The Educational and Disciplinary Impacts of Student Cell Phone Use at a Rural Secondary School

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Dedication

I want to dedicate this doctoral journey to my wife and two children. Alyssa, your unconditional love and support in my personal and professional goals allowed me to complete my doctoral program and capstone project to the best of my ability. I would not have been able to complete this journey if not for your selfless efforts in picking up the slack at home and encouraging me when I needed it. I love you! To my children, Kanin and Nova, without knowing it, you give me the motivation and inspiration to continue growing and striving to be the best version of myself. Your daily silliness brings a smile to my face even when life has me spinning. I encourage you to strive to find your true self and remember that a strong work ethic, perseverance, independent thinking, and a willingness to take calculated risks will help to guide you where you desire to be in life. Never settle! I love you both!

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Table of Contents

List of Tables

List of Figures

Abstract

As student cell phone possession in schools increases yearly, uncharted challenges are presented to schools that are not necessarily equipped to handle them. This mixed methods research project examines the educational and disciplinary impact of secondary student cell phone use at West Shamokin JSHS. The goal of this study is to gather student, teacher, and parent perceptions on classroom cell phone policies and student cell phone use during the school day. Additionally, it is structured to determine what impact a classroom cell phone restriction would have on junior high students. Student disciplinary data from the West Shamokin JSHS student information system, in combination with student, teacher, and parent perception survey data, were analyzed. Quantitative results indicated improvements in student disciplinary incidents when cell phone restrictions were implemented across various grade levels, particularly in grades 7-8. Qualitative results showed mixed responses in student, teacher, and parent perception surveys regarding the impact of student cell phone use in school. Teachers perceived the negative impacts of student cell phone use and desired stronger policies. Students opposed teacher views and perceived cell phone use in school to have a positive impact on their discipline and academics and favored more lenient cell phone-related policies. Parent responses indicated a more neutral stance. This research project provided valuable insights into the educational and disciplinary impact of cell phone use at West Shamokin JSHS. The results will be used to consider classroom and school policy adjustments to benefit our students, staff, and school community.

CHAPTER I

Introduction

Cell phones have not only had a major impact on society but are making their way into school in the hands of students. Among adolescents, approximately 91% report the ability to access a cell phone, while 84% have their own device. Of 8-year-olds, 19% were reported to have a cell phone which is up from 11% in 2015. In the 8- to 12-year-old range, cell phone ownership has risen from 24% in 2015 to 41% in 2019. Among 13- to 18-year-olds, this number has risen from 67% in 2015 to 84% in 2019. Additionally, teenagers in the United States spend on average 9 hours and 33 minutes on digital media per day. Nearly half of this time is spent on a cell phone (Rideout & Robb, 2019). This access has given students to opportunity to have information at their fingertips throughout the school day to enhance their educational experience. However, that same opportunity provides students access to distracting content and enables behaviors that can be detrimental to their studies. Negative student behavior has an impact on student academic achievement, student motivation, and overall school culture.

Background of the Study

Comparing the last few school years, the researcher has seen a decrease in the number of disciplinary incidents overall at West Shamokin JSHS. However, of the disciplinary incidents occurring, there is a perceived increase involving or deriving from student cell phone use in school. Ongoing discussions occur regarding actions that our school can take to curb these incidents in order to potentially help students with their mental health, to increase their academic success, and to reduce disciplinary incidents.

The researcher currently serves as the assistant principal at West Shamokin JSHS,

and one of my primary roles is addressing student discipline. Student cell phone use in schools is an increasing trend, and the impact that it has on student discipline and academic achievement is still unknown. West Shamokin JSHS is no exception. More students are coming to school with cell phones, and the disciplinary incidents stemming from them are seemingly increasing. This study is an opportunity to further explore the educational and disciplinary impacts that student cell phone use has and what possible options we have to further assist should there be a need.

Capstone Focus

The focus of this research is to utilize a mixed methods approach gathering both quantitative and qualitative data to examine the educational and disciplinary impacts that secondary student cell phone use in high school has on students. Survey data from students, teachers, and parents will help give a qualitative collection of data while utilizing disciplinary data throughout the 2023-2024 and 2024-2025 school years will broaden data with quantitative information. It is important to recognize that the qualitative data from students, teachers, and parents may vary from each group based on their personal experiences with cell phones and their personal beliefs. Using these two data collection methods will provide a holistic view of the impact that student cell phone use has in school.

Research Questions

The research questions are targeted to investigate both the perception and impact of students using cell phones in school by utilizing mixed methods research:

1. What are the perceptions of teachers, students, and parents on student cell phone use during the school day?

2. How does a teacher's classroom cell phone policy impact student disciplinary behavior?
3. What impact would a cell phone restriction in class have for junior high students?

Expected Outcomes

The study will provide insight and information on both the perception and impact that student cell phone use has at West Shamokin JSHS. By gathering qualitative data such as perception data from students, teachers, and parents in addition to quantitative data including disciplinary data from the last two school years with regard to student cell phone use, administrators will have more data and information from which they can base classroom and schoolwide expectations. This doctoral research project will serve as an opportunity to better serve our students and school in creating a safe and impactful learning environment for our staff and students. The intent is to learn how student cell phone use in school impacts their disciplinary and educational development as well as learn the perceptions of various stakeholder groups when it comes to cell phones in school. Given the findings of this study, potential recommendations to school policy or practices will be shared for future considerations to improve both student and staff experience.

Fiscal Implications

When considering the fiscal implications related to this research project, the researcher will utilize Google Forms that are sent to students, teachers, and parents. These surveys will be voluntary and will come at no cost to the participant. The researcher will also utilize student disciplinary data that is stored in the school district's student information system. This also will come at no cost to the district given that it is

an existing program. Lastly, this project will require cell phone caddies in each classroom. These were already purchased by the district for calculator storage, so this will not be an extra cost to the district. An indirect cost will be the time and effort of the researcher and survey respondents.

Summary

Following this study, an action plan will be developed with recommendations provided in order to support the next steps that the school should take with regard to student cell phone use in school. This project intends to gather stakeholder perceptions with regard to student cell phone use in school as well as to analyze the disciplinary impact that cell phones have on student behavior. The data that is gathered through a mixed methods research study will provide direction and best practices to enhance student safety and learning in school. While literature surrounding this topic spans decades, the data is constantly evolving as the world changes. The technological advancement of cell phones in coordination with the lowering age of cell phone possession for adolescents has created drastic changes in our society.

CHAPTER II

Literature Review

The impact of cell phones across the world has been profound over the last few decades. What began as your cell phone to make phone calls—has now turned into a mobile telephone that also acts as a computer, internet, bank, calculator, and GPS. Cell phones can send pictures and videos, gather weather information, play games, and complete many other tasks (Kaur, 2018). As with other modern advancements, cell phones have made their way into the hands of our youth and schools. This shift has posed a challenge for schools to balance the academic advancements that can be made while also navigating the difficult disciplinary landscape that cell phones in schools bring. As with any rising trend in education, stakeholder perceptions should be part of the conversation and taken into consideration. As school districts have developed and implemented policies to manage cell phones in schools, lawsuits have been brought forward between families and their school districts. Some cases have made it the whole way to the Supreme Court, and those results have shaped the landscape and parameters that school districts operate within. This study will explore the overall academic and disciplinary impacts of student cell phone use and what best actions can be implemented moving forward.

Due to increased ownership of cell phones, they have made their way into schools at record levels, yet teaching with those technological opportunities has not fully adapted (Liu, 2011). The COVID-19 pandemic sped up time, and it is clear that the increasing use of cell phones in classrooms is creating new opportunities for use (Misirli & Ergulec, 2021). Rideout and Robb (2019) conducted a study that showed the extent that cell

phone ownership has significantly increased. Among adolescents ages 10-18, approximately 91% report the ability to access a cell phone, while 84% have their own device. Of 8-year-olds, 19% were reported to have a cell phone, which is up from 11% in 2015. In the 8- to 12-year-old range, cell phone ownership has risen from 24% in 2015 to 41% in 2019. Among 13- to 18-year-olds, this number has risen from 67% in 2015 to 84% in 2019. This increased ownership has created difficulties for school districts that are caught between working to implement cell phone usage as a learning tool while managing student behavior resulting from cell phone usage.

Throughout the chapter, the literature related to the history of cell phones in school and more specifically the increased accessibility of cell phones for students will be explored. The academic impact that cell phones have on students does not only consist of student academic performance—but also student engagement—and classroom use. The behavioral impact of student cell phone use including student discipline such as cheating, cyberbullying, and general inappropriate uses will be explored.

Additionally, the social-emotional impact that cell phone use has on students will be explored which also encompasses social relationships, mental health, and the rise of nomophobia, which is the reliance on cell phones. As the effects of student cell phone use become known, school districts are attempting to figure out what they can do to ensure they have the student's best interests in mind. Cell phone policies and practices will be explored, as well as cell phone policy perceptions of teachers, students, parents, and administrators. As with any change in policies, there is a rise in court cases involving the search and seizure of cell phones. Court rulings and the shifting in court rulings will also be explored. As the literature review concludes, a summary of the key

findings will be gathered and include recommendations that the literature has shared in various areas. By learning the existing research that exists involving these various topics surrounding student cell phone use, there will be an opportunity to gather a greater understanding as to what education and disciplinary impacts exist and where we go from here as a nation.

Increasing Cell Phone Accessibility for Students

As cell phones have become something that most adults possess, they have made their way into the possession of our youth. A study by Sarker et al. (2019) found that approximately 96.8% of the global population was able to reach a rate of 100% coverage with their cell phones in numerous developed countries. When it comes to cell phone possession amongst adolescents ages 10-18, Rideout and Robb (2019) found that approximately 91% report the ability to access a cell phone, while 84% have their own device. Adolescents are beginning to use cell phones at an earlier age than ever before. Kim (2017) found that approximately 50% of the respondents to a survey claimed that their first cell phone use was between grades 4 and 6. That number rose to 61.3% when respondents considered their first time using a cell phone. In a more recent study, Wang (2022) found that 42.5% of respondents stated they first used a cell phone in grades 3 or 4 showing an even earlier usage amongst adolescents than previously reported. When asked about their access to cell phones, 43.3% of adolescents reported that they used their parents' old cell phones. Rideout and Robb (2019) conducted an online survey of 1,677 people between the ages of 8 and 18 years old from the United States in 2019. This report presented that prior to age 12, 53% of youth had a cell phone. When the youth respondents reach the age of 12, that percentage jumps to 69%. When looking at the

younger ages, 19% of 8-year-olds indicated that they have their own cell phone, which is an increase of 11% from 2015. These increases from 2015 to 2019 span across all age groups including an 11% increase from 8% to 19% amongst 8-year-olds, a 17% increase in 8-to-12-year-olds from 24% to 41%, and an increase of 17% from 67% to 84% among 13-to-18 year-olds.

In order to break it down further beyond general age groups of cell phone ownership, it is important to consider demographically which youth own cell phones. There are inequities in cell phone ownership among low-income students in urban regions (Rideout & Robb, 2019). According to Rideout and Robb (2019), teenagers in the United States spend on average 9 hours and 33 minutes on digital media per day. Nearly half of this time is spent on a cell phone. As stated prior, youth from low-income households had a lower percentage of cell phone ownership but spent on average an hour and 50 minutes more on cell phones than students from higher-income households. In the study conducted by Wang et al. (2022), 79% of respondents recorded that their most frequent use of cell phones was after school hours. When it came to using cell phones on weekends, 54.1% of youth used their cell phones during the daytime, and 44.1% of youth used their cell phone during the nighttime. As we move forward, the trend of youth cell phone ownership is increasing but also earlier ages are owning their own cell phones each year.

Cell Phone Impact on Students

Student Academic Performance

There are both positives and negatives with regard to academic performance when it comes to understanding the impact that cell phone use has on students. To begin with

the positives, students using cell phones can help to increase the level of quality education. Cell phones with internet capability are able to access school resources more quickly in order to find study material or assignments online as needed (Kaur, 2018). The mobility and capability of cell phones also allow students to access these resources nearly anywhere at any time (Lepp et al., 2014). With the rise in social media, this helps play a role with students in sharing content and applications. Communication between students and staff as well as students themselves can be done quicker with cell phones, which may lead to more efficient studying and collaboration (Chen & Ji, 2015; Lepp et al., 2014). Students use cell phones in the classroom to create short videos, access online materials, collaborate with peers, and utilize social media—as well as educational platforms (Ehnle, 2022). An advantage that might not be as apparent as others is the genuine desire from both teachers and students to find ways to implement cell phones in the classroom as learning tools (Thomas et al., 2013).

Studies have shown that cell phones can have a negative impact on student academic performance. Research suggests that students view their cell phones more as an entertainment tool rather than an educational tool (Lepp et al., 2013). This goes along with the time-displacement hypothesis that van der Schuur et al. (2015) raises, which refers to the time spent on cell phones displaces time put toward academic achievement. In this case, when a student splits their focus between social media on their cell phone and the class lecture, they ultimately have a lesser mental capacity to dedicate to academics thus hurting their learning capability (Mrazek et al., 2021). There is research showing a strong correlation between student social media usage and their academic achievement. Kaur (2018) found that social media, texting, and app usage distract

students from their educational tasks ultimately resulting in lower grades and overall poor academic achievement. Even if students do not intend to use their cell phones, the proximity alone of the cell phone can tempt students and distract them, leading to task-switching or multitasking (Amez & Baert, 2020). The limited capacity model shows that when students engage with multiple information sets, their mental capacity is reduced to the point that their learning is impaired due to not having the mental resources available for processing (Lang, 2000). The scattered-attention model shows that poor academic performance is due to a lack of cognitive control that results from student digital multitasking (van der Schuur et al., 2015). Continued experimental studies show that digital multitasking during reading assignments has a negative impact on student comprehension—and recognition of concepts (Lee et al., 2012). All of this research arrives at a similar conclusion that digital multitasking can have a negative impact on student achievement particularly outside of the classroom where there are often fewer parameters for cell phone use (Mrazek et al., 2021). Overall, the impact of digital multitasking results in a negative impact on academic achievement which includes test scores, reading comprehension, and GPA (Mrazek et al., 2021). Similarly, Clayson and Haley (2013) also found that digital multitasking in the classroom can lead to lower test scores, grades, and GPAs.

One action that is happening is classroom cell phone bans. A study that found the cell phone classroom bans resulted in a 6% increase in standardized test scores which was more resounding with low-achieving students with an increase of 14% (Smale et al., 2021). A 2015 survey that investigated the impact of the cell phone ban in relation to high-stakes test scores yielded that student academic performance increased about 6.41%

of a standard deviation (Beland & Murphy, 2016). Amez and Baert (2020) conducted research that found the empirical results confirm a negative correlation between student cell phone use and student academic achievement. However, when looking at the model of surveys, paper and pencil questionnaires yielded less negative results than online surveys did. In various situations, both positive and negative educational outcomes are possible with student cell phone use. Due to this, it is necessary to have a well-thought-out plan of implementation to ensure the impact on students is positive and rules are in place to prevent negative outcomes.

Student Engagement

Student engagement in the classroom is something that some teachers perceive to be able to improve by properly implementing cell phones and other digital technologies. With regard to the teacher's viewpoint, they are often of the opinion that cell phones can be used to increase student collaboration, and engagement, and to share information across content areas (Smale et al., 2021). Teachers also find opportunities for cell phone implementation in the classroom for engagement purposes by allowing students to use their cell phones to respond to apps, questions, and polls (Harriman, 2017). Permitting students to use their cell phones to respond to assessments is one of the more common ways for teachers to implement cell phone use in the classroom. Krochinak et al. (2023) found that students were externally motivated when socially competing with other students to engage in the classroom using apps. However, it seemed that this would be short-lived with some students if they were to fall behind other students in the competition, which would impact their motivation negatively. Krochinak et al. (2023) also reported that students indicated that academic progress was a strong external

motivator. Their progress and success in the classroom in these engagement opportunities gave them an increased sense of confidence. These assessments in class using cell phones often include some sort of intangible reward such as fake currency or badges. Teachers do at times have real rewards that students can exchange their virtual tokens for to help increase motivation. Students often preferred this to extend their increased motivation since not having tangible rewards can be short-lived. The earning of intangible rewards made the games seem video game-like to some students while others preferred tangible rewards such as candy, snacks, trinkets, chewing gum, or bonus points (Krochinak et al., 2023). While this works for some students for some time, a student shared that in order to continue sustained success, they must have some level of internal motivation to continue success and create a habit of participation and studying (Krochinak et al., 2023).

Other studies showed results that cell phone proximity to students during instructional time is an important factor in their ability to focus. Watson (2017) showed that the closer the proximity of the cell phone to the student—from away in a locker, put aside in an area of the classroom, in their book bag near them, on them directly, or on their desk—the poorer the cognitive functioning was about both assignment completion and teacher lecture. These results showed again when Ward et al. (2017) found the simple presence of a cell phone on the student or near the student at their desk or book bag, can be enough to have a negative impact on cognitive performance. Bergdahl and Bond (2021) found that when observing class, students who had their phones available to them were able to hold their attention to a lecture but as that continued, students were likely to begin using their phones for mobile games or other non-educational uses.

Pauley (2015) conducted a survey consisting of 840 students in grades 9-12. When asked if they felt encouraged to use their cell phone in school to complete academic assignments, 58.3% agreed. When asked how often they were distracted by cell phone use from other students in school, only 14.3% indicated they were just sometimes or never distracted while at school. These results show that teachers have yet to implement cell phones for academic purposes in the classroom on a broader scale and that students do not feel that the possession of cell phones by other students in school is distracting to them. However, Mrazek et al. (2021) conducted a study that showed 66.7% of the students surveyed believed that cell phones have a negative impact on their ability to concentrate. Student engagement continues to be a focus in general, and the addition of cell phones has added a new dimension to it. Schools continue to seek best practices to help enhance the educational environment.

Classroom Uses

Cell phones have a wide variety of uses in general, and educators are looking for ways to implement them in the classroom. Previously, lecture-style teaching for upper grades seemed to be the strongest form of direct instruction. However, Harriman (2017) found that educators are looking for newer, more engaging ways to reach students and students are more likely to engage at times with increased cell phone use. Part of the issue is that teachers do not know or do not feel comfortable with cell phone implementation in the classroom. Even when not using a cell phone as an engagement tool during class, teachers should still encourage and assist students using their cell phones to organize notes and remember assignments, tests, or other important dates (Harriman, 2017). These miniature computers are in the pockets of the majority of

teenagers, so it is necessary to find ways to use them to assist in their day-to-day lives. O'Bannon and Thomas (2015) share this sentiment when recognizing the extensive number of organizational tools on cell phones such as calendars, clock features, and homework apps. Admiraal et al. (2020) studied 27 schools from the perspectives of the teacher, student, and technology. In order to increase student achievement, they found that if there was a stronger emphasis on student control rather than teacher control, it did not have positive effects on cognitive outcomes. Krochinak et al. (2023) found that when teachers were asked what kinds of cell phone apps they used, the most common answers were Google Classroom, Kahoot, Anatomy4D, Elements4D, Plickers, Quiver, and other educational apps. The purpose of these apps was focused on data storage, student tracking, pre and post-test uses, and presentation of information. A parameter that many teachers looked for was the apps that presented intrinsic rewards as much as possible for students. Teachers also wanted to use apps that were accessible and had relevant content to their students both academically and that allowed customization, so students could tailor it to what they preferred. Another important point of emphasis was choosing apps that had classroom and student connections like Kahoot, Google Classroom, or other engaging apps (Krochinak et al., 2023). Teachers continue to strive to find ways to implement new technologies that students resonate with. Cell phones are just that tool, yet there must be a balance between finding the uses and ensuring students are on task.

Student Discipline

Along with the rise in positive uses of cell phones—comes the opportunity for negative choices. Student cell phone use over the years has become associated with sexting, cyberbullying, academic dishonesty, and poorer mental health (Smale et al.,

2021). A 2010 survey of 20,000 students at 11 post-secondary educational institutions found that digital technology had an impact on student attitudes toward cheating. It was found that nearly 73% of post-secondary and 60% of secondary students admitted to cheating on assignments or tests. This study focused on both secondary and post-secondary students but is relevant to the impact that cell phones have had over time with regard to academic dishonesty. Haller (2017) conducted an online survey of 1,201 high school students in the United States in grades 9-12 and found that approximately 33% of students used their cell phones to cheat in school. Of the same student population, 60% shared that they were aware of another student using their cell phone to cheat on a test. The discrete nature of cell phones and the instant access to a seemingly unlimited amount of content—have created a tempting opportunity for our youth to cheat.

Cyberbullying is defined as "the electronic posting of mean-spirited messages about a person (such as a student) often done anonymously" (Merriam-Webster, 2024, para. 1). Cyberbullying has become increasingly common given the instantaneous access that students have to communicate with each other not only through text—but also pictures and other social media platforms. The increase in cyberbullying can have detrimental effects on the mental health and safety of our youth. The discreteness and privacy of cell phones create an environment where it is difficult to identify when there is a problem (Smale et al., 2021). Schools are continuously looking to find ways to combat and contain this increasing issue. Students now have instant access to communicate with other peers who also have cell phones whether they are right beside them or anywhere else on campus. Given the results of the survey shared previously, 33% of students report being a victim of cyberbullying. When broken down by gender, females are 30%

more likely to be cyberbullied than males (Haller, 2017; McAfee, 2012). In 2019, the U.S. Department of Education shared data from principals regarding cyberbullying. Principals shared that from 2010 to 2016, there was an increase from 7.9% to 12% in 2016 in the daily/weekly frequency of cyberbullying. When asked about monthly, the percentage rose from 9.4% in 2010 to 14.9% in 2016. When asked about occasional cyberbullying, the frequency rose from 45% in 2010 to 54% in 2016 (U.S. Department of Education, 2019). These results raise the question regarding student cell phone access during school hours. When these principals were asked whether their schools had rules or policies limiting students' cell phone use during the school day, 65.8% of schools shared that they do indeed have rules prohibiting student cell phone use. Of the respondents, the school that had rules against student cell phone use reported a higher rate of daily/weekly cyberbullying with 16.4% than the 9.7% of schools that permitted student cell phone use during school hours (U.S. Department of Education, 2019). Cyberbullying is and will continue to be a concern for stakeholders in school. It is important that school districts strive to find ways to curb these incidents, and the role of cell phones in cyberbullying is constantly being explored.

There are additional inappropriate cell phone uses that students use cell phones for in school. Pauley conducted a study consisting of 840 students between 9-12 grades. When students were asked to rate the frequency with which they used cell phones in school for academic purposes, at least 70% of students indicated that they use them for these reasons. On the contrary, when students were asked how often they use cell phones in school for non-academic purposes, 74.3% of the responses indicated that they do use

them for these reasons (Pauley, 2015). It is evident that cell phones in school are strongly used by students for both academic and non-academic purposes.

Social Relationships

The increased use of cell phones by youth has shifted more social interactions to the virtual category resulting in less face-to-face interactions (Aloteibi, 2022). These results have been studied, and it is agreed that student learning and achievement are directly impacted by social interactions. In particular, face-to-face social interactions are important to student learning (Hurst et al., 2013). Williams et al. (2019) showed evidence of a negative impact on academic achievement when students are unable to develop skills to effectively communicate with their peers. Along with a lack of social interactions—comes cell phone addiction. Alkin et al. (2020) conducted a study to explore cell phone addiction and more specifically the social reasons for this. It was found that socially, it can be split into familial and environmental reasons. When participants were asked why they believe people become addicted to cell phones, responses included that cell phones were fun, that they were able to facilitate friendships on social media, and that they were able to escape real-life problems on their cell phones. They also shared that due to not having as many common interests as their peers, they relied more heavily on cell phones to explore what they enjoyed. Participants also reported that an increase in cell phone use was to conform more with their friends, socially to be more popular, or to meet new people (Alkin et al., 2020). Ong (2010) shared that it is perceived that for students, their cell phone is a key link to social status, self-image, and friendships. The immediate ability to respond is perceived to be a positive link to their social status and a need to be reached at any time and place. Lenhart

(2012) shared that 63% of teenagers are more likely to text than any other communication. Their perceived lack of face-to-face interaction was reinforced when 39% of students shared that they talked on their cell phone, 35% communicated face-to-face outside of school, 29% communicated on social media sites, and 29% on instant messaging apps. This lack of face-to-face interaction is having a negative impact on the social development of our youth and does not show signs of slowing down. Assuming the research is accurate, it is necessary for both schools and parents at home to take a look at the environment they are developing for our youth and take action. With the adolescents that have already been impacted by cell phone use, it will be a difficult change. However, there are changes that we can make for our younger children to ensure they do not reach the level of cell phone dependency that older adolescents have.

Mental Health / Cell Phone Reliance / Nomophobia

Cell phone reliance now has official terminology that was necessary to categorize the rise in cell phones. Nomophobia is considered the fear of being without access to a working cell phone (Merriam-Webster, 2024, para. 1). Botha and Matwadia (2023) conducted a study to investigate nomophobia as a possible mental disorder. The quantitative study resulted in teachers displaying higher levels of nomophobia than the students. However, the qualitative aspect of the study determined that teachers were more likely to use their cell phones for work-related tasks than students. Nomophobia can lead to students believing they are missing access to relevant information and communication with others. The uncertainty of when they will get to look at their cell phone and the lack of control results in additional stress (Tams et al., 2018). Social media use on cell phones continues to increase and is linked to addictive behavior (Kaur,

2018). Durak (2018) conducted a study with 7th and 8th graders. This study showed that youth were somewhat likely to feel loneliness and social media addiction. There is a strong correlation between social media addiction and nomophobia as well as loneliness and nomophobia. The study also showed a strong correlation between the duration of daily social media use and nomophobia. It is perceived that many youths are afraid to lose their phones due to potentially missing out on social media updates and social information.

The results of nomophobia can trigger negative emotions such as decreased interest in learning, lack of communication with family, and distancing themselves from social interactions. Alkin et al. (2020) also found a strong correlation between cell phone addiction and loneliness. When looking at the relationship with one's parents and the correlation to cell phone addiction, participants shared that when their relationship with their parents was negative, it was more likely to lead to them going to their bedroom to share negative comments on social media to receive positive feedback. This reinforces the positive emotion that can be achieved with cell phone and social media use. Interestingly, it was found that adolescent perception of one's mother was a variable that significantly predicted cell phone addiction whereas one's perception of their father was not statistically significant. Females were more likely to succumb to cell phone addiction compared to males (Alkin et al., 2020). Given these factors, adolescents with nomophobia experience stress and anxiety when without their cell phones for extended periods. More specifically, studies show that it takes about 10 minutes for students to feel anxiety when without their cell phones. This seemingly short period results in negative effects such as a lack of attention span, low productivity, and reduced mental

well-being (Mendoza et al., 2018). According to Lee and Kim (2018), there is no observed gender difference with regard to these outcomes of nomophobia. Contradicting one another, Kim et al. (2019) found that boys yield a higher level of cell phone dependency whereas Kim (2017) found that girls were more likely to result in higher cell phone dependency. Cell phone dependency regardless of gender has created a developmental issue among our youth and needs addressed (Wang et al., 2022).

Moving forward, it is important for educational professionals to recognize the existence of nomophobia and consider what they can do to assist in this issue. Schools and more specifically teachers are better able to control cell phones for students during their time in the building. This comes with considering rules and policies for classroom use, finding more positive uses for cell phones with regard to education, and striving to reduce the negative effects of cell phones on students (Carels, 2019). A few years ago, many might have heard of nomophobia and thought that it was a fabricated disorder. However, when taking a long and honest look at our youth and their behaviors, it is evident that nomophobia is real and has strong effects on them. Educating our students on this reality and working with them to change behaviors would be a step in the right direction. Youth involvement in investigating their feelings to help identify how exactly we got to this point would help determine our next steps to help those negatively affected now and to help prevent this from happening to younger adolescents.

Cell Phone Policies

Exploration of Cell Phone Policies and Practices

As cell phones become more prominent in schools and classrooms, schools are working to find the best approach to handle both the positives and negatives of student

cell phone use. When considering cell phones as an instructional tool, Gao et al. (2014) encourage schools to update and lay out clear school policies and classroom expectations for student cell phone use. When policies are in place, students are more likely to respond positively if the perception is that teachers agree with the policies they are expected to enforce (Tatum et al., 2018). Obringer and Coffey (2007) polled high school principals regarding policies in their schools. At that time, 84% of principals responded that their schools had written cell phone use policies. For teacher cell phone use in school, 78% of principals responded that teachers are permitted, while only 24% permitted cell phone use by students. Of the teachers that have cell phones available, only 6% of principals believe that they used their cell phones for school-related business. Of the respondents, 73% believe that teachers having cell phones improved school safety. Of the principals that responded, 82% believe that parents are supportive of the school's overall cell phone policy. Lastly, 80% of principals shared that text messaging features are a problem/potential problem during tests and examinations. Having cell phone policies does add another dynamic to schools and in a way puts the burden on the teachers. Myers (2024) shared that at times, teachers can feel as if they are "cell phone cops" which is something that they did not envision being. Having teachers take on this additional burden—can put both them and the school at risk if confiscation is necessary. Districts need to consider these aspects when creating and implementing their cell phone policies. There is not a one-size-fits-all cell phone policy model, so each district and its stakeholders should be taken into account.

Cell Phone Policy and Perceptions

In one form or another, administrators, teachers, students, and parents have a perception of student cell phone use in schools, which has become a strong focus of school districts. When it comes to cell phone policy, this is one of the more controversial topics surrounding the cell phone student use category. Lang and Sorgo (2024) claim that students, parents, and teachers are interested in cell phone and tablet use in the educational environment mainly for homework, school work, and video conferencing. The results are positive in terms of all three perspectives toward cell phones, but the most desired use is for distance learning. When creating cell phone policies, it is seen as a multilateral process that must take into account various stakeholder interpretations, and best practices across the organization. Due to the complications of this process, decisions across school districts are often left to the individual teachers to develop and implement their own policies that best fit their classroom structure and students. Students, parents, and teachers all appear to recognize the classroom challenges of student cell phone use with regard to their engagement in learning. However, they all have an open-minded attitude to explore and learn about the positives and negatives (Wikstrom et al., 2024). Stachowski et al. (2020) conducted a study that showed there is a divide in attitudes with regard to cell phones in the classroom among these three parties. That degree of difference does seem to be decreasing, which shows some alignment with what was shared by Wikstrom et al. (2024) previously. Both teachers and students shared the view that a complete cell phone ban from classrooms would result in a decrease in overall cell phone use and that a complete cell phone ban is more enforceable than other school

policies. Meanwhile, students also shared that they believe that student cell phone use would decrease regardless of the level of cell phone policy (Stachowski et al., 2020).

When considering creating a cell phone policy, school districts first should consider the legislation and local sentiment toward such policy. Smale et al. (2021) found it worthwhile to gather stakeholder input to understand what the local students, teachers, and parents perceive to take various accounts into consideration. Botha and Matwadia (2023) suggest when developing the contents of the cell phone policy in school, it is important to focus on both students and teachers to put them in a position to benefit from proper uses while also ensuring that cell phones do not become a distraction resulting in negative educational impact. When creating a policy for students, it must be designed to ensure consistent expectations for all students and offer necessary guidance regarding the appropriate use of cell phones in school. Botha and Matwadia (2023) also suggest that along with a student-use cell phone policy, a teacher-use cell phone policy must also be introduced. The framework for the teacher cell phone policy must set clear expectations for cell phone use during working hours and offer guidance as to what constitutes appropriate use of cell phones within the workplace. Consequences for both students and teachers must be clear if there is a breach of policy. Smale et al. (2021) suggest in order to consider the specific contents of the policy, creating a committee is a potentially important step in gathering input from the various stakeholders to ensure it is well-thought-out. Such a committee can include positions such as the school district solicitor, a school board member, the superintendent, a building principal at each level, a teacher, a parent, and a student. This ensures that all voices are considered in the process. The policy should outline student rights and under what circumstances school officials

can confiscate and search cell phones. Additionally, who is responsible for the cell phones once they are confiscated, and what options are there for the cell phone to be returned to the student or parent? Both parent and student should sign a form stating their understanding of the policy and the consequences for violation of said policy.

While Lang and Sorgo (2024) state that cell phone use inside of school must be purposeful for students to learn necessary skills, O'Bannon and Thomas (2015) suggest that it is in the best interest of schools, teachers, and students to remove bans on cell phones in schools and reassess policies. Cell phones offer students positive organizational tools such as a calendar, clock/alarm, educational apps, and internet browsers. By changing our mindset and improving policies, teachers can learn to best incorporate cell phones in classrooms as an academic tool in order to differentiate and personalize student learning.

When policies are developed, it is necessary to outline the role of school officials in cell phone confiscation and search if necessary. With an increase in cell phone litigation hitting school districts, one important lesson to be learned from this is that cell phone policies must be carefully applied when assigning student disciplinary consequences for policy breaches. It has been shown thus far that many courts are willing to defer the authority to the educators to implement proper cell phone policies to ensure school safety and security (Smale et al., 2021). This result emphasizes to school districts the importance of focusing on the specific violations themselves and subsequent consequences and not extending beyond those actions. School officials should not search the contents of the phone if there is no specific reason to do so, such as school safety and security (Smale et al., 2021).

An aspect of student cell phone use that can assist schools is guardians enacting cell phone restrictions at home. Guardians have a high level of influence as to how their children use cell phones both in school and outside of school. Alkin et al. (2020) conducted a study that showed parental indifference influenced intensive smartphone use for high school students, and they were often isolated in response to family issues. Families can enact "phone-free hours" at home to shift the focus to face-to-face interactions, reading, or quality family activities.

Student, parent, teacher, and administrator perceptions have some agreements and disagreements regarding student cell phone use in schools. Lang and Sorgo (2024) claim that students, parents, and teachers are interested in cell phone and tablet use in the educational environment mainly for homework, school work, and video conferencing. The results are positive in terms of all three perspectives toward cell phones, but the most desired use is for distance learning. All of these stakeholders recognize the classroom challenges of student cell phone use with regard to their engagement in learning. Wikstrom et al. (2024) found they all have an open-minded attitude to explore and learn about the positives and negatives. Another study by Stachowski et al. (2020) shows that there is a divide in attitudes with regard to cell phones in the classroom among these three parties. That degree of difference seems to be closing over time, which is resulting in a stronger alignment with what was shared by Wikstrom et al. (2024) previously. Both teachers and students shared the view that a complete cell phone ban from classrooms would result in a decrease in overall cell phone use and that a complete cell phone ban is more enforceable than other school policies. Meanwhile, students also shared that they

believe that student cell phone use would decrease regardless of the level of cell phone policy (Stachowski et al., 2020).

While stakeholders can have similar opinions, they oftentimes vary in their main focus of cell phone use policy in schools, which helps drive their preferences. Teacher, student, parent, and administrator perceptions of student cell phone use in schools—will be further explored to help gather a well-rounded understanding of stakeholder opinion.

Teacher Perceptions. Teacher perceptions overall are found to vary on whether or not cell phones are disruptive in the classroom. Wikstrom et al. (2024) found in Sweden, they have "head teachers" who view this topic as polarizing for teachers but they are in opposition to the media that views the cell phone as a threat to schools. In this same study, teachers suggest that student cell phone use in the classroom poses a difficult challenge to increase their connection to students. Teachers had overall concerns that cell phones were a threat to social and disciplinary order in the classroom. However, despite this view, teachers were opposed to a complete classroom cell phone ban and preferred a lesser policy enactment instead (Wikstrom et al., 2024). When it comes to implementing cell phones as instructional tools, teachers are the best voice to consider the options. In a study conducted by Lang and Sorgo (2024), teachers shared a low interest in using cell phones as alternatives for questioning in formative assessments. Reasons for this could be due to the added planning and creation time associated with this task or even the enhanced opportunity for students to be on a platform that could lead to misbehavior that otherwise would not be present in the classroom. One outlier in this study was biology teachers. Their responses expressed a higher interest in cell phone use in class. This discrepancy shows the depth of the topic and brings to light the consideration of policies

by curriculum type. Krochinak et al. (2023) conducted a study to gather information on teacher perceptions and cell phone use in the classroom. When asked what cell phone apps students used, the most common answers were Google Classroom, Kahoot, Anatomy4D, Elements4D, Plickers, Quiver, and other educational apps. The use of these apps was focused on data storage, student tracking, pre and post-test uses, and presentation of information. The teacher's focus on app use was to ensure that the apps supported traditional and proven learning methods. The ease of use of the app was also a focus for teachers. Looking at it from the student's perspective, if the app is difficult to use it can lead to difficulty in gaining buy-in (Krochinak et al., 2023). Another focus for teachers is the relevance of the content. Teachers stressed the importance of the app content being relevant to the students. Customization of the app was also preferred, which included voiceovers and curriculum adjustments as deemed necessary (Krochinak et al., 2023). Classroom connection was a final teacher focus found in this study. This is about the app's ability to allow full-class participation, like Kahoot where a competition environment can be implemented (Krochinak et al., 2023). In another study with teachers, Aloteibi (2022) found that more teachers believe cell phones have a negative effect socially, psychologically, and on student learning. These results indicate overall that teachers are mixed in their perceptions of student cell phones. Their involvement in the management and implementation creates a challenging atmosphere that will remain a topic of conversation amongst teachers.

Student Perceptions. Student perception is important to take into account when talking about new implementation activities and technologies. Given that students are the focus and the primary beneficiaries, their input with regard to the technologies

themselves, expectations, and their general preferences is important. In a study conducted by Lang and Sorgo (2024), a small number of students expressed that they did not want to use cell phones in class compared to the majority that did. Stachowski et al. (2020) also found that students were more accepting of cell phone use in the classroom than teachers. Interestingly, students responded with stricter consequences for breaking cell phone policies than teachers. Students also viewed cell phone bans as more enforceable than other policies that might be in place. Wikstrom et al. (2024) found that when students were asked about policy creation with regard to cell phones in the classroom, their focus lay on gaining a sense of responsibility for one's learning, respecting the teacher's authority in the classroom, and being socially available and supportive of their classmates. Pauley (2015) conducted a study of 840 students in grades 9-12 on student perception of cell phone use in the classroom. The study found that more than 75% of students felt that cell phones were a useful educational tool. Additionally, about 80% of students indicated that their cell phones helped them complete assignments. Lastly, just 16% of students shared that cell phones were a distraction in a school setting. Krochinak (2023) conducted a study where students were to select the most important reason for having a cell phone in school. The top two answers were education and communication. Entertainment, photo/video, notes/reminders, and emergencies were additional positives of cell phone use. When students did have the opportunity to use cell phones in the classroom, they expressed that social competition was an external motivator. An example of this is earning points for tutorials or competitively beating a study streak. Students shared that this could be counterproductive if they fell too far in the game, which could swing their perception to

the negative. Academic progress was another external motivator such as time commitment improvements or grade improvements. Intangible rewards such as virtual badges, points, or coins were also motivating factors for students as they made students feel as if they were playing a video game. Despite some students enjoying these rewards, others preferred that teachers transfer those intangible rewards to tangible rewards such as bonus points, toys, and snacks. One agreeable aspect of the study amongst students is that they believed in order to be successful in using apps in class, students must have a level of internal motivation (Krochinak et al., 2023). Students seem overall relatively well-grounded in the pros and cons of cell phone use in the classroom. Most acknowledge the potential of distraction while also recognizing the positives of using cell phones as an engagement tool. Ultimately, it comes back to the school atmosphere to foster the engagement aspect of it.

Parent Perceptions. Lang and Sorgo (2024) expressed that parent perception is important to consider as they should be brought into the conversation given their interest in the potential benefits and concerns for their children's education. Kadvany (2019) shares insight into parental perceptions resulting from a study. The two main concerns that parents expressed are not being able to contact their child in the event of an emergency and not being able to reach their child at any point in time during the school day. EdChoice (2024) conducted a survey showing that 32% of parents are concerned about cyberbullying at their child's school. Additionally, 32% of parents also feel at least somewhat negatively about the impact of cell phones on their child's social-emotional development. Parents expressed more strongly their feelings toward their child being permitted to possess their phone in school with 67% in favor of it, and more specifically,

32% feel students should be permitted to possess them in the classroom. Lang and Sorgo (2024) found that parents were most receptive to students' active cell phone use and other technologies when it came to distance learning, particularly video conferencing. Parents vary in their overall perception of student cell phone use in schools. While most recognize the negative impact that it can have, oftentimes the desire to be able to communicate with their child in an emergency or throughout the day trumps the potential negative impact.

Administrator Perception. Administrators are in a position to be able to create cell phone policies and encourage their implementation. Toth (2022) conducted a study that found principals believe that student cell phone use impacts academic achievement and leads to multiple disciplinary incidents. Principals did not believe there was any association between student age or gender with regard to the negative effect on their academic achievement and disciplinary incidents. Furthermore, the surveyed principals felt that cell phones are addicting, distracting, and lead to cheating and harassment. As stated earlier, Obringer and Coffey (2007) polled high school principals regarding policies in their schools. At this time, 84% of principals responded that their schools have written cell phone use policies. When comparing both teacher and student policies in school, 78% of administrators permitted cell phone use by teachers while only 24% permitted cell phone use by students. Of the teachers that have cell phones available, only 6% of principals believe that they used their cell phones for school-related business. With regard to school safety, 73% of respondents believe that teachers having cell phones improved school safety. Principals perceive that 82% agree that parents are supportive of the school's overall cell phone policy. Lastly, 80% of principals shared that text

messaging features are a problem/potential problem during tests and examinations. Toth (2022) heard from principals that they believe a positive of student cell phone use is to help organize, improve academic engagement, access information, and develop 21st-century skills. Across the studies, administrator perceptions often align but are able to identify both positives and negatives of student cell phone use in schools. Administrators are in a unique position in this debate to bring about change in their schools. They have the authority, with school board support, to implement real policies with clear and concise consequences for violations of rules. With that being said, administrators often include stakeholders in decision-making, which creates different environments across school districts based on stakeholder perspectives and preferences.

Search and Seizure Court Rulings

Given the rise in cell phones, there undoubtedly come policies to help control as necessary. Cell phone confiscation is often a part of district policies for cell phone violations, and with that comes court rulings in regard to the legalities of search and seizure. Cell phone searches put districts in a position to be held liable for a violation of student rights and damages in the event they are caused. A case in Pennsylvania between Tunkhannock Area School District and the American Civil Liberties Union of Pennsylvania ended with the school district paying a student $33,000 to settle the case when the district was accused of illegally searching the student's cell phone. The school district had confiscated the cell phone—and while searching the cell phone found semi-nude images of the student. The district then disciplined the student as they deemed necessary in accordance with their district policies related to the images on the cell phone (ACLU of Pennsylvania, 2010). Due to those actions on behalf of the district, the student

sued, and the district settled the case. With lawsuits like this becoming more prevalent, it was only a matter of time before one reached the Supreme Court. When students legally challenge the search and seizure of their cell phone and its contents, the Fourth Amendment is usually cited.

The Fourth Amendment 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 be issued, 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. Const. amend. IV)

Myers (2024) conducted a study to review cell phone-related lawsuits in education and break down the parameters for school districts. To combat the rise in cell phone issues in schools, Georgia made a policy in 2010 prohibiting the use of cell phones at school during the school day. Myers (2024) cited the case of *Jackson v. McCurry* and found that there are legal gray areas around this topic that leave room for interpretation making this a difficult situation in the court of law. This gray area suggests the importance of school officials considering the necessity of the search and seizure related to school safety, policy, and respecting the privacy of students. A study by Nowak and Glenn (2017) analyzed and compiled similarly various cases and broke down the interpretations of the courts based on the results of those cases. A primary cause for schools to conduct a search is that there must be reasonable suspicion that will produce evidence of a violation of school policy or rules. It is when schools conduct searches that are considered unreasonable, that rulings begin to side in favor of the student and away from school

districts. An example of this occurred in a 2010 case between *J.W. v. Desoto County School District* when a middle school student's phone was seized for a basic classroom cell phone violation. However, the school officials went a step further to search the student's phone and found a photo of the student's friend holding a BB gun, as well as other gang-related photos. The student was suspended for the additional findings and ultimately sued the district. The court ruled in favor of the student due to the lack of justification that the school officials had for searching the student's cell phone due to a general classroom violation (Nowak & Glenn, 2017). This result shows the importance of the school districts focusing on the violations and the subsequent consequences and stopping there. If there is no primary reason to search the contents of a phone, schools should not put the district in a position to have to defend that action.

Key Findings in Literature

The first step when considering student cell phone use in school is to recognize that connections exist between student cell phone use and social, psychological, and learning effects among high school students. If we want to improve student academic achievement, it is necessary to focus on face-to-face social interactions between students and teachers and to decrease the use of cell phones among students (Aloteibi, 2022). Another necessity is to encourage students to be a part of setting boundaries giving them the tools to self-regulate cell phone usage. Aloteibi (2022) also states that school districts need to create effective and equitable cell phone policies and practices to ensure classrooms are conducive to learning. Pauley (2015) concludes that teachers should be the primary driver of integration in the classroom rather than mandated through school policy.

When it comes to cell phone perspectives among students, teachers, and parents, all three groups recognize that cell phones are a potential threat or challenge to the social order and student engagement in classroom learning. Teachers recognize the opportunity for enhanced engagement in the classroom if cell phones and media technology are properly utilized, but there is still concern that these activities are not implemented in a quality manner. However, all three groups have an open-minded attitude toward this task (Wikstrom et al., 2024). The way that students and teachers use cell phones differs in the manner that students often play games, access resources for school work, and use social media apps to keep in touch with their family and friends. Whereas teachers do not follow nearly as many social media websites and prefer face-to-face interactions (Botha & Matwadia, 2023). However as mentioned before, both groups agree that cell phones can be useful tools in the classroom if properly utilized. This agreement is predicated on the fact that cell phones are used to improve the quality of teaching and the quality of learning (Botha & Matwadia, 2023).

Wang et al. (2022) conducted a study that found that parental control affected student cell phone use. This further emphasizes the major role that parents play in student cell phone use and responsibility while using. According to this study, when the student's parents had no cell phone restrictions, students were more likely to spend time on entertainment, leisure, and on interpersonal communication rather than on educational tasks. As school districts continue to focus on what they can do in their buildings to help students navigate this cell phone era, the importance of cell phone use brings the focus back to the parents.

With regard to school policies, Wikstrom et al. (2024) found that when school districts create formal policies that ban or severely restrict student cell phone use in schools, it may be unnecessary and counterproductive. They also found that teachers should have the capacity to discuss with their students respectfully and cooperatively to develop a stance on cell phone use in the classroom to encourage buy-in. This is more effective for students in their late teens but can still be effective for younger students too. Additionally, when it comes to cell phone use in classrooms, younger students were found to be less distracted during lectures when they had access to their cell phones.

Along with student cell phone use comes policy enactment. Policies unfortunately are often reactive rather than proactive. Cyberbullying is a major reason that cell phone policies are emphasized across school districts around the country. The U.S. Department of Education (2019) reported that after surveying district principals, found that 65.8% of their schools had rules prohibiting student cell phone use. Counterintuitively, schools that did not permit student cell phone use in school reported a higher rate of cyberbullying at 16.4% compared to the 9.7% of schools that allowed student cell phone use in schools. These key findings result in school districts searching for answers in their own specific situations. School districts must consider their stakeholder perspectives and preferences in order to determine what is best for their students. The research shows that the impact of student cell phone use can vary based on student age, gender, socioeconomic status, etc. Because of this, there is no one-size-fits-all decision that school districts can make to help our youth.

Summary

As cell phones in school have become a popular topic worldwide, more quality research is being released each year. A major step is to educate and empower students with the self-regulatory skills to manage their digital multitasking given they are coming to school with various levels of cell phone restriction, if any, at home (Mrazek et al., 2021). Students also need to be taught how they can direct their attention and remove distracting features such as cell phones when completing their homework or other assignments. Cell phones provide access to the world in the student's eyes, so it is important that we teach them how to put it aside (Mrazek et al., 2021).

When it comes to cell phone policy, it is worthwhile to gather stakeholder input to understand what the local students, teachers, and parents perceive to take various accounts into consideration (Smale et al., 2021). With regard to specific cell phone policies in schools, schools should focus on both student and teacher uses to ensure there are benefits from their use and the negative impacts are kept to a minimum (Botha & Matwadia, 2023). A committee needs to be formed to consider specific aspects of a cell phone policy which should include various stakeholders (Smale et al., 2021).

Given the increase in cell phone use in schools, cell phone litigation is increasing as schools strive to find appropriate ways to respond to inappropriate use. Thus far, courts are often deferring to educators to determine policies to support school safety and security (Smale et al., 2021).

It is necessary for school districts to look at their infrastructure and stakeholders when determining what approach they should take in their school district regarding

student cell phone use in schools. There is no one-size-fits-all model, and input must be gathered from all stakeholders including teachers, students, parents, and administrators.

CHAPTER III

Methodology

Chapter II highlighted a study conducted by Rideout and Robb (2019) conducted a study that laid out the recent increase in cell phone ownership among youth. They reported that approximately 91% of adolescents have the ability to access a cell phone, while 84% have their own device. For 8-year-olds, 19% were reported to have a cell phone which is up from 11% in 2015. For youth between the ages of 8 and 12, cell phone ownership has risen from 24% in 2015 to 41% in 2019. Among 13- to 18-year-olds, this number has risen from 67% in 2015 to 84% in 2019. This increased ownership has created difficulties for school districts that are caught between working to implement cell phone usage in learning strategies and managing student discipline as a result. Further research is needed in this area as year-over-year the number of adolescents that have their own cell phones continues to increase. This increased ownership has impacted schools to create a landscape that many did not anticipate arising. The review of literature covered a wide range of topics related to student cell phone use in school such as student academic performance, student engagement, classroom use, student discipline, and social relationships. Additionally, it included mental health, cell phone reliance, nomophobia, cell phone policies, and perspectives from students, staff, parents, and administrators. Lastly, the literature review dove into legal issues including recent court rulings as the landscape of cell phones in school continues to evolve.

In this study, the researcher utilized a mixed-methods approach that implemented various data collection methods through questionnaires and a review of student disciplinary data from the two most recent school years. This study analyzed student,

staff, and parent perceptions of student cell phone use in schools. Additionally, the educational and disciplinary impact of classroom policy and the effect a cell phone restriction has on junior high students during class was analyzed. This data was gathered from student disciplinary data regarding incidents that involved cell phone use during the 2023-2024 school year in comparison with the 2024-2025 school year. The information collected in this action research project from the participants through the identified data collection tools will provide invaluable insights to school leaders and inform future practices connected to student cell phone use in school. After drawing conclusions based on the results of the action research project, recommendations will be made related to cell phone policies implemented at the building level.

The first section of this chapter focuses on the purpose of this research study with regard to the research questions. The second section of this chapter describes the setting and participants involved in the research study in order to establish the context and educational environment. The third section of this chapter will explain the research plan that connects the review of the literature with the methodology of cell phone research. The fourth section of this chapter will lay out the research design, methods, and data collection to give details on the important elements of the conducted research. Additionally, the timeline breakdown will be outlined along with the corresponding data tool used which includes surveys and student disciplinary data. The final section of this chapter will describe the validity of the research study to help provide information on the accuracy related to the research methods and how that corresponding data is triangulated to support the research project.

Purpose

The research from the literature review suggests that student cell phone possession is increasing at the highest rates in history and that the majority of secondary-aged students own a cell phone. Additionally, this increased ownership is escalating the distractions and stress levels that students experience not only in school but in their everyday life. There are still philosophical differences in opinions on the best ways to approach student cell phone use in schools: some encourage increased integration into the lessons and classrooms while others recommend a complete cell phone ban in schools, and many more with varying neutral positions. At West Shamokin JSHS, student cell phone use has led to a large number of potentially avoidable disciplinary referrals due to inappropriate cell phone use. These disciplinary incidents have resulted in both inclusionary and exclusionary disciplinary practices, such as loss of cell phone privileges, in-school suspensions, and out-of-school suspensions. Exclusionary disciplinary practices have a direct negative impact on students due to them missing school and potentially increasing negative behaviors due to loss of instructional time. Additionally, teachers often consider themselves "cell phone police" managing distractions in the classroom with students daily. The inconsistent expectations from teachers have at times created situations where when some teachers strive to implement stricter policies and they are sometimes met with student frustration and disrespect due to other teachers having more lenient policies. This does not differ from other varied classroom policies such as late work, timeliness, and classroom behavior, but it nonetheless is a topic important to students about their freedom of cell phone use and possession in the classroom.

This study is relevant to the researcher because Armstrong School District has explored policy and practice adjustments centered around student cell phone use in schools. Two years ago, a survey was sent out to gather stakeholder responses regarding various topics, one of which was student cell phone use and possession in schools. After receiving the results of that survey, the school district decided to keep policies and practices status quo and at the discretion of the building principals for what best fit the needs of their students. During this time, each of the 2 high schools and 6 elementary schools in the Armstrong School District have unique expectations for student cell phone use in schools. Some administrators have regular conversations about issues that arise and what actions to take thereafter. However, inconsistencies have surfaced as each school is in a different position to combat student cell phone use. This study will dive deeper into not only surveying feedback from parents but adding student and teacher feedback as well. Student disciplinary data will be added to a two-year comparison to analyze how cell phone practice among junior high students impacts this disciplinary data. The results of this study will give administrators and potentially upper administration and the school board concrete data to help drive decision-making, policy change, and in-school practice for several buildings in Armstrong School District.

The purpose of this mixed-methods study is to utilize qualitative student, parent, and teacher perception survey data along with a two-year comparison of quantitative student disciplinary data to provide recommendations based on the found impact that cell phone use in school has on secondary students. Through this study, teachers will receive further support and clear guidance to potentially be better prepared to structure their classroom regarding student cell phone possession. Data may reveal that certain cell

phone practices in the classroom are more relevant based on student grade level or in particular content areas.

To target and investigate both the perception and impact of student cell phone use in school, the following three research questions were developed utilizing mixed methods research to guide the research design and data collection procedures.

1. What are the perceptions of teachers, students, and parents on student cell phone use during the school day?
2. How does a teacher's classroom cell phone policy impact student disciplinary behavior?
3. What impact would a cell phone restriction in class have on junior high students?

The first research question focuses on specifically the perceptions of various stakeholders including teachers, students, and parents regarding their opinion on student cell phone use during school. Qualitative research data from individual teacher, student, and parent surveys will help target specific opinions regarding the extent to which they think cell phones should be both possessed and used in school during regular operational hours. The second research question focuses on how teacher classroom cell phone policy impacts student disciplinary behaviors. Qualitative data from the teacher, student, and parent surveys was used to gather perceptions on student behaviors in various classrooms with varying cell phone policies as well as what classroom policies teachers implement in their classrooms and the corresponding disciplinary incidents that coincide with those policies. Quantitative disciplinary data from the 2023-2024 and 2024-2025 school years was compared to identify the number and percentage breakdown of disciplinary referrals related to student cell phone use. Finally, the third research question focuses on the

impact that a cell phone restriction in class would have on 7th and 8th-grade students. This quantitative data includes 7th and 8th grade student disciplinary data from the 2023-2024 and 2024-2025 school years. The comparison of the two school years helped to compare how frequent cell phone-related referrals were between the two school years given that a new cell phone policy in 7th and 8th grade was implemented for the 2024-2025 school year. Additionally, qualitative data from the teacher, student, and parent surveys helped to identify perceptions based on cell phone restriction among 7th and 8th-grade students and corresponding disciplinary incidents.

Setting

This doctoral research study was conducted specifically at a rural junior-senior high school in Western Pennsylvania. West Shamokin JSHS is a public school located outside of the town of Rural Valley, Pennsylvania, in eastern Armstrong County. West Shamokin JSHS is one of two high schools in the Armstrong School District that is comprised of eight schools in total. Figure 1 shows the school enrollment at West Shamokin JSHS is approximately 558 students. Enrollment by gender breaks down as 50.4% of students are male while 49.6% of students are female. The primary race/ethnicity is white with 98.4% of students in that category. Other races/ethnicities within the school are 0.7% Hispanic, 0.5% Asian, 0.2% black, and 0.2% 2 or more races (Future Ready PA Index, 2025).

Figure 1

West Shamokin JSHS Demographics – Percent Enrollment by Race/Ethnicity

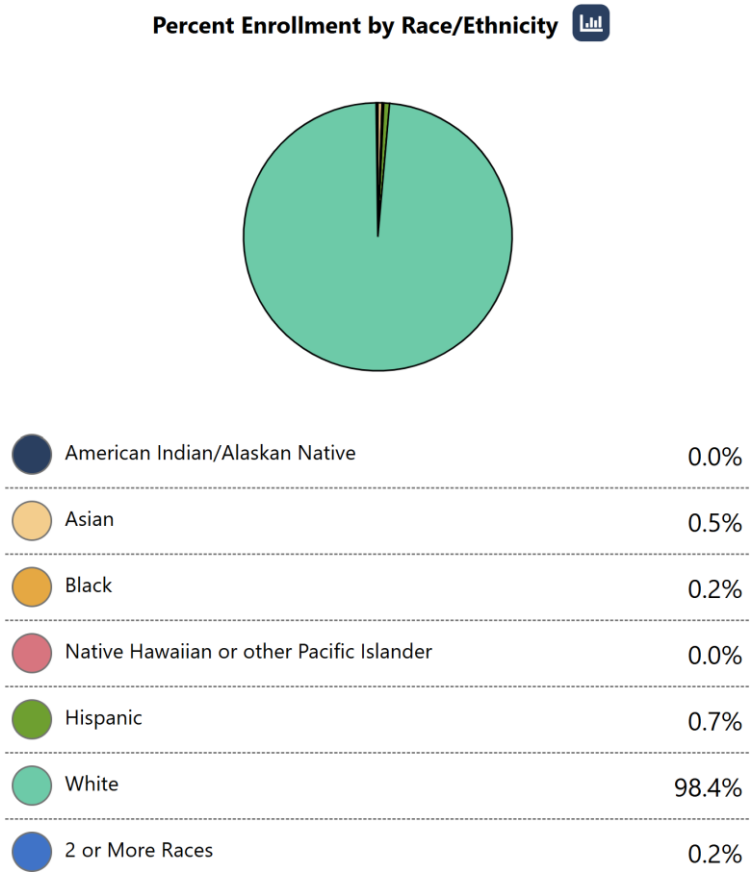
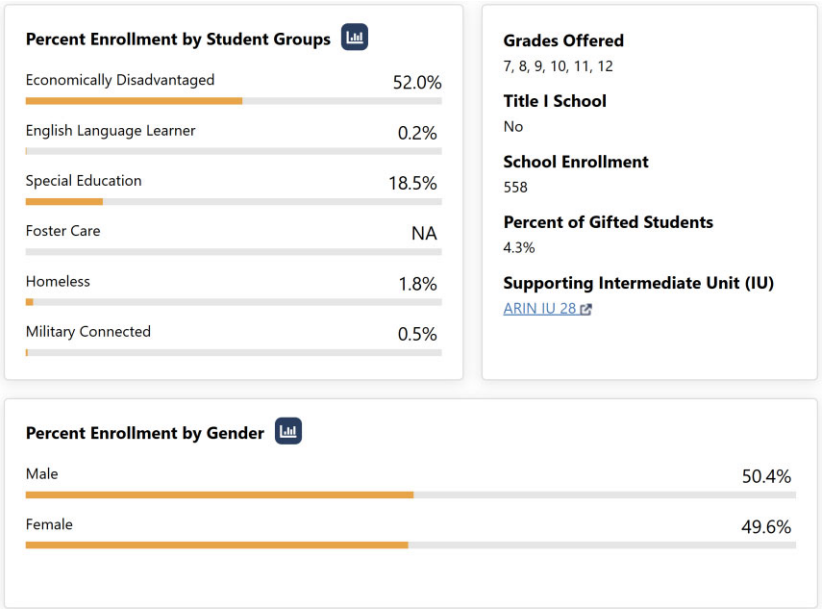


Figure 2 displays that West Shamokin JSHS offers grades 7 through 12 and is supported by Intermediate Unit 28. Of those students, 4.3% of students qualify as gifted, 52% are economically disadvantaged, 18.5% are special education, 1.8% are homeless, 0.5% military-connected, and 0.2% are English Language Learner (Future Ready PA Index, 2025).

Figure 2

West Shamokin JSHS Demographics – Grades Offered, Title 1, Enrollment, Intermediate Unit, and Percent Enrollment by Student Groups, Gender, and Gifted



As a whole for Armstrong School District in which West Shamokin JSHS is a member school, there are eight schools in total with two being junior senior high schools along with 6 elementary schools. The overall district enrollment is approximately 4,534 students that span approximately 444.17 square miles, which makes it about the 4th largest school district by land area geographically in Pennsylvania. There are approximately 184 students enrolled in charter schools outside of Armstrong School District and 452 students enrolled at the partnering career and technical center, which is Lenape Tech. In Armstrong School District, 55.7% of students are economically disadvantaged while 20.5% of students qualify for special education services. 0.2% of students are English Language Learners (ELL), 2.3% are homeless, and 0.4% military military-connected. The supporting intermediate unit is ARIN Intermediate Unit 28 (Future Ready PA Index, 2025).

Participants

Participants in the study included all general education teachers, special education teachers, students, and parents of those students at West Shamokin JSHS in grades 7-12. This overall group potentially included 46 general education teachers, 7 special education teachers, approximately 558 students, and their parents. All of the said participants were invited to anonymously participate in this research study. Those recipients of the surveys who did not want to participate simply did not complete the survey when it was administered. Parents who wanted to opt their child out of the survey without the opportunity to complete it or exposure to the survey provided writing the student's name to the researcher, and it was ensured that the student was not sent the survey and also was not present at the time that students had the opportunity to complete the survey. There was one parent who chose this route to opt their child out of the study. At the top of each teacher, student, and parent survey, participants were required to read an informed consent notification and select a checkbox that they agreed with all of the said informed consent information. Failure to do so would prohibit the participant from submitting the survey and the corresponding data would be absent from the survey results. In total, 43 of the 46 (93.5%) general education teachers, 4 of 7 (57.1%) special education teachers, 404 of 558 (72.4%) students, and 205 parents responded to their respective surveys. The researcher desired to include all of these stakeholders to ensure that perceptions were gathered from various viewpoints to gain a holistic view of student cell phone use in schools.

Research Plan

Given the literature review, it is evident that the impact and school district response to student cell phone use in schools is a fluid situation as more research is provided. Throughout just the last year, there have been new teams of parents, teachers, administrators, and even students speaking out about the use of cell phones in schools and the impact it is having on student learning and school culture. The research plan identified various forms of qualitative and quantitative data to collect to provide West Shamokin JSHS and Armstrong School District with recommendations to navigate the educational and disciplinary challenges that student cell phone use in school presents whether it is increased implementation in the classroom, a complete ban, or a combination of efforts that fall in between.

The research plan process began on June 10, 2024. At this time, the researcher presented the proposed research project at the school board meeting to the board, administration, and any public viewers. The corresponding proposal PowerPoint was posted on the school board minutes under the Information Folder for a minimum of 30 days to permit ample time for stakeholders to view and express any concerns about the project. At the following school board meeting on July 18, 2024, the Armstrong School District school board and superintendent unanimously approved permission for the researcher to conduct the research project within the school district. After the said meeting, the researcher received an official letter from the Assistant Superintendent of Armstrong School District granting permission to conduct the research project in Armstrong School District (Appendix A). On September 20, 2024, the researcher

received official approval from the Pennsylvania Western University Institutional Review Board to proceed with the research project (Appendix B).

Qualitative data collection began on December 3, 2024, and continued for one week through December 10, 2024. This inquiry data was collected using a Google Form shared with West Shamokin students in grades 7-12 to gather their perceptions on their personal cell phone use during school, the impact of their cell phone use during school, other student cell phone use during school, teacher classroom policies, and their personal preferences for a cell phone policy at West Shamokin JSHS. Survey questions were structured in a way that used Likert-scale response options. The survey included informed consent for the participants to indicate their agreement before submission of their responses. Students had the opportunity to opt-out on their own as well as have their parents provide an opt-out on their behalf. Students were provided with the survey and time to complete it during their homeroom period at the start of their school day (Appendix C).

Another qualitative data collection piece began on November 6, 2024, and continued through December 6, 2024. This inquiry data was collected from West Shamokin JSHS general education and special education teachers to gather input on adjustments made in individual classroom cell phone policy from the previous school year to the current school year, their perceived academic and disciplinary impacts of student cell phone use in schools, and their preference for district and school-wide cell phone policies. Inquiry data was collected using a Google Form for participants to read the informed consent, indicate their agreement, and provide their responses to various questions. Survey questions were structured in a way that used Likert-scale response

options (Appendix D). A reminder email was sent to teachers one week before the survey was set to close to potentially increase the final number of participants.

A final qualitative data collection piece began on November 1, 2024, and continued through December 2, 2024, with a Google form survey to parents of students in grades 7-12 who attend West Shamokin JSHS. Participants were required to review the informed consent and indicate their agreement prior to submission of their responses. Inquiry data was collected on the perceptions of student cell phone use during school hours and the corresponding frequency, impact, and personal preferences. Survey questions were structured in a way that used Likert-scale response options. Participants were required to check off the disclaimer at the top to acknowledge that all of the collected information would be anonymous (Appendix E). Again, a reminder email was sent to parents one week before the survey was set to close to potentially increase the final number of participants.

The final data collection method was quantitative and gathered and compared student disciplinary data between the 2023-2024 and 2024-2025 school years about the relation of cell phone use within the referral. The data is housed in the student information system, Skyward, that West Shamokin JSHS utilizes to enter this data. Names were omitted from this data and were not connected to student responses to the cell phone survey particularly due to the anonymity of the survey responses and the disciplinary data. This data did however include for each referral the student grade, infraction type, and the specific cell phone referral category.

Research Methods & Data Collection

This research project utilized a mixed methods data collection method exploring both qualitative and quantitative data points. A trend analysis was utilized to compare responses and disciplinary data to determine the actual impact that student cell phone use has in school. The collected data will be used to address the three research questions in their entirety and make connections where the data suggests.

A quantitative data collection piece was gathered by comparing student disciplinary data from the 2023-2024 school year with the 2024-2025 school year disciplinary data regarding incidents involving student cell phone use. There are four categories that disciplinary actions can fall into: cell phone used inside the classroom (CPIC), cell phone use inside of school but outside of the classroom (CPOC), cell phone outside of school but the incident occurred as a result inside of school (CPOS), or cell phone not involved in the incident (CPNI). Each disciplinary referral incident was labeled with one of these four acronyms to track throughout and at the end of the school year. To help with the comparison, a junior high classroom policy for 7th and 8th graders has been implemented for the 2024-2025 school year which limits student cell phone possession during class time in an effort to gather data to determine if incidents increase or decrease due to this enhanced measure.

The research project plan and data collection timeline are outlined in Table 1 below. Data from the three qualitative surveys were used to directly address the first research question which states, “What are the perceptions of teachers, students, and parents on student cell phone use during the school day?” The results of the surveys will be given to each stakeholder group about the research question. The second research

question which states "How does teacher classroom cell phone policy impact student disciplinary behavior?" will be addressed by using both the three qualitative surveys as well as the quantitative disciplinary referral incident data. The survey responses will help to analyze teacher classroom policies and how often they address cell phone issues in class with information gathered from both teachers and students. Additionally, the quantitative disciplinary referral data helped to provide insight as to the change or lack thereof from the 2023-2024 school year to the 2024-2025 school year with regard to the number of referrals overall and cell phone related in junior high classrooms given the policy change. The final research question "What impact would a cell phone restriction in class have for junior high students?" was similarly analyzed like the second research question with both the qualitative and quantitative data. The qualitative survey responses helped to analyze the perceived impact that the junior high cell phone classroom restriction had on both students and teachers. The quantitative disciplinary data that was collected from the 2023-2024 and 2024-2025 school years categorized by cell phone codes for junior high students will give concrete information regarding the cell phone restriction impact with regard to disciplinary data. All of these data points together gave an enhanced picture of the actual impact that student cell phone use during school has at West Shamokin JSHS.

Table 1

Research Project Plan & Data Collection Timeline

Research Questions	Data Sources	Data Collection Date
What are the perceptions of teachers, students, and parents regarding student cell phone use during the school day?	Surveys – Distributed to all general education teachers, special education teachers, students in grades 7-12, and parents of students in grades 7-12. An analysis of the three Google surveys will yield an answer to this question.	November/December 2024
How does a teacher's classroom cell phone policy impact student disciplinary behavior?	Surveys – Distributed to all general education teachers, special education teachers, students in grades 7-12, and parents of students in grades 7-12. Data – Student disciplinary data collected from the Skyward student information system from the 2023-2024 and 2024-2025 school years. Each student referral will be categorized by one of four cell phone categories in order to determine its relevance.	November/December 2024 August 2023 – May 2025
What impact would a cell phone restriction in class have on junior high students?	Surveys – Distributed to all general education teachers, special education teachers, students in grades 7-12, and parents of students in grades 7-12. Data – Student disciplinary data collected from the Skyward student information system from the 2023-2024 and 2024-2025 school years. Each student referral will be categorized by one of four cell phone categories in order to determine its relevance.	Administer November/December 2024 August 2023 – May 2025

Note. This summary data was obtained from the researcher's Data Collection Timeline.

The research plan has few fiscal implications. In order for the study to be conducted, no costs are being incurred by Armstrong School District or West Shamokin

JSHS. Direct costs to conduct the study will utilize existing platforms and materials. Armstrong School District already has Google licenses for all students and staff. This platform was utilized to create and administer the three surveys to address the qualitative data collection. The student information system, Skyward, was used to gather and organize student disciplinary data that will be used as the quantitative data collection. Each of the classrooms at West Shamokin JSHS is already provided with a cell phone caddy, which was utilized in the junior high classrooms throughout this project. There are enough that no extra caddies were purchased for this research project.

Based on the findings, conclusions, and recommendations, a possibility does exist that additional indirect fiscal responsibilities may be connected to supplies to limit student cell phone use or for programs for staff to use to enhance cell phone use in the classroom. If the junior high cell phone restriction is found to be beneficial with regard to student academic and disciplinary experiences, West Shamokin JSHS and the Armstrong School District could look to expand their efforts in various ways. One way would necessitate a district-wide policy that collects cell phones as students enter the building. This would be done by using materials such as Yondr pouches that other school districts utilize. A second option for cell phone collection is to provide each classroom with a lock box that students place their phone inside and it remains there during the entire school day. These materials would need to be purchased to execute these efforts. As mentioned previously, each classroom is already equipped with a cell phone caddy, but general wear and tear on these do occur over the course of a school year. In time, it will be necessary to replace those that break or show wear beyond safe use.

Validity

Validity is a crucial aspect of research for the researcher to consider when planning, throughout, and in reflection on the research study.

> As with any approach to conducting educational research, the researcher must always ensure that the measurement techniques result in valid indicators of the variables, as well as valid overall research conclusions and inferences. As always, the researcher should be concerned with the study's internal validity, external validity, and credibility and trustworthiness. (Mertler, 2022, p. 150)

When considering these four aforementioned terms of internal validity, external validity, credibility, and trustworthiness, all are considered threats to validity in mixed-methods research.

Quantitative data was collected using student school disciplinary data for both the 2023-2024 school year and the 2024-2025 school year. This data was chosen to be used to directly compare the official disciplinary impact of student cell phone use in school between the two most recent school years. This data helps to support both the second and third research questions that address teacher classroom policy impact on student disciplinary incidents as well as the impact of a cell phone restriction for junior high students. To ensure validity, this data does not take into account the specific level of discipline that was assigned by the assistant principal but simply that there indeed was cell phone involvement in the discipline in general.

Qualitative data was collected through student, teacher, and parent surveys distributed in November and December of 2024. This time frame allowed for nearly 2 to 3 months of school to pass to give the teachers the opportunity to establish their classroom policies, for students to learn and work through those expectations, and for stakeholders to develop their perceptions of student cell phone use in school. The data gained helps to support all three research questions. The first research question is a direct beneficiary of this qualitative data given the results being perceptions from students, teachers, and parents. The second research question would benefit from learning what teacher classroom policies are and how often incidents occur given those policies. Lastly, the third research question would be addressed to understand perceptions of how a cell phone restriction in junior high would directly impact student disciplinary incidents. Given the structure of this research study, results are transferable to another district given that students are in a similar setting and demographics are comparable. Any founded results would be expected to be applicable and corresponding recommendations could be similarly made.

Mertler (2022) describes the importance of using multiple methods and sources of data collection to enhance the validity of research findings, known as triangulation. Data was triangulated during this research project to ensure that a holistic view of the study topic would explored and supported in various ways. By bringing together the qualitative data from the three surveys in addition to the quantitative data from the two-year comparison of disciplinary incidents, the triangulation of data resulted in a higher level of creditability of the results and verified that the project is credible, transferable, and dependable.

Summary

The purpose of this chapter was to understand the purpose of the study and research plan, to break down the methods and data collection, and to recognize the participants and setting in which the study was conducted. The qualitative data used in this study was through student, teacher, and parent surveys. The quantitative data used in this student was through student disciplinary referrals. By utilizing various forms of inquiry data, the study yielded relevant results to inform recommendations and conclusions regarding the impact of student cell phone use in school. In Chapter IV, Data Analysis and Results, the mixed-methods data results associated with the three research questions will be presented.

CHAPTER IV

Data Analysis and Results

The objective of this Doctoral Capstone project is to evaluate the educational and disciplinary impacts of student cell phone use at West Shamokin JSHS. The data analysis and results were guided and aligned with the following research questions:

1. What are the perceptions of teachers, students, and parents on student cell phone use during the school day?

2. How does a teacher's classroom cell phone policy impact student disciplinary behavior?

3. What impact would a cell phone restriction in class have on junior high students?

The study analyzed qualitative student, teacher, and parent survey data as well as quantitative student disciplinary data over the last two school years. Perception data was collected through a Google Form survey of students (Appendix C), parents (Appendix D), and teachers (Appendix E) from November 2024 through December 2024. This data was collected to be analyzed to help determine the impact that teacher classroom cell phone policy has on students. Additionally, quantitative student disciplinary data obtained from the Armstrong School District's student information system (SIS) and compared from the last two school years will help assess the disciplinary impact that student cell phone use has in coordination with the junior high classroom cell phone restriction. Both data collection sets were aligned with the research questions for analysis and results.

Data Analysis

The data analysis was conducted using a mixed-methods approach, including both qualitative and quantitative data. Qualitative data was collected through different Google Form surveys that were distributed to West Shamokin JSHS students, staff, and parents. The goal of the surveys was to obtain teacher's classroom cell phone policies as well as perception data related to the impacts of student cell phone use in school. The student survey consisted of 27 questions and was optional and anonymous. Students were given time during homeroom at the beginning of the school day to complete the survey. The staff survey consisted of 17 questions and was optional and anonymous. Like students, staff were given time during homeroom at the beginning of the school day to complete the survey. The final survey for parents and guardians to complete consisted of 16 questions and was optional and anonymous. All of the surveys contained multiple-choice, checklists, Likert-scale, and open-ended questions. The student survey was distributed to approximately 518 students and received 405 responses yielding a 78% response rate. The teacher survey was distributed to 56 teachers receiving 48 responses in total yielding an 86% response rate. The parent survey was distributed to the email addresses on file for the approximate 518 student primary family members. The parent survey received 205 responses in total. Parents have the option to complete one survey for all of their high school-aged students or complete one for each student individually if their answers vary by student.

Given that the surveys were administered through Google Forms, responses were organized by responses. The open-ended responses were summarized by key points and organized into a coding scheme. Mertler (2022) encourages researchers to make note of

each category as it appears and code the narrative data accordingly. Inductive analysis is considered the process of trying to reduce the volume of collected information and organizing it into important patterns or themes. With the amount of data collected through the surveys, inductive analysis was necessary. This compilation and process assisted in identifying the key and most common points that respondents expressed.

Quantitative data was collected from the Armstrong School District's student information system (SIS) from the 2023-2024 and 2024-2025 school years. This data comprised student disciplinary data attributed to one of four different categories of cell phone use. These four categories are cell phone not involved (CPNI), cell phone inside of class (CPIC), cell phone inside of school but outside of class (CPOC), and cell phone outside of school (CPOS). Student names were removed from the data set, but student grade, infraction type, and level of cell phone involvement were included to analyze the disciplinary impact that student cell phone use has in coordination with teacher-classroom policy, specifically the junior high classroom cell phone restriction. Given the intentional cell phone policy change for junior high students, an experimental design was created to gather relevant research results. The desired outcome for this is to determine if requiring junior high students to place their cell phones in a wall caddy upon entry to class has any disciplinary impact. Additionally, inductive analysis was utilized when gathering and analyzing the student disciplinary data from the 2023-2024 and 2024-2025 school years given classroom policy changes. The combination of these strategies provided the necessary information to answer each of the three research questions.

Qualitative Results

The qualitative analysis results of our student, staff, and parent perceptions of cell phone use in school are depicted below in Table 2 through Table 43. Student responses are found in Table 2 through Table 16, teacher responses are in Table 17 through 30, and parents in Table 31 through 37.

Table 2 depicts the grades that student respondents were enrolled in. Traditionally, the enrollment in grades 10, 11, and 12 is lower due to the number of students enrolled at Lenape Technical School. Based on the results, students in grades 7 through 9 resulted in nearly 69% of the total survey responses.

Table 2

Student Survey Responses – Question #2

Question #2	What grade are you in?					
Total Responses	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Grade 12**
405	94 23.2%	89 22.0%	96 23.7%	40 9.9%	46 11.3%	40 9.9%

In Table 3, the data from questions #3 and #4 are presented. Questions #3 and #4 show that 93.8% of students bring their cell phones to school, and nearly 93% take their cell phones to their classes. This gives clarity showing that nearly all of the students that bring a cell phone to school do not leave it in their locker or somewhere else during the school day.

Table 3

Student Survey Responses – Questions #3 and #4

Question #3	Do you bring a cell phone to school?	
Total Responses	**Yes**	**No**
405	380 93.8%	25 6.2%
Question #4	Do you bring a cell phone to your classes?	
Total Responses	**Yes**	**No**
405	375 92.6%	30 7.4%

Table 4 includes questions #5 through #10 which apply to student use of cell phones during school hours. Of the student respondents, 88% replied that they use cell phone apps during the school day outside of class. When asked how many times during the school day, the majority fell between 1-5 times with 3-5 times being the highest number of respondents. When the focus shifted to during class time, 50% of students responded that they use educational apps during class time and most often 1-2 times at 24%. Students indicated that nearly 34% of them use social media or gaming apps during class time with 1-2 times being the most common at 19%.

Table 4

Student Survey Responses – Questions #5, #6, #7, #8, #9, and #10

Question #5	Do you use apps on your cell phone during the school day outside of class?				
Total Responses	**Yes**		**No**		
404	357 88.4%		47 11.6%		
Question #6	If you use apps on your cell phone outside of class, how many times during the school day?				
Total Responses	**0 – I do not use apps on my cell phone outside of class**	**1-2**	**3-5**	**6-9**	**10+**
402	40 10%	106 26.4%	134 33.3%	63 15.7%	59 14.7%
Question #7	Do you use educational apps on your cell phone during class time? (Google Suite, Canvas, Clever, Quizlet, etc.)				
Total Responses	**Yes**		**No**		
401	201 50.1%		200 49.9%		
Question #8	If you use educational apps on your cell phone during class time, how many times?				
Total Responses	**0 – I do not use apps on my cell phone outside of class**	**1-2**	**3-5**	**6-9**	**10+**
401	211 52.6%	98 24.4%	66 16.5%	21 5.2%	5 1.2%
Question #9	Do you use social media and/or gaming apps on your cell phone during class time? (Instagram, TikTok, Snapchat, X/Twitter, etc.)				
Total Responses	**Yes**		**No**		
403	135 33.5%		268 66.5%		
Question #10	If you use social media and/or gaming apps on your cell phone during class time, how many times?				
Total Responses	**0 – I do not use apps on my cell phone outside of class**	**1-2**	**3-5**	**6-9**	**10+**
399	259 64.9%	76 19.0%	34 8.5%	20 5.0%	10 2.5%

Table 5 identifies the prevalence of the various classroom cell phone policies that students are expected to abide by. Question #11 shows that the majority of students are

required to put their cell phones in the cell phone caddy on the wall in their classroom in the majority of their classes. The most common response was 8 periods with nearly 29% of the responses along with 7 periods at about 13% of responses. This means that roughly 41% of students in total are required to put their cell phones in the cell phone caddy majority of their school day. The next most common grouping was about 22% of students saying 1-2 periods of the day they are required to use the wall caddy. In question #12, students were asked how many classes during their school day were permitted to have their cell phones on their persons but not in sight. The majority of responses indicated a fewer number of periods during the day. The most common response was 0 periods yielding 32% followed by 17% of students being permitted in 1 period. Over 61% of students fell in the 0-2 period range. In question #13, 48% of students indicated that they are not permitted to have their cell phones out in sight in any of their classes. This is followed by 14% of students permitted in one class and 13% of students in two classes.

Table 5

Student Survey Responses – Questions #11, #12, and #13

Question #11	Of your 8 periods during the school day, how many periods are you required to place your phone in a cell phone caddy on the wall when you enter the classroom?								
Responses	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
402	30 7.5%	44 10.9%	44 10.9%	28 7.0%	46 11.4%	28 7.0%	16 4.0%	51 12.7%	115 28.6%
Question #12	Of your 8 periods during the school day, how many periods are you permitted to have your cell phone on you or in your bag but not permitted to have in sight (not required to be in the cell phone caddy)?								
Responses	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
398	127 31.9%	68 17.1%	50 12.6%	52 13.1%	40 10.1%	11 2.8%	24 6.0%	15 3.8%	11 2.8%
Question #13	Of your 8 periods during the school day, how many periods are you permitted to have your cell phone on your desk or accessible as needed?								
Responses	0	1	2	3	4	5	6	7	8
402	193 48.0%	58 14.4%	52 12.9%	20 5.0%	25 6.2%	12 3.0%	23 5.7%	14 3.5%	5 1.2%

Table 6 assessed what specific apps or features students access on their cell phones during school hours. The highest response was messaging with nearly 79% of respondents, followed by 56% for e-hall pass, 55% for social media, 37% for email, 37% for gaming, and 22% for sending pictures or videos.

Table 6

Student Survey Responses – Question #14

Question #14	Which of the following activities do you use your cell phone for during school hours? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	390	
E-Hall pass	217	55.6%
Educational apps and purposes	156	40.0%
Email	145	37.2%
Gaming	144	36.9%
Messaging	307	78.7%
Sending pictures/videos	85	21.8%
Social media	213	54.6%
Video streaming	34	8.7%
Web browsing	103	26.4%
Other – I don't own a cell phone	5	1.3%
Other	43	11.0%
Other Comments	Skyward, Canvas, music, calculator, Remind messenger for sports, no phone, online shopping	

Table 7 illustrates the specific apps that students use during school hours. The most common app used is Snapchat with 62%, followed by 58% for texting, 50% for TikTok, 46% for Canvas, 33% for email, 30% for Instagram, 29% for internet search, and 26% for YouTube. All other responses fell under 25% of respondents.

Table 7

Student Survey Responses – Question #15

Question #15	When using your cell phone in school, what apps or websites do you use? (For classroom or free time, check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	392	
Canvas	180	45.9%
Club/Team communication apps (GameChanger, Remind, SportsYou, TeamSnap, etc.)	105	26.8%
Facebook	85	21.7%
Google Classroom	75	19.1%
Google Docs	95	24.2%
Google Email	130	33.2%
Google Sheets	35	8.9%
Google Slides	66	16.8%
Instagram	118	30.1%
Internet Search	117	29.8%
Snapchat	244	62.2%
Texting	228	58.2%
TikTok	196	50.0%
X (Twitter)	17	4.3%
YouTube	100	25.5%
Other – I don't own a cell phone	5	1.3%
Other	58	14.8%
Other Comments	Spotify, Roblox, Discord, ESPN, Tumblr, Pinterest, Duolingo, Games	

Table 8 identifies the educational cell phone features that students find most useful. The calculator is overwhelmingly the most popular feature at 82%, followed by Canvas at 53% which is the online classroom platform, 42% e-hall pass, 38% classroom games, 33% note-taking, and 31% internet search, 30% using the organizer, planner, and calendar feature, and 29% using the G-Suite apps. All other responses yielded less than 25% of responses.

Table 8

Student Survey Responses – Question #16

Question #16	Which cell phone features do you find most useful for educational purposes? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	394	
Calculator	323	82.0%
Camera	96	24.4%
Canvas	207	52.5%
Classroom games (Kahoot, Quizlet, BlookIt)	148	37.6%
E-Hall Pass	166	42.1%
Email	121	30.7%
Facebook	14	3.6%
G Suite apps (Docs, Slides, Sheets, Classroom, etc.)	114	28.9%
Instagram	12	3.0%
Internet Search	123	31.2%
Note Taking	128	32.5%
Organizer / Planner / Calendar	118	29.9%
Snapchat	33	8.4%
TikTok	26	6.6%
YouTube / Other Video Streaming	35	8.9%
X (Twitter)	1	0.3%
Other – I don't own a cell phone	5	1.3%
Other	16	4.1%
Other Comments	Reminders apps, clock app, ESPN, Spotify	

Table 9 illustrates that nearly 65% of students find cell phones helpful for studying and doing school work during school hours.

Table 9

Student Survey Responses – Question #17

Question #17	Do you find cell phones helpful for studying and/or school work during school hours?		
Total Responses	**Yes**	**No**	**Not Sure**
400	259 64.7%	48 12.0%	93 23.3%

Table 10 covers questions #18 and #19, which ask students about the impact of cell phones in school on their academic performance and disciplinary history. Nearly 80% of students feel that cell phones in school have a strong positive or positive impact on their academic performance. Similarly, nearly 70% of students indicate that cell phones in school have a strong positive or positive impact on their disciplinary history implying that cell phone possession helps to reduce their number of disciplinary incidents.

Table 10

Student Survey Responses – Questions #18 and #19

Question #18	What impact has cell phone usage in school had on your academic performance?			
Total Responses	**Strong Positive**	**Positive**	**Negative**	**Strong Negative**
388	42 10.8%	268 69.1%	68 17.5%	10 2.6%
Question #19	What impact has cell phone usage in school had on your disciplinary history?			
Total Responses	**Strong Positive**	**Positive**	**Negative**	**Strong Negative**
382	72 18.8%	192 50.3%	76 19.9%	42 11.0%

Table 11 addresses student perceptions regarding how often students are distracted by either their own or someone else's cell phone in class. Just under 75% of students indicated that they are never distracted by their own cell phone in class with about 25% stating they are sometimes distracted. Similarly, 77% of students report that they are never distracted by someone else's cell phone in class and just over 20% indicated that they are sometimes distracted. Given the high number of students who are not permitted cell phones during class time, the high percentages for the never category might reinforce that practice.

Table 11

Student Survey Responses – Questions #20 and #21

Question #20	How often do you get distracted by your own cell phone in class?		
Total Responses	**Often**	**Sometimes**	**Never**
399	2 0.5%	99 24.8%	298 74.7%
Question #21	How often do you get distracted by someone else's cell phone use in class?		
Total Responses	**Often**	**Sometimes**	**Never**
401	10 2.5%	82 20.4%	309 77.1%

Table 12 indicates what situations students find cell phone usage distracting. The most popular answer at 42% was that cell phones never distract them. During class, lectures were second with 32%, followed by while studying or completing work at 31%, during exams with 29%, and lastly 16% during social interactions.

Table 12

Student Survey Responses – Question #22

Question #22	In which situations do you feel cell phone usage is distracting? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	396	
During class lectures	127	32.1%
While studying and/or completing work	123	31.1%
During exams	116	29.3%
In social interactions	64	16.2%
Cell phones never distract me	167	42.2%

Table 13 illustrates the perceived negative effects that students have experienced due to cell phone use during school hours. The most common response is that 54.2% of students do not feel they have experienced any negative effects using their cell phones during school hours. Procrastination was the second highest response with 23% of students, followed by 14% posture issues, 9.7% eye strain, 9.2% conflict with peers, 8.4% decreased social interaction, 7.7% reduced physical activity, and 5.4% increased level of stress.

Table 13

Student Survey Responses – Question #23

Question #23	Which overall negative effects have you experienced due to cell phone usage during school hours? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	391	
Procrastination	90	23.0%
Eye strain	38	9.7%
Increased level of stress	21	5.4%
Posture issues	54	13.8%
Reduced physical activity	30	7.7%
Decreased social interaction	33	8.4%
Conflict with peers due to cell phone interaction (texting, social media, etc.)	36	9.2%
I haven't experienced negative effects	212	54.2%
Other	6	1.5%
Other Comments	I don't use my phone during school, I don't own a phone, none	

Table 14 shows that 60% of students engage in face-to-face conversations more often than communicating using a cell phone. Just over 34% of students responded that their communication is an equal amount between the two choices, and nearly 6% that their communications are more often through their cell phone.

Table 14

Student Survey Responses – Question #24

Question #24	With peers, how often do you engage in face-to-face conversations compared to communicating on cell phones during school hours?		
Total Responses	**More face-to-face conversations**	**Equal Amount**	**More cell phone conversations**
395	238 60.2%	135 34.2%	22 5.6%

Table 15 analyzes the specific subjects that students find cell phone usage beneficial to study during school hours. The overwhelming first choice for students was math at 63%, followed by science at 28%, and technical education courses at 27%. A few courses were similar in responses with 23% English, 22% art, and 21% family consumer science. All other subjects were under 20% of responses.

Table 15

Student Survey Responses – Question #25

Question #25	What subjects or areas of study during school hours do you find cell phone usage most beneficial? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	362	
Art	78	21.5%
English	82	22.7%
Family Consumer Science	77	21.3%
Foreign Language	55	15.2%
Math	228	63.0%
Music	47	13.0%
Phys Ed / Health	36	9.9%
Science	101	27.9%
Social Studies	60	16.6%
Tech Ed (Woodshop, Electronics, Computer Science, Business Classes, etc.)	99	27.3%

Table 16 shows what students preferred as their cell phone policy in school and their classes. Overall, 51% of students feel they should be permitted to have their cell phones on their persons, but out of sight in their backpacks or pocket during class. The second most common answer was an open policy for students to have their cell phone on their desk in sight with 33% of the overall responses. Classroom restriction was the third option at 13%, which consists of students being permitted to bring their cell phone in

class, but it must remain in a safe place out of sight during class such as a cell phone caddy on the wall. Lastly, the classroom ban that permits students to have cell phones in their lockers but not in class and a school ban that does not permit students to possess their cell phone at all in school were very low choices with 1% and 1.8% respectively.

Table 16

Student Survey Responses – Question #26

Question #26	What would your preferred cell phone policy be for you in school and your classes?	
	Number of Responses	**Percentage of Responses**
Total Responses	400	
Open – Permitted on the student's desk in sight	132	33.0%
On Persons – Permitted on the student/in backpack but away out of sight during class	204	51.0%
Classroom Restriction – Permitted in class but in a safe place out of sight during class	53	13.3%
Classroom Ban – Permitted in the locker but not in class	4	1.0%
School Ban – Not permitted at school	7	1.8%

Question #27 on the student survey provided students the opportunity to add any additional comments that they would like to include in their responses. In total, 121 of 405 students took advantage of this opportunity to provide additional information. To summarize many of these responses, many students entered “none” or something similar. Of the responses with comments or recommendations in favor of students keeping cell phones, the most common response was the stance that cell phones shouldn't be banned from school but rather increased discipline for those students who do not follow the expectations for cell phone use. One student expressed "I believe the kids that cannot

follow the rules should get punished for it, but I think the kids that do follow the rules should not be punished for their classmate's poor decisions." Additionally, several students felt that they agreed cell phones should not be used during class time but are still able to remain on the student for emergency access if needed. One student responded "If you guys take our phone it's like shutting us out from everyone in our life besides other kids for half of our day every day of the school week. Like what if there's an emergency? We won't know until the school is over. Or with the rising number of school shootings, you know I'd want to be able to text my mom." Numerous students like to use their cell phones to listen to music. A couple of shared quotes include "I like using my phone mainly for listening to music so I find it very beneficial in that aspect during school hours" and "I use my cell phone when I listen to music and educational services. I just change a song on YouTube music when I am permitted/allowed to listen to music." Other students feel that cell phones should be available to use during the end of class if permitted when they are finished with their classwork and at lunch or in areas outside of class. One respondent said, "I feel that cell phones should be allowed and we can have rules like whenever we finish working we can go on them." There were a number of students who commented in favor of some sort of cell phone restriction. The most common response in this context was that cell phone restrictions should be for younger students or those who do not follow the policy. An example of this sentiment from a student is, “I think for the younger students they should be more restricted with cell phone use since they are not as mature as the older students. I believe grades 10-12 should not matter because, at that point, you should be mature enough to know if you need your phone or not." Additionally, some students shared that cell phones are a cause

for bullying through text messages or Snapchat, which causes distractions in school. One student stated, "Some of us are not mature enough to use them only when necessary, especially the younger classes. It is too easy for someone to say something through a screen because it is not to the person's face." Some students expressed concern about missing out on social information if they do not have their cell phones in their possession during the school day. A different student shared partly that "My peers/classmates use their phone when not permitted which I think has caused a lot of conflict between with bullying and physical fights via text message."

As the teacher survey results are presented, Table 17 illustrates the specific roles that staff members hold at West Shamokin JSHS. Nearly 90% of respondents are general education teachers, 8.3% are special education teachers, and 2.1% represent the one paraprofessional response. One note to consider is that the responsibility of the lone paraprofessional respondent is to remain in the emotional support classroom throughout the school day, which would yield the same cell phone classroom results throughout the school day.

Table 17

Teacher Survey Responses – Question #2

Question #2	What is your position?		
Total Responses	**General Education Teacher**	**Special Education Teacher**	**Paraprofessional**
48	43 89.6%	4 8.3%	1 2.1%

Table 18 indicates that the majority of respondents teach English at nearly 19%, 17% math, 17% science, 10% social studies, and 10% other.

Table 18

Teacher Survey Responses – Question #3

Question #3	What subject do you primarily teach?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Art	0	0%
English	9	18.8%
Family Consumer Science	2	4.2%
Language	3	6.2%
Learning Support	2	4.2%
Math	8	16.7%
Music	2	4.2%
Phys Ed / Health	3	6.3%
Science	8	16.7%
Social Studies	5	10.4%
Tech Ed	1	2.1%
Other	5	10.4%
Other Courses	Reading, Computer Science, Business	

Table 19 requested teachers to indicate their classroom cell phone policies over the last two school years. Question #4 shows that during the 2023-2024 school year from one of the three options. The highest response at 52% is that students were permitted to have their cell phones on their persons but not in sight. 31% of teachers had an open classroom policy where students were permitted to have their cell phones on their desks in sight. Just 17% of teachers had a classroom ban where students were required to place their cell phones in a caddy upon entry to class. Question #5 shows a strong shift in classroom policy indicating that for the 2024-2025 school year, over 60% of teachers have a classroom ban, 31% permit students to have their cell phones on their persons but out of sight, and just over 8% have an open classroom policy. Part of this shift is attributed to a requirement from the building administration for junior high teachers to require a classroom ban. However, much of the shift was the teacher's decision.

Table 19

Teacher Survey Responses – Questions #4 and #5

Question #4	Which of the below options was most like your cell phone policy in class during the 2023-2024 school year?		
Total Responses	**Open – Students are permitted to have their cell phones on their persons during class and it can remain in their sight**	**On Persons – Students are permitted to have their cell phone on their persons during class but are not permitted to have it in sight**	**Classroom Ban – Students are required to place their cell phones in the cell phone caddy upon entry to class and are not permitted to have it again until class ends**
48	15 31.3%	25 52.1%	8 16.7%
Question #5	Which of the below options is most like your current cell phone policy in class for the 2024-2025 school year?		
Total Responses	**Open – Students are permitted to have their cell phones on their persons during class and it can remain in their sight**	**On Persons – Students are permitted to have their cell phone on their persons during class but are not permitted to have it in sight**	**Classroom Ban – Students are required to place their cell phones in the cell phone caddy upon entry to class and are not permitted to have it again until class ends**
48	4 8.3%	15 31.3%	29 60.4%

Table 20 shows that while teachers communicate their policy verbally to students or in their syllabus, nearly 65% of teachers post their cell phone policy inside or outside their classroom for students to see daily.

Table 20

Teacher Survey Responses – Question #6

Question #6	Do you have your classroom cell phone policy posted in and/or outside your classroom for all students to see?		
Total Responses	**Yes**	**No**	**I don't have a specific cell phone policy for my class**
48	15 31.3%	31 64.6%	2 4.2%

Table 21 indicates the number of times that teachers tell students to put their phones away without sending an official referral or confiscating their phones. Nearly 59% of teachers say that on a typical day, they do not have to tell students to put their phones away. The number of responses per range steadily decreases from 29% saying it 1-2 times per day, 10% for 3-5 times per day, and 2% in the 6-9 times per day range.

Table 21

Teacher Survey Responses – Question #7

Question #7	On a typical school day, how many times do you tell students to put their phone away without sending an official referral or confiscating their phone?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
0	28	58.3%
1-2	14	29.2%
3-5	5	10.4%
6-9	1	2.1%
10+	0	0%

Table 22 illustrates that of the teachers who changed their policy from the 2023-2024 school year to the 2024-2025 school year, nearly 71% made a mild or strong improvement to their cell phone policies. Both of those categories had equal responses

with 35.4% each. The data also indicated that 25% of teachers had the same policy for both school years.

Table 22

Teacher Survey Responses – Question #8

Question #8	If your classroom cell phone policy has changed from the 2023-2024 school year to the 2024-2025 school year, has student attention during class improved or declined?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Strong improvement	17	35.4%
Mild improvement	17	35.4%
No change	1	2.1%
Mild decline	1	2.1%
Strong decline	0	0%
N/A – I have had the same policy both years	12	25.0%

Table 23 indicates that of the teachers who changed their classroom policy from the 2023-2024 to the 2024-2025 school year, roughly 52% saw a mild or strong improvement in student discipline. Just under 17% of teachers saw no change and 6% saw a mild decline. Again, 25% of teachers had the same policy between the two school years.

Table 23

Teacher Survey Responses – Question #9

Question #9	If your classroom cell phone policy has changed from the 2023-2024 school year to the 2024-2025 school year, has student discipline during class improved or declined?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Strong improvement	7	14.6%
Mild improvement	18	37.5%
No change	8	16.7%
Mild decline	3	6.3%
Strong decline	0	0%
N/A – I have had the same policy both years	12	25.0%

Table 24 overwhelmingly indicates that almost 94% of teachers find student cell phone access during class disruption to their instructional goals. Nearly 48% of those fell under the significantly option with 46% as somewhat of a disruption. Only 6.3% of teachers indicated that cell phone access for students is not a distraction at all.

Table 24

Teacher Survey Reponses – Question #10

Question #10	Does student cell phone access during class present a disruption/barrier to your instructional goals?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Significantly	23	47.9%
Somewhat	22	45.8%
Not at all	3	6.3%

Table 25 further presents that nearly 96% of teachers believe that student cell phone usage in school has a negative or strong negative effect on students. The two choices were split at 47.9% with the remaining 4.2% of teachers citing a positive effect.

Table 25

Teacher Survey Responses – Question #11

Question #11	What impact do you believe student cell phone usage in school has on their academic performance?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Strong positive	0	0%
Positive	2	4.2%
Negative	23	47.9%
Strong Negative	23	47.9%

Table 26 shifts the focus to student disciplinary history. Teachers indicated that nearly 92% of them believe student cell phone usage in school has a negative or strong negative effect on student disciplinary history. The majority of that percentage was made up of negative with 60.4%. Just 8.4% of teachers felt that student cell phone use has a positive or strong positive impact on student disciplinary history.

Table 26

Teacher Survey Responses – Question #12

Question #12	What impact do you believe student cell phone usage in school has on their disciplinary history?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Strong positive	1	2.1%
Positive	3	6.3%
Negative	29	60.4%
Strong Negative	15	31.3%

Table 27 indicates again that the majority of teachers find student cell phone use distracting in various settings. About 96% of teachers shared that they believe student cell phone use is distracting for students during class instruction with studying and completing assignments following closely with nearly 92%. During exams and in

social interactions were tied at 79.2% overall. No teachers shared that they do not believe cell phones to be distracting for students.

Table 27

Teacher Survey Responses – Question #13

Question #13	In which situations do you believe cell phone usage is distracting for students? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
During class instruction	46	95.8%
While studying and/or completing assignments	44	91.7%
During exams	38	79.2%
In social interactions	38	79.2%
Cell phones are not distracting for students	0	0%

Table 28 shows that no teachers often encourage students to use their cell phones during class time for educational purposes. Sometimes 54% of teachers do and about 46% of teachers indicate that they never do.

Table 28

Teacher Survey Reponses – Question #14

Question #14	Do you encourage students to use their cell phones during class time for educational purposes?		
Total Responses	**Often**	**Sometimes**	**Never**
48	0 0%	26 54.2%	22 45.8%

Table 29 depicts that of the apps that teachers encourage students to use during class for educational purposes, e-hall pass is the favorite with 40% of responses. The calculator follows with 32%, nearly 28% for classroom games, and internet search at 21%. Others received 19% of the responses and the most common write-ins were a

flashlight, Skyward, and Spotify. Camera, Canvas, and G-Suite Apps each received 17% of responses followed by email at 10.6%. The social media apps such as X (Twitter), Snapchat, TikTok, Facebook, and Instagram received no responses.

Table 29

Teacher Survey Responses – Question #15

Question #15	If you encourage students to use their cell phones during class time for educational purposes, what apps are you directing them to use? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	47	
Calculator	15	31.9%
Camera	8	17.0%
Canvas	8	17.0%
Classroom games (Kahoot, Quizlet, BlookIt)	13	27.7%
E-Hall Pass	19	40.4%
Email	5	10.6%
Facebook	0	0%
G-Suite apps (Docs, Slides, Sheets, Classroom, etc.)	8	17.0%
Instagram	0	0%
Internet search	10	21.3%
Note taking	2	4.3%
Organizer / Planner / Calendar	3	6.4%
Snapchat	0	0%
TikTok	0	0%
YouTube / Other video streaming	1	2.1%
X (Twitter)	0	0%
I do not encourage them to use their cell phones during class	18	38.3%
Other	9	19.1%
Other Comments	Desmos, flashlight for lab activities, only if they do not have their Chromebook, Skyward, apps for wireless sensors, camera for lab setup, Spotify, Goodreads, audiobooks, guitar tuner	

Table 30 illustrates teacher' preferred cell phone policy in school and their classes. Overall, nearly 42% of teachers indicated that students should be permitted to have their

cell phones in school but kept in their locker and not permitted in class. About 27% of teachers feel that students should be permitted to have their cell phones in class but that it is kept in a caddy or somewhere safe away from the student during class. Almost 17% of teachers prefer that a complete school ban is appropriate where students are not permitted to have cell phones in school. Almost 15% of teachers responded that students should be able to have their cell phones on their persons during class time but kept out of sight. Lastly, no teachers indicated that they prefer an open policy where students are permitted to have their cell phones on their desks in sight throughout the school day.

Table 30

Teacher Survey Responses – Question #16

Question #16	What would your preferred cell phone policy be for all students in school and in their classes?	
	Number of Responses	**Percentage of Responses**
Total Responses	48	
Open – Permitted on the students desk in sight	0	0%
On Persons – Permitted on the student/in backpack but away out of sight during class	7	14.6%
Classroom Restriction – Permitted in class but in a safe place out of sight during class	13	27.1%
Classroom Ban – Permitted in locker but not in class	20	41.7%
School Ban – Not permitted at school	8	16.7%

Question #17 on the teacher survey provided teachers the opportunity to share any additional comments that they would like to include in their responses. The most common response in favor of student cell phone use in school is that while younger students are often times more dependent and likely to react poorly when using their cell

phone, older students are better able to conduct themselves in accordance with the policy and should be provided the opportunity to develop separation of responsibilities. One staff member shared that "A school-wide policy is not the best solution in this situation. If we are going to do a broader policy, it should be based on age and also up to the teacher." Another respondent stated "I have mixed feelings about the policy. With senior high, I believe they need to self-monitor; they drive cars, they work, and many are headed to college. But more and more, the kids don't seem to be able to self-monitor, and I believe their conversational skills are weakening every year. I miss the small talk at the end of class; some kids engage but others have their faces down, smiling at something they are seeing on their phone. It's pathetic…" Some respondents were able to find the pros and cons of cell phones. One respondent commented "I agree that students who stay after for school activities need access to a phone to call parents, etc. but they should be secured during the school day. It would make lunch louder but students would be able to keep better social skills with their peers." On the contrary, several teachers shared comments opposed to student cell phone use in school. The most common response was that student cell phone use in school brings a challenge to students developing social skills and their ability to de-escalate certain social interactions. One staff member shared "The immediate nature of social media also presents problems and doesn't give students a chance to 'cool off' before escalating something to a platform that we have very little authority over here in school. Although their friends are all in class at the same time, my phone caddy buzzes constantly during class, and when I ask students about it they say it's active chat groups with other students in the school (during class time)." Technology is readily available for students as Armstrong School District is one-to-one ratio for

students and Chromebooks. One respondent emphasized this by expressing that "students have Chromebooks. There is no need for any other technology." Lastly, several teachers expressed the benefit of adjusting their classroom cell phone policy this last school year and the positive impact that it has made. One respondent said, "This year I have required students to put their phones in a caddy, and while I don't actually monitor if every student places it in the caddy every day, I have not had one time this school year where I have had to ask a student for a phone to be put away." Another said "Going to no phones in class was one of the best decisions I've ever made as a teacher. Phones give almost no benefit to students at the junior high level." They shared a desire for a consistent school-wide policy for all students and staff to continue this positive change. One staff member noted, "I would like the ban to be across the board for all classrooms at our school---not teacher choice; no phones in the classrooms at all."

As the parent survey results are presented, Table 31 helps to identify how many children the parent respondent has at West Shamokin JSHS. The vast majority nearly 96% of respondents have one or two children currently enrolled at West Shamokin with 73% of those falling in the one-child category. Just 4.4% of respondents have three or more students currently enrolled.

Table 31

Parent/Guardian Survey Responses – Question #2

Question #2	How many children do you have currently enrolled at West Shamokin JSHS?							
Total Responses	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
205	150 73.2%	46 22.4%	8 3.9%	0 0%	1 0.5%	0 0%	0 0%	0 0%

Table 32 breaks down the number of students that the parents have at each grade level.

Table 32

Parent/Guardian Survey Responses – Question #3

Question #3	Indicate how many children you have in each grade level.		
	1	**2**	**3**
Total Responses	262	6	1
7th Grade	61	2	0
8th Grade	56	0	0
9th Grade	51	2	0
10th Grade	38	1	1
11th Grade	26	1	0
12th Grade	30	0	0

Table 33 illustrates that 97% of parents have a child who brings their cell phone to school. Parents also share that 95% of them believe their child uses their cell phone apps during the school day between classes, while only 39% believe their child uses their cell phone apps during class time. If students use their cell phones during class time, nearly 79% of parents believe that to be a distraction.

Table 33

Parent/Guardian Survey Responses – Questions #4, #5, #6, and #7

Question #4	Does your child(ren) bring a cell phone to school?	
Total Responses	**Yes**	**No**
205	199 97.1%	6 2.9%
Question #5	Do you believe your child(ren) uses cell phone apps during the school day between classes, during lunch, and on the bus?	
Total Responses	**Yes**	**No**
205	195 95.1%	10 4.9%
Question #6	Do you believe your child(ren) uses cell phone apps during class time?	
Total Responses	**Yes**	**No**
203	80 39.4%	123 60.6%
Question #7	Do you think student cell phone use during class time is a distraction to their education?	
Total Responses	**Yes**	**No**
203	160 78.8%	43 21.2%

Table 34 depicts parent responses about what cell phone apps they believe their child uses during school. The most common responses were overwhelmingly social media apps with texting at nearly 74% of respondents, Snapchat at 62%, and 42% TikTok. Canvas was mixed in at 45% with Google search and club/team communications at 35%. YouTube followed at 32% with other Google items such as Classroom, Docs, and Email around the 27% range.

Table 34

Parent/Guardian Survey Responses – Question #8

Question #8	While using their cell phone in school, what apps do you think your child(ren) uses? (check all that apply)	
	Number of Responses	**Percentage of Responses**
Total Responses	198	
Canvas	90	45.5%
Club/Team communication apps (GameChanger, Remind, SportsYou, TeamSnap, etc.)	69	34.8%
Facebook	30	15.2%
Google Classroom	55	27.8%
Google Docs	53	26.8%
Google Email	52	26.3%
Google Search	70	35.4%
Google Sheets	27	13.6%
Google Slides	29	14.6%
Instagram	42	21.2%
Snapchat	123	62.1%
Texting	146	73.7%
TikTok	84	42.4%
X (Twitter)	6	3.0%
YouTube	64	32.3%
Games	5	2.5%
Spotify	4	2.0%
Other	8	4.0%
Other Comments	Spotify and iTunes for music, Skyward, Roblox or other games, and Be Real for shopping	

Table 35 assessed parents' perception of the level of impact that student cell phone use in school and the classroom has on their child. When asked about the educational impact of their child using their cell phone during class time, nearly 80% of responses indicated a negative or strong negative impact with over 57% of those being negative. Parents shared that 18% of them felt it has a positive impact while 2.6% were strong positive. Those percentages shifted when asked about the educational impact when cell phones were used outside of class time. Over 48% of respondents said that it

would have a positive impact compared to about 37% of respondents saying a negative impact. Strong positive and strong negative were similar responses with 6.3% and 8.4% respectively. Nearly 73% of parents believe that student cell phone use during class time has a negative or strong negative effect on the student's stress level with 58% of those responses falling in the negative category. One-quarter of parents feel cell phone use during class has a positive effect on student stress levels. Lastly, with regard to student stress level, 51% of parents believe that student cell phone use in school but outside of class has a positive effect. Secondly, 36% feel it has a negative effect. Strong negative and strong positive came in at 5% and 7% respectively.

Table 35

Parent/Guardian Survey Responses – Questions #9, #10, #13, and #14

Question #9	If your child(ren) is using their cell phone during class time, what type of educational impact (student grades, homework completion, focus in class, etc.) do you think that has?			
Total Responses	**Strong Positive**	**Positive**	**Negative**	**Strong Negative**
194	5 2.6%	35 18.0%	111 57.2%	43 22.2%
Question #10	If your child(ren) is using their cell phone during school hours but outside of class, what type of educational impact (student grades, homework completion, focus in class, etc.) do you think that has?			
Total Responses	**Strong Positive**	**Positive**	**Negative**	**Strong Negative**
191	12 6.3%	92 48.2%	71 37.2%	16 8.4%
Question #13	What type of impact on their stress level do you think your child(ren) using their cell phones during class has?			
Total Responses	**Strong Positive**	**Positive**	**Negative**	**Strong Negative**
193	5 2.6%	48 24.9%	112 58.0%	28 14.5%
Question #14	What type of impact on their stress level do you think your child(ren) using their cell phones during school but outside of class has?			
Total Responses	**Strong Positive**	**Positive**	**Negative**	**Strong Negative**
191	10 5.2%	98 51.3%	69 36.1%	14 7.3%

Table 36 addresses parents' perception of student disciplinary action with regard to their cell phone use. When asked if their cell phone use in class leads to disciplinary action, the answers came in similar across the response options with just under 23% replying yes, 29.2% probably, nearly 25% rarely, and 23% no. Those responses shifted when parents were asked their perception of students using their cell phones outside of

class but during school hours. Nearly 62% of parents said they do not think this use would lead to disciplinary action followed by nearly 28% rarely. Almost 6% of parents said probably and 4.5% said yes.

Table 36

Parent/Guardian Survey Responses – Questions #11 and #12

Question #11	Do you think your child(ren) using their cell phone in class leads to disciplinary action (loss of cell phone, lunch detention, ISS, etc.)?			
Total Responses	**Yes**	**Probably**	**Rarely**	**No**
202	46 22.8%	59 29.2%	50 24.8%	47 23.2%
Question #12	Do you think your child(ren) using their cell phone during school hours but outside of class leads to disciplinary action (loss of cell phone, lunch detention, ISS, etc.)			
Total Responses	**Yes**	**Probably**	**Rarely**	**No**
202	9 4.5%	12 5.9%	56 27.7%	125 61.9%

Table 37 illustrates parent' preferred cell phone policy in school and their classes. Overall, nearly 49% of parents indicated that students should be permitted to have their cell phones on their persons, but out of sight during class. The second highest response at 25% was classroom restriction which requires students to put their cell phones in a safe place in the classroom during class time but not directly on them. Just under 16% of parents indicated they prefer a classroom ban for students to be required to leave their cell phones in their locker and not have them in the classroom at all. The results for an open cell phone policy with no restrictions and a complete school ban on cell phones were relatively close at 5.9% and 4.4% respectively.

Table 37

Parent/Guardian Survey Responses – Question #15

Question #15	What would your preferred cell phone policy be for your child(ren) in school and in their classes?	
	Number of Responses	**Percentage of Responses**
Total Responses	204	
Open – Permitted on the students desk in sight	12	5.9%
On Persons – Permitted on the student/in backpack but away out of sight during class	100	49.0%
Classroom Restriction – Permitted in class but in a safe place out of sight during class	51	25.0%
Classroom Ban – Permitted in locker but not in class	32	15.7%
School Ban – Not permitted at school	9	4.4%

Question #16 on the parent survey provided parents the opportunity to share any additional comments that they wanted to include in their responses. The most common response in favor of student cell phone access and use in school is overwhelmingly for safety purposes so that a student can contact a parent in case of an emergency. Along these same lines are the viewpoints for students to access throughout the day to communicate regarding sports or other activities. One parent shared "In today's society, I worry that if my child did not have a phone what would happen in the instance of an emergency? Would I be notified right away? Would I be able to speak to my child?" Another respondent stated "I believe my children should be able to have their phones on them in case of an emergency either at school or home during school hours. But checking in between class is sufficient, they don't need them during class unless they're instructed by their teacher to have them out in sight." Some responses highlighted the

importance of students learning to balance responsibilities with cell phone usage as they will when they get a job outside of school. One parent responded "High school prepares students with skill sets to enter the workforce or continued education. Students must learn to balance responsibilities with cell phone usage. In the 'real world' most people have their cell phones at all times. Students must learn to manage the responsibility of managing a cell phone." Several parents were in favor of cell phones not being used during class, and those who do not follow school rules should be reprimanded accordingly. One response about this was "I think this needs to be looked at from an individual perspective, not an all-inclusive policy. If a student is being disrespectful or is distracted and there is a trend, then discipline them. If students have good grades and are performing well in classes, they should not be disciplined." Several parents were opposed to student cell phone use in school citing an interest in a school ban or at minimum phones remaining in student lockers during the school day. One parent stated "I fully support a ban on phones at school. However, if that can't happen, I'd support a rule where phones must be kept in lockers until the end of the day." They expressed the unfortunate reality of this becoming a school issue when they believe it should be a parent and home issue. One parent responded "My thought would be every class have a station to dock each student's phone. Inside the classroom out of the hands of the student. Truthfully this should be a parent issue. Sadly, roles and rules are blurred." Several parents shared their concern that high school students are not mature enough to the capability of cell phones and that usage increases student stress levels. One parent expressed "Kids between the grades of 7 and 12 are not mature enough to own cell phones. They are a distraction and lead to stress, anxiety, and bullying."

Quantitative Results

The quantitative analysis results of student disciplinary incidents related to cell phone use in school are depicted below in Table 38 and Table 39. Total official referral incidents were combined with the teacher incidents where cell phones were taken from a student during class but no official referral was made. The official incident referrals were organized and tracked in Skyward Student Information System (SIS), while the teacher confiscation cell phones that were sent to the office were tracked by the disciplinary administrative assistant during the school year. The official Skyward incidents did not include any of the tardy-to-school referrals and instead only included the incidents that occurred during school hours that could be related to student cell phone use. Each of the incidents included in the data was categorized into one of four categories. The first category is titled Cell Phone Not Involved (CPNI), which indicates that the incident did not in any way involve a cell phone. The second category is Cell Phone Inside Class (CPIC), which indicates that the incident occurred with a student using a cell phone inside of class. The third category is titled Cell Phone Outside Class but in School (CPOC), which indicates that the incident involved cell phone use but occurred outside the classroom during the school day. The fourth category is titled Cell Phone Outside of School (CPOS) which indicates that while the incident occurred inside of school, it is due to cell phone use outside of school that led to an incident inside of school.

Table 38 depicts the detailed student disciplinary information from West Shamokin JSHS during the 2023-2024 school year. There were 416 total referrals that qualified for this research project. When considering the overall referrals, about 21% of total referrals were cell phone-related. Over 14% of referrals involved student cell phone

use in class, while 5.8% were outside of class but inside the school, and nearly 1% involved a cell phone outside of school which led to student discipline in school. When breaking down the cell phone-related incidents in comparison to the total referrals, 7th through 9th grade students accounted for about 77.3% of total cell phone-related referrals and more specifically 78.3% of the cell phone referrals inside of class (CPIC). Cell phone incidents outside of class but in school (CPOC) were led by 11th and 12th grade students.

Table 38

2023-2024 Student Disciplinary Data

2023-2024 Student Disciplinary Data					
	CPNI – Cell Phone Not Involved	**CPIC – Cell Phone Inside Class**	**CPOC – Cell Phone Outside Class but in School**	**CPOS – Cell Phone Outside of School**	**Total Referrals**
All Grades Total & Percentage of Total Referrals	**328 78.9%**	**60 14.4%**	**24 5.8%**	**4 0.9%**	**416**
7th Grade Total & Percentage of Total Referrals	70 77.9%	13 14.4%	4 4.4%	3 3.3%	**90**
8th Grade Total & Percentage of Total Referrals	79 76.7%	16 15.5%	7 6.8%	1 1.0%	**103**
9th Grade Total & Percentage of Total Referrals	53 68.8%	18 23.4%	6 7.8%	0 0%	**77**
10th Grade Total & Percentage of Total Referrals	77 91.7%	6 7.1%	1 1.2%	0 0%	**84**
11th Grade Total & Percentage of Total Referrals	39 78.0%	6 12.0%	5 10.0%	0 0%	**50**
12th Grade Total & Percentage of Total Referrals	10 83.4%	1 8.3%	1 8.3%	0 0%	**12**

Table 39 depicts the detailed student disciplinary information from West Shamokin JSHS during the 2024-2025 school year. There were 348 referrals that qualified for this research project. When considering the overall referrals, 16% of total referrals were cell phone-related. Under 10% of referrals involved student cell phone use

in class, while 3.7% were outside of class but inside school, and 2.6% involved a cell phone outside of school that led to student discipline in school. When breaking down the cell phone-related incidents in comparison to the total referrals, 7th and 9th-grade students accounted for about 66% of total cell phone-related referrals and more specifically 73.5% of the cell phone referrals inside of class (CPIC). Cell phone referrals for cell phone use outside class but in school (CPOC) were split relatively evenly across grade levels.

Table 39

2024-2025 Student Disciplinary Data

2024-2025 Student Disciplinary Data					
	CPNI – Cell Phone Not Involved	**CPIC – Cell Phone Inside Class**	**CPOC – Cell Phone Outside Class but in School**	**CPOS – Cell Phone Outside of School**	**Total Referrals**
All Grades Total & Percentage of Total Referrals	**292 83.9%**	**34 9.8%**	**13 3.7%**	**9 2.6%**	**348**
7th Grade Total & Percentage of Total Referrals	138 87.9%	14 8.9%	2 1.3%	3 1.9%	**157**
8th Grade Total & Percentage of Total Referrals	32 86.5%	2 5.4%	3 8.1%	0 0%	**37**
9th Grade Total & Percentage of Total Referrals	58 76.3%	11 14.5%	3 3.9%	4 5.3%	**76**
10th Grade Total & Percentage of Total Referrals	42 82.4%	7 13.7%	0 0%	2 3.9%	**51**
11th Grade Total & Percentage of Total Referrals	11 84.6%	0 0%	2 15.4%	0 0%	**13**
12th Grade Total & Percentage of Total Referrals	11 78.6%	0 0%	3 21.4%	0 0%	**14**

Summary

In summary, the data presented in this action research study provides adequate information to answer the research questions. Results included both qualitative data collected through the Google Form Surveys and quantitative data collected through

Skyward Student Information System (SIS) disciplinary data related to cell phone use in school. These research methods together address the three research questions. The triangulation process was used during the overall compilation of the qualitative survey multiple choice, Likert, and checklist responses, along with the open-ended responses and quantitative disciplinary data. The intention of this method according to Mertler (2022) is to potentially support common results or at least not directly contradict each other. Overall, there was a strong level of participation among students, staff, and parents in the surveys. This high participation gives more confidence to the validity of the responses as a representation of the group as a whole.

In the next chapter, future research considerations and limitations of the study will be presented. Additionally, conclusions and recommendations will be made regarding student cell phone use in school by revisiting the three research questions in this action research study and utilizing the qualitative and quantitative data presented in this chapter.

CHAPTER V

Conclusion and Recommendations

This chapter presents the conclusions and recommendations from evaluating student, teacher, and parent perceptions as well as the educational and disciplinary impact of student cell phone use at West Shamokin JSHS. Cell phones have become a major part of student lives and have become a common accessory for students in school. The goal of this research was to understand if there exists an impact between student cell phone use in school and their educational and disciplinary history. It was also conducted to get an understanding of student, staff, and parent perceptions related to student cell phone use in school to determine the perceived impact on students and future cell phone preferences in school.

Each research question will be answered individually. To address these questions, the study employed both a qualitative and quantitative approach. Qualitatively, the study examined perceptive data from students, teachers, and parents with regard to the educational and disciplinary impact of student cell phone use in school and future recommendations. Quantitatively, student disciplinary data related to cell phone use gathered from Armstrong School District's student information system (SIS) was compared between the 2023-2024 and 2024-2025 school years. This analysis will help assess the disciplinary impact that student cell phone use has in coordination with the junior high classroom cell phone restriction.

Conclusions

Research Question 1

It was important to survey students, teachers, and parents to gather a holistic view of the perceptions of student cell phone use in school. Given the difference in stakeholder responsibility and priority, it is expected that perceptions may vary when asked similar questions. The qualitative survey that each stakeholder group completed confirmed this expectation.

The first research question asked, "What are the perceptions of teachers, students, and parents on student cell phone use during the school day?" It is necessary to note that 45.2% of total respondents were junior high (grades 7-8) students. This is a percentage to keep in mind when reviewing the data and understanding the cell phone restriction in place and the potential level of maturity compared to older students. It was important to gather information on the prevalence of student cell phone possession in school before getting into specific uses. Students indicated that the vast majority take their cell phones to school and into their classes. Parents supported this response by indicating that the majority of the children take their cell phones to school. Generally speaking, a minority number of students similarly felt that student cell phone use is distracting during instruction, while studying, and during exams. However, when teachers were asked similar questions, the numbers drastically rose to an overwhelming majority believing cell phones are distracting for students during instruction, while studying or completing assignments, during exams, and in social interactions. Not a single teacher indicated that they believe cell phones in school are not a distraction for students. Students find cell phone use most beneficial in order for math, science, technology education and business,

English, art, family consumer science, social studies, language classes, music, and lastly physical education and health.

Classroom cell phone policy information was gathered from teachers. During the 2023-2024 school year, about half of the teachers implemented an on-person policy, and roughly one-third of teachers had an open cell phone policy where essentially there were no specific rules or limitations in class. The fewest category for teachers was that they implemented a classroom restriction where students were student cell phones were to be kept in a cell phone caddy on the wall or not brought into the classroom. Moving into the 2024-2025 school year, the researcher required junior high classrooms to implement a cell phone restriction in their classrooms. All other teachers were encouraged to do the same but not required to do so. This initiative showed in the survey results with now majority of teachers implementing a classroom restriction, just below one-third having an on-person policy, and the fewest number of teachers having an open policy. However, one-quarter of teachers did indicate they had the same policy over the two school years. Student responses confirmed those policies by indicating they are required to put their cell phones in the caddy majority of the school day, on-person often around 0-3 periods, and out in the open on desk 0-2 periods. To compare the two school years, the majority of teachers reported that they saw a mild or strong improvement in student attention based on their policy change. The policy changes seemed to have a positive impact in some classrooms considering over half of teachers shared that they never have to tell students to put their cell phones away. With regard to the impact on student discipline, just over half of teachers reported a mild or strong improvement to again emphasize the positive impact that the policy change had.

Stakeholders were also asked to share their perceptions regarding student cell phone use during class time. Over half of teachers reported they sometimes encourage students to use cell phones during class time. The most common classroom uses directed by teachers were led with E-Hall Pass, followed in order by calculator, classroom games like Kahoot, Quizlet, BlookIt, etc., and internet search. Student responses aligned with that notion given that a similar number indicated that they use educational apps during class time, usually around one to two times per day. When it comes to social media use during class, one-third of students shared that they use social media apps during class time, most often 1-2 times per day. When parents were asked if they believe their children use cell phone apps during class time, the majority responded no they do not believe so. A majority of students indicated that they are never distracted by their cell phone or another student's cell phone during class. Teachers and parents shared a vastly different view with regard to cell phones being a distraction for students during class. An overwhelming majority of teachers and parents shared they believe cell phones in class significantly or somewhat disrupt instructional goals. Parents went a step further when the majority shared they believe it has a negative or strong negative impact on their stress level.

Student cell phone use outside of class was another focus of the surveys. Most students shared that they use cell phone apps during the school day outside of class. The level of use is relatively spread out depending on the individual student. This aligns with parent perceptions who overwhelmingly responded that they believe their children use cell phone apps during the school day. Student activities involving cell phones during school hours are primarily messaging, E-Hall Pass, social media, educational apps, email,

and gaming. These numbers indicate that students use their cell phones more often for non-educational purposes. Students reported that their most commonly used apps outside of class are Snapchat, texting, TikTok, Canvas, Google Email, Instagram, internet search, YouTube, and Google Docs. When students were asked specifically about specific educational apps, the most common responses in order were the calculator, Canvas, E-Hall Pass, classroom games such as Kahoot, Quizlet, BlookIt, etc., note-taking apps, internet search, Google Email, organizer/planner/calendar, G-Suite apps, and the camera. Parents showed an understanding of their children when they were asked what cell phone apps their children use during the school day. The majority believe texting is the most common app, followed by Snapchat, Canvas, TikTok, Google Search, club or team communication apps, YouTube, Google Email, and Docs.

Stakeholders were also asked their views on the academic impact of cell phones outside of the classroom. The majority of students reported they believe cell phones help study and school work during the school day, and a stronger majority shared that it has had a positive or strong positive impact on their academic performance. Teachers shared a drastically different opinion on the same question. Nearly all teachers believe student cell phone use outside of class has a negative or strong negative impact on student academic performance. Parents fell in the middle with just over half believing that their child using their cell phone during school hours has a positive impact on their education. When students were asked to share any negative effects that they have experienced due to cell phone use during school hours, over half reported no negative effects, followed by procrastination, posture issues, eye strain, conflict with peers, decreased social interaction, reduced physical activity, and increased level of stress. While very few

students reported an increased level of stress, parents believe that number falls much higher with nearly half of parents believing cell phone use outside of class has a negative or strong negative impact on their stress level. Very few students felt a decrease in social interaction was a negative effect of cell phones in school. This notion was emphasized more when over half of students reported more face-to-face conversations during the school day with their peers. However, over one-third of students indicated an equal amount of face-to-face and cell phone conversations with friends which is substantial considering the amount of face-to-face time during the school day students have.

Student cell phone use related to discipline was another topic on each of the stakeholder surveys. As previously shared, when teachers strengthened their classroom cell phone policy from the 2023-2024 to the 2024-2025 school year, over half reported that student discipline had a mild or strong improvement. An overwhelming majority of teachers believe student cell phone use has a negative or strong negative impact. As we have seen with several topics, students had a drastically different view when over two-thirds reported that cell phones have a positive impact on disciplinary history. Parents however were relatively split when asked if student cell phone use in class leads to disciplinary action. When parents were asked the same question, the results were mixed. Over half reported that yes or probably it leads to disciplinary action while just under half of parents believe that cell phone use outside of class either rarely or never leads to disciplinary action.

The final question of each stakeholder survey was constructed to gather their preferred cell phone policy. As expected, the preferences between students, teachers, and parents varied greatly. Students shared that one-third prefer an open cell phone policy

with no restrictions whatsoever, and about half prefer cell phones to be permitted in person. This indicates the desire for fewer cell phone restrictions. On the other end of the spectrum, no teachers want an open policy, over one-quarter prefer a classroom restriction, and just under half want a classroom ban. This shows teachers overwhelmingly prefer a stricter cell phone environment for students. As with many other questions, parents ranged somewhere between students and teachers with half of the respondents preferring an on-person policy, and one-quarter a classroom restriction.

For Research Question #1, a strong amount of perception data was collected from the three stakeholder groups. When conducting the literature review, the researcher found that most of the existing data regarding stakeholder perceptions about cell phones in school, the educational impact, disciplinary impact, and overall policy preferences, were aligned with the results of this study. The study showed that the majority of the student population brings a cell phone to school and almost all of those students take it into the classrooms. From the 2023-2024 to 2024-2025 school year, 75% of teachers changed their classroom policy. Due to this policy change of those that changed, nearly all of the teachers saw a positive impact on student attention in class. Both teachers and students were aligned on the amount of permitted cell phone use in the classroom. However, the uses for apps varied with teachers believing more educational apps and students reporting more messaging or social media app usage in the classroom. Student cell phone use during the school day outside of class is extremely prevalent. An even stronger majority of cell phone uses outside of the classroom are for messaging, social media, and gaming. Email and educational apps did take a decent portion of student responses. What stood out the most from the perception data was how much opinions

amongst stakeholders strongly varied. When these differences occurred, teachers preferred more cell phone restrictions and viewed cell phones as more of a distraction, students preferred fewer restrictions and viewed cell phones as less of a distraction, and parents were in the middle. These preference differences were presented in topics such as the overall level of distraction for students during instruction, while studying, during exams, in social interactions, on student stress levels, and the impact on student education as a whole. One of the largest differences in opinion was with the preferred school-wide cell phone policy where teachers overwhelmingly preferred a stricter environment, students a very open environment, and parents in the middle.

Research Question 2

The second research question asked, "How does a teacher's classroom cell phone policy impact student disciplinary behavior?" To answer this question, both qualitative and quantitative data were collected and analyzed. As previously stated, qualitative data was collected through the use of three separate Google Form surveys sent to students, teachers, and parents. The student survey was distributed to approximately 518 students and received 405 responses yielding a 78% response rate. The teacher survey was distributed to 56 teachers receiving 48 responses in total yielding an 86% response rate. The parent survey was distributed to the email addresses on file for the approximate 518 student primary family members. The parent survey received 205 responses in total. Parents have the option to complete one survey for all of their high school-aged students or complete one for each student individually if their answers vary by student.

The results of the surveys conveyed three differing opinions as anticipated and found in Research Question #1. As was previously shared in Research Question #1,

45.2% of respondents were junior high students. Students shared that 93.8% of them take their cell phones to school and 92.6% take their cell phones into their classes. Parents indicated close to that percentage when they shared that 97.1% of their children bring their cell phones to school.

Teacher classroom cell phone policy was the focus of this research question, so the qualitative survey for teachers offered questions to gather this information. During the 2023-2024 school year, one-third of teachers had an open cell phone policy while just over half implemented an on-person policy. For the 2024-2025 school year, the researcher required junior high classrooms to implement a cell phone restriction in their classrooms. All other teachers were encouraged to do the same but were not required. Teacher survey results supported the implementation of this initiative as the majority of teachers that changed their policy strengthened it substantially with nearly two-thirds of teachers implementing a classroom restriction. Student responses supported teacher responses given they reported that they were required to put their cell phones in a caddy the majority of the school day, on-person often around 0-3 periods, and in the open on their desk 0-2 periods. When teachers were asked if their policy was posted in their classroom for students to see, nearly two-thirds indicated that they did not have it posted.

When comparing the two school years, the policy changes reportedly had an extremely positive impact in classrooms considering the majority of teachers reported that they saw a mild or strong improvement in student attention based on their policy change. Additionally, as a result of their policy change, over half of the teachers shared that they never have to tell students to put their cell phones away, and over half reported a mild or strong improvement in student discipline in class. Nearly all of the teachers also

reported that cell phone use's impact on overall school disciplinary history is negative or strongly negative. The majority of students believe that cell phone use in school has a positive or strong positive impact on their academic performance, and fewer but still, the majority indicated a positive impact on disciplinary history. As different as students and teachers were in their responses, parents fell in the middle with student discipline. Parents were relatively split in their belief in how often student cell phone use leads to discipline. When asked the same question but outside of class, parents reported that the majority believe that cell phone use rarely or never leads to disciplinary incidents. While all three stakeholder groups have their opinions on the connection between student cell phone use and disciplinary actions, the teachers are in the position of reporting many of these occurrences.

Quantitative data results were extracted from the Armstrong School District student information system, Skyward. As was mentioned previously, teacher classroom cell phone policies adjusted significantly from the 2023-2024 to the 2024-2025 school year. While they shared their perceived benefits with regard to student discipline, there are quantitative results that support their findings. Looking at West Shamokin JSHS as a whole during the 2023-2024 school year, there were a total of 416 referrals. Of those referrals, three-quarters did not involve cell phone use in any capacity. Of those involving cell phone use, the most common referral type involved cell phone use inside of class, followed by cell phone use in school but outside of class, and the fewest involved cell phone use outside of school. The results of this data showed that 7th through 9th grade students were more likely to have cell phone discipline-related issues than 10th through 12th graders. Outside of class but in school, the data showed that 7th

through 9th graders fell in the vast majority of this category for several referrals as well. Finally, with an extremely small sample size with regard to cell phone use outside of school resulting in a disciplinary incident inside of school, 7th and 8th graders were the only ones to commit such infractions.

For comparison, the same data was collected from the 2024-2025 school year in the same manner but noting that many teacher classroom cell phone policies were strengthened. It is also worth noting that these policies would seemingly only impact the number of cell phone referrals in class and not necessarily outside of class during the school day. During the 2024-2025 school year, there were 348 total referrals which was a decrease down from 416 referrals in 2023-2024. Of those 348 referrals, the majority did not involve student cell phone use. Of those that did, the most common incident involved cell phone use inside the classroom, followed by outside the classroom but in school, and very few outside of school resulting in an incident during school hours. Overall, the number of disciplinary incidents involving cell phone use decreased in every category except incidents resulting from cell phone use outside of school. In particular, incidents inside the classroom decreased from 60 to 34 which is a 43.3% decrease. When taking a look at the specific grade levels, 7th graders had the most referrals and if combined with 9th graders, they together accounted for nearly three-quarters of these incidents followed by 10th and 8th graders. Neither 11th nor 12th graders resulted in any cell phone referrals in class. Cell phone incidents outside of class but in school decreased from 24 to 13. For the referrals outside of class but in school, these grade levels were relatively evenly split between all grade levels except 10th grade, which had no referrals of this nature. For the final category of cell phone use outside of school resulting in a

discipline incident in school, 9th graders resulted in just under half of the total incidents, followed by 7th graders with one-third and 10th graders with over one-fifth. The trend of 7th through 9th graders resulting in the majority of disciplinary incidents related to cell phone use continued into the 2024-2025 school year. While it must be noted that these are different students from year to year, their maturity levels change, and there are additional factors at play, it is evident that cell phone restrictions have had some level of positive impact on student disciplinary referrals.

For Research Question #2, the qualitative data shows a disconnect between the three stakeholder groups with regard to the disciplinary impact of student cell phone use. Teachers strongly suggest their classroom cell phone policy has had a positive impact on student disciplinary behavior. Multiple questions reference this topic and are supported by the survey data. However, students strongly believe that cell phones have a positive impact on their disciplinary behavior. Meanwhile, parental opinions more often than not fell somewhere between the extremes of teacher and student preferences.

Similarly, quantitative data results indicate the majority of cell phone-related referrals were committed by 7th through 9th graders. This held for almost every category during both the 2023-2024 and 2024-2025 school years including incidents in school, outside of class but in school, and incidents involving cell phone use outside of school but an incident occurred in school. Additionally, the stricter classroom cell phone policies that teachers implemented during the 2024-2025 school year had a high level of positive impact in reducing the number of overall disciplinary incidents related to cell phone use and consequently in each category as well.

Research Question 3

The third research question asked, "What impact would a cell phone restriction in class have on junior high students?" To answer this research question, both qualitative and quantitative data were collected and analyzed. As previously stated, qualitative data was collected through the use of the same three separate Google Form surveys sent to students, teachers, and parents. As was shared in previous research questions, nearly half of the respondents were junior high students.

During the 2023-2024 school year, teachers were permitted to create their classroom cell phone policy. During the 2024-2025 school year, the researcher required all junior high classrooms to enforce a mandatory classroom restriction policy which instructed students to place their cell phones in wall caddies that were installed in each classroom. This impact was shown in the teacher survey when the overall percentage of teachers instituting a classroom restriction cell phone policy increased from 16.7% to 60.4%. A strong majority of teachers reported that student cell phone use in class is distracting for students in class instruction, while studying or completing assignments, during exams, and in social interactions. No teachers reported that cell phones are not distracting for students. This extremely high teacher confidence reinforced their belief in the importance of the junior high cell phone restriction. Teacher responses reported overwhelmingly that student cell phone access during class presented somewhat or significant disruption to instructional goals. This continued the teacher trend of believing cell phones impact students significantly in negative ways during class time. When teachers were asked how the policy change impacted student attention, nearly three-quarters reported a mild or strong improvement and nearly all of the remaining did not

change their policy from one year to the next. When teachers were asked the same question on the impact of change on student discipline, over half reported a mild or strong improvement. When the perspective shifted to parents, the majority believe their child using their cell phone during class time has a negative or strong negative impact on their level of stress, and a similar majority believe it has a negative or strong negative educational impact. When focusing on student discipline based on student cell phone use during class, results were relatively split across all answer choices ranging from "yes, it leads to discipline", to "no, it does not". While the numbers overall are relatively evenly split, over three-quarters of parents believe that discipline is still in some manner a factor with student cell phone use in class.

Quantitative data results were extracted from the Armstrong School District student information system, Skyward. As was mentioned previously, teacher classroom cell phone policies adjusted significantly from the 2023-2024 to the 2024-2025 school year. While they shared their perceived benefits with regard to student discipline, there are quantitative results that support their findings. Looking at 7th and 8th-grade students at West Shamokin JSHS during the 2023-2024 school year, they accounted for 193 of the 416 total referrals which equates to 46.4%. Of those referrals, 44 were related to cell phone use, which is nearly one-quarter of total referrals involving cell phones. When analyzing each category, these two grade levels accounted for nearly half of the total referrals inside the class, nearly half of the referrals outside of class but in school, and all of the incidents involving cell phone use outside of school but an incident occurred in school. When considering these are two of the six total grade levels at the high school, these percentages are significant portions of the overall totals.

To make a comparison, the same data was collected from the 2024-2025 school year in the same manner, but it is worth noting that junior high teachers were required by the researcher to implement a classroom cell phone restriction. Additionally, it is worth noting that this restriction may only impact the number of referrals inside of class. During the 2024-2025 school year, 7th and 8th graders accounted for 194 of the 348 total referrals which is over half of total referrals. This is an overall increase from the 2023-2024 school year in terms of the overall percentage of total referrals while the overall number itself nearly stayed the same. Of those referrals, the number related to cell phone use decreased in comparison to the previous 2023-2024 school year. When analyzing each category, 7th and 8th graders accounted for nearly half of the total referrals involving cell phone use inside the classroom compared to 2023-2024. Of cell phone incidents outside the classroom but in school, 7th and 8th graders displayed a drop in over half of the total from 2023-2024. Lastly, these two grade levels also accounted for fewer referrals occurring inside school but from a cell phone incident outside of school in comparison to the 2023-2024 school year.

For Research Question #3, the qualitative data presents some strong perception indications from stakeholders. Based on stakeholder responses to the three surveys and weighing teacher perspectives a bit more than students and parents due to the nature of their responsibility in the classroom, it is apparent that the perception is overwhelming that the junior high cell phone restriction had a positive impact on student focus, discipline, and general level of education. Parents support this view as well, though not to the strength of teachers, while students do not necessarily side with the other two stakeholder groups.

The quantitative data strongly supports the positive impact of the junior high cell phone restriction in class. Not only did the overall number of cell phone-related disciplinary incidents decrease significantly from 2023-2024 to 2024-2025, but each cell phone referral category also decreased by a significant percentage compared to the previous school year. Despite being the same students, the overall number of referrals from 7th graders in 2023-2024 to 8th graders in 2024-2025 decreased from 90 to 37. It must be noted that one year of maturity at the junior high level is significant, but the cell phone policy change for junior high students should be considered as a potentially significant reason for this substantial decrease. This quantitative data not only supports continuing the restriction moving forward but brings into question whether it should be expanded beyond junior high.

Limitations

The researcher acknowledges limitations based on the sample size, survey design, timeliness of the survey, the researcher's role at the building, demographics of the participants, and the researcher's own presumed bias.

The first potential limitation of the research study was that it was voluntary for students, teachers, and parents to participate. The surveys were offered to all of the aforementioned stakeholders to participate, and while there was a strong completion rate overall, there were some that chose not to participate resulting in less than 100% of possible respondents. If more stakeholders participated, that would increase the validity of the responses, which would lead to a stronger output of data and recommendations.

A second potential limitation is the survey design and timeliness of the survey. How respondents felt at the time of survey completion may have impacted their results

compared to how they could have felt on a different day. With regard to the survey design, the wording of certain questions could have placed limitations on the responses by respondents. Additionally, the survey was conducted between the first and second quarters of the school year. Stakeholder opinions or classroom policies could have changed as the school year progressed. Also, cell phone incidents that resulted in some issues in school but not enough for disciplinary referral may have occurred but are not factored into the disciplinary data. To address the timeliness limitation, the survey or an additional survey could be administered at the start of the school year and at the end of the school year to determine the change or consistency of perceptions.

A third potential limitation is the nature of the researcher's role at the school. As the disciplinarian, participants could perceive that their responses will have a direct impact on actions taken in the future, which would skew the responses if the respondents did not provide their honest feedback. While it is recognized that conducting the study in the researcher's school is beneficial to buy-in and participation, the relationship between the researcher and participants could impact responses and furthermore the outcomes of the study.

A fourth limitation to consider is the demographics of the participants involved in the study. This study was conducted at West Shamokin JSHS which is one of eight schools in the Armstrong School District. While this sample size provides valuable insights, and the demographics of students, staff, and parents are comparable to the seven other buildings, caution should be exercised when generalizing the findings to other buildings in the same school district and other school districts in particular. To address this demographic limitation, future studies could target a broader range of participants

and extend to the other secondary schools in Armstrong School District or secondary schools in other school districts. This would allow for a broader understanding and would add targeted data with regard to student cell phone use in schools.

A fifth potential limitation is the researcher's own presumed bias on the topic. The researcher has an invested interest in the topic and knows the more general impact that it has on the building. All students, teachers, and parents were allowed to participate to intentionally encourage an unbiased setting, but that does not account for the potential biases that the researcher holds in interpreting the results of the study. To mitigate this potential bias, the researcher employed a variety of research methods and data analysis techniques. These data collection methods and data analysis resulted in the triangulation of data to ensure a thorough research process was employed.

In conclusion, while this study has presented a large amount of data and valuable insights into the topic at hand, it is necessary to consider the various limitations that are evident and those that are not. The researcher also acknowledges that there could be other limitations that are not being considered. Acknowledging any potential limitation will aid further research on student cell phone use in secondary schools. By acknowledging these limitations, future researchers can improve upon the process to reduce the potential limitations of their work.

Recommendations for Future Research

The results and conclusions of this Doctoral Capstone project helped to answer the three research questions. The overall goal was to gain a stronger understanding of the education and disciplinary impact of student cell phone use in school. As a whole, the qualitative and quantitative research helped to generate future considerations to improve

stakeholder experience and foster a stronger educational environment at West Shamokin JSHS.

The first of these future recommendations is to continue the cell phone restriction into the 2025-2026 school year for junior high students. The qualitative and quantitative data both support the positive impact that a junior high classroom cell phone restriction has had. Continuing this process moving forward is supported by the study.

The second future recommendation is to potentially expand the classroom cell phone restriction to 9th and possibly 10th-grade students. The quantitative data showed the high level of cell phone involvement in school with regard to disciplinary incidents with not only junior high students but 9th graders in particular. Older high school level students had a lower number of incidents but the numbers were still substantial at the 9th grade level. Implementing the same restriction that junior high students have will possibly help to provide a better classroom experience for students and staff.

The third future recommendation is to review the current school cell phone infraction consequences and consider if they are appropriate for the level of incident. Lower-level incidents should result in lower-level disciplinary action than higher-level incidents. However, whether these levels of consequence are appropriate for the level of incidents should be examined.

A fourth future recommendation should be to explore assemblies, speakers, or other informative information to provide to stakeholders regarding the negative impacts of student cell phone use in school. The advancements in technology have rapidly changed, and much is still not known about what can be done to create safe environments

for students with regard to cell phone use. Educating stakeholders will potentially have a positive impact on student-safe technology uses.

The final recommendation for West Shamokin JSHS is to explore the pricing on cell phone pouches such as Yondr. The implementation of these cell phone pouches would require district-wide policy changes and future discussions. However, one of the first steps in any process is to consider the financial implications of any new initiative. This would be a major step to essentially lock student cell phones during the school day so that they are completely unavailable from when a student passes through the metal detectors until they leave for the bus at the end of the day. However, if the district believes there exists a negative impact on students with regard to cell phone use in school, then this would potentially be a topic for consideration.

After the conclusion of this study, there are a few areas of research in which the researcher finds a shortcoming. The first need for future research rests with the need for additional research regarding the impact of student cell phone use on mental health and social development. As previously stated, advancements in student cell phone use have come so quickly that we don't know the implications of that use. While we can make unfounded assumptions, additional research on this area would help to drive school district policy.

Another need for future research is the various levels of infractions of student cell phone use and the effectiveness of corresponding disciplinary consequences. There are various levels of cell phone infractions, and exploring what consequences work best to prevent the occurrence of future incidents would be hugely beneficial for district administration and stakeholders.

The final need for future research is the regular start-of-school-year and end-of-school-year surveys for students, teachers, parents, and administrators across the United States of America. Different school districts have taken various stances on cell phone use in school, and it would be beneficial to know how prevalent certain policies are as well as their corresponding impact on students', discipline, and mental health. If there are proven data points already existing to be shared, there is no need for school districts to reinvent the wheel on their own.

Summary

This research examined the educational and disciplinary impact of student cell phone use at West Shamokin JSHS. The study sought to find answers and focused on the following research questions:

1. What are the perceptions of teachers, students, and parents on student cell phone use during the school day?
2. How does a teacher's classroom cell phone policy impact student disciplinary behavior?
3. What impact would a cell phone restriction in class have on junior high students?

This study provided useful qualitative and quantitative data for the researcher and other interested stakeholders. The data will help West Shamokin JSHS and potentially other school programs to make adjustments and improvements to progressing overall practices with regard to cell phone use in school. Other research will potentially occur in the future in order to make improvements and continue to analyze the impact of adjustments in order to find the best line of practices that are permitted.

Given the overall results of the qualitative and quantitative data from the three research questions, there are strong considerations to take to West Shamokin JSHS to potentially adjust and continue policies and practices regarding student cell phone use in school. The relevance of the gathered data makes it extremely applicable to the school setting given the results are directly based on West Shamokin JSHS data. Such considerations include the existing cell phone restriction in junior high classes and whether to continue with it into the 2025-2026 school year, if a classroom cell phone restriction should be expanded to other grade levels, if disciplinary consequences at the administrative level should be adjusted based on cell phone infractions, and if additional measures should be taken to educate stakeholders on these impacts of student cell phone use in school. To continue or expand general classroom or disciplinary expectations at West Shamokin JSHS, no fiscal implication would be evident. However, if a district-wide policy such as a school ban on cell phones were to be implemented, this would come at the cost of materials to secure cell phones throughout the school day. Time would need to be dedicated to creating a process with existing staffing and building it into the daily schedule.

In conclusion, the completion of this process and study as a whole was an invaluable experience for the researcher. It has offered deeper insight into a topic that is not only facing schools today but showing potentially an increased impact in the future. The researcher has provided valuable insight into not only the perceptions of various stakeholder groups but also concrete disciplinary data and trends that have occurred. This will allow the researcher and potentially others to examine current practices and make positive adjustments in the future. Using data, analyses, and proven research

methodologies will help elevate West Shamokin JSHS's culture and foster data-driven practices when implementing new policies and practices.

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APPENDICES

APPENDIX A

Armstrong School District – Letter of Approval

"Working Together for Academic Excellence"

181 Heritage Park Drive, Suite 2, Kittanning PA 16201-7025
(724) 548-7200 •FAX (724) 548-6026
jdwilliams@asd.k12.pa.us

Josh Williams
Assistant Superintendent 7th – 12th

July 8, 2024

463 Sgros Road
Dayton PA 16222

Dear Frank Nagy,

I am pleased to write a letter in support of your doctoral capstone project entitled, "The Educational and Disciplinary Impacts of Student Cell Phone Use at a Rural Secondary School". The proposed research has significant value for our district as we continue to examine permitted use of cell phones in our schools.

I have reviewed the project proposal and understand the following related to participation:

- Teacher, guardian, and student participation involves completion of pre- and post-intervention surveys.
- Participation will be voluntary, and teachers may withdraw from the study at any time.
- Data collected will be kept confidential and kept secure via electronic files.
- Potential risks are minimal and primarily include loss of confidentiality, though precautions have been thoroughly planned and explained.

Please accept this letter as my formal consent and support of the district's participation in the proposed research project as well as using Armstrong School District and/or West Shamokin JSHS by name in your research project.

Sincerely,

Josh Williams
Assistant Superintendent
Armstrong School District

APPENDIX B

Institutional Review Board (IRB) – Letter of Approval

Institutional Review Board
250 University Avenue
California, PA 15419
instreviewboard@pennwest.edu
Melissa Sovak, Ph.D.

Dear Frank,

Please consider this email as official notification that your proposal titled "The Educational and Disciplinary Impacts of Student Cell Phone Use at a Rural Secondary School" (Proposal #PW24-044) has been approved by the Pennsylvania Western University Institutional Review Board as submitted.

The effective date of approval is 09/20/2024 and the expiration date is 09/19/2025. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

(1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)

(2) Any events that affect the safety or well-being of subjects

(3) Any modifications of your study or other responses that are necessitated by any events reported in (2).

(4) To continue your research beyond the approval expiration date of 08/15/2025, you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD.
Chair, Institutional Review Board

APPENDIX C

Student Perceptions Survey – Student Cell Phone Use in School (Including Informed Consent)

Student Survey - Doctoral Research Study

INFORMED CONSENT - IRB Approved Dates: 9/20/2024 - 9/19/2025

Title of Study: The Educational and Disciplinary Impacts of Student Cell Phone Use at a Rural Secondary School

Researcher's Name: Frank Nagy

You are being asked to be in a research study, you are volunteering to take part, and you may stop at any time.

The research study looks at the impact of student cell phone use in school.

Your part in this study will be to answer questions to share your opinion about student cell phone use in school, and nothing bad will happen to you during the study.

The study will take about 5 minutes for you to do. Your parent/guardian has been told about the study and knows you are being asked to take part, but it is up to you to decide if you want to do the study.

Your answers will only be seen by the researcher, Frank Nagy, and will not be shown to your teachers or parents. Your name is not connected to your answers.

You understand that you are volunteering to take part in the study and that you do not have to be in this study unless you want to. You do not have to answer any questions you do not want to, and you can stop being in the study whenever you want. If you choose not to answer a question or to stop taking part in the study, it is okay, and no one will be upset with you. If you want to stop taking part in the study, you just need to tell, your teacher and/or Frank Nagy that you want to stop. If you do not want to be in the study or if you want to quit the study once you have started, no one will be mad or upset at you.

If you have any questions about the study, you may ask now or at any time during the study. After the study, if anything about what you did worries or upsets you, you should talk to your parent/guardian about it.

I agree to be in this study, have had all my questions about the study answered, and know I can stop at any time.

If you would like a copy of this informed consent, please print this screen or contact Mr. Frank Nagy at nag82228@pennwest.edu.

Thank you,
Frank Nagy
Assistant Principal WSHS

By clicking on the "I agree" box and continuing with the survey, you have acknowledged that you have read the informed consent. Also, you acknowledge that you agree to participate in the study and have the right not to answer any or all the questions in the survey. Finally, you understand your participation is entirely voluntary, and you may quit the study at any time without penalty. *

- [ ] I agree

What grade are you in?

- ○ 7th
- ○ 8th
- ○ 9th
- ○ 10th
- ○ 11th
- ○ 12th

Do you bring a cell phone to school?

- ○ Yes
- ○ No

Do you bring a cell phone to your classes?

- ○ Yes
- ○ No

Do you use apps on your cell phone during the school day outside of class?

- ○ Yes
- ○ No

If you use apps on your cell phone outside of class, how many times during the school day?

- ○ 0 - I do not use apps on my cell phone outside of class
- ○ 1-2
- ○ 3-5
- ○ 6-9
- ○ 10+

Do you use educational apps on your cell phone during class time? (Google Suite, Canvas, Clever, Quizlet, etc.)

- ○ Yes
- ○ No

If you use educational apps on your cell phone during class time, how many times?

- ◯ 0 - I do not use apps on my cell phone during class time
- ◯ 1-2
- ◯ 3-5
- ◯ 6-9
- ◯ 10+

Do you use social media and/or gaming apps on your cell phone during class time? (Instagram, Tik Tok, Snapchat, X/Twitter, etc.)

- ◯ Yes
- ◯ No

If you use social media and/or gaming apps on your cell phone during class time, how many times?

- ◯ 0 - I do not use apps on my cell phone during class time
- ◯ 1-2
- ◯ 3-5
- ◯ 6-9
- ◯ 10+

Of your 8 periods during the school day, how many periods are you required to place your phone in a cell phone caddy on the wall when you enter the classroom?

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7
- ◯ 8

Of your 8 periods during the school day, how many periods are you permitted to have your cell phone on you or in your bag but not permitted to have in sight (not required to be in the cell phone caddy)?

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7
- ◯ 8

Of your 8 periods during the school day, how many periods are you permitted to have your cell phone on your desk or accessible as needed?

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7
- ◯ 8

Which of the following activities do you use your cell phone for during school hours? (check all that apply)

- ☐ E-Hall pass
- ☐ Educational apps and purposes
- ☐ Email
- ☐ Gaming
- ☐ Messaging
- ☐ Sending pictures / videos
- ☐ Social media
- ☐ Video streaming
- ☐ Web browsing
- ☐ Other: _____

When using your cell phone in school, what apps or websites do you use? (For classroom or free time, check all that apply)

- [ ] Canvas
- [ ] Club/Team communication apps (Gamechanger, Remind, SportsYou, TeamSnap, etc.)
- [ ] Facebook
- [ ] Google Classroom
- [ ] Google Docs
- [ ] Google Email
- [ ] Google Sheets
- [ ] Google Slides
- [ ] Instagram
- [ ] Internet search
- [ ] Snapchat
- [ ] Texting
- [ ] Tik Tok
- [ ] X (Twitter)
- [ ] YouTube
- [ ] Other:

Which cell phone features do you find most useful for educational purposes? (check all that apply)

- [ ] Calculator
- [ ] Camera
- [ ] Canvas
- [ ] Classroom games (Kahoot, Quizlet, BlookIt)
- [ ] E-Hall Pass
- [ ] Email
- [ ] Facebook
- [ ] G Suite apps (Docs, Slides, Sheets, Classroom, etc.)
- [ ] Instagram
- [ ] Internet Search
- [ ] Note Taking
- [ ] Organizer / Planner / Calendar
- [ ] Snapchat
- [ ] Tik Tok
- [ ] YouTube / Other Video Streaming
- [ ] X (Twitter)
- [ ] Other:

Do you find cell phones helpful for studying and/or school work during school hours?

- ◯ Yes
- ◯ No
- ◯ Not sure

What impact has cell phone usage in school had on your academic performance?

- ◯ Strong negative
- ◯ Negative
- ◯ Positive
- ◯ Strong positive

What impact has cell phone usage in school had on your disciplinary history?

- ◯ Strong negative
- ◯ Negative
- ◯ Positive
- ◯ Strong positive

How often do you get distracted by your own cell phone in class?

- ◯ Often
- ◯ Sometimes
- ◯ Never

How often do you get distracted by someone else's cell phone use in class?

- ◯ Often
- ◯ Sometimes
- ◯ Never

In which situations do you feel cell phone usage is distracting? (check all that apply)

- ☐ During class lectures
- ☐ While studying and/or completing work
- ☐ During exams
- ☐ In social interactions
- ☐ Cell phones never distract me

Which overall negative effects have you experienced due to cell phone usage during school hours? (check all that apply)

- [ ] Procrastination
- [ ] Eye strain
- [ ] Increased level of stress
- [ ] Posture issues
- [ ] Reduced physical activity
- [ ] Decreased social interaction
- [ ] Conflict with peers due to cell phone interaction (texting, social media, etc.)
- [ ] I haven't experienced any negative effects
- [ ] Other:

With peers, how often do you engage in face-to-face conversations compared to communicating on cell phones during school hours?

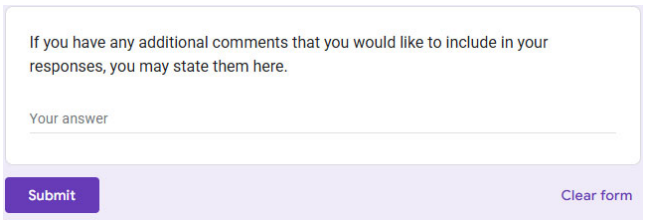
- ◯ More face-to-face conversations
- ◯ Equal amount
- ◯ More cell phone conversations

What subjects or areas of study during school hours do you find cell phone usage most beneficial? (check all that apply)

- [ ] Art
- [ ] English
- [ ] Family Consumer Science
- [ ] Language
- [ ] Math
- [ ] Music
- [ ] Phys Ed / Health
- [ ] Science
- [ ] Social Studies
- [ ] Tech Ed (Woodshop, Electronics, Computer Science, Business Classes, etc.)

What would your preferred cell phone policy be for you in school and in your classes?

- ◯ School Ban - Not permitted at school
- ◯ Classroom Ban - Permitted in locker but not class
- ◯ Classroom Restriction - Permitted in class but in a safe place out of site during class
- ◯ On Persons - permitted on the student/in backpack but away out of sight during class
- ◯ Open - Permitted on the students desk in sight


If you have any additional comments that you would like to include in your responses, you may state them here.
Your answer
Submit
Clear form

APPENDIX D

Teacher Perceptions Survey – Student Cell Phone Use in School (Including Informed Consent)

Teacher Survey - Doctoral Research Study

INFORMED CONSENT - IRB Approved Dates: 9/20/2024 - 9/19/2025

Title of Study: The Educational and Disciplinary Impacts of Student Cell Phone Use at a Rural Secondary School

KEY INFORMATION

You are being asked by Mr. Frank Nagy, High School Assistant Principal at West Shamokin JSHS, to participate in a research study. Participation in the study is voluntary, and you may stop anytime.

The purpose of the study is to further explore the educational and disciplinary impacts that student cell phone use has and what possible options we have to further assist if there is a need.

In this study, you will be asked to answer questions about your perceptions and preferences regarding the educational and disciplinary impacts of student cell phone use in school.

It will take about 5 minutes to complete the survey.

The potential risks during the study are probing for personal or sensitive information regarding your perceptions or feelings about cell phone use in school. Remember, you may stop taking the survey at any time. In addition, if you feel the need to talk with someone, you may contact the PennWest Edinboro counseling center at 814-732-2252, or for emergencies, call 814-732-2911.

There are no direct benefits to participants from the research. It will help researchers better understand the educational and disciplinary impacts of student cell phone use in a secondary school setting.

SECURITY OF DATA

The online study is completely anonymous; you will not be asked to give any information that could identify you (e.g., name). The survey is NOT linked to IP addresses. Individual responses will not be presented, just the aggregated data.

Remember, taking part in this study is voluntary. If, while taking the survey, you feel uncomfortable or no longer want to participate, you may stop at any time. To stop taking the survey, you may either:

(1) proceed to the last page of the survey and press "Submit," or (2) if you wish to exit the survey, close your browser completely.

There are no consequences if you decide to stop participating in this study.

There is no identifiable information collected from you during this study; all other information from this study will be confidential within local, state, and federal laws. The PennWest University Institutional Review Board (IRB) may review the research records. The study results may be shared in aggregate form at a meeting or journal, but there is no identifiable information to be revealed. The records from this study will be maintained for a minimum of three (3) years after the study is complete.

Your information collected in this research will not be used or distributed for future research, even if all your identifiers are removed.

If you have questions about the research or a research-related injury, you can contact Dr. Mary Wolf at wolf@pennwest.edu. If you have a question about your rights as a research participant that you need to discuss with someone, you can contact the PennWest University Institutional Review Board at InstReviewBoard@pennwest.edu.

If you would like a copy of this informed consent, please print this screen or contact Mr. Frank Nagy at nag82228@pennwest.edu.

By clicking on the "I agree" box and continuing with the survey, you have acknowledged that you have read the informed consent and are at least 18 years old. Also, you acknowledge that you agree to participate in the study and have the right not to answer any or all the questions in the survey. Finally, you understand your participation is entirely voluntary, and you may quit the study at any time without penalty. *

- [ ] I agree

What is your position?

- ○ General education teacher
- ○ Special education teacher
- ○ Paraprofessional

What subject do you primarily teach?

- ○ Art
- ○ English
- ○ Family Consumer Sciences
- ○ Language
- ○ Learning Support
- ○ Math
- ○ Music
- ○ Phys Ed / Health
- ○ Science
- ○ Science
- ○ Social Studies
- ○ Tech Ed
- ○ Other

Which of the below options was most like your cell phone policy in class during the 2023-2024 school year?

- ○ Classroom Ban - Students are required to place their cell phones in the cell phone caddy upon entry to class and are not permitted to have it again until class ends
- ○ On Persons - Students are permitted to have their cell phone on their persons during class but are not permitted to have it in sight
- ○ Open - Students are permitted to have their cell phones on their persons during class and it can remain in their sight

Which of the below options is most like your current cell phone policy in class for the 2024-2025 school year?

- ○ Classroom Ban - Students are required to place their cell phones in the cell phone caddy upon entry to class and are not permitted to have it again until class ends
- ○ On Persons - Students are permitted to have their cell phone on their persons during class but are not permitted to have it in sight
- ○ Open - Students are permitted to have their cell phones on their persons during class and it can remain in their sight

Do you have your classroom cell phone policy posted in and/or outside your classroom for all students to see?

- ◯ Yes
- ◯ No
- ◯ I don't have a specific cell phone policy for my class

On a typical school day, how many times do you tell students to put their phone away without sending an official referral or confiscating their phone?

- ◯ 0
- ◯ 1 - 2
- ◯ 3 - 5
- ◯ 6 - 9
- ◯ 10+

If your classroom cell phone policy has changed from the 2023-2024 school year to the 2024-2025 school year, has student attention during class improved or declined?

- ◯ Strong improvement
- ◯ Mild improvement
- ◯ No change
- ◯ Mild decline
- ◯ Strong decline
- ◯ N/A - I have had the same policy both years

If your classroom cell phone policy has changed from the 2023-2024 school year to the 2024-2025 school year, has student discipline during class improved or declined?

- ◯ Strong improvement
- ◯ Mild improvement
- ◯ No change
- ◯ Mild decline
- ◯ Strong decline
- ◯ N/A - I have had the same policy both years

Does student cell phone access during class present a disruption/barrier to your instructional goals?

- ○ Significantly
- ○ Somewhat
- ○ Not at all

What impact do you believe student cell phone usage in school has on their academic performance?

- ○ Strong negative
- ○ Negative
- ○ Positive
- ○ Strong positive

What impact do you believe student cell phone usage in school has on their disciplinary history?

- ○ Strong negative
- ○ Negative
- ○ Positive
- ○ Strong positive

In which situations do you believe cell phone usage is distracting for students? (check all that apply)

- ☐ During class instruction
- ☐ While studying and/or completing assignments
- ☐ During exams
- ☐ In social interactions
- ☐ Cell phones are not distracting for students

Do you encourage students to use their cell phones during class time for educational purposes?

- ○ Often
- ○ Sometimes
- ○ Never

If you encourage students to use their cell phones during class time for educational purposes, what apps are you directing them to use? (check all that apply)

- [ ] Calculator
- [ ] Camera
- [ ] Canvas
- [ ] Classroom games (Kahoot, Quizlet, BlookIt)
- [ ] E-Hall Pass
- [ ] Email
- [ ] Facebook
- [ ] G-Suite apps (Docs, Slides, Sheets, Classroom, etc.)
- [ ] Instagram
- [ ] Internet search
- [ ] Note taking
- [ ] Organizer / Planner / Calendar
- [ ] Snapchat
- [ ] Tik Tok
- [ ] YouTube / Other video streaming
- [ ] X (Twitter)
- [ ] I do not encourage them to use their cell phones during class
- [ ] Other: _____

What would your preferred cell phone policy be for all students in school and in their classes?

- ○ School Ban - Not permitted at school
- ○ Classroom Ban - Permitted in locker but not class
- ○ Classroom Restriction - Permitted in class but in a safe place out of site during class
- ○ On Persons - permitted on the student/in backpack but away out of sight during class
- ○ Open - Permitted on the students desk in sight

If you have any additional comments that you would like to include in your responses, you may state them here.

Your answer

Submit Clear form

APPENDIX E

Parent Perceptions Survey – Student Cell Phone Use in School (Including Informed Consent)

Parent/Guardian Survey - Doctoral Research Study

INFORMED CONSENT - IRB Approved Dates: 9/20/2024 - 9/19/2025

Title of Study: The Educational and Disciplinary Impacts of Student Cell Phone Use at a Rural Secondary School

KEY INFORMATION

You are being asked by Mr. Frank Nagy, High School Assistant Principal at West Shamokin JSHS, to participate in a research study. Participation in the study is voluntary, and you may stop anytime.

The purpose of the study is to further explore the educational and disciplinary impacts that student cell phone use has and what possible options we have to further assist if there is a need.

In this study, you will be asked to answer questions about your perceptions and preferences regarding the educational and disciplinary impacts of student cell phone use in school.

It will take about 5 minutes to complete the survey.

The potential risks during the study are probing for personal or sensitive information regarding your perceptions or feelings about cell phone use in school. Remember, you may stop taking the survey at any time. In addition, if you feel the need to talk with someone, you may contact the PennWest Edinboro counseling center at 814-732-2252, or for emergencies, call 814-732-2911.

There are no direct benefits to participants from the research. It will help researchers better understand the educational and disciplinary impacts of student cell phone use in a secondary school setting.

SECURITY OF DATA

The online study is completely anonymous; you will not be asked to give any information that could identify you (e.g., name). The survey is NOT linked to IP addresses. Individual responses will not be presented, just the aggregated data.

Remember, taking part in this study is voluntary. If, while taking the survey, you feel uncomfortable or no longer want to participate, you may stop at any time. To stop taking the survey, you may either:

(1) proceed to the last page of the survey and press "Submit," or (2) if you wish to exit the survey, close your browser completely.

There are no consequences if you decide to stop participating in this study.

There is no identifiable information collected from you during this study; all other information from this study will be confidential within local, state, and federal laws. The PennWest University Institutional Review Board (IRB) may review the research records. The study results may be shared in aggregate form at a meeting or journal, but there is no identifiable information to be revealed. The records from this study will be maintained for a minimum of three (3) years after the study is complete.

Your information collected in this research will not be used or distributed for future research, even if all your identifiers are removed.

If you have questions about the research or a research-related injury, you can contact Dr. Mary Wolf at wolf@pennwest.edu. If you have a question about your rights as a research participant that you need to discuss with someone, you can contact the PennWest University Institutional Review Board at InstReviewBoard@pennwest.edu.

If you would like a copy of this informed consent, please print this screen or contact Mr. Frank Nagy at nag82228@pennwest.edu.

Your child will be receiving a similar survey in a week to complete during their homeroom period. If you would like them not to complete it, please let me know and encourage them not to complete it at the time the other students do.

Thank you,
Frank Nagy
Assistant Principal WSHS

By clicking on the "I agree" box and continuing with the survey, you have acknowledged that you have read the informed consent and are at least 18 years old. Also, you acknowledge that you agree to participate in the study and have the right not to answer any or all the questions in the survey. Finally, you understand your participation is entirely voluntary, and you may quit the study at any time without penalty. *

- [ ] I agree

How many children do you have currently enrolled at West Shamokin JSHS?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8

Indicate how many children you have in each grade level.

	0	1	2	3
7th Grade	○	○	○	○
8th Grade	○	○	○	○
9th Grade	○	○	○	○
10th Grade	○	○	○	○
11th Grade	○	○	○	○
12th Grade	○	○	○	○

Does your child(ren) bring a cell phone to school?

- ○ Yes
- ○ No

Do you believe your child(ren) uses cell phone apps during the school day between classes, during lunch, and on the bus?

- ○ Yes
- ○ No

Do you believe your child(ren) uses cell phone apps during class time?

- ○ Yes
- ○ No

Do you think student cell phone use during class time is a distraction to their education?

- ○ Yes
- ○ No

When using their cell phone in school, what apps do you think your child(ren) uses? (check all that apply)

- ☐ Canvas
- ☐ Club/Team communication apps (Gamechanger, Remind, SportsYou, TeamSnap, etc.)
- ☐ Facebook
- ☐ Google Classroom
- ☐ Google Docs
- ☐ Google Email
- ☐ Google Search
- ☐ Google Sheets
- ☐ Google Slides
- ☐ Instagram
- ☐ Snapchat
- ☐ Texting
- ☐ Tik Tok
- ☐ X (Twitter)
- ☐ YouTube
- ☐ Other: _____

If your child(ren) is using their cell phone during class time, what type of educational impact (student grades, homework completion, focus in class, etc.) do you think that has?

- ◯ Strong negative
- ◯ Negative
- ◯ Positive
- ◯ Strong positive

If your child(ren) is using their cell phone during school hours but outside of class, what type of educational impact (student grades, homework completion, focus in class, etc.) do you think that has?

- ◯ Strong negative
- ◯ Negative
- ◯ Positive
- ◯ Strong positive

Do you think your child(ren) using their cell phone in class leads to disciplinary action (loss of cell phone, lunch detention, ISS, etc.)?

- ◯ Yes
- ◯ Probably
- ◯ Rarely
- ◯ No

Do you think your child(ren) using their cell phone during school hours but outside of class leads to disciplinary action (loss of cell phone, lunch detention, ISS, etc.)?

- ◯ Yes
- ◯ Probably
- ◯ Rarely
- ◯ No

What type of impact on their stress level do you think your child(ren) using their cell phone during class has?

- ◯ Strong negative
- ◯ Negative
- ◯ Positive
- ◯ Strong positive

What type of impact on their stress level do you think your child(ren) using their cell phone during school but outside of class has?

- ◯ Strong negative
- ◯ Negative
- ◯ Positive
- ◯ Strong positive

What would your preferred cell phone policy be for your child(ren) in school and in their classes?

- ◯ School Ban - Not permitted at school
- ◯ Classroom Ban - Permitted in locker but not class
- ◯ Classroom Restriction - Permitted in class but in a safe place out of site during class
- ◯ On Persons - permitted on the student/in backpack but away out of sight during class
- ◯ Open - Permitted on the students desk in sight

If you have any additional comments that you would like to include in your responses, you may state them here.

Your answer

Submit Clear form