhetoric, texts related to these topics were not included unless they referred to the search of a cell phone in a public school.

Texts representing or based on fact patterns of teachers involved in predatory or otherwise illegal activity were eliminated from the sample, as were those regarding the privacy rights teachers enjoy in cell phones at school unless they highlighted differences between student and teacher rights. Other criteria for deselection included topics related

to privacy behaviors of students pertaining to disclosure of information to third party applications and developers. Privacy rights and behaviors associated with computers, laptops, tablets, and school district owned instructional technology were not considered.

Searches in Lexis/Nexis Academic, Google Scholar, and Proquest were conducted using the search terms student AND phone AND school AND “expectation of privacy;” excluded terms were LGBT transgender. I explored only full-text scholarly journals written in English. Since scholarly work is typically conducted by individuals with affiliations with post-secondary institutions, control for terms like college or university was conducted post-search by screening each individual article. As law reviews are discussed in previous chapters, these were eliminated from this evaluation.

In order to present a feel for mass and online media treatment of the issue I conducted two separate searches. First, I used the RSS reader Feedly to search a variety of media outlets for the terms student + privacy + phone + school + search + “Fourth Amendment.” In Google, I searched from the date of the *Riley* decision to March 2018 for search terms student + phone + school + “expectation of privacy” NOT LGBT or transgender. In Lexis/Nexis I conducted a newspaper search from the date of the *Riley* decision to March 2018. Search terms included student + phone + school + “expectation of privacy” NOT LGBT or transgender. In order to control for the number of publications represented in the search engine that subscribe to national media services, newswires and distributors such as the Associated Press, I eliminated those with high similarity.

For the texts from newspapers and media stories, each text was assigned a numerical identifier. Each document was then subjected to two layers of coding. This

coding matched that of the tweets; the first layer identified the voice or perspective represented: 1) student, 2) parent, and 3) other. Then each of these three categories were then analyzed for the level of privacy rights that each implied for students related to cell phones at school. These included, 1) School has no right to search phones at school, 2) Students have privacy unless a warrant or *T.L.O.*-like suspicion gives rise to a search, and 3) Students have no privacy rights to cell phones at school. When coding was complete, I undertook efforts to make meaning of the messages from each perspective to determine whether any trends or themes emerged and whether the students' perspectives (if they were represented) aligned with the adult populations' represented perspectives.

The four most popular social media or online social network platforms for in the United States are Facebook, Snapchat, Instagram and Twitter (Pew, 2018). Because of the nature of the applications, Facebook, Snapchat and Instagram content is often limited by the account holder to an audience of only those given permission, in a friends group, or a direct recipient. Therefore, data mining in these platforms is much more limited. Further, while blogs and online forums likely serve as a rich source for future data, their formats and content are much different than Twitter. To ensure the broadest sample, the social media component of this research focused on Twitter.

I performed an advanced Twitter search for content between the date of the *Riley* decision and March 22, 2018. The terms "school" and "phone" in combination with "privacy," "4th," "amendment," "amend," or "Fourth" were selected. Excluded terms were "college" and "university." No identifying information about the author of the tweets was retained. As each tweet was analyzed, those that were obviously not

originating or commenting on issues in the United States, posts by legal professionals or professional organizations, and those posts from commercial enterprises were excluded. Also excluded were posts regarding perceptions of privacy obviously referring to intrusions by peers, relating to the privacy rights of deceased individuals involved in school violence, and privacy rights involving the use of electronics in school bathrooms were determined to be outside the scope of this research.

These tweets were uploaded to Discovertext for coding. Utilizing the software, I generated a word cloud (see Appendix A). In the initial coding, I coded the content of the tweet, as much as could be determined, by the voice of the author, 1) student, 2) parent, and 3) other. Each of these three categories were then analyzed for the level of privacy rights that each implied for students related to cell phones at school. These included, 1) School has no right to search phones at school, 2) Students have privacy unless a warrant or *T.L.O.*-like suspicion gives rise to a search, and 3) Students have no privacy rights to cell phones at school. I then attempted to make meaning of the messages from each perspective to determine whether any trends or themes emerged and whether the students' perspectives aligned with the adult populations represented.

In the case of school policies, I did a Google search for school AND policy AND "cell phone" AND search. I did not evaluate policies that treated cell phones in the general category of student searches and searches of their belongings without specifically mentioning phones. Nor did I review policies concerning whether a student had the right to possess or use a cell phone while at school. Rather, the only policies selected for analysis were those that specifically addressed searches of cell phones in the public-school context. These policies were assigned numerical identifiers. They

were coded in three ways: 1) Search policies that refer to language authorizing searches based on *T.L.O.* analysis, 2) Policies in which students are forewarned that their possession of cell phones at school served as the equivalent of a consent to their search, and 3) Other. These levels of policy established privacy expectations were assumed to represent an adult/parent/educator perspective and were compared with student perceptions identified in the other levels of document searches to determine whether they aligned. It should be noted that I discovered thousands of school districts across the country use some version of sample policies available through services of National School Boards Association affiliate organizations. These will be discussed separately in the findings.

The coded results of these searches were then grouped and analyzed for trends and disparity in perspective within representative groups. These trend and disparity categories represent the substantive findings of the document analysis, and as previously stated partially include differing perspectives among adults, and varying student perceptions ranging from disgust at their lack of privacy rights in their cell phones to a position that school actors should have no right to search their devices. Most importantly, these grouped texts were used in synthesis to establish general privacy expectation for students and adults and compared with the privacy expectations evidenced by the federal court cases analyzed. This analysis was used to develop the final conclusions and recommendations for practice and future research.

Chapter 6: Findings

Overview

Overall, this I find most federal circuit and appellate courts that have published opinions related to searches of student phones in public schools dedicate little or no portion of their discussion to the actual rights of students or establishing what may be reasonable in a student's expectation of privacy in a cell phone in the public school context. What is clear, is that, absent further direction from the Supreme Court, the touchstone and best guidance for the future about how best to evaluate searches of student cell phones remains the structure set forth in *New Jersey v. T.L.O.*

Volumes of scholarly texts are devoted to the privacy behaviors of young people in relation to digital information, but none explore students' privacy expectations in the devices that most frequently serve as a portal to that information. Mainstream media has done little to report on privacy rights related to cell phones in the school context from the student perspective, and social media evidences that students are both troubled by the lack of concern for their privacy rights and left feeling powerless about schools' approaches to access to their cell phones while on campus. As school policies from across the country show, there remains no clear consensus about how schools may both protect student rights and legally maintain order in schools in how they approach accessing student data, communication, and other digital content in the context of cell phone searches.

Caselaw: United States District Court Cases

Klump v. Nazareth Area School District

In 2004, Christopher Klump was a student at Nazareth High School. Pursuant to policy, students at his school were allowed to carry cell phones at school. However, the students were forbidden to use or display the phones during school hours.

On the date in question, Klump's phone fell out of his pocket and upon his leg. Upon viewing Klump's cell phone, a teacher enforced the policy by confiscating the phone. Subsequently, the teacher and an assistant principal went about making phone calls using Klump's phone to numbers in his phone directory to determine whether any others were violating the policy. In doing so, the teacher and assistant principal accessed Klump's phone directory, text messages, and voice mail. Furthermore, they initiated a conversation with Klump's younger brother via America Online Instant Messaging using Klump's account and without disclosing that Klump was not the person with whom he was communicating.

Five days later Klump's parents met with school officials regarding these events. During the course of the meeting the assistant principal indicated that, while the phone was in her possession, Klump received a message from his girlfriend that included a slang ridden directive that he get her a large marijuana cigarette. The assistant principal advised that the message served as the basis for her later actions using the phone to investigate possible drug use at the school. Before the phone was turned over to the parents, evidence of the phone calls and messages made by school employees were erased from its memory card.

Klump's parents sued, first in Commonwealth Court, and later removed the action to federal court. In the case that became *Klump v. Nazareth Area School District*, 425 F.Supp 2d 622 (2006), they alleged a variety of state and federal law claims, including that the search of Klump's cell phone violated the Fourth Amendment.

The United States District Court for the Eastern District found that the initial seizure of the phone was permissible as it was contraband. However, the search of its contents failed the *T.L.O.* standard at the first prong. Specifically, it was not justified at its inception. At the time the search was initiated, school actors had no reason to believe that Klump had violated any law or other school rule than possession of the cell phone. As such, the court refused qualified immunity to the school employees and denied their motions to dismiss on the Fourth Amendment claims.

By accessing Christopher Klump's phone number directory, voice mail and text messages, and subsequently using the phone to call individuals listed in the directory, defendants Grube and Kocher violated Christopher's Fourth Amendment right to be free from unreasonable searches and seizures. Although the meaning of "unreasonable searches and seizures" is different in the school context than elsewhere, it is nonetheless evident that there must be some basis for initiating a search. A reasonable person could not believe otherwise.

Here, according to plaintiffs' allegations, there was no such basis.

J.W. v. DeSoto County School District

J.W. v. DeSoto County School District, 2010 U.S. Dist. 09-cv-00155-MPM-DAS, LEXIS 116328, (N.D. Miss.; Nov. 1, 2010), involved the expulsion of R.W. R.W. was expelled after being caught viewing a text message on a cell phone on school grounds, in defiance of a school disciplinary rules prohibiting use or possession of a cell phone at school. Upon being observed using the phone, a school employee asked for the phone. R.W. closed the phone and handed it over. The employee opened the phone to review the personal pictures stored on it and taken by R.W. at his home. These included

a photo of R.W. in the restroom, as well as a photo of another student holding a B.B. gun.

After viewing the photos, the employee gave the phone to a coach at the school who then pressed a button on the phone to reactivate the screen that had gone into a dark mode. He then took R.W. to a principal's office where the principal proceeded to examine the photos and share them with a local police sergeant who happened to be in the office. The two accused R.W. of having gang photos on his phone, and R.W. was promptly suspended for violation of a school rule prohibiting displaying, in any manner, on school property any message associated with gang or criminal activity.

This suspension was reviewed at a disciplinary hearing at which the police sergeant told the hearing officer that he recognized gang signs in the photo and knew the identity of the student holding the B.B. gun. The principal expressed his view that R.W. was a threat to school safety. The hearing officer issued an order of suspension, with a recommendation for expulsion. Upon appeal to the board of education, R.W. was suspended from August through the remainder of the school year.

When R.W.'s parents sued in federal court, the United States Court for the Northern District of Mississippi found the search to be not contrary to established law, focusing on the reduced level of suspicion needed to justify a search as outlined in *T.L.O.* Justified at its inception, the court further concluded that the search was reasonably related in scope to the circumstances. The court distinguished the case from *Klump*, calling *Klump* a "fishing expedition," whereas the case at bar presented a search it considered to be far more limited in scope and far more justified. It viewed a student's decision to violate the school rules by bringing contraband to school and using that

contraband in the view of teachers results in a diminished privacy expectation in that contraband.

The court concluded that the search was not contrary to clearly established law and ordered dismissal of the Fourth Amendment claims.

The court, after having researched nationwide authority on this issue, is unable to determine that the search in this case was unlawful clearly supports a conclusion that a school teacher lacking legal training should not be forced to defend himself at trial for his split-second decision in this regard. (*Id* at 13)

The case was later settled.

Mendoza v. Klein Independent School District

Of the cases identified in this research, the most extensive evaluation of the rights of students came in *Mendoza v. Klein Independent School District*, No. 09-3895 (S.D. Tex. Mar. 16, 2011). This case involved a 2009 incident in which an associate principal viewed an eighth grader showing a group of students something in her hand the administrator believed to be a cell phone. As the administrator approached, the student turned off the phone and placed it in her pocket. Since district policy dictated that any cell phone or pager observed to be used by a student during the school day was to be confiscated, the administrator demanded the device be turned over.

The student became visibly upset and protested that she had not been using the phone. She ultimately surrendered the device and went to class. Since the student had denied using the phone, the administrator proceeded to turn on the phone to determine whether it had been used during school hours. Upon determination that the phone had been used during school, the administrator then went about seeking the most recently sent text message. Soon upon opening the sent texts the administrator saw a nude picture of the student taken in front of a mirror.

Called into the office to explain the content, the student explained that she sent the photo to a boy in what was an exchange of similar pictures. When asked if she had shown the inappropriate images to any other students, the student admitted showing the nude photo she had received to a friend. The school principal was notified and told the associate principal to contact the local police department. The student's mother was also contacted and asked to come to the school.

The student was placed in in-school suspension, and subsequently placed in the district's disciplinary alternative education program for 30 days. The phone was turned over to law enforcement, and after investigation the child exploitation division of the local police precinct decided to destroy the phone.

After a fruitless appeal to the school board, the student's mother filed suit alleging a number of violations, including Fourth Amendment violations on behalf of both the student and her mother. In its initial inquiry of whether there was an alleged violation of a constitutional right, the magistrate for the Southern District of Texas Southern Division found the contents of the student's cell phone contained "private information, that (the student) had a reasonable expectation of privacy regarding this information, and that any search of the phone was subject to the limitations of the Fourth Amendment" (*Id.*, 2011, at 13).

After a thorough discussion of the history of school searches through *T.L.O.* and its progeny, the court found that the search in the immediate case was made in circumstances very similar to *T.L.O.* It determined that the administrator had a reasonable, individualized suspicion that a search of the phone would show evidence of

the student's violation of the cell phone policy. Further, it found that it was not unreasonable for the administrator to seize and search the device for that purpose.

Discussing both the Klump and J.W. cases, the court also noted that the administrator's own testimony showed she was aware that she could not legally conduct an unfettered search of the phone without reasonable suspicion, and that she did not need to access the content of any message to determine the student was in violation of school rules. The court determined that it could not, "conclude as a matter of law that her search of the content of (the student's) text messages was reasonable" (Mendoza, 2011, at 27).

Notably, the arguments in this case included allegations that the student's mother's Fourth Amendment rights were violated by the school's actions. Specifically, she argued that she purchased the phone for her daughter and was the paid subscriber through the cellular network. It was determined that the mother failed to demonstrate an actual subjective expectation of privacy that society would recognize as reasonable. She did not have a privacy interest in the contents of the phone because the information stored on the phone was not hers, but her daughter's.

Gallimore v. Henrico County School Board

The search in *Gallimore v. Henrico County School Board* (2014), Civil Case No.3:14cv009 (E.D. Va.) was based on parental reports of student misconduct on a school bus. School officials received reports from two parents that they witnessed a student with long hair smoking marijuana on a school bus that morning. That afternoon, they brought W.S.G. to the school office, where he was asked to empty his pockets. Without explanation he was then searched, including a pat-down of his person and a

thorough search of his backpack, shoes, and pockets. Among the items searched were a Vaseline jar, a sandwich wrapper, and a cell phone. Upon finding no marijuana, W.S.G. was returned to class.

The court's *T.L.O.* inquiry was influenced by the nuances of *Safford v. Redding* (2009). As such, it determined that the school officials met the threshold of needing only a moderate chance of finding evidence of wrongdoing to validate a search at its inception. As to the scope, the court found that all the physical elements searched were also permissible in that they could have contained drugs.

Where the court drew the line, however, was the search of the phone. Since the phone could not have contained drugs, this component of the search was not reasonably related and exceeded the scope of a reasonable search initiated with the stated aim of finding drugs. The court noted that "common sense dictates that a school administrator cannot claim to look for marijuana and then look through a student's cell phone" (*Gallimore*, 2009, at 5).

Masciotta v. The Clarkstown Central School District

In *Masciotta v. The Clarkstown Central School District*, 136 F. Supp. 3d 527 (S.D. N.Y, 2015), the female student in question reported to the nurse's office to complete a scheduled test. Upon entering the office, she saw a fellow student in the office and inquired why her friend was present. She was told it was difficult to explain and that she should leave. Later, the friend called her to let her know the reason he was in the nurse's office was because she was questioning him about a purported cut they believed she had on her leg and whether he had seen it. He denied seeing anything of the sort.

Shortly thereafter, the female student was approached by the school social worker and asked to accompany her to the nurse's office. The nurse and social worker then told her they were there because of an alleged carving of a cat they believed she had on her leg and that it "needed to be checked." After lodging her opposition to this inspection, the student was ushered into a storage closet with the nurse and directed to lower her pants to her ankles. They found no cuts or bruises. She was also directed to lift her shirt just beneath her bra. The nurse inspected the front of her torso and turned to her back and lifted her shirt inspecting her back. Finding no unusual marks, cuts, or bruises the student was allowed to leave.

When the student emerged from the closet, the school's social worker was on the phone with the school psychiatrist and passed the phone to the student. The psychiatrist accused the student of not being truthful about cutting herself and claimed that she had shown the cuttings to the male student. She then demanded to search the student's phone. Despite her rejections, the psychiatrist proceeded to look through the student's Facebook account, Instagram account, and all her photo albums, finding no evidence of cutting, before returning the device.

The psychiatrist then called the school police officer and told him the student had carved a cat into her leg and that it was seen in an Instagram photo, even if they discovered no evidence of it on the phone. The student was given the phone to briefly speak with the officer before leaving the nurse's office and running out of the building in tears.

The child's parent sued in federal court on a number of claims, including that the search of the phone violated the student's Fourth Amendment rights. The United

States Court for the Southern District of New York evaluated the claim as a search for medical purposes. As such, the court said that, based on the precedential cases argued by the parties, that it “cannot say that the Defendants’ conduct violated Plaintiff’s clearly established right because it was not clearly established that the Defendant’s actions were even covered by the Fourth Amendment.” The student’s expectation of privacy was not discussed. The Fourth Amendment claim was dismissed.

DeCossas v. Tammany Parish School Board

A student was ordered to his school’s chief disciplinarian’s office upon allegations of drug related misconduct, specifically that he was involved in the purchase or sale of a controlled dangerous substance in the case of *DeCossas v. Tammany Parish School Board*, 2017 U.S. Dist. LEXIS 44186 (E.D. La. 2017). In the presence of the sheriff’s deputy on site, the school administrator searched the student, seized his cell phone, and demanded the phone be unlocked. Once the phone was unlocked, the disciplinarian, the deputy, and an assistant principal then searched the contents of the phone. Upon recognizing the number of another student, the second student was brought in for questioning and signed a statement.

The court noted that “the Fifth Circuit has not spoken directly to the question of the appropriate standard for assessing the legality of searched conducted by school officials in conjunction with law enforcement officers.” (*Id* , 2017, at 49). It also noted the other Fifth Circuit case, *J.W. v. Desoto County School District*. It summarily dismissed *Gallimore v. Henrico County School Board* (2014) as non-binding precedent from outside the circuit. It also distinguished the case from *G.C. vs. Owensboro*, in that the phone was not searched pursuant to general background knowledge, but in relation

to specific allegations of purchase, sale, and possession of illegal substances. The school and all individual school defendants were granted summary judgment on the Fourth Amendment claims.

Jackson v. McCurry

The case of Jackson v. McCurry, 2017 U.S. Dist. LEXIS 21805 (M.D. Ga. 2017) involved two middle/high school administrators who searched a student's cell phone as part of their investigation into threats against the student. The student, EDJ, had allegedly been "bad-talking" another student, making fun of them for not making the volleyball team and sending text messages to others about her. When the rumors of these slights reached the subject, they responded by threatening EDJ.

After interviewing other students, an administrator brought EDJ and another administrator to his office to get EDJ's side of the story. She was questioned about the messages and denied talking to others about the other student. An administrator then told her to unlock her phone and give it to him so that he could see if EDJ had been sending messages about the aggrieved student. She claimed she did not give him permission to do so, and not only did he review messages with the student with whom she allegedly disparaged other students, but also messages from family members, her best friend, and her boyfriend. Stating that he did not see any evidence of wrongdoing, the administrator then returned the phone.

Angered that his child's phone was searched, the student's father allegedly threatened school officials. His access to the school and staff were then limited, and at one time he was forcibly removed from school property. He was also prevented from voicing his opinions at a school board meeting.

The student's parents sued, individually and on their daughter's behalf, on a number of claims, including that the cell phone search violated the Fourth Amendment. The United States District Court for the Middle District of Georgia Columbus Division noted that the plaintiffs could point to no cases of precedent regarding the search of a student cell phone at school from the United States Supreme Court, the Eleventh Circuit, or the Georgia Supreme Court. Based on a *T.L.O.* evaluation, the court found that the administrators had reasonable grounds to suspect that a search of the text messages would reveal evidence that she was violating or had violated the school's rule against harassment. The court found that the search was not overly intrusive given the age, sex, and the nature of the infraction. Further, because the student masked the identity of some of her contacts with emojis rather than their true names, the scope of the search was also permissible.

Rejecting arguments that *Riley* should be applied, the court stated that,

T.L.O. specifically contemplated searches of 'highly personal items [such] as photographs, letters, and diaries' that students carried to school. Though technology has changed since T.L.O. was handed down, a school official's search of a student's cell phone on school property and during the school day still fits within the framework announced in T.L.O. (pg. 18-19)

As such, the administrator searching the phone was granted qualified immunity on the Fourth Amendment claim related to the search of the cell phone.

United States Courts of Appeal

G.C. vs. Owensboro Public Schools

The search of a troubled student led to the suit in *G.C. vs. Owensboro Public Schools*, 711 F.3d 623 (6th Cir. 2013). As a non-resident student of the Owensboro School District, G.C.'s continued enrollment in the district was subject to the recommendation of the school principal and the approval of the superintendent. During

his freshman year of high school, shortly after experiencing disciplinary problems, G.C. communicated with school officials that he used drugs and was disposed to both anger and depression.

Later in the year, he visited an assistant principal and expressed that he was upset about an argument with a girlfriend, and had a plan to take his life. He also expressed feeling of pressure about sports and that he smoked marijuana to deal with the pressure. Subsequently, the administrator met with his parents and suggested he be evaluated for mental health issues. He was taken to a treatment facility that day.

In the following year he had several disciplinary referrals. On the day in question he walked out of a meeting with the high school prevention coordinator and left the building without permission. G.C. called his father and was located by school staff in the parking lot at his car. In the car, tobacco products were in plain view. Upon being escorted to the assistant principal's office he indicated that he was experiencing some of the same issues as the previous conversation in which he expressed suicidal thoughts. Concerned about his well-being, she checked his cell phone to determine if there were any indication he may be contemplating suicide. He visited a treatment center that day and was recommended for a stay of one to two weeks.

Four days later school officials convened a hearing with G.C. and his parents, after which he was placed on probation and given four days of in-school suspension. Approximately a month later G.C. was suspended for violent behavior. At the conclusion of the academic year, the principal recommended the superintendent revoke G.C.'s authorization to attend the school for the following year. Rather than follow the recommendation, the superintendent met with the student's parents to explain what was

expected of G.C. in order for him to be permitted to continue his attendance at Owensboro High School. The options provided to them were to take him back to his district of residence, to move to the Owensboro district and attend with all the rights of a resident student, or to submit to the condition that any future disciplinary infraction would result in the immediate suspension of his right to attend Owensboro High School.

Less than a month into the school year G.C. violated the school cell phone policy by texting in class. His teacher confiscated the phone and turned it over to an assistant principal who proceeded to read four text messages on the phone. Her stated purpose was “to see if there was an issue with which (she) could help him so that he would not do something harmful to himself or someone else.” (*Id* at 5).

Following this incident, the principal recommended to the superintendent that G.C.’s privileges to attend Owensboro High School be revoked. The superintendent agreed. G.C.’s parents were contacted and notified of their right to appeal the decision.

Approximately a month later school officials met with G.C.’s parents and their attorney and explained the revocation. The next week G.C. filed in federal court for declaratory and injunctive relief, as well as compensatory and punitive damages, alleging violations of G.C.’s First, Fourth, and Fifth Amendment rights, as well as violations of the Kentucky Constitution. Summary judgment was granted on all federal claims.

Upon appeal, the Sixth Circuit Court of Appeals analysis of the Fourth Amendment claims relied on *New Jersey v. T.L.O.* While G.C. conceded at oral argument that the first search of his cell phone was justified in light of the surrounding

circumstances, he maintained the second search was not supported by reasonable suspicion to read the text messages.

The court noted that it had never addressed how a *T.L.O.* inquiry might apply to the search of a student's cell phone and distinguished the facts at issue from those in *J.W. v. DeSoto County School District* (2010), noting "using a cell phone on school grounds does not automatically trigger an essentially unlimited right enabling a school official to search any content stored on the phone that is not related either substantively or temporally to the infraction" (*Id* at 13). As such, they adopted the fact-based approach of *Klump v. Nazareth* (2006).

"We disagree, though, that general background knowledge of drug abuse or depressive tendencies, without more, enables a school official to search a student's cell phone when a search would otherwise be unwarranted" (*Id* at 14). Clinging to the *T.L.O.* inquiry, the court found there was no reasonable suspicion sufficient to justify the search at its inception.

Though the school district argued that the claim should fail because the student did not suffer any demonstrable harm and was not disciplined in any way based on the contents of the search, the court remanded the case to the district court to determine whether any damages would be appropriate.

Notably, Judge Norris dissented from the Fourth Amendment portion of the decision. Specifically, given the circumstances, he found the limited reading of four text messages to be reasonable under *T.L.O.* Under his reasoning, that school officials, *acting in loco parentis*, must be given more leeway than would be appropriate outside the school setting, considering their keen interest in student welfare and safety.

The court entertained no discussion of the privacy rights of the student. The only mention of Fourth Amendment rights were that in the iteration of the complaint and quoting another case in the determination of whether damages would be appropriate.

General Conclusions Concerning Case Law

In all, the federal caselaw related to student rights with respect to search of cell phones in public schools is a patchwork. Very little direction is given to distinguish searches of these digital devices from the personal and property searches implicated in *T.L.O.* and its progeny. The issuance of the *Riley* decision, with its commentary about the privacy interests implicated in a device with the potential to disclose such volumes of personal information, has had very little impact on how the federal courts view phone searches. Furthermore, despite the focus the United States Supreme Court has placed on a student's reasonable expectation of privacy in searches in the school context, discussions about student expectations are the exception rather than the rule in federal cases involving the search of cell phones.

The federal cases reported that deal with student privacy rights in cell phones are a bit all over the map. While one court stressed that Fourth Amendment rights are different in the school context, another suggests that once the device is used in violation of law or school rules and becomes contraband, the expectation of privacy diminishes even further.

Another court established that students hold a reasonable expectation of privacy in private information contained in a cell phone in language ringing somewhat similar to the sentiment of the Supreme Court in *Riley v. California* (2014), one court felt that *T.L.O.* already contemplated highly personal items brought to school. Another seems

willing to uphold cell phone searches when the scope is narrowly aligned with very specific allegations of wrongdoing. However, none of these courts have thoroughly contemplated the privacy implications of content inadvertently accessed while on a narrow fishing expedition. In laymen's terms, how can you authorize someone to look into Pandora's jar and see only a single evil?

Other cases don't even discuss students' expectations of privacy. In fact, the Sixth Circuit Court of Appeals, the only federal appellate court to rule on a cell phone case, never discussed the student's expectation of privacy. Its fact-based approach would seem that the electronic revolution that has transformed American society in the years that followed *T.L.O.* in no way diminished the Supreme Court's standards for student searches, regardless of *Riley*.

Scholarly and Media Texts

Mainstream media has covered a great deal about policies concerning possession of cell phones and similar devices in public schools. A great deal of attention has been paid to the role of these devices in the school setting as well. The debate about whether schools are safer when students are allowed to have devices versus the argument that they pose a security threat continues. Equally at issue is the question of whether they are valuable devices to be used as tools to drive instruction or they are a distraction from the educational goals of schools.

Social Science

Despite myriad manipulations of search terms and search engines, I was able to find no social science exploring students' privacy beliefs about cell phones at school. Many studies involve youth consumer practices related to private information,

protection of student data, and privacy behaviors related to online social networks. However, no studies have explored student privacy perceptions related to the devices that serve as a near instant conduit to the gamut of personal information.

It is possible that the very laws that aim to protect students prevent quality research in this area. In order to gain access to students for research, individual parent consent must be granted. Not only is this tedious and limiting in establishing quality samples, it all but eliminates the ability to engage students in survey instruments presented digitally on the devices with which they are so comfortable and adept.

This is an area I see as ripe for future research. Not only are courts not considering the expectations of privacy of students, there is no social science to support reasoning if they should consider them.

Media Representation

However, aside from coverage of the court cases outlined above, little has been mentioned about the Fourth Amendment rights of students implicated in possession of cell phones at public schools. After controlling for the exclusions outlined in Chapter 5, I identified 15 unique articles between June 25, 2014 and March 22, 2018, from the Feedly, Google, and Lexis/Nexis Newspapers searches combined.

These articles did not on their face present student or parent/school administrator perspectives on the topic, but rather all spoke with a traditional third person voice. None of them included quotes from students, teachers, parents, or school leaders to offer differing perspectives.

With the exception of three, these all presented the search of cell phones in public schools as legal except for when the criteria set forth in *T.L.O.* is followed. One

article outlined a school district policy in which students are required to provide the school the passcode to their phones. Further, the right of the principal or their designee to search a student's cell phone and its contents "including but not limited to, phone usage, texting, and images/videos when a reasonable suspicion exists that the student violated the District's Student Responsible Use Guidelines for Technology." (St. Meyer, 2016). Beyond this right, the school administration is also granted the right to search the phone as personal property in what appears to be a straightforward *T.L.O.* basis.

Another took the position that the *Riley* decision, while not directly related to the school setting, had major implications for how schools should view their authority to search cell phones. Particularly, this text focused on the *Riley* decision's discussion of digital information and its contrast to traditional property searches. It stated, "digital is different, and therefore the legal standard for school searches of contraband does not apply to cell phones." (Patchin, 2014).

Of those that aligned their representations of the law with *T.L.O.*, some went beyond simply the belief that evidence of a violation of law or school policy might be evidenced by the search and focused on exigent security concerns.

Our best advice to educators is to resist searching a student-owned cell phone unless there is a possible safety concern (e.g., a student says that they just received a text message from another student who said they have a gun). And in this kind of situation, it is best to turn the case over to law enforcement officers, who should better understand the current legal framework for these circumstances. (Patchin, 2014)

Notably, another advised schools to be aware about the sensitive responses that may come from searching cell phones.

Disputes related to a person's right to privacy, actual or perceived, can provoke strong feelings and lead to bitter debate. Searching a student and/or his or her

cellphone has the potential of inflaming the protective instincts of a parent or guardian when the search is perceived as an unnecessary violation of their child's rights or a threat to their child's physical or mental well-being (Harkness)

One article discussed schools where possession of cell phones is prohibited.

Where these policies are in place, it seems schools are treating them as contraband, even likening the devices to items that students may not legally possess. Nevertheless, still recognized that state laws may limit the scope of searches in each state. "Anything illegal or banned by school policy, be it a gun, illegal drugs or alcohol, or a banned cell phone, can be confiscated and searched. Nonetheless, state laws may place added restrictions on the searches." (National Youth Rights Organization). Meanwhile, a similar article focuses on the intent of the search. It would advise that in schools where simple possession of a phone is a violation, no search may be indicated, unless there is evidence of more specific wrongdoing.

Reasonableness is predicated on clearly explicated school rules and policies. For example, if a school policy exists that precludes possession of cell phones and a student is found with a cell phone, the student has violated school policy. A search of the cell phone, however, would only be permissible if school officials reasonably believe the student has engaged in additional wrongdoing (like cyberbullying or sexting). (Virginia Office of the Attorney General)

The final text for analysis discussed the ambiguous position that schools are currently in given the lack of judicial guidance on school searches of cell phones. It called on state legislatures and other statewide policy setting bodies to provide direction as schools seek to set policies balancing their need for safety and security with the rights of students.

As devices and disagreements surrounding them become increasingly common, we hope that more states will consider seriously when device searches are warranted, and adopt guidelines that offer clarity to school officials and students while protecting privacy. Until then, administrators, teachers, students, and

parents should all learn their schools' policies — and, if needed, update them for the digital age. (Johnson, A., 2018)

These media depictions tended to be from a neutral voice on their face, but many came from sources with some bias based on the groups they represented. This included the American Civil Liberties Union affiliates, groups advising school boards or administrators, as well as legal groups seeking to share information.

Social Media Twitter Content

In all, 71 tweets met the research criteria. Given that a majority of these texts were from student perspectives, it was not unexpected to find that these overwhelming spoke of protections against searches of student cell phones. (see Appendix B). Among the messages in which students expressed lessened or no privacy in their phones at school, the perspective seemed that these students felt resigned to a fate with which they disagreed rather than believing they should have limited privacy in their devices at school.

Most parent and other adult voices spoke within themes advocating reduced privacy rights for students and minors. There were those that advocated reduced privacy to combat conduct issues such as bullying, “Privacy is an adult issue. If under 18s don't want their phones checked at school, leave them at home. Bullying needs to stop”. Other adult perspectives declined to impart any privacy rights to students in their cell phones, “one thing they've talked about in my area is if a student has a smart phone and go to school they forfeit all privacy to its data”. On the other hand, there were adult voices that spoke about protecting the rights of students generally and, in the case of parents, their children, specifically. Notably, one adult teacher voice stated, “I DON'T GO THROUGH PHONES! Went to school to be A TEACHER NOT A FORENSIC

SCIENTIST... I will STOP dealing with you if I'm VIOLATING PRIVACY.” (Stewart, 2015).

Student voices often spoke of techniques and devices to prevent teachers and others from being able to view the content as they used their devices. Some specifically spoke to the ambiguity of an institution that seeks to teach future citizens about their Constitutional rights and then proceed to search student cell phones without reasonable suspicion,

Searching people's phones without explicit permission and giving punishments to people without real tangible evidence is NOT the way to stop cheating! In your school you teach us students to respect people's privacy, but you don't uphold your own philosophy! (dead, 2018)

Others student voices purported that schools should have no right to search phones under any circumstance. “In my opinion the schools should not be able to touch a kid’s phone. They didn't buy not do they pay the bill on it. Major privacy violation.”

Policies

There are challenges to analyzing school board policies on search and seizure. With over 98,000 public schools in the United States (U.S. Department of Education, 2016), there are many differences in the availability of their policy documents. Whether they are required to publish the policies is something that differs from state to state. After analyzing hundreds of policies that fit my criteria online, and further refining the list to evaluate only those policies that specifically speak to the search of cell phones rather than simply addressing personal property or contraband, the policies fell into two categories. First, there were those policies that were customized for a particular district. After for controlling for all excluded texts I analyzed 10 unique policies and variations. (see Appendix D).

The second group of policies were those provided to districts through policy subscription services. These services are contracted services from state affiliates of the National School Boards Association. Levels of service vary by state and by district. For some, these policies are individually customized for a particular school district with consultation between the district and attorneys prior to formal adoption by the school board. Others simply adopt sample policies as written. There are some variations of these policies based on specific state laws, and some districts choose to modify the policies without legal input. Furthermore, maintenance of the contract affects the uniformity of these policies. Some districts routinely review their policy manuals to ensure they maintain compliant with all changes in law. However, some do not review policies on a schedule, nor do they maintain their policy subscription services. In these situations, there may be two districts in the same state that have policies based on the same subscription service, with the same coding, but very different content based on the date of the policy's adoption.

For thousands of school policy manuals across the country, these policies as they relate to searches of student cell phones are coded as either policy JICJ or 5145.12. I see this as another area for potential research. Whereas these districts may have, at one time, subscribed to a policy service to ensure their legal compliance, their adherence to these policies and procedures without a fiduciary commitment to maintain and update them on an ongoing basis has the potential to put them at legal risk at some time in the future.

I noted that one California school district had not updated policy 5145.12 since 2008. While the coding is the same as the current California School Boards

Association's current sample policy on student searches, the content is manifestly different. The 2008 policy predates *Redding v. Safford*, recent privacy protection legislation in California, and fails to contemplate numerous technological advances made readily available in student cell phones in the last ten years.

Chapter 7: Conclusions and Recommendations for Policy and Practice

In the past five years, state legislatures have passed no less than 100 laws regulating how schools and service providers collect, use, protect, and transmit the private data of public school students in this country. (Vance, 2018). Federal laws speak to the privacy of student data, but not one outlines the privacy protections afforded students in the devices that contain or link to that data. This focus on data rather than devices gives little direction to school policy makers. Whether slow or reluctant to act on rapidly advancing technology, with few exceptions, state and federal lawmaking bodies rely upon the Fourth Amendment to shoulder the burden.

However, as the federal cases identified in this research illustrate, our courts have yet to interpret the application of the Fourth Amendment to student cell phones at schools with sufficient depth and uniformity to inform policymakers concerning a consistent, universally applicable expectation of privacy for student cell phones. Not only do the decisions in these cases give erratic guidance, almost all of them fail to fully contemplate the very strong, emotional expectations of privacy that many students evidence in their cell phones through social media.

It is clear that parents', teachers', policymakers' and other adults' views reflect this lack of guidance and ambiguity. Established school policies, as well as the published perceptions of various adults in mainstream media and social media show that adults see student rights on a scale from near absolute to essentially absent when it comes to searching devices on school campuses. These disconnects will likely continue until the Supreme Court rules on a case of this nature, or until a predominance of the federal appellate circuits issue rulings in cases on point.

The federal cases reported that deal with student privacy rights related to cell phones are a bit all over the map. While one court stressed that Fourth Amendment rights are different in the school context, another suggests that once the device is used in violation of law or school rules and becomes contraband, the expectation of privacy diminishes even further.

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Other cases don't even discuss students' expectations of privacy. In fact, the Sixth Circuit Court of Appeals, the only federal appellate court to rule on a cell phone case, never discussed the student's expectation of privacy. Its fact-based approach would seem that the electronic revolution that has transformed American society in the years that followed *T.L.O.* in no way diminished the Supreme Court's standards for student searches, regardless of *Riley*.

Overwhelmingly, the social science conducted to date focuses on digital content and not the physical conduits that students carry upon their person every day. To liken the situation to literature, the current body of research explores almost every aspect of

Narnia without ever considering the role of the wardrobe. Unlike public computers or other shared devices, mobile phone owners set up their devices to provide rapid access to their data and the applications they use to retrieve and exchange data. They do not log-in to their phone contacts or history, nor to their text, email, and instant messaging accounts. Often their bank account access, food ordering, and social media applications are set up so that the phone is a preferred and remembered secure device, bypassing security features. Photographs, calendars, and map histories typically have no security features on phones. Ironically, one single physical item serves as a gateway to near limitless digital content. Yet, virtually no research has been conducted to determine what students think about the privacy of this conduit that serves as a single point of entry to numerous details of their private lives.

And still, the tension remains. Schools balance the remnants of the common law's right to act in loco parentis, or in a role much like that with the rights and responsibilities of a parent, with the modern educational system's duty to protect students. However, the same duty to protect students from the harms that can come from the ill use of cell phones or the misdeeds evidenced in their digital contents, is the same duty that compels school employees to protect students from unreasonable searches and related violations of individual rights.

Until the Supreme Court considers a case related to a cell phone search at a public school, or the federal courts shift their tenor, the digital frontier has done little to change policy implications for public schools. The tests for legality of searches of students set forth in *T.L.O.* and subsequent cases remain the gold standard in the era of the smart phone. School leaders would be wise to ensure that their policies align with

the standards set forth in *T.L.O.*, and do not have general language that essentially waives all students' Fourth Amendment rights in their phones. Further, it would be prudent to be constantly vigilant about the potential for new and changing state laws that may impact a school's authority to conduct cell phone searches in their jurisdiction.

In the meantime, it seems that, through media and social media depictions that there are vastly different views among students and among adults about what rights students have related to the search of cell phones in the public-school setting. Not only does this disconnect have the potential for creating future legal controversy, this presents an opportunity to inform students, parents, and the public about the actual policies and procedures within an individual school district to ensure all stakeholders are operating from a common expectation.

While educative initiatives designed to teach students about digital citizenship are growing in popularity, it would be wise to ensure that content is also designed to help students and parents better understand their rights related to their actual devices in practical ways and practices they can employ to protect themselves and the information and access points contained therein, as well as how what use on school property may potentially make them subject to search or inadvertently subject to forms of electronic surveillance. With the proliferation of access to digital devices, this content should be considered as a mandatory part of curriculum related to citizenship and ethical behavior from the earliest grades on. Further, it would be wise for state-level policymakers to work to create some uniformity through policy and guidance and suggested curriculum throughout the schools in their respective states.

This research is in no way exhaustive on the topic of student privacy rights in cell phones at public schools, but shows this area to be ripe for future research on many levels. A lack of clear direction from the courts, the absence of meaningful social scientific data, and limited legislative action leave schools and school leaders in the position of enacting and enforcing policy relying on information that is ambiguous and open to mixed interpretation. This investigation evidences a need for quality social science research to inform courts and policymakers about the actual privacy beliefs of modern public-school students and how these beliefs may potentially inform future lawmaking and policy development.

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Appendix A: Twitter Word Cloud

able access allowed bc believe cant cause cell cheating check
children confiscated content didnt doing dont educators email etc
expectation invade invading invasion kids laws left nudes people
peoples personal **phone** phones
privacy property respect **school** schools
screen search shouldnt start stop student students teacher thats total
understand wifi youre

generated by  DiscoverText

Appendix B: DiscoverText Tweet Statistics: Privacy Expectation

DiscoverText

Dataset Name: Tweets (Project: Research)

display download options

General Stats (Filters don't apply to general stats)

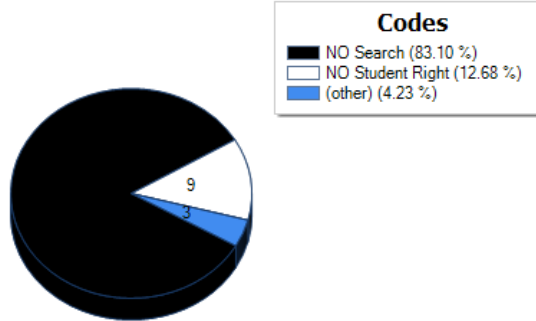
Number of codes:	6	Number of coders:	1
Units in dataset:	71	Total number of units to code:	71
Number of units coded:	71 (100.00%)	Total number of units coded:	71 (100.00%)

Coder Stats

Total Coding Time: 00:22:26

Avg. Coding Time: 9s

Coder	Units Coded	Avg. Coding Time	Total Coding Time
t b	71(100.00%)	9.48s	00:11:13



Appendix C: DiscoverText Tweet Statistics: Voice



Dataset Name: Tweets (Project: Research)

display download options

General Stats (Filters don't apply to general stats)

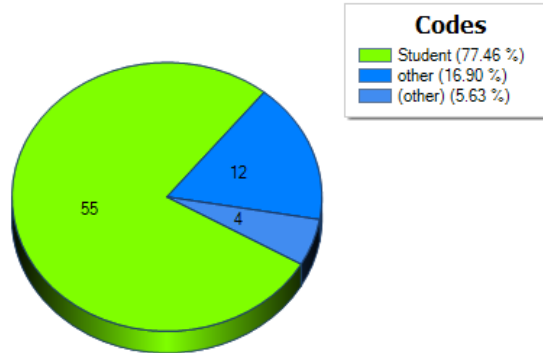
Number of codes:	6	Number of coders:	1
Units in dataset:	71	Total number of units to code:	71
Number of units coded:	71 (100.00%)	Total number of units coded:	71 (100.00%)

Coder Stats

Total Coding Time: 00:22:26

Avg. Coding Time: 9s

Coder	Units Coded	Avg. Coding Time	Total Coding Time
t b	71(100.00%)	9.48s	00:11:13



Appendix D: Policy Codes

Policy Reference Number	Portion of Policy Aligning with Research Questions	Level of Privacy Protection Code
1	Students shall have no expectation of confidentiality with respect to their use of PCDs (includes phones) on school premises/property.... School officials will not search or otherwise tamper with PCDs in District custody unless they reasonably suspect that the search is required to discover evidence of a violation of the law or other school rules. Any search will be conducted in accordance with Policy 5771 – Search and Seizure.	3, No expectation of confidentiality with respect to use of cell phones on school property
2	<p>Students retain an expectation of privacy in their cell phones and electronic devices. As the Supreme Court has recognized, students do not shed their constitutional rights when they go to school.</p> <p>A school official may search an individual student’s cell phone or electronic device only when she has a reasonable and individualized focused on the individual student—suspicion that the search will reveal evidence that the student violated a school district policy pertaining to the conduct of students, as published and made available by the school pursuant to G.L. chapter 71, §37H. Simple possession or use of a cell phone or electronic device in violation of a school rule is insufficient justification for a search of the device. Reasonable suspicion must be based on specific and objective facts that the search will produce evidence related to the particular alleged violation. Reasonable suspicion cannot be based on curiosity, rumor, hunch, mere disruptive activity, attempts to hide personal possessions, or invocations of a student’s constitutional rights. Searches of an individual student’s cell phone or electronic device may not be conducted in order to search for evidence of another student’s or students’ violations. Prior to conducting any search of a student’s personal device, school staff shall: (1) document the individualized facts that constitute the reasonable suspicion justifying the search; (2) notify the student and the student’s parent or legal guardian of the particular suspected violation and the type of data to be searched for as evidence of the violation; and (3) provide the student’s parent or legal guardian the opportunity to be present during the search. The search must be limited in scope to locating evidence of the suspected policy violation and must be terminated when any such evidence has been located. It shall be a violation of this policy to copy, share, or in any way transmit any information from a student’s cell phone or electronic device unless that action is directly related to the stated justification for the search and is necessary for the proper handling of any related disciplinary proceeding.</p>	1

Code Key: 1) Search policies that refer to language authorizing searches based on T.L.O. analysis, 2) Policies in which students are forewarned that their possession of cell phones at school served as the equivalent of a consent to their search, and 3) Other.

Policy Reference Number	Portion of Policy Aligning with Research Questions	Level of Privacy Protection Code
3	Unauthorized use of cell phones will result in confiscation and/or search of the cell phone as such action is a direct violation of school policy. * Cell phones, like all other personal items brought by a student into a school building, may be subject to search. The outcome of that search may result in school sanction and/or a criminal investigation by the police.	2
4	Pictures or recordings taken on campus or at school events will not be posted on the Internet or shared without written permission of the Administration. The District is not liable for any inappropriate actions, content, or materials accessed or shared on personal devices (see BP 6163.5 and AR 6.7). If there is reasonable suspicion, administration reserves the right to hold onto the device and search content on any personal device, including but not limited to blogs, text messages, images, etc., during an investigation.	3, Cites reasonable suspicion, but fails to follow the guidelines in T.L.O
5	The contents of a cellular phone, camera, or other device may be searched to determine ownership, to identify emergency contacts, or upon reasonable suspicion that a school or District rule or the law has been violated.	3, Cites reasonable suspicion, but fails to follow the guidelines in T.L.O
6	If the School District has reasonable suspicion to believe that students have used a cell phone, or other electronic device to cheat, plagiarize, violate a copyright or commit any other act that is in violation of the Student Conduct Policy, then the School District shall have the right to search the device to the maximum extent permitted by law for evidence of such activity. If it is determined that the use of the device violated more than one policy, then they may be disciplined under each policy.	1
7	School administrator or designee may search digital media devices based on reasonable suspicion that they contain evidence of a violation of school rules or policy.	3, Appears to follow T.L.O., but fails to ensure the search is narrowly tailored to the suspected violation.
8	Students have no right of privacy as to the content contained on any electronic devices that have been confiscated. 3 A search of a confiscated device shall meet the reasonable individualized suspicion requirements of Policy 4.32—SEARCH, SEIZURE, AND INTERROGATIONS.	3, Meets T.L.O.'s reasonable individualized suspicion element, but fails to incorporate its additional protections.

Code Key: 1) Search policies that refer to language authorizing searches based on T.L.O. analysis, 2) Policies in which students are forewarned that their possession of cell phones at school served as the equivalent of a consent to their search, and 3) Other.

Policy Reference Number	Portion of Policy Aligning with Research Questions	Level of Privacy Protection Code
9	The types of student property that may be searched by school officials include, but are not limited to, lockers, desks, purses, backpacks, student vehicles parked on district property, cellular phones, or other electronic communication devices. Any search of a student, his/her property, or district property under his/her control shall be limited in scope and designed to produce evidence related to the alleged violation. Factors to be considered by school officials when determining the scope of the search shall include the danger to the health or safety of students or staff, such as the possession of weapons, drugs, or other dangerous instruments, and whether the item(s) to be searched by school officials are reasonably related to the contraband to be found. In addition, school officials shall consider the intrusiveness of the search in light of the student's age, gender, and the nature of the alleged violation.	1
10	Possession of a personal electronic device on school property acknowledges consent to search the contents of the device in a school or criminal investigation. In such investigations, students will provide necessary login information as needed.	2

Code Key: 1) Search policies that refer to language authorizing searches based on T.L.O. analysis, 2) Policies in which students are forewarned that their possession of cell phones at school served as the equivalent of a consent to their search, and 3) Other.