# PREFACE TO "IS THE PEN MIGHTIER THAN THE LAPTOP? DIGITAL NATIVES AND THEIR PREFERRED WRITING TOOLS"

Joyce Kinkead, Distinguished Emeritus Professor of English | Utah State University

In a History of Writing course, we investigate the 5,000-year span of developments in writing and its material culture. An early assignment asks students for their personal histories of writing including an investigation into their own favorite writing implements. These are digital natives, right? Surely their treasured tools are electronic? Perhaps surprisingly, not so much. In our classroom discussions about these outcomes, students talked enthusiastically about the tactile and aesthetic qualities of their preferred writing implements. A research question arose organically from these conversations: What are the preferred writing implements for traditional-age college students?

Approved by our university's IRB, the project involved two classes as participants. The students in Honors 1320, a first-year humanities class, served as the investigators and authors of the research article that follows. They divvied up scholarly and popular articles for the review of literature, coded and analyzed the "favorite writing tool" essays, constructed a Qualtrics survey and graphed the results, determined findings, and presented a research poster at the annual student research symposium on campus. (This process follows the steps I take in my upper-division research methods

class for English majors, detailed in an article in *Prompt*, a professional journal about writing assignments.)

Reflections from the students about the research noted that they appreciated being introduced to research processes early in their collegiate careers, that it was not "as scary" as expected. They cited the strategic steps of reviewing literature, determining methods, analyzing results, and presenting their findings. One commented, "Compiling the report was much simpler than expected. Because we were all working together, the load was not too heavy for any one person. Everyone had a voice and was able to collaborate and compromise." Although initially concerned about a public presentation, they found that they "didn't realize quite how much I knew"; as one said, "when people asked questions, it was as though my mouth was moving on its own and formulated well thought out, evidence-based responses." This early introduction also serves as a gateway for research in their own fields: "This experience definitely made me want to do a research project of my own." They saw in the symposium that other students are "so passionate about their projects." In the final analysis, they see themselves as researchers.

# IS THE PEN MIGHTIER THAN THE LAPTOP? DIGITAL NATIVES AND THEIR PREFERRED WRITING TOOLS

Avery Truman (corresponding author), Dylan Ash, Mason Bodell, Jane Harvey, Clarissa Lloyd, Ellie Miller, Lauren Myers, Hannah Potter, William Spence, Anna Tuite, Isabelle Vasquez, Nevaeh Villastrigo, & Landon Corbett | Utah State University

Students in a course on the History of Writing investigated traditional, college-aged students and their preferred writing implements. Digital Natives-people born after 1980 who grew up with technology—are assumed to prefer digital writing implements such as computers, tablets, and Smartphones. We recognize that the term "digital native" may be outdated, but we chose to include it in our research because it was a central term in the questions asked to participants. Do they really tend to use digital implements, or do they use analog instruments such as pens and pencils? To find out, the researchers designed a Qualtrics survey to ask students about their use of digital and analog writing tools. A second data source were essays on the topic "My Favorite Writing Implement," which were analyzed on a spreadsheet, counting each instance of tools noted, ranging from digital to analog, from tablets to gel pens. Participants were enrolled in two university classes: one lower-division and one upper-division. Their majors ranged across all colleges. Through a review of the literature, the researchers found that a trend exists toward Gen-Z using analog writing tools. Some steer clear of digital altogether. David Sax notes in *The Revenge of* Analog that analog offers "real and tangible experiences" that are tactile.

hether Digital Natives are committed to digital or analog writing tools depends on the situation. We noted in our research that most academic tasks require digital implements; however, for social or non-academic writing, students often prefer analog for their "intimacy, aesthetics, and physical feel." Gel pens top the list, followed by ballpoint pens and mechanical pencils. Although few in number, some students turn

to fountain pens or even dip pens. Sixty percent of respondents said that their choice of writing implements contributes to their identity as writers, and many are loyal to a particular brand.

#### INTRODUCTION

Before the digital age, pencil companies battled for "best pencil" as depicted in this Faber-Castell advertisement with knights jousting. Nuremberg, Germany, bills itself as "The Pencil Capital of the World." In the 21<sup>st</sup> century, do writers really care about such analog instruments when digital tools make writing so much more efficient?

The purpose of this study was to investigate the preferred material culture for writing tasks among college students. What do we mean by the term digital natives? They are defined as "the generations born after 1980 - for their entire lives, they've been surrounded by technology, social media, mobile devices, computers, and the internet. At this point in time, digital natives include Generation Z, Millennials, and Zillennials" (McClure). This generation is "inherently technology-savvy" according to Anoush Margaryan and colleagues. On the other hand, the people born before 1980and those typically in charge of college campuses—are termed digital immigrants (Dean and Levine).

Two more definitions to provide context for our study: *digital* refers to electronic technology such as computers, while *analog* is the non-electronic, non-digital, such as pens and pencils. Vincent Mosco says that "analog is shorthand for the offline world of material objects that operate through direct human contact and not through the mediation of binary code" (177). This shows that analog writing implements are typically not associated with technology and require a physical connection between the writer and the words that appear.

#### REVIEW OF LITERATURE

The writing implements most often used by digital natives are not analog. As we discovered in our research, college-age students use electronic tools: tablets, laptops, and mobile

phones. In fact, they must be adept as users since so many of their assignments and class work are housed on Course Management Systems (CMS) like Blackboard and Canvas. Simply put, computers make life easier and writing more efficient. A study by Margaryan and colleagues found that perhaps digital natives are only so adept:

This explorative study aimed to provide a snapshot of the extent and nature of students' use of digital technologies and their perceptions of the educational value of these technologies. The results lead us to conclude that students may not have the characteristics of epitomic global, connected, socially-networked, technologically-fluent 'digital natives'. Students in our sample appear to favor conventional, passive and linear forms of learning and teaching. (439)

Perhaps digital tools are not preferred entirely? David Sax in his The Revenge of Analog: Real Things and Why They Matter argues that analog writing tools are making a comeback because humans need real and tangible objects that don't distract from the intended use in order to function properly. Sax also makes the point that people prefer materials that aren't as overwhelming as the digital world can be. In a review of Sax's best-seller, Bill McKibben said that users can "relax, and maybe even think, as opposed to click." Analog simply doesn't have the bells and whistles of digital technology, which can be distracting. He doesn't advocate going digital-less; it is okay to embrace technology for appropriate uses. Writing in The New Yorker, Julian Lucas sums it up this way:

"Everyone seemed to want to unplug, but without sacrificing the convenience of digital text." This shows that though they may want to, people often struggle to connect back to their roots, where they can perform simple tasks such as writing without a computer. While Sax acknowledges the efficiency of digital writing, he also advocates bringing analog back to digital natives for the sake of simplicity.

Notably, Cydney Alexis wrote a research paper on the human tendency to attach identity to material things. Alexis is also the editor (with Hannah J. Rule) of The Material Culture of Writing. Alexis highlights how memories and self-identity can be tied to special objects. She states, "Individuals attach to particular possessions in intense ways, weaving them into self-concept as reflecting 'me'" (33). Considering the physical nature of analog writing implements could reveal why digital natives may prefer the connection of physical writing objects. The act of writing with a pencil may spark a memory from learning to write in school or help revert back to some other, simpler time in the writer's life.

Other scholars and journalists are exploring the seemingly contradictory practice of digital natives valuing analog tools. Tim Gorichanaz asks, "Why are GenZ-ers drawn to old digital cameras?" He speculates that there is a longing to return to childhood and to slow down "life by engaging with slower technology [that] creates space to make choices more thoughtfully in relation to . . . values." A *New York Times* article by Alex Vadukul from 2023 finds that some teens are Luddites, taking after the 19th-century textile workers who rebelled against machinery. These teens grudgingly accept a flip phone so family can stay in touch,

but they find that "social media and phones are not real life," preferring to meet regularly in a park for writing time.

Perhaps it's not surprising that creative writers veer to analog writing implements. Poet Matthew Zapruder felt a failure at writing as a graduate student until he moved to an inherited Royal Quiet Deluxe typewriter, which didn't provide the sterile, clean copies of his poems; instead, he adopted a process in which each revision was re-typed, as many as fifty times, until he was satisfied. It worked. He's published several volumes of poetry. In her essay, Writing Material, Laura Micciche states, "Of course, before digitality became a way of being, writing scholars paid attention to other seemingly mundane writing activities. Early contributions include Janet Emig's focus on hand, eye, and brain activities during the composing process (Web of Meaning); Sondra Perl's exploration of the sensory experience of writing; and Christina Haas's work on writing as a technology, 'for without the crayon or the stylus or the Powerbook, writing simply is not writing" (493). This suggests that there is a physical connection between writers and their work completed with analog implements that cannot be replicated by digital means. There is a sensorial involvement that comes with traditional writing that can affect the outcome of the written content, which may be why creative writers tend to prefer analog.

Other writers like Emma Thompson and Stephen King note that the best word processor is a fountain pen and legal pad (Reynolds; King). Do people really prefer handwriting? Some benefits to this analog approach have been tested in research. Philip Hensher says that handwriting may be a lost art, but it still

matters. As he puts it, having a "relationship with the written word, which is sensuous, immediate, and individual . . . is a source of pleasure for the user" (224). He adds that handwriting "will never again have the place in people's lives that it had in 1850" (245), but writing by hand has benefits, particularly in taking class notes as shown in a study by Pam Mueller and Daniel Oppenheimer that has been widely cited. Megan Watkins and Greg Noble argue that writing "engages the senses, and especially tactility, but [also] because it requires particular forms of bodily control, posture, and movement" (218). Although schools regularly use computer technology, they posit that handwriting is crucial in understanding language and developing fluency.

Businesses are keen to attract digital natives as customers, but even these corporations may embrace analog tools for writers: the Moleskine notebook, Post-It Notes, and Evernote. Upscale stationery shops continue to stock artisan and designer paper, expensive fountain pens, and greeting cards. Print books may still dominate leisure reading.

This research study focuses on the writing implements college students/digital natives choose to use. The study of the material culture of writing has increased in recent years. Material culture refers to the physical aspects of a society, the objects made or modified by a human. For our purposes, pens, pencils, notebooks, and computers are examples of the material culture of writing. Alexis conducted a research study on how a college writer's identity was tied to Moleskine Notebooks. Alexis puts her finger on an important point: writing implements may be chosen as they enhance a person's identity. She quotes Russell Belk: "We

may impose our identities on possessions and possessions may impose their identities on us" (32). College students who keep their jottings in Moleskine Notebooks may be trying to emulate Hemingway, reputed to have written in such a notebook himself, which would have been a neat trick as they were not on the market until 1998. Objects can help writers "carve out identities for themselves" (Alexis 35). By using unique writing implements, or ones that resonate with the writer because of a fond memory or ideal, that writer can mentally set themselves apart from peers. This may subsequently create an individualized identity within the written work. This topic has not been addressed in the scholarly literature. From student essays on their "favorite writing implements," the researchers have a sense of the reasons why analog may surpass digital: aesthetics, tactile pleasure, viscosity of ink, convenience, and self-identity. But more systematic study and analysis are needed.

#### **METHODS**

For the study design, we drew on two data sources. First, we analyzed student essays from two classes of Spring 2023: a lower-division class (n=12) and an upper-division class (n=18), both on the subject of the history of writing, both taught by the same professor. The assignment focused on "My Favorite Writing Implement" (directions included in Appendix 1). These essays, which were already evaluated with grades recorded, were anonymized and then coded for patterns and themes. All students received information about the study and signed informed consent (one chose not to participate); those who did not consent did not

have their work analyzed. Because the PI is the instructor of record, a third party delivered the invitations to participate. The anonymized results were coded on a spreadsheet for the two classes and then shared with the research team, who were enrolled in the lower-division class.

A second means of gathering data was a Qualtrics survey (Appendix 2) that asked questions about students' digital and analog writing implements use and drew on a published article by Margaryan and colleagues, "Are Digital

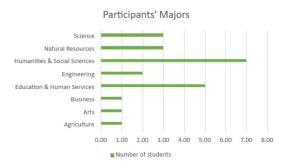


Figure 1: Majors of students participating in the study.

#### **RESULTS AND DISCUSSION**

Within these results, we integrated the analysis and discussion. The Qualtrics survey was completed by 23 students, which is a high return rate of 77%. The survey asked 23 questions delving into students' use of both digital and analog writing implements. (The list of questions is included in the appendix.) The following offers descriptions of answers to each question, and questions have been grouped thematically:

Natives a Myth or Reality? University Students' Use of Digital Technologies." The original questions from this study can be found in Appendix 3. These questions were adapted by the researchers, assisted by the undergraduate teaching fellow for the course.

The participants in both classes range in major across the university (see fig. 1). Following IRB protocol, the PI and researchers ensured that students' privacy and confidentiality were maintained.

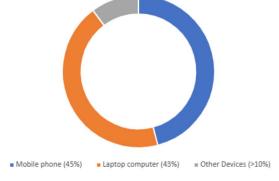


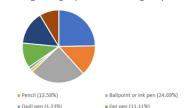
Figure 2: Chart showing students' use of mobile phones, laptops, and other devices.

Which of the following devices do you own and use regularly in general?

- ☐ Mobile phones and laptop computers are used dramatically more than other devices.
- ☐ Mobile phones and laptops are the most common devices for college students and arguably the most useful.
  - O Phones are obviously important and have many uses; everybody seems to own a phone.

O Laptops are essential for academic work and are required to complete classwork in nearly all classes. They can also be used for recreational use like watching movies or games.

Percentage of analog writing implements used regularly



■ Other (please give details) (0.00%

Figure 3: Chart depicting the use of analog writing implements by student participants.

Marker (8.64%)

■ Mechanical pencil (24.69%)

Fountain pen (1.23%)

■ Sharpie (14.81%)

Which of the following analog writing implements do you own and use regularly (see fig. 3)?

- ☐ Mechanical pencils and ballpoint pens were owned and used most regularly, at about 25% each.
  - O Possibly a reason why the use of these two writing implements is so high is because they are the easiest and cheapest writing implements to find and use.
- ☐ Device usage is much more spread out over different analog writing implements and less skewed toward particular options.
  - O There's a lot more freedom toward which writing device students can use as compared to digital devices; options exist for students to choose all kinds of writing implements (pens, pencils, markers, etc.), but are

- limited to just a few options in the digital world (laptop, phone, tablet).
- ☐ Fountain pens and quill pens were the least used writing implements, with 1% of people owning and using both regularly.
  - O These are less modern and harder to find, buy, and use, but it is notable that they were mentioned at all.

In terms of the importance of digital writing implements and analog implements, on a scale of 1-10 for academic writing, the digital average was 9, which was 3 points above analog. This means that, overall, digital is much more necessary for academic purposes than analog. In fact, it is impossible to use analog writing implements for some academic tasks.

When asked about the importance of digital writing implements and analog implements on a scale of 1-10 for nonacademic or social writing, the digital average was 8, which was 2 points above analog. This means that overall, digital is viewed as more necessary for nonacademic or social purposes than analog, but significantly, analog is not far behind (see fig. 4).

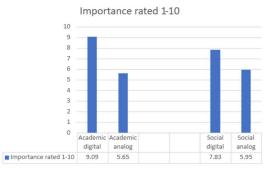


Figure 4: Students rated digital and analog writing instruments for their academic and non-academic use.

How would you rate the importance of digital and analog writing implements on a scale of 1-10?

Several thematically similar questions on preferences (8,10,16,17) were grouped together for analysis. The most popular uses of digital devices for nonacademic work are texting, music, and social networking. The least popular is for letters and journals. Digital devices for academic work are used for course websites. online tests, internet websites, and emails, but never used for writing letters. The most popular use of analog instruments in academic work is writing notes in class and journals, while the least used is drafting assignments before submitting. It should be noted that some classes may have a "no electronics" policy so that students are not distracted by social media or that instructors believe that note-taking by hand is more effective. In summary, not everyone chooses analog devices when digital is more convenient.

## What is your favorite writing implement?

While digital implements seemed to be viewed as functional and efficient, analog also made a showing. Laptops were by far the most popular writing implement for students, making up 39% of the responses. The gel pen was the second most preferred (13%). Pencils, mechanical and wooden, made up 17% of the vote and were split evenly. Mobile phones and tablets ranked very low despite the overwhelming preference for laptops (see fig. 5).

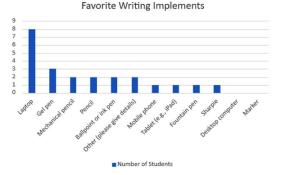


Figure 5: Students ratings of their favorite writing implements.

Why is this your favorite writing implement?

Analog implements were generally chosen because of a perception of quality or an aesthetic preference. Digital devices were overwhelmingly chosen for convenience, especially in academic environments.

Does your favorite writing implement contribute to your identity as a writer?

This question draws on Alexis' work in which students reported, "It doesn't make what you're writing special, it makes that you're writing special" (7) and that "Objects are used as self-expression in service of building an identity around writing" (12). The question itself highlighted the concept of "identity," which drew attention to this aspect. Sixty percent of students responded that "yes," writing implements contribute to their identity as a writer (see fig. 6).

They identified intimacy with the object and the creativity they can use with it that ties into their writing. For those who responded negatively, the actual writing was more important than the implement itself; they noted that digital is more convenient and practical. They were not as concerned with writerly identity. Respondents had the opportunity to explain further in Table 1:

# Do writing implements contribute to your identity as a writer?



Figure 6: Qualtrics survey question asking if a writing implement contributes to the student's identity as a writer.

Table 1. Quotations from student participants on their relationship with writing implements.

- I collect pencils, share pencil facts, and write pencil-written letters to people.
- Sharpies are permanent, and I like to do things that are permanent and get them right on the first try
- When I use this kind of pen, my writing changes
- I am kind of a whimsical person, and the colors reflect that.
- I have used a laptop for the majority of my writing. As such, it's been an important part in the formation of my identity as a writer.
- The majority of my identity as a writer is an outgrowth of my journal entries, which are solely done with my favorite pencil.
- I find more creativity writing with a pen than on a computer.
- I like to think of myself as a creative writer, and the pencil on paper is my go-to writing style.
- The world is changing and to keep up, I use what is more accessible now days.

Does advertising influence your choice of writing implements?

This question was asked as the researchers noted advertising for both analog and digital implements that employed clever tag lines. Zebra pens offer to "Find the Zen in Your Pen" and feature videos of a Buddhist-appreciative Zebra (Figure 5). Apple markets iPad as "Lovable. Drawable. Magical." A slightly higher number indicated that advertising doesn't influence their choice of writing implements and, if annoying, may work against purchase. In contrast, 43% claimed a correlation between advertisements and their implement of choice. Those who answered yes tended to prefer implements that had been advertised in a way that conveyed quality. Whether the implement was easy to use or came from a reputable source was the primary deciding factor for those who were influenced by advertisements. In the comments section, one is influenced if it's "Made in America"; another looks for no-smear pens as a left-handed person; yet another quotes Blackwing 602 Pencils: "Half the pressure, twice the speed."

The essays on "My Favorite Writing Implement" yielded somewhat different results. We speculate that the term "writing implement" or "favorite" may have implicitly suggested analog instruments, as only 2 of the 28 respondents noted a preference for digital laptops. Still, the Qualtrics survey used similar language. Three had no favorites at all. The rest reported specific analog instruments that they preferred. Of the digital tools in the coding spreadsheet,

only the laptop was chosen. Digital notebooks, tablets, and smartphones did not receive any votes. Gel pens took the top spot, followed by ballpoint pens and mechanical pens. Rather amazingly, dip/nib/quill pens had a following. Laptops, pencils, and Sharpies came in with equal votes (see fig. 7).

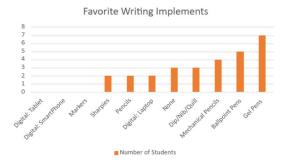


Figure 7: Results to the question on favorite writing implements from the analysis of essays.

Specific brand names figured prominently in the responses, with the Pilot G2 notable. One essay writer declared it was a Pilot G2 or nothing, a "hill willing to die on." This pen offers a rubber grip with a "perfect point" that doesn't smudge even though it has a "wet" look. Pilot users were influenced by advertising: "G2 is the ultimate pen for the everyday overachiever." They thought of themselves as "everyday overachievers." PaperMate's InkJoy (Figure 7) offers vibrant colors and smooth writing, particularly appropriate for bullet journals or calligraphy, and its ad with a white cat that rolls on the fresh ink without blemish is appealing.

Notably, left-hand writers face a frustrating time when finding an implement that will not leave ink smears. Although a small number, those who turn to fountain or dip pens do so for a sense of history and romance. The results can be "beautiful"; even holding these implements is a pleasurable experience. A user cites these pens' artistry and the therapeutic effects of "slowing down, thinking, and feeling." Mechanical pencil users cite "reusable, restockable graphite that never needs sharpening." Some prefer ballpoint pens—as long as they are free. They can be "liberating, lightweight, with classic brilliance," but are also "expendable."

The digital proponents noted their convenience, the auto-save feature, along with other tools that allowed ready access from the device itself or via the Cloud. "The laptop gave me unlimited and unbounded writing," an anonymous survey participant said. "I'll still enjoy a quick essay or note in handwriting, but nothing tops the satisfaction of a keyboard. My mind flows better, and there is even a stark difference in my writing voice and quality between handwritten and typed essays." It was also preferred for its neatness as opposed to handwriting. Given the decreasing emphasis on handwriting in primary school curriculum, an unintended consequence may be writing that is not as legible or readable. "For me, the laptop has proven to be the perfect tool for all my writing needs," another anonymous participant noted. "I will continue to use this as it proves to be the most effective and practical for my day-to-day life." The keyboard seems favored for its ability to get thoughts down quickly and keep the flow of writing uninterrupted.

Some surprising and interesting results were found in this study. Key ideas include how digital natives seem to prefer analog because it is less distracting. This was demonstrated in

David Sax's book, where he highlighted that physical books, pens, and paper do not distract. It exemplifies that people naturally need to connect to physical objects and relax, which leaves more room to think. We found that slower technology allows more room for deeper thinking and time to apply our values to our work. When technology is too convenient and quick, the brain moves to the next task at the same speed, which leaves little room for reflection. Gorichanaz explained that people may find that slower technology brings the experience of using it more "meaning." He compared "meaning" to happiness, except "meaning" has a longer-lasting impact on an individual's life. The slow technology movement "aims to design technology for goals like self-reflection, rather than efficiency or productivity. Research on meaningful design shows people form stronger attachments to products when they have to make more choices or get more involved," Gorichanaz said. We found that writing physically requires bodily control and posture, which gives writers the choices and control that Gorichanaz said encourages self-reflection and meaning. The art of handwriting is very individual; no two people write the same, and connecting the implement to the paper to let the ideas flow feels more intimate. We found that handwriting can be aesthetically pleasing, which is valued in a digital world where everything is the perfect size and shape. As Alexis discussed, digital natives will correlate identities with physical objects that may change the way they feel about what they write. For example, someone might feel that they write more creatively on paper than on a screen.

#### LIMITATIONS

The study has a small number of participants. While only a couple are English majors, the overall group may be more disposed toward writing and its tools as they selected a writing-focused class. Likewise, Honors (the lower-division course) students may be more likely to enjoy writing and use a variety of implements. There is a possibility that analog writing implements are more favored in the sample than the rest of the population.

#### **CONCLUSIONS**

In conclusion, the survey shows that mobile phones and laptop computers are the most used digital devices. Mechanical pencils and ballpoint pens are the most used analog writing implements. The survey also reveals that digital writing implements are viewed as more necessary than analog for academic writing, while analog writing implements are viewed as almost equally necessary for nonacademic or social writing. Students' preference for digital or analog writing implements is influenced by their perception of quality or aesthetic preference, as well as convenience. Additionally, students reported that writing implements contribute to their identity as writers, with a higher percentage of respondents indicating that advertising does not influence their choice of writing implements. Overall, the survey provides valuable insights into college students' use of digital and analog writing implements and their attitudes toward these tools.

While digital devices seem to be used more often, analog devices are generally favored

when academics are not considered. Regarding the discrepancy between the essays reviewed and the Qualtrics surveys, it could be viewed as a difference between realism and idealism. While taking the survey, people thought about what they realistically use daily. When writing the essays on favorite writing implements, people thought about what they enjoy using to write in an ideal world where they don't have to use digital devices for academic or professional life. Matthew Zapruder found creative writing was more fulfilling when he used a typewriter and created many physical drafts of his poetry. Perhaps seeing the physical nature of an individual's writing makes it easier to focus on what needs to change and makes it apparent how far the work has come from its original draft. As Mueller and Oppenheimer found, "students who took notes on laptops performed worse on conceptual questions than students who took notes longhand." The connection between the brain, a hand, and a paper makes it easier to comprehend what is being written, as opposed to writing verbatim on a laptop. This may also be true of original writing where using analog methods helps a student conceptually understand what they are writing better than if written digitally. Is it as Gorichanaz found that there is a longing to return to childhood and to slow down "life by engaging with slower technology"? It could be concluded that digital natives crave a simpler world where they can be more present. Alexis's research showed that people attach their own identities to physical objects (e.g., notebooks, pens, and pencils) which shows why digital natives might prefer tangible methods of writing in an ideal and simpler world. Moreover, the use of artificial intelligence (e.g., ChatGPT) and its potential impacts may influence the need for humanity, a turn toward analog. There is also a connection with analog implements for certain times in our lives where we want to bring personality to what we are trying to express. Technology has the advantage of "cutting to the chase," while analog implements have the advantage of creating relationships.

Furthermore, we can ask whether the term "digital native" is useful going forward, as our research showed that people classified in this group tend to prefer analog writing implements when used creatively.

Material culture and writing studies scholar Alexis summarizes, "How a person approaches and uses an object is intimately connected to family, sense of self, writing history, relation to peers, media connections, social awareness, and life story. Hence, turning to objects is one way of uncovering the very complicated identities that perform the practice of writing and for understanding the writing process itself" (32). One of the participants echoed this

philosophy: "The pen you choose to write with will shape your thoughts as much as it shapes your script." To summarize, the research team found that for the most part, digital natives prefer analog writing for some tasks for many reasons, most of which relate to nostalgia, slowing down in a fast-paced environment, and the authenticity of physical writing. Digital natives may find pleasure in the feeling of creating their individual handwriting and feeling the ink spread on the paper. Laptops and phones are most used for academic work, but this may be because of the institutional organization and not because of the student's preference. Students like to write with analog in their own time to slow down, think, and be messy, and they like to type on a computer academically to have a professional and fast-paced experience.

#### **ACKNOWLEDGMENTS**

The authors would like to thank Joyce Kinkead for her contributions to this project, and the editors at YSW.

#### **WORKS CITED**

Alexis, Cydney. "The Symbolic Life of the Moleskine Notebook." *Composition Studies*, vol. 45, no. 2, 2017, pp. 32-54, https://www.jstor.org/stable/26402782.

Alexis, Cydney, and Hannah J. Rule. The Material Culture of Writing. Utah State UP, 2022.

Dean, Diane R., and Arthur Levine. "Digital Natives, Digital Immigrants, and the Analog Campus." *High-erEdJobs*, 9 October, 2013, https://www.higheredjobs.com/blog/postDisplay.cfm?post=462.

Gorichanaz, Tim. "Why Are So Many Gen Z-ers Drawn to Old Digital Cameras?" *The Conversation*, 24 Feb. 2023, https://theconversation.com/why-are-so-many-gen-z-ers -drawn-to-old-digital-cameras-198854 Hensher, Philip. *The Missing Ink: The Lost Art of Handwriting (and Why It Still Matters)*, Macmillan, 2012. King, Stephen. *On Writing: A Memoir of the Craft*, Scribner, Anniversary ed., 2010.

- Lucas, Julian. "Can'Distraction-Free'Devices Changethe Way We Write?" The New Yorker, 13 Dec. 2021, https:// www.newyorker.com/magazine/2021/12/20/can-distraction-free- devices-change-the-way-we-write
- Margaryan, Anoush, et al. "Are Digital Natives a Myth or Reality? University Students' Use of Digital Technologies." Computers & Education, vol. 56, no. 2, 2011, pp. https://doi.org/10.1016/j. compedu.2010.09.004.
- McClure, Erin. "Digital Natives: How to Win the Trust of Gen Z and Millennials." The Future of Commerce, SAP Customer Experience, www.the-future-of-commerce.com/2022/05/digital-natives-definition-stats-marketing-strategies/. Accessed 21 Mar. 2023.
- Micciche, Laura R. "Writing Material." College English, vol. 76, no. 6, 2014, pp. 448–504, https://library. ncte.org/journals/ce/issues/v76-6/25459
- McKibben, Bill. "Pause! We Can Go Back!" The New York Review, 9 Feb. 2017, https://www.nybooks.com/ articles/2017/02/09/revenge-analog-pause-we-can-go-back/
- Mosco, Vincent. Becoming Digital: Toward a Post-Internet Society, Emerald Publishing, Bingley, 2017.
- Mueller, Pam A., and Oppenheimer, Daniel M. "The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking." Psychological Science, 2014, vol. 25, no. 6, pp. 1159-1168, https:// doi.org/10.1177/0956797614524581
- Reynolds, Simon. "Emma Thompson to Write 'My Fair Lady." Digital Spy, 17 July 2008, https://www. digitalspy.com/movies/a112135/emma-thompson-to-write-my-fair-lady/.
- Sax, David. The Revenge of Analog: Real Things and Why They Matter. Public Affairs, 2016.
- Vadukul, Alex. "Luddite Teens Don't Want Your Likes." The New York Times, December 15, 2023, https:// www.nytimes.com/2022/12/15/style/teens-social-media.html.
- Watkins, Megan, and Greg Noble. "Pedagogies of Incorporation." Cultural Pedagogies and Human Conduct, edited by Megan Watkins et al., Routledge, 2015, pp. 217-230.
- Zapruder, Matthew. "My Royal Quiet Deluxe." The Paris Review, 7 Mar. 2023, https://www.theparisreview.org/blog/2023/03/07/my-royal-quiet-deluxe/.

## APPENDIX 1: WRITING ASSIGNMENT DIRECTIONS: MY FAVORITE WRITING IMPLEMENT

This is the first of several short essays in which you explore a topic about writing in more depth. These essays should be 1-3 pages in length. One of the goals of these short essays is to develop material that can be added to the final Writing Autobiography. Each short essay should include a minimum of one secondary source with correct bibliographic citation. (Choose your documentation style: APA, MLA, Chicago.) This will make it easier to compile the references for the final version of the Writing Autobiography. Also, don't hesitate to include images. It's true that "A picture is worth a 1000 words"—well, maybe not that many, but a lot.

#### DIRECTIONS

Writing implements—pencils, pens—are considered part of the material culture of writing. Material culture can be described as an object that humans use to survive, define social relationships, represent facets of identity, or benefit social or economic standing. For instance, some writers spend large amounts of money on fountain pens.

Choose your favorite writing implement among pencils and pens for the focus of this essay. Why do you like it? What are the characteristics that make it valuable to you? If you are noncommittal on a favorite writing implement, then explain why that is. What values

do your choices make about you? If you admire a certain writing implement, what is its history, its corporate identity? What is your history with this writing implement? When did you settle on a preferred writing implement? Research integration: For the final Writing Autobiography, research of primary and secondary sources is to be integrated. Put any references at the end of your essay marked as References and then use a standard documentation style (APA, Chicago, MLA).

#### APPENDIX 2: QUALTRICS SURVEY QUESTIONS WITH INTRODUCTION

#### INTRODUCTION:

The purpose of this survey is to gather details concerning your use of technology—both digital and analog—for academic and other writing tasks.

What do we mean by analog and digital writing implements? *Digital* refers to electronic or computerized implements while *analog* is not electronic—pens, pencils, paper.

Your participation is entirely voluntary, and although completing this survey will not benefit you directly, it will help the researchers understand the use of both analog and digital writing implements. Please know that responses are confidential and will be stored in a secure online environment. We will begin with questions about writing implements and their use in both academic and non-academic settings and then move to a brief demographics section.

- 1. Which of the following do you own and use regularly? (Please check all that apply.)
  - a. Mobile phone

- b. Laptop computer
- c. Desktop computer
- d. Tablet (e.g., iPad)
- e. Other (please give details)
- 2. In your **academic work** do you use your digital devices (always, sometimes, never)?
  - a. Course websites
  - b. Online discussion groups
  - c. Virtual/RealTime Chat Facility
  - d. Video conferencing (e.g., Zoom)
  - e. Online tests/exams
  - f. Mobile phone
  - g. Podcasts
  - h. Internet Websites
  - i. Google, Google forms/docs
  - j. Wikipedia
  - k. Games
  - l. Message boards
  - m. Text messages
  - n. Email
  - o. Weblog or Blog
  - p. YouTube
  - q. Flash cards
  - r. Creative writing

- s. Letters
- t. Notes and lists
- u. Other (please give details.)
- 3. For non-academic work such as social functions, I use your digital devices (always, sometimes, never)?
  - a. Notes and lists
  - a. Entertainment
  - b. Text messages
  - c. E-mail
  - d. Games
  - e. Music
  - f. Photo upload and sharing
  - g. Video upload and sharing (e.g., You-Tube)
  - h. Blogging
  - i. Social Networking (e.g., Facebook, Instagram, Snapchat)
  - j. Letters
  - k. Journals
  - l. Whiteboard
  - m. File sharing
  - n. Discussion groups
  - o. Chat rooms
  - p. Wikis (e.g., Wikipedia)
  - q. Virtual Reality, Video Games
  - r. Creative writing
  - s. Other (please give details)
- 4. Which of the following analog writing implements do you own and use regularly? (Check all that apply.)
  - a. Mechanical pencil
  - b. Pencil
  - c. Ballpoint or ink pen
  - d. Fountain pen
  - e. Quill Pen
  - f. Gel pen

- g. Sharpie
- h. Marker
- i. Other [text entry box]
- 5. In your academic work, how do you use your analog writing implements?
  - a. Taking notes in class
  - b. Keeping a planner
  - c. Writing assignments (e.g., essays, research papers)
  - d. Written homework (not essays)
  - e. Drafting assignments before submitting online
  - f. Taking tests, exams, quizzes
  - g. Flash cards
  - h. Letters
  - i. Annotations for reading
  - j. Laboratory notes
  - k. Field notes
  - l. Journals
  - m. Other (please give details- text box)
- 6. For non-academic work such as social functions, how do you use your analog writing implements?
  - a. Notes and lists
  - b. Entertainment
  - c. Letters
  - d. Journals
  - e. Whiteboard
  - f. Creative writing
  - g. Other (please give details)
- 7. This question asks you to note on a "slider," your preferences for analog and digital writing implements. On the "slider," show which of the two formats you prefer for academic writing.
  - a. Digital

- b. Analog
- 8. This question asks you to note on a "slider," your preferences for analog and digital writing implements. On the "slider," show which of the two formats you prefer for non-academic or social writing.
  - a. Digital
  - b. Analog
- 9. What is your favorite writing implement?
  - a. Mobile phone
  - b. Laptop computer
  - c. Desktop computer
  - d. Tablet (e.g., iPad)
  - e. Mechanized pencil
  - f. Pencil
  - g. Ballpoint or ink pen
  - h. Fountain pen
  - i. Quill Pen
  - j. Gel pen
  - k. Sharpie
  - l. Marker
  - m. Other [text entry box]

- 10. Why is this your favorite writing implement?
- 11. Does your favorite writing implement contribute to your identity as a writer?
  - a. Yes
  - b. No
  - c. Why [text box]
- 12. Manufacturers of writing implements (digital and analog) have been known to advertise their products with some flair (e.g., Zebra: "Find the Zen on Your Pen"; iPad: "Lovable. Drawable. Magical.") Have you been influenced by any advertisements for writing implements?
- 13. What is your gender?
- 14. What is your class year? First-year, second-year, third-year, fourth year, fifth year
- 15. What is your college: Agriculture, Arts, Business, Education & Human Services, Engineering, Humanities & Social Sciences, Natural Resources, Science.

## APPENDIX 3: ORIGINAL QUESTIONS FROM MARGARYAN, LITTLEJOHN, AND VOJT'S "ARE DIGITAL NATIVES A MYTH OR REALITY? UNIVERSITY STUDENTS' USE OF DIGITAL TECHNOLOGIES."

1. What is your gender?	4. Do you currently have Internet access in
O Male	your place of residence?
O Female	O Yes
2. How old are you? (Please enter your age in	O No
the box )	5. Do you access the Internet on campus, and
3. What is your course of study?	if so where?
O BA Social Work	O Library
O BSc Engineering	O Labs
O bot Engineering	O Campus café
	O Other

- 6. Which of the following do you own and use regularly? (please tick as many as apply)
  - O Mobile
  - O Phone
  - O Portable Media Player (e.g. iPod, mp3 player)
  - O Personal Computer (e.g. Mac, PC)
  - O Handheld Computer (e.g. PDA, Blackberry, Palmtop)
  - O Laptop computer
  - O Games Console (e.g. Xbox, Playstation, Nintendo)
  - O Portable Games Console (e.g. Gameboy, SonyPSP)
  - O Digital Camera
  - O Other(s) (please give details)

### SECTION B – USE OF TECHNOLOGY ON YOUR COURSE

This section concerns your use of technology on your modules for your chosen course of study.

- 7. In your current year of study (2006/2007), how many of your modules have content that you can access through the university's Virtual Learning Environment (VLE), e.g. Blackboard or WebCT?
  - O All of my modules
  - O Most of my modules
  - O A few of my modules
  - O None of my modules
- 8. Please indicate which electronic tools you use in your course and the extent to which you use them:

- O daily weekly monthly never
- O Course website (e.g. lecture notes, activities, PowerPoint slides, video clips)
- O Online Discussion Groups
- O Virtual/Real Time Chat Facility
- O Video Conferencing
- O Online Assessments (e.g. Multiple choice quizzes)
- O MP3 player
- O Digital Camera
- O Handheld Computer
- O Mobile Phone
- O Podcasts
- O Internet Websites
- O Google/Google Scholar
- O Wikipedia
- O Simulations, games
- O Message Boards
- O Text Messaging
- O MySpace
- O Weblog or Blog
- O YouTube
- O Other(s) (please give details)

# SECTION C – USE OF TECHNOLOGY FOR YOUR OWN LEARNING

This section concerns your use of technology for the purpose of learning or communication in relation to your course (e.g. to talk to other students about coursework), but NOT tools provided by your university for the course

Please indicate which electronic tools NOT provided by the University you use to help

you with your studies (e.g. this may be other software or your own tools and devices.)	SECTION D – OTHER USE OF TECHNOLOGY/SOFTWARE
O MySpace O Digital Camera	This section is about your use of technology other than that detailed above
<ul> <li>O Networked PCs/Macs</li> <li>O Weblog or Blog</li> <li>O Message Boards</li> <li>O Mobile Phone</li> <li>O Second Life</li> <li>O Video/audio clips</li> </ul>	11. Please indicate the extent to which you use the following electronic tools, software, websites etc., but NOT in relation to your course or study (i.e. for recreational use), and which particular ones you use.
O Course Websites O Internet Websites O Podcasts	<ul><li>O Music (e.g. iTunes, MP3, etc)</li><li>O Photo upload and sharing (e.g. Flickr)</li></ul>
O MP3 player O Wikipedia	O Video upload and sharing (e.g.You- Tube)
<ul><li>O Simulations, games</li><li>O Handheld Computer</li></ul>	O Blogging (e.g. Blogger, Myspace) O Social Networking (e.g.
O Text Messaging O Chat O YouTube	Myspace, Bebo) O File sharing (e.g. Napster, BitTorrent)
<ul><li>O Google/Google Scholar</li><li>O Other(s) (please give details)</li></ul>	O Discussion groups (e.g. Google Groups, Yahoo)
10. Would you like to use any of these tools/ software formally as part of your course if not already being used?	O Chat Rooms O Wikis (e.g.Wikipedia) O Virtual Worlds (e.g. Second Life) O Internet gaming
O Yes O No	O Others? (please give details)

O Don't know