To Type or Not to Type? Student's Perceived Effects of Laptop Use and Policy in the Classroom

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Introduction

In the past decade, the use of technology has increased significantly. In 2019, 91% of Canadians over the age of 15 used the internet, in comparison to 83% who used it in 2012 (Statistics Canada, 2019). With society becoming increasingly digital, laptop use in the classroom has also become ubiquitous. A new generation of students, commonly known as the Net-Generation are coming into university. The Net (or N-Generation) are individuals who have grown up with technology in their everyday lives, allowing for a generation with widespread technology use (Jones, 2010). This reality has largely translated into their university studies, as demonstrated by Patterson and Patterson (2017), who found that 72% of students used laptops in class. Further research conducted by the Educause Centre for Analysis and Research also found that over 95% of undergraduate students own a laptop with many seeing their laptops as a necessary tool for their educational success (Brooks and Pomerantz, 2017). These results are also further enhanced by the fact that many universities today require students to own a laptop[1] and certain university departments, such as engineering, business, and computer science, often specify certain laptop models and/or software needed for their program[2]

The widespread prevalence of laptop use in university has prompted large debates over its perceived benefits and costs. Many have seen that laptops have led to negative effects on learning in the classroom, prompting initiatives such as the implementation of laptop-free policies. These initiatives have led to further debates among students, researchers, and professors advocating for and against their use in the classroom. To better understand the relationship

[1] University of Toronto; University of Denver

[2] Bowers; Dalhousie University; University of Denver; University of Waterloo; Western Engineering; Western Science

between technology and education, we conducted an explanatory research study using semi-structured interviews. The goal of the study was to better understand the role of laptops in the classroom from a qualitative perspective. By interviewing subjects from social science majors, we found that while students largely perceive laptops to be a form of distraction and that handwritten notes carry many benefits, they are largely against the implementation of laptop-free policies. We hope that these findings will add meaningful contributions to the field of existing literature on the topic as well as provide information for the accurate creation and implementation of future, laptop-related university policies.

Literature Review

The focus of most studies on laptop usage in the classroom has been primarily on the laptop's distracting effect. Laptops give users the ability to readily access any information or website they wish, which can easily be a source of distraction within the classroom. A study that tracked the online activity of university students during their classes, found that students spent 37 minutes on average on non-class related activities such as social media and online shopping (Ravizza, Uitvlugt, and Fenn, 2016). In a similar study where researchers sat at the back of four upper year law classes to observe laptop engagement, it was found that around 87% of students used their laptops for non-class related purposes for more than five minutes at a time (Sovern, 2013). With this, a survey conducted by Ragan, et al. (2014) also demonstrated similar results as it found that students reported using their laptop for non-academic purposes 61% of the class time. Other studies have also focused on the way in which laptop use in the classroom has led to lower levels of class participation (Jackson, 2012; Yamamoto, 2007). Following a qualitative approach, Yamamoto (2007) recounted his own experiences as a professor, explaining how laptops would lead to lower levels of class participation as they would create a physical and

psychological barrier between his students and himself. Besides providing an individual distraction, studies have also stated that laptop usage in the classroom can distract other students as well, including those who take paper notes (Fried, 2008; Sana, Weston, and Cepeda, 2013; Yamamoto, 2007). Specifically, a study conducted by Sana, Weston, and Cepeda (2013) found that students who had a good view of a peer's non-academic laptop activity scored 17% lower when assessed after class. These findings though have been largely debated as they are one of few studies that directly address the relationship between laptops and peer distraction. With this, another study by Aguilar, et al. (2012) found contrary results.

Due to the widespread distraction and prevalence of non-academic activities in the classroom, various scholars have also signaled a relationship between the use of laptops in the classroom and lower academic performance (Jackson, 2012; Patterson and Patterson, 2017; Ravizza, Uitvlugt, and Fenn, 2016). From these studies, many have attributed the decrease in academic performance to the cognitive effects of multi-tasking, which often make it harder for students to focus in class (Downs, el at., 2015; Fried, 2008; Junco and Cotten, 2012; Sana, Weston, and Cepeda, 2013). Aside from inhibiting multi-tasking, research conducted by Mueller and Oppenheimer (2014) found that students who used laptops produced notes of a lower quality in comparison to handwritten notes. These findings were largely attributed to the increased levels of cognitive processing that occur when one paraphrases handwritten notes (Mueller and Oppenheimer, 2014).

Largely due to the negative factors mentioned previously, it has become increasingly common for professors and lecturers to employ laptop-free policies within the classroom (Aguilar-Roca, et al., 2012; Fried 2008; Jackson, 2012), a practice that has also been met with widespread debate among both students and faculty. A qualitative, narrative study that focused

on the experience of a professor who implemented a laptop-free policy expressed mainly positive results (Yamamoto, 2007). Yet, other studies state that a general negative consensus is commonly held among students and some faculty regarding the banning of laptops in the classroom (Aguilar-Roca, et al., 2012; Jackson, 2012). With this, some professors have described positive effects that can arise from laptop use, and instead, advocate for its regular implementation in the classroom as a way to enhance learning (Granberg and Witte, 2005).

Despite the large body of research conducted on laptops in the classroom, the majority of studies followed a quantitative approach (Aguilar-Roca, et al., 2012; Downs, el at., 2015; Fried, 2008; Junco and Cotten, 2012; Mueller and Oppenheimer, 2014; Patterson and Patterson, 2017; Ragan, et al, 2014; Ravizza, Uitvlugt, and Fenn, 2016; Sana, Weston, and Cepeda, 2013; Sovern, 2013). Aside from this, these studies have mainly focused on the direct effects of laptop use in the classroom in regard to distraction and grades and very little attention is placed on the subjective experiences of students themselves. From the studies that did follow a purely qualitative approach, most focused solely on the experiences of professors (Yamamoto, 2007; Granberg and Witte, 2005). Although it is important to consider the subjective experiences of professors in regard to laptops in the classroom, it is also important to understand the experiences of students who are also directly affected by their use. For these reasons, our study followed a qualitative approach to deeply understand the experiences of students in the classroom in regard to laptop use. To address this, our research was guided by the following research questions:

1) What note taking strategies do students primarily use in the classroom?

2) What views do students hold around laptop use in the classroom?

3) What are student's views on the implementation of laptop-free policies in the classroom?

Methodology

In order to understand the subjective experiences of students, we conducted a series of semi-structured interviews comprised of mainly open-ended questions. Our sample consisted of undergraduate students from the University of Western Ontario, which allowed for an easier recruitment process as we currently attend the university ourselves. Aside from this, we further specified our sample to students in the social sciences due to the fact that most social science classes do not rely on laptop use and so, laptop-free policies are common throughout the department. To locate participants for our study, we chose to employ convenience sampling, which is when one samples from a group of available cases (Singleton and Straits, 2005, p.171-172). As mentioned previously, we chose this method since our sample consists of Western undergraduate students and as insiders, we have access to many known networks. To recruit participants from these networks, we debriefed known members, such as classmates and friends about our study and asked if they would be willing to participate in our interviews. Once participants were found, each were interviewed by another member of the group who did not recruit them and who they did not know personally. This was done in an effort to reduce any bias or discomfort that commonly arises from interviewing friends or other known members of one's network (Quinney, Dwyer, and Chapman, 2016).

Various ethical concerns could have arisen throughout the study due to the personal nature of the interview process. To limit these concerns and ensure the comfort of all our participants, we employed a variety of tactics. First, conditionality was provided throughout the study, as participants were informed that they could stop the interview at any moment. With this, the sensitive nature of some aspects of the research topic, such as one's grades, was taken into

consideration and questions that directly referenced the participant's numerical grade were avoided. We also informed each participant of the confidentiality of the interview and each was presented with a consent form that further explained the study in detail, which they were also required to sign. To further ensure confidentiality, the names of the participants have also been excluded, and all interview recordings were deleted once transcribed. We also attempted to be reflexive throughout the study, acknowledging that Western University may provide students with certain advantages over other universities, which could potentially serve to bias our results. Due to the interview process itself and the nature of our research questions, there was also a large possibility of a social desirability effect in our findings, in which participants alter their answers to what they believe the interviewer wants to here (Singleton and Straits, 2005, p. 133). In the case of our study, this could include stating lower levels of distraction to appear more studious or lying about one's feelings towards laptop-free policies in order to conform to perceived general consensus. In order to limit the possibility of a self-serving effect, we took the format of our research questions into careful consideration and avoided any loaded or double-barreled questions. Lastly, we also recognize that our small sample size, although beneficial in providing in-depth findings, makes it difficult for us to generalize our findings to the greater population.

Findings

Styles of Notetaking

As this study is primarily focused on the subjective experiences of undergraduate students in regard to notetaking, an important topic that arose from our findings was the different forms of notetaking used by each participant. All participants stated taking notes in class, and two emphasized that they take notes on a regular basis. With this, each student described a different form of notetaking when asked about their preferred method. Participant.1 who is a

third-year psychology student (04, 08), is a big fan of handwritten notes, and stated that: “Well, it depends on the class, but I do like handwriting notes better because I find that I remember the information more.” (12-13). Besides memorization, she also believes that laptops create a distraction in the classroom and that: “the future is very tech based, so I think it's important to remember our roots in handwriting” (89-90). With this, Participant.1 also emphasized the importance of one’s style of notetaking in relation to academic success. For her, taking notes on the key points of the lecture’s content is paramount, as demonstrated in her statement:

“Well, if you take notes that don’t have like relevant information for the exam, you're going to end up studying info. that's not the main topic, and you probably won't do as well on the exam. So, in the end, notetaking can like impact you grade.” (22-25).

Another student who prefers handwritten notes was Participant.4, a third-year student in management and organizational studies (04, 08) who takes notes by paraphrasing the professor’s lecture slides She described her notetaking process, explaining that:

“I look at what's on the PowerPoint slide and then I read that slide and then I kind of rephrase whatever information is on the slide. Then I write my notes in blue pen using bullet points and different headings, which makes it easier for me to take quick notes.” (12-16).

Diverting from Participant.1’s method of notetaking key lecture points, Participant.4 focuses on paraphrasing her notes in an effort to process the lecture’s content more deeply. She explained how using this method can help students understand the content better, while also providing a break from technology. These thoughts are reflected in her following statement:

“I think it gives the student a bit of a break to kind of understand what the process or the information is saying. It also allows them to take their time with notes as opposed to just copying

and pasting what's on the side and I don't know, I find I can also sometimes read better like with my notes as opposed to on a screen so it gives my eyes a break sometimes too" (25-31).

Less focused on a single style of notetaking, Participant.3, a third-year criminology major (04, 08), employs different methods of taking notes depending on the class she is attending. She explains that: "It depends on the course; I typically take notes by hand for courses like stats where typing is difficult, but I type my notes for the majority of my other classes" (12-14). In regard to academic success, Participant.3 states that: "I think that prewriting your notes prior to coming to class is beneficial because you don't have to scramble to write when the professor is talking." (16-17).

Similar to Participant.3, Participant.2, a second-year criminology student (04, 09) has employed both handwritten and laptop, notetaking. She explained how she initially preferred to handwrite her notes but due to efficiency, now mainly types her notes on a laptop. This is reflected in her statement:

"So, I actually used to handwrite my notes, but I found that it was kind of hard to continue doing so because the prof always speaks at a faster rate than I am able to write, so now I always tend to type my notes in class." (13-16).

In opposition to Participant.1's method of writing key points and Participant.4's method of paraphrasing, Participant.2 prefers to note all details of the lecture for future reference. She explains her reasoning in the following quote:

"I think there is pros and cons for both [handwritten and typed notes], but personally, I do like typing up my notes just because when I was handwriting them it was easier to process everything that I've been learning, but I could only get down key points rather than all the little important

details. In terms of typing them now, I can literally get everything down that the professor is saying, and everything that is on the slides." (19-25).

Benefits of Handwritten Notes

Despite the wide variety of differences in notetaking styles used by each participant, a general theme arose around the perceived benefits of taking handwritten notes. First, many of the participants referenced improved memorization as a key advantage of handwritten notes. Participant.3 stated forthright that: "[handwritten notes are] proven to enhance memorization" (20) and although she mainly uses typed notes, Participant.2 also mentioned memorization as a positive effect of handwritten notes. This is demonstrated in her following statement:
"In terms of handwriting, what I find and what I've actually heard from some of my peers as well, is when you hand write your notes, you're actually going through it in your head, so you're able to memorize as you go". (28-32).

Besides memorization, handwriting one's notes was also commonly associated with increased focus and enhanced information processing, as Participant.2 stated how: "With a paper and pen you can't really get distracted with anything else" (45-46). Participant.4 also mentioned a variety of benefits that come with handwriting one's notes. Relating to her personal experience, she stated that: "I usually take notes by hand as I find it gives me another opportunity to digest and reread the information and I find that I can just clarify them to the shorter form." (19-21). When asked why professors may choose to implement laptop free policies, she described a variety of reasons. These reasons are described in the following statement:

"[I think professors urge students to write handwritten notes] again, for being able to digest that information a second time and also to not just say things, for being able to put your

things in your own words and for rephrasing things. And also too, I know a lot of courses like that I have to take in my program, such as math, need to do calculations on time so it is easier to sometimes write a formula and if you're using subscript, it's also easier to memorize." (34-41).

When asked the same question about why professors may employ laptop free policies, Participant.1, also referenced a study which found that laptops decreased class attention and focus. This is demonstrated in her following statement:

"There are studies out there that were completed by psychologists and they say that if you have a laptop in front of you, your focus decreases by a specific percentage overall. So, I think one reason that profs want to just have handwritten notes, besides that it helps you memorize information, is that if you write notes down, you will stay more focused and you won't be as distracted with technology." (28-33).

Negative Views on Laptop-Free Policies

The majority of participants were not in favour of laptop polices, mainly attributing their negative views to a lack of fairness. The participant most strongly against the implementation of laptop-free policies was Participant.3 who stated that: "I think [laptop-free policies] ignore other people's learning styles and we pay to be in university, so we should be able to decide what works best for us." (22-23). Participant.3 was also the only participant who found that: "[a laptop-free policy hasn't but has potential to" (28) influence her decision to enroll in a class. When asked her thoughts on how these policies could be improved, she simply suggested: "Don't have them in place" (15).

Although she had never taken a class with a laptop-free policy, Participant.2 also expressed negative feeling towards their implementation. She believes it is unfair to ban the use

of laptops altogether, as it limits student's options and could pose difficulties for students who are not used to taking notes by hand. This is demonstrated in her quote:

"I haven't experienced a laptop free policy in any of my classes, but personally now knowing what it is, I do not agree with it. I can see how it might be beneficial to a student's academic success if laptops were not allowed in the classroom, but I don't think it is fair to discard laptop use completely. I just think maybe professors should encourage students to not use a laptop for note taking, rather than giving no option at all. I don't think it's fair to give students no option, especially if typing notes is what the student feels most comfortable with." (63-71).

Although she also sees that laptop policies are unfair for students who may not be able to take handwritten notes, Participant.2 also believes that there are benefits to handwriting. Due to this, she suggested professors should teach their students about the benefits of handwriting while also allowing them the freedom to follow their preferred style of notetaking. These views are expressed in the following statement:

"I personally don't agree with laptop free policies because I feel students should be given an option of how they would prefer to get down all the information. Some people aren't able to handwrite notes for many reasons, such as having a disability, or simply just because they can't type as fast as the prof can speak. I think professors should just emphasize not doing certain things on your laptop in class, instead of having a laptop free policy." (49-56).

Similar to Participant.3 and Participant.2, Participant.4 also disagreed with the implementation of laptop-free policies, stating that: "I do believe that students should feel free to take notes however will help them" (43-44). With this, she also sees that having access to a laptop during lecture can produce a variety of benefits such as helping "to look up a term quickly if you need to look up something or access something else" (47-48).

Regardless of the popular views against laptop policies, Participant.1 held highly favourable views around their implementation, explaining that: “Especially in first year, because most classes were huge sometimes, I’d get distracted by other people's laptops, even if I don't have mine open (36-39). With her positive views on laptop policies, Participant.1 also noted that professors need to adapt parts of their lectures to better fit the needs of students taking handwritten notes. To explain this, she stated:

“Yeah, well I would recommend making sure that profs. are also adapting to the fact that people will be handwriting because when you're writing something down; you can't focus on what the prof. is saying because your brain can't multitask. So, keeping that in mind is important. I also think professors will have to adapt by maybe talking slower or keeping slides up longer or posting slides so that we can have time to write down all the information.” (41-47).

Laptops as a Distraction

In spite of the largely unfavourable views around laptop-free policies, another common theme that arose throughout the interviews was the distraction that arises from using laptops in class. Nearly all participants reported getting distracted with their laptops at some point during class, either from their own or other’s laptops. Throughout the interviews, the websites and activities that were most commonly mentioned as sources of distraction were social media platforms like Facebook, online shopping, and message/texts.

Facebook and other forms of social media were referenced by both Participant.1 and Participant.2 as their main sources of personal distraction. Participant.1 emphasized Facebook as a major source of distraction, stating that: “In class I’ll definitely go on Facebook because I'll mostly go check group chats, like not even group chats from my friends but more like club group

chats or something." (69-71). To remedy this, Participant.1 also explained that she will often silence Facebook or other messages to ensure that she can maintain focus throughout class. This is demonstrated, in the following statement:

"I do get distracted on my computer if it's open and that's why I like to turn off iMessage on my mac, so I don't get distracted by texts. But yeah, like when you have your computer open, it's like the exact same thing as if you're on your phone." (54-57).

On a different note, Participant.2 explained that she rarely gets distracted in class, stating that: "whenever I'm in class I tend to be 100% engaged" (90-91). Despite this, when asked how her laptop affects her engagement with class material, she explained that it can occasionally be a distraction. This is explained in her following quote:

"I have found it can be a distraction sometimes, I'm not going to lie. Sometimes let's say the professor is just talking about something that I find wouldn't be important, I might go on social media." (84-87).

To further clarify the types of social media websites she uses in class, Participant.2 also stated that: "Facebook is the main one, but also Instagram, YouTube, and Pinterest. Sometimes I [also] like to read random articles that pop up on my Facebook newsfeed, or go on my email." (110-112).

Other forms of messaging besides Facebook were also described as common forms of distraction as, Participant.3 explained that: "I get easily distracted by notifications on my laptop" (30). Apart from messaging, she also described "online shopping" on websites such as "Amazon and Fashion Nova" as other main sources of distraction in class (37 and 39).

Besides individual distractions such as social media and online shopping, another source of distraction commonly described in the classroom was the laptop use of others. As prior studies

have suggested, the presence of other laptop users can cause major distraction for other students, including those who take handwritten notes. The participant with the strongest views surrounding this was Participant.1. Participant.1 described the distraction from other's laptops as one of the main reasons she favoured laptop-free policies, as demonstrated in her statement: "I'm a fan of laptop free policies because if everybody is just not using laptops, I won't get distracted by other people's laptops." (35-36). To further explain the ways in which other's laptops can serve as a distraction, she recounted a story from her first year of university:

"One girl I still remember, and this is a true story from first year, she was watching Grey's Anatomy on her computer and she was a couple rows ahead of me and she had subtitles on, and I just ended up watching Grey's Anatomy and I was like, "oh shoot, I just missed this entire lecture". (laughs) So yes, I definitely have gotten distracted [by someone else using a laptop during class]" (62-66).

Participant.2, who initially stated she rarely gets personally distracted from her laptop, also shared a similar story of losing attention in class due to distraction from a classmate's laptop. This is demonstrated in her story:

"I've seen people like I mentioned before go online shopping, and I myself would get distracted because I would look at their screen and the next thing I know minutes have passed, and I have no idea what the professor has been talking about. I've also seen people watching Netflix and YouTube videos." (94-99).

Discussion

The findings demonstrate a variety of topics surrounding the use of technology in the classroom. First, it was clear that students relied on multiple different forms of notetaking

strategies. While some relied primarily on handwritten notes, others preferred typing, and all described both positive and negative factors pertaining to each. With this, participants also described using alternative styles of notetaking when both handwriting or typing their notes. This was demonstrated as some participants focused on paraphrasing (Participant.4, 19-22; Participant.2, 20-22) and writing key points (Participant.1, 22-25), while others focused on taking down in-depth details from the lecture (Participant.2,23-25). The widespread variety of notetaking methods demonstrated by each participant reflects the diverse needs of students in regard to notetaking and academic success. This is an important factor that must be considered when professors and researchers create and implement policies in the classroom, especially those that specify or limit certain styles of notetaking.

Aside from notetaking methods, participants also expressed a variety of views regarding laptop use in the classroom. First, in-line with studies that described technology as a major source of distraction, (Fried, 2008; Ragan, et al., 2014; Ravizza, Uitvlugt, and Fenn, 2016; Sana, Weston, and Cepeda, 2013; Sovern, 2013; Yamamoto, 2007) the majority of participants mentioned being distracted by a laptop at some point in class. These distractions were mainly attributed to social media platforms and online shopping, also reflecting similar findings from Ragan, et al., (2014). Aside from this, participants also described distractions arising from the laptop use of others, contradicting the oppositional findings from Alguilar, et al. (2012). The widespread views of technology as a distraction that are found in our study as well as in prior research, can largely be understood by the psychological theory of exogenous and endogenous interruptions. Current smart technology has multiple uses and so, can easily produce both exogenous and endogenous interruptions, which can make it difficult to focus in class (Wilmer, Sherman, and Chein, 2017). Exogenous interruptions refer to ones that arise from an external

source, such as texts or notifications (Wilmer, Sherman, and Chein, 2017). They are difficult to ignore and easily serve to take one's mind away from the task at hand, as referenced by multiple participants who described getting distracted from texts and notifications (Participant.1, 55; Participant.2, 106; Participant.3, 30). Another form of exogenous distraction occurs when one sees someone else engage with a rewarding activity, such as social media (Wilmer, Sherman, and Chein, 2017). This can be extremely common in a classroom setting where laptops are ubiquitous and student's laptop screens are easily visible. Besides acting as an exogenous interruption, technology can also act endogenously, by shifting one's thoughts away from their current task (Wilmer, Sherman, Chein, 2017). This most commonly occurs when an individual is uninterested with their current activity and so, shifts their thoughts towards a more entertaining topic (Wilmer, Sherman, and Chein, 2017). In a lecture setting, where students may not always be engaged with the class content, endogenous interruptions arising from technology are also quite common, as demonstrated by Participant.2 who recounted often engaging with social media when she found her lecture uninteresting (85-87).

Aside from the distractive tendencies reported from laptop use, participants also held views around the perceived benefits associated with taking handwritten notes in comparison to typed notes. The majority of these benefits referenced studies similar to Mueller and Oppenheimer's (2014), which found that handwriting one's notes led to increased levels of cognitive processing and in turn, higher quality notes. These views were overtly expressed by Participants.2 (20-22) and 4 (19-22) who mentioned that they were able to process their notes better when handwriting. With this, participants.1 (12-13). and 3 (20) also described benefits of handwriting one's notes, explaining that they helped with memorization and focus. Understanding the views that students hold in regard to laptops and handwriting, helps provide a

deeper insight into the experiences of students in the classroom. Acknowledging that students commonly report getting distracted from a laptop and report benefits arising from handwriting, serve as important findings that should be taken into consideration in the creation and implementation of class policies.

Aside from their views on laptops and handwriting, participants also held strong views around the implementation of laptop policies. Besides Participant.1, who saw that laptop policies were beneficial to prevent distraction (35-39), the remaining participants held highly negative views towards their implementation. To explain their position against laptop policies, participants frequently stated that the act of banning laptops was unfair and limited the student's freedom. Apart from this, Participant. 2 also mentioned that students have diverse methods of taking notes and some are not used to or cannot take them handwritten (51-54). These views appealing to a freedom of choice, fairness, and individuality, can be explained by the way in which they reflect morals of individualism, which are common in Canada and other Western cultures. An individualistic culture refers to a culture that prioritizes the individual, focusing on their needs and self-expression (Carducci, 2012). In individualistic cultures, such as in Western Europe and North America, freedom of choice and behaviour is emphasized and individuals are often encouraged to act as they see best (Carducci, 2012). This also includes an emphasis on self-reliance and individual enhancement (Baumeister and Bushman, 2017, pp. 47 and 106). In contrast, a collectivist culture tends to prioritize the group, defining individuals in relation to their social role (Carducci, 2012). Collectivist cultures are common in countries such as China and Japan, where individual enhancement is often considered in relation to group and societal harmony (Carducci, 2012; Baumeister and Bushman, 2017, p. 106). Due to their focus on uniqueness and self-reliance, individuals from individualistic cultures are less likely to accept

policies such as the one's banning the use of laptops in the class. This was largely demonstrated in the findings, as participants appealed to aspects of uniqueness and freedom of choice when contradicting the laptop-free policies. In turn, these findings provide another important insight into the student experience, which should also be taken into consideration when laptop-free policies are being created and implemented.

Overall, it is clear that the debate surrounding laptop use in the classroom is still prominent, as students hold a variety of different views on the subject. While many described laptops as a common source of distraction and handwriting as a beneficial form of notetaking, a largely negative consensus was also held against the implementation of laptop-free policies. These findings, paired with the observation that students engage in diverse forms of notetaking, gives significant insight into the highly subjective nature of laptop use in the classroom. This, in turn, demonstrates the importance for researchers and professors to understand and listen to the views of students when forming and implementing laptop policies. With a better understanding of the student experience, policies such as ones that designate both laptop and laptop-free zones within the classroom can be implemented, to accommodate for all student needs.

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