Teachers, Gen Z, and Technology

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Acquisition of Knowledge

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Abstract

With the uprising of a new generation of learners different from all the previous ones, education and teaching methods have to adapt to those unique students. Teachers should welcome technology in their classrooms because it is familiar to most students, stimulates their interest and motivation, improves their problem solving skills and bonds with peers, makes learning more inclusive, and starts being perceived as a tool for acquiring knowledge. Using high-level evidence and reasoning combined with personal experience and relevant examples, I argued how technology is necessary in XXI century learning, brings multiple benefits for student development, and shows excellent outcomes. When learning digitally, students feel comfortable, are actively engaged, develop digital literacy, form bonds with peers, and eventually see technology as a way to knowledge. Educators should give mentees more autonomy over their individual learning processes. Even though technology makes every information easier to access, it will never truly replace knowledge.

Thesis Body

Recently, discussions regarding the role of technology in education have become even more prevalent. Primarily due to a general abrupt transition from in-person learning to online, and how many tools that showed outstanding advantages and results were kept by schools and universities even after in-person learning was re-established. One example is recording lectures so students could keep up even if they had to miss a class, complete their notes in case they forgot something, and review after class. "A Pew Research Center survey found that nearly 90 percent of teachers believe that digital technologies are creating an easily distracted generation with short attention spans. About 60 percent said it hindered students' ability to write and communicate face to face, and almost half said it hurt critical thinking and their ability to do homework. Also, 76 percent of teachers believed students are being conditioned by the Internet to find quick answers, leading to a loss of concentration" (Porter, Alfonzo). However, on the other hand, most students wished their teachers allowed them to use smartphones, tablets, and laptops during class. Such a paradox is a potential game changer for teaching, learning, and knowledge. Generation Z was the first to have contact with the fast-paced environment promoted by modern technologies at such a young age. While the previous generations ended up adapting to technology to some extent, Gen Z is tech native. As generations change and evolve, education must follow at the same pace. Compared to the other generations, Gen Zs have a shorter attention span but are very used to multitasking. They are creative and innovative and need their space to take action. Formal learning environments, such as school and college, are kept analog. In contrast, informal learning environments, like family, friends, and even the Internet, are already digital, resulting in a decline in curiosity in formal learning contexts. Teachers should welcome technology in their classrooms because it is familiar to most students, stimulates their interest

and motivation, improves their problem solving skills and bonds with peers, makes learning more inclusive, and starts being perceived as a tool for acquiring knowledge.

Because Generation Z was born digital, it is expected that they present a stronger bond to technology and a sense of familiarity with it. The digital sphere is a known environment. Hence, many students feel more comfortable exploring their curiosity using technological tools. This comfort and understanding are also responsible for a higher level of student interest and engagement. Curiosity has diverse definitions, but most theories agree that it involves an excitement caused by uncertainty leading to research and a need for competence. "The student must feel competent in his ability to use what he knows to engage with the information which aroused his curiosity. Perception of competence is a prerequisite for sense making which leads to sustained interest and the desire to explore until curiosity is satisfied" (Arnone, Marilyn P., et al.). Indeed, if students feel capable of fulfilling their curiosities, they are more inclined to chase that knowledge. As a student, I cannot count how many times I encountered something unknown and immediately pulled up my phone, laptop, or tablet to research that topic, leading to learning about a newness, discovering different interests, and even building a more extensive collection of fun facts. Whenever I end up on another website or even a random Reddit page, I discover new things to explore and topics to discuss with my friends. Consequently, inserting technology into formal learning contexts will encourage students to explore their interests and further their education.

Following this, technology also plays a role in improving student curiosity and motivation. Several studies with kids in technology-rich environments show that they tend to chase their interests, fulfill their curiosity, and learn more when using digital devices as highly flexible and reliable tools. For example, during the Acquisition of Knowledge classes, Dr.

Jenkins mentioned that he only cared that his students reflected on what they read in the assigned readings, not which path they chose to achieve that. In this case, I believe that students expanding their horizons must matter more to a teacher than which tools they use to learn. "By enabling learners to learn 'anytime, anywhere, mobile technology augments the propensity for students to engage in self-directed, informal learning beyond the classroom walls (Sharples, Taylor, & Vavoula, 2007). As shown in the excerpt below, Kathy viewed mobile technology as a tool for bridging school learning and home learning as she engaged in learning that was both spontaneous and deliberate (Sharples et al., 2009). [...] Thus, mobile technology may have played a role in cultivating students' curiosity by providing greater and easier access to a wealth of new information (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006)" (Ciampa, K). In addition, as stated in Ciampa's article, the mix of technology and education builds a bridge between informal learning contexts and formal learning environments, leading students to keep studying outside of a classroom and bringing their individual interests to in-class discussions which enrich both their experience and their peers' experience. It makes learning interactive and engaging, teaching students that learning is not only essential for one's life but also fascinating and enjoyable. Every kid wants to have fun, and they can do that when learning once they realize that.

Moreover, Indonesian researchers showed that Technology Embedded Scientific Inquiry uses technology to improve students' problem-solving skills. "This innovation is adapted to the skills demands of the 21st century and the literacy needed in the 4.0 revolution era. The form of innovation uses technology and learning models that develop skills and attitudes, including the Problem Based Learning. [...] Innovation in science learning was seen in the emergence of the TESI component at the learning stage. The learning stage has the characteristics of the problem

based learning model including direction on the problem, interdisciplinary problem solving, independent inquiry, and collaboration" (Susilowati, et al.). Problem-solving in the XXI century is directly related to digital literacy since most issues can be solved digitally, or how to solve them can be learned on the Internet. When COVID hit, for example, and classes suddenly were online, all students had to adapt. I have spent hours explaining to some classmates how our lectures and homework would work at the start of the pandemic. I was able to help because, even though my Brazilian High School did not encourage digital learning, I was doing online dual enrollment at Texas Tech University, where technology was welcomed and necessary in class. It was very noticeable who could quickly learn how classes, assignments, and exams would work on the school's platform. However, most students were still lost by the end of the semester. Problem solvers could get over this issue. Solving problems is directly related to making choices, independence, and confidence. A child with those characteristics will likely grow into an adult with similar ones, which is essential for building a better society.

Next, according to the National Education Association, "Collaborative learning has been shown to not only develop higher-level thinking skills in students but boost their confidence and self-esteem as well. Group projects can maximize the educational experience by demonstrating the material while improving social and interpersonal skills. Students learn how to work with various types of learners and develop their leadership skills". Technology makes collaborative learning more accessible and engaging for students since it facilitates connection and peer bonding. One relevant bonding moment in a learning environment is playing with the well-known app Kahoot, where students can pair up and engage in healthy competition and interactive, active learning. Professor Ciampa's study in Computer Assisted Learning showed a higher level of student motivation when cooperating with peers and tablets to learn. "The use of

mobile technology markedly improved learning outcomes and promoted greater motivation to persist on tasks. Students in cooperative learning groups engaged in more positive, task-oriented interaction with each other. The following quote highlights the affordances of a technology-enriched classroom where such practices as (cross-age) peer mentoring and reciprocal teaching is fostered." (Ciampa, K). From personal experience, technology not only makes collaboration easier but incentives students to help each other and work together. During high school, and especially during college application season, my friends and I always reviewed each other's essays, adding comments and suggestions on Google Docs, for example. By doing that, we had the opportunity to learn from our own and each other's mistakes.

Finally, it is common knowledge that technology blurs limits that seemed impossible to challenge before. As a future computer scientist and engineer, one of my main objectives in entering this industry is to ensure that my work promotes diversity, accessibility, and inclusiveness in the digital world. A way to achieve that is by enjoying all the perks of technology regarding education. Technology makes self-teaching possible even in formal learning contexts. Online and self-paced classes might be better for a student capable of absorbing more information when studying freely, for example. In addition, a study on the relationship between technology and children's natural curiosity by two elementary school teachers indicates that technology made education inclusive. The kids were involved in a research project about puppies and kittens and had various technological tools (computers, video equipment, cameras, smartboards, and audio recorders) available for an enhanced experience. The following quotes express how even when facing difficulties, children are still eager to learn and get involved in the process of knowing when digital devices are on the table. "One first-grader was highly allergic. She had to leave the room when the animals were visiting. […]

She was eager to learn as much as possible about the kitten and didn't mind writing. However, her comments about the second day of kitten observations, when the camera was recording, made the teachers very aware that this use of technology would be extremely valuable to help all students feel included" (Hogan and Gomm).

Nevertheless, some still think that technology and education should be two separate things and that the former causes more harm than benefit to the latter. As the news article in the introduction states, teachers are concerned with distraction in schools. "If many students are now studying at home without adequate guidance on how to focus effectively in a distance learning environment, it is important to examine the effects of digital devices on student learning and academic performance. While digital devices such as laptops and smartphones may be used for non academic purposes such as entertainment and social communications, they also offer the opportunity to provide affordable learning platforms that may be tailored to individual student needs" (Dontre, Alexander J.). It is especially relevant to consider that, sometimes, what a teacher believes is best for their student is only partially correct. One example is learning through note-taking. For a teacher, it should not matter if a student chooses to handwrite or type as long as they complete the required notes and understand the content. A teacher's learning style might be different from their students'. Having that power to choose also gives the student freedom to explore many study strategies and find out which works best, enhancing adaptability and problem-solving skills. By showing students that laptops, tablets, smartphones, smartboards, apps, and so many other technologies are also "for learning," educators can condition kids and teens to perceive digital devices beyond simply mindless entertainment but as learning tools. I believe I was conditioned to see technology as a source of knowledge by my parents, who are doctors who work and study online all the time. From an early age, I knew everything could be

discovered through a few swipes. And contrary to what some might think, such a habit never made me comfortable with not knowing but always excited me to know more. If students feel more compelled, confident, and interested when learning digitally, they must be free to do so. What truly matters is that they learn as much as possible and learn to enjoy the pursuit of knowledge.

To conclude, teachers should encourage students to learn using technology as a tool because it is incredibly beneficial for their process of acquiring knowledge overall. Being in the digital sphere is familiar to most students, stimulates their curiosity and motivation, enhances their problems solving skills, improves their bonds with peers, makes learning more inclusive, and starts being perceived as a tool for acquiring knowledge. As all the research studies, journal articles, news articles, and other sources proved, all those claims are accurate. As Hogan and Gomm mentioned in their research, we want students to want to learn. As a student and aspiring future tech professional, I believe that technology should have space within modern education since it guarantees a superior learning experience for students. Still, even when tech use is limited in the learning environment, a student is the only one capable of making them succeed in their studies. Therefore, students should pursue knowledge even in the digital era, where everything is just a few swipes away, because technology does not replace the unexplainable satisfaction of learning.

Works Cited

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Appendix One

Writer-Review Form

Please attach copies of this sheet to all copies of your own paper. Please answer as specifically as possible.

1. Who is your intended audience? Be specific.

Teachers (the ones teaching in classrooms and the ones developing courses).

2. What are you trying to do in this paper (what is your purpose)?

Convince teachers that using technology in the learning environment is beneficial.

3. What is the central conclusion or thesis of the paper, and where is it stated?

Teachers should welcome technology in their classrooms because it is familiar to most students, stimulates their curiosity and motivation, enhances their problems solving skills, improves their bonds with peers, makes learning more inclusive, and starts being perceived as a tool for acquiring knowledge.

It's stated in the introduction and conclusion paragraphs.

4. What type of reasoning and evidence do you use to support this thesis? Do you feel you have made a convincing case?

I used several published research articles, content discussed in the Acquisition of Knowledge, and personal experience as reasoning and evidence. Yes.

5. How have you organized your paper (topically, chronologically, etc.)? You may include a brief outline if you like.

    1) Introduction
    2) Body
        a) Students see familiarity in digital environments.

b) Technology stimulates student curiosity

c) Technology improves students' problem-solving skills

d) Stronger bonds through technology

e) Technology makes learning more inclusive and flexible

f) Teachers' beliefs aren't always correct

3) Conclusion

4) Works Cited

5) Writer Review Form

6. What do you like best about the paper? What are its strengths?

I really like how the theme is very relevant and that it is related to my major. My paper's main strengths are my arguments. I believe I chose good reasoning to defend my thesis, even though they still need improvement.

7. What are the paper's greatest weaknesses? What changes would you want to make in another draft?

I think my arguments might be a little bit repetitive. I would develop stronger arguments and connections to personal experience in a second draft.

8. What specific questions do you have for your readers?

Does technology instigate hunger for knowledge or accommodate people with such easy access? Why would students learn if all information is a few swipes away? Why should they?

Peer Review Form, One

Name of Reviewer Alexander Gambrell

Author and Title and Draft: Isadora Oliveira Grasel / Teachers, Gen Z, and Technology

(Give both positive and negative comments. Make your responses as concrete as possible. Think about what feedback would be helpful to you to hear and how you would like to hear it.)

DEFINITION OF TOPIC:

What is the thesis statement? Which aspects of placement and presentation of the thesis did you find helpful?

The thesis statement argues that technology should become welcomed by teachers because it is familiar to students, is engaging, enhances problem-solving, improves bonds with peers, and makes learning more inclusive. The placement of the thesis statement at the end of the introductory paragraph is very effective at telling the reader what to expect when reading the paper. The thesis statement is also formatted in such a way that the statement appearance in the paper lines up with the thesis. This makes it easy on the reader to follow the paper. Although I believe the thesis statement can be altered to still exhibit the topics present in the paper while being more concise. This will help the reader digest the information more effectively.

Which aspects of the thesis did you find unclear? What additional background or context would you require in order to understand the thesis?

None of the aspects stated in the thesis were unclear to me. It was simple to follow, and the topics being explored were easy to comprehend. No background knowledge is needed to understand what is going to be discussed in the paper. The paper only requires of you beforehand is to know the current education system and its relation to technology.

ARGUMENT AND STRUCTURE:

Which parts of the paper are the most convincing? Be specific.

The parts of the paper I found most convincing were the paragraphs regarding inclusiveness, bonding with peers/ collaborative learning, and student curiosity and motivation. All 4 of these

paragraphs were supported with multiple pieces of evidence taken from different sources. The reasoning after the support from the evidence was sound and made sense. Little to no room for debate existed between these points.

Which parts are the least convincing? Why? Gaps? Counter-arguments that should be acknowledged? Unrelated strands?

Some parts of the thesis essay had complications associated with it. For example, the paragraph regarding technology being perceived as a tool for knowledge. This paragraph gives less so of a reason why teachers should integrate technology into the classroom and more so a causal reason why technology isn't already integrated into classrooms. Another example is the problem-solving skills paragraph. The only fault with this paragraph is the deviation from the problem-solving skills that technology teaches to the focus on how students handled the covid situation. The discussion about TESI seems a little disjointed when read by the reader. To fix this the ending could be reworked or a few sentences can be added to link the two together.

USE OF REASONING AND EVIDENCE:

Where does the author make effective use of reasoning, evidence or examples to support a conclusion?

The author uses effective reasoning and evidence in almost every paragraph written. There is evidence from articles and authors that support the claims given by the author either explicitly or insinuated. Every paragraph has at least one source for the reasoning except the 2nd. Although I think this paper could be stronger with increased quantitative figures that could make that support the qualitative evidence given.

Are there paragraphs where the author could have used more support?

The author could have supported the 2nd paragraph about curiosity with a source outside their own anecdote. Although I would also preserve the anecdote because it gives character to the paper.

INDIVIDUAL COMMITMENT OR CONTRIBUTION:

What unique insights did the paper offer?

This paper provides me with new ways to look at the benefits of technology in the classroom. The paper really gathers assorted thoughts and puts them into words onto a paper. The paragraph about how technology is not perceived as a teaching tool by some teachers is also a very interesting take provided by the paper. I also really enjoyed the foundational groundwork laid out for Gen Z and their position as tech natives.

Where would you have liked the author to commit him or herself more fully?

I would've liked the author to commit themselves more to describing what types of technologies should be integrated into the classrooms to make the point more poignant. I think this would really help the paper provide a more argumentative tone for the claim the author is trying to defend.

FORM AND STYLE:

List examples of use of language that you found interesting or that helped you as a reader:

Some languages that I found interesting and helped me as a reader were:

- While the previous generations ended up adapting to technology to some extent, Gen Z is tech native.
- In addition, as stated in Ciampa's article, the mix of technology and education builds a bridge between informal learning contexts and formal learning environments

- Finally, it's common knowledge that technology blurs limits that seemed to be impossible to challenge before

Which features of the writing got in your way as a reader?

Some features of the writing that got in the way of reading were the transitions from one topic to the next whether it be from paragraph to paragraph or in the paragraphs themselves. The transition is sometimes a little difficult but can be easily remedied by the addition of a few more words or reorganization of a few sentences.

Some formatting errors also get in the way of reading such as missing in-text citations and extended sentences or too short sentences. Although all of this can be easily corrected.

Did this paper meet the expectations of its audience? Why or Why not?

I think this paper did meet the expectations of the audience because it provided a statement and reasons as to what foundations the claims made by this statement rest on. The thesis does a well enough job presenting its reasoning and comes to a certain conclusion regarding a subject.

GENERAL COMMENTS:

Given all of the above, remind the author (and yourself) what you liked best in this paper?

What I liked best about the paper was the insertion of the personal anecdotes that gave a personality to the paper. I also liked how simple it was as a reader to follow the piece and see clear lines of evidence and reasoning that supported the claims made by the thesis.

What do you think should be the author’s priorities in revising this piece?

I think the author's priority in revisiting this piece should be to hamper down on the reasoning why teachers should bring technology to the classrooms. I think this paper can get lost sometimes and if the author focused on hitting it home with the points given it can make this paper outstanding.

Peer Review Form, Two

Name of Reviewer: Justin DeBoskey

Author and Title and Draft: Isadora Oliveira Grasel; Teachers, Gen Z and Technology

(Give both positive and negative comments. Make your responses as concrete as possible. Think about what feedback would be helpful to you to hear and how you would like to hear it.)

DEFINITION OF TOPIC:

What is the thesis statement? Which aspects of placement and presentation of the thesis did you find helpful?

Thesis Statement: “Teachers should welcome technology in their classrooms because it is familiar to most students, stimulates their interest and motivation, enhances their problem-solving skills, improves their bonds with their peers, makes learning more inclusive, and starts being perceived as a tool for acquiring knowledge”

The intro paragraph served as s strong “background information dump” that allows the reader to understand the general ideas surrounding the thesis (such as opinions surrounding technology in classrooms, the history of technology in classrooms, background on some of the traits of Gen Z and just generally important statistics on the topic), and give the reader all the information they need to understand the argument the thesis is making to some extent before reading the more detailed paper.

Which aspects of the thesis did you find unclear? What additional background or context would you require in order to understand the thesis?

In the beginning of the intro paragraph, it mentions the “outstanding advantages and results” of technologies that were introduced as a result of online learning. However, the sentence after that statement, it goes into why teachers find digital technologies distracting, without elaborating on

the earlier mentioned point. By adding maybe a brief sentence of the nature of some of those benefits, it may enhance the thesis by showing some of the benefits of technology in the classroom

ARGUMENT AND STRUCTURE:

Which parts of the paper are the most convincing? Be specific.

Without a doubt the most convincing aspect of this paper are the two paragraphs after the introduction about how technology in the classroom brings out an increase in curiosity. These paragraphs are a perfect mix of supporting data and critical thinking/insight, with the point being made having support from a variety of different sources and information, but also containing a fair bit of personal analysis and commentary that makes the point not only well supported, but easy for the reader to understand and relate with, making it easily the most convincing of the arguments made in this paper.

Which parts are the least convincing? Why? Gaps? Counter-arguments that should be acknowledged? Unrelated strands?

The main note that can be made on this paper is the lack of counterarguments presented within the paper. The second to last paragraph does briefly discuss a counter argument (how technology can be distracting), and it is a strong counterargument, but it is only briefly explored. Furthermore, the counterargument is kind its own point, unarguably important and relevant to the thesis, but not necessarily connected with the points made in the paper. As a result, this paper could benefit from more counterarguments, and maybe could also benefit by adding those counterarguments throughout the paper instead of as an end note, as rebuttal of counterpoints is a strong way to bolster one's own points.

USE OF REASONING AND EVIDENCE:

Where does the author make effective use of reasoning, evidence or examples to support a conclusion?

This papers strongest aspect is the amount of evidence and examples that are used to back up each and every point in the paper. Every statement, argument and fact is supported by some manner of evidence, be it a study or article. The strongest paragraphs when it comes to evidence are the paragraphs on Technology Embedded Science and collaborative learning, which are almost entirely made up of evidence (which can have its weaknesses as well, but not die to the fact that there's is too much evidence, but in the fact that there is not enough commentary and critical thinking to go along with it)

Are there paragraphs where the author could have used more support?

Honestly, there isnt a single part of this paper that is lacking in the field of evidence and support for points (unless you count my earlier note on the intro mentioning the benefits of technology introduced in online learning) If I had to choose, maybe the paragraphs on the blurring of limitations from technology and the counterargument paragraph could use some more evidence, but the amount of evidence they have is still perfectly fine as it is, but those could potentially benefit from a bit more evidence based support.

INDIVIDUAL COMMITMENT OR CONTRIBUTION:

What unique insights did the paper offer?

The most unique and interesting insight brought up in this paper is the idea of Generation Z being "tech native". The idea that generation z is a generation that was brought up entirely in the technological age, and required no adaptation to the introduction of these new technologies, provides a very compelling argument in its own right on why the idea of technology in classrooms made up of tech native students should be viewed differently than it would a

classroom of students from previous generations where students were not adapted to the existence of technology to the extent of gen z. Again, I also think the section on curiosity was incredibly unique as well, and as mentioned before, was one of the strongest paragraphs in this paper.

Where would you have liked the author to commit him or herself more fully?

Once again, the main thing this paper needs is far more commitment to counterarguments. It is by far the weakest aspect of this paper, which other than that one aspect, is overall very strong. As mentioned before, by having strong counterarguments and then rebutting said strong counterarguments, it only serves to strengthen one's own arguments in the process, which I think is the best way in which to improve this paper further.

FORM AND STYLE:

List examples of use of language that you found interesting or that helped you as a reader:

I think the most interesting use of language in the paper were the personal anecdotes, particularly the personal commentary that was used in the first two paragraphs about curiosity and a love for learning. This use of language gave these paragraphs a more personal feel, and allowed the reader to relate to the topic more that they would have been able to with a paragraph of merely facts and statements about the topic. By putting a "story-like" spin on presenting an argument, these paragraphs allows the reader to immerse themselves in the paper, which made it easier to understand the argument being made.

Which features of the writing got in your way as a reader?

As mentioned before, paragraphs that are merely facts and statements about the topic are sometimes difficult for the reader to immerse themselves in, and so it makes the paper difficult to read, and less effective in delivering the point it is trying to make. While using strong evidence

and sources to back up a point is very important, without critical thinking and commentary to support those aspects, the paragraphs read as more of a mere dumping of information as opposed to a critical analysis (as seen in the paragraphs about technology embedded science and collaborative thinking). Luckily enough, the first two paragraphs are a perfect example of a combination of evidence and analysis, so making the other paragraphs akin to these examples would most likely strengthen the flow of the paper, as critical thinking and analysis can also serve as a segway between different points, because a times the paper came off a little choppy, which could be distracting.

Did this paper meet the expectations of its audience? Why or Why not?

Overall, despite some of its weaknesses, the paper absolutely meets the expectations of the audience. The arguments are strong, there are a variety of different points being made, the vocabulary and language are very strong, and it is overall a very well put together paper that demonstrates why technology should be a part of the classroom environment.

GENERAL COMMENTS:

Given all of the above, remind the author (and yourself) what you liked best in this paper?

What I liked best about this paper was, when it was present, the critical analysis and commentary. The paper was filled to the brim with evidence and support, and when that was paired with strong analysis, it made the points being made very relatable, and as in the very often mentioned first two paragraphs after the intro,very interesting and understandable, which is only accented by the fact that the topic is very fine tuned to the audience it is being received by, that being teachers and students in a university education setting in which technology is a very present factor.

What do you think should be the author's priorities in revising this piece?

Luckily, I think this paper has already accomplished all the heavy lifting in the fact that it has all the data and evidence it need to be a strongly supported paper. All that's left to do is make the paper flow better in some of the choppier sections of the paper, and add in critical analysis and commentary in places where it may be lacking. Again, using the papers own paragraphs on curiosity as an example, all this paper needs in some sections is a to be a little more personal and analytical in places, but other than that, it is a very strong rough draft

Writer Review Revision From

Please attach copies of this form to your revision. Please answer as specifically as possible.

How have you changed this paper from the last version? Please be as specific as possible, discussing any of the following: audience, purpose, thesis and argument, reasoning, evidence and examples, organization, context, style, or any other aspect of the paper that you have changed?

I tried to follow most suggestions I agreed that could improve my paper. I attempted to make my thesis statement more concise and the whole thesis flow better, added more arguments and examples to the weaker paragraphs, and double-checked for missing transitions and extended or too long sentences.

What do you like best about the revised paper? What are its strengths?

I like how I integrated high-level evidence and personal experience to defend a relevant and current topic. I believe I was capable of convince my audience by exposing reasonable arguments with strong support.

Are there weaknesses or problem areas that remain? What are they?

I tried implementing more counterarguments throughout the paper, as suggested by one of the reviewers. However, that made my writing unorganized and confusing. I still added them where I thought they fit better but I'm still not sure if there are enough counterarguments.

What specific questions do you have for your readers?

Does technology instigate your hunger for knowledge or accommodate you with such easy access?

Appendix Two

Fascinations Report

As an avid learner and tech enthusiast, one of the questions that keep me up at night is: how does technology influence the way we learn and, even more importantly, our will to do so? I have always been a great observer, and it is too noticeable that technology has an absurd influence over us. It makes every daily activity effortless and knowledge more accessible, but it is also responsible for stimulating bad habits and addictions.

Scientists, psychologists, educators, anthropologists, entrepreneurs, parents, and students. They all question the same thing with different approaches and goals. Since everyone uses technology to some extent daily, I believe that reflecting on this dilemma would affect all people. They might use it differently; therefore, they will be affected differently and view technology differently. Some might go into digital detoxes, and others might try to use new tools when learning. I believe that studying this topic could provide guidance on interpreting those effects and an opportunity to reflect on how we personally connect learning and technology.

One example of a predicament when discussing technology and learning is if computers should be used at schools. Unfortunately, scientists, psychologists, educators, anthropologists, entrepreneurs, parents, and students most likely do not have the same opinions. To understand this issue in depth, I think choosing a target audience to identify with is essential. As a student, I believe I must discuss and analyze such a relevant matter with others like me, from pre-school to Ph.D.

Will computers, calculators, and other tools be banned or become mandatory for college? Do they help students have a higher understanding of the process of acquisition of knowledge? Or do they distract students?

Why would students learn if all information is a swipe away? Why should they?

Does technology make us more hungry for knowledge? Or accommodated with such easy access?

Annotated Bibliography

Arnone, Marilyn P., et al. "Curiosity, interest and engagement in technology-pervasive learning environments: a new research agenda." *Education Tech Research and Development*, vol. 59, no. 2, 2011, pp. 181–198. *Springer Link*, https://doi.org/10.1007/s11423-011-9190-9 Accessed October 2022.

The article's authors discuss how curiosity, interest, and technology are ultimately connected and combining them can lead to both good and bad outcomes. They state that even though curiosity is considered a basic human survival instinct, it does not automatically turns into enough interest and engagement necessary for a higher level of learning. The article mentions how technology can be both a stimulator for one's curiosity and a distraction.

Several parts of this piece can support the idea that the students are who make technology a useful tool or an addictive distraction, and how people borned digital differ from those that were not. Reflection on overstimulation and how to deal will a huge amount of information can be also promoted.

Ciampa, K. "Learning in a mobile age: an investigation of student motivation." *Journal of Computer Assisted Learning*, vol. 30, no. 1, 2014, pp. 82-96. *Wiley Online Library*, https://doi.org/10.1111/jcal.12036 Accessed October 2022.

K. Ciampa's article concludes that motivation can be increased through challenge, curiosity, control, recognition, competition, and cooperation. All of those can be provided by including use of technology in the learning process. The text also explicitly mentions how grade 6 students are engaged and totally focused on learning when using tablets.

This piece can support the argument that using technology is in a learner's best interest. If motivation is necessary for student involvement, influences learning's level of efficiency, and can be provided by integrating technology in the classroom environment, technology is then a vital tool for pursuing knowledge.

Dontre, Alexander J. "The influence of technology on academic distraction: A review." *Human Behavior and Emerging Technologies*, vol. 3, no. 3, 2020, pp. 379-390. *Wiley Online Library*, https://doi.org/10.1002/hbe2.229 Accessed October 2022.

Dontre's article mainly discusses how technology might cause detrimental effects on academic distraction, especially in online learning, where teacher supervision is reduced. It also addresses the psychological side of distraction, mentioning that some technologies end up promoting behavioral addiction. Examples like how students might just mindlessly surf on the Internet instead of paying attention during lectures are also included.

Several paragraphs from this piece can be used as supporting arguments and examples of counter arguments, exposing points in my thesis that might lead to disagreement. Mainly, the use of laptops in the learning environment can open up a broad and complex reflection, as it is a point for disagreement in a lot of cases.

Hogan, Kathleen, and Damian Gomm. “How Can Technology Enhance Children's Natural Curiosity?” *Computers in the Schools*, vol. 16, no. 3-4, 2000, pp. 237-246. *Taylor & Francis Online*, https://doi.org/10.1300/J025v16n03_11 Accessed October 2022.

The article written by Kathleen Hogan and Damian Gomm discusses a unique approach on teaching and shape teaching strategies based on children's curiosity, aiming to make students realize that learning can be fun instead of a dreadful responsibility. The authors explain in detail how they motivated students and enhanced their natural curiosity using pets and technology to teach science while simultaneously following the National Science Education Standards. The result was a group of actively involved students that were interested in the animals' progress beyond classroom and even followed up with owners during the summer.

The awesome idea detailed in this piece can be used as an example of how to motivate kids and keep them interested in school projects by making the process of learning more engaging and interactive, instead of impersonal and purely theoretical. Again, it's noticeable that technology provides excellent tools to improve learning and improve the experience.

Spiegler, Israel. “Technology and knowledge: bridging a “generating” gap.” *Information & Management*, vol. 40, no. 6, 2003, pp. 533-539. *Science Direct*, https://www.sciencedirect.com/science/article/pii/S0378720602000691 Accessed October 2022.

The article written by Spiegler states several definitions for technology and knowledge, aiming to refute the notion of technology as a replacement of knowledge. The discussion's main point is that technology is the prerequisite and means, while knowledge is the product, the ongoing process of knowing, the knowing-that and knowing-how. The author mentions that today,

knowledge is more advantageous than technology. He says that technology has a "self-canceling advantage" since it is becoming increasingly available for everyone and, therefore, cannot be seen as a strategic asset anymore.

Definitions in this piece could easily be used to prove how technology and knowledge differ. Specific parts could be used to promote reflection on how a student will only stand out among others that have the same access to technology by having more knowledge. Rather than replacing knowledge with technology, the focus should be on using technology to acquire more knowledge and using knowledge to develop exclusive pioneer technology. Students will most likely conclude that technology is a tool that will make them more successful in the continuous learning process of life.

Précis

Does technology instigate hunger for knowledge or accommodate people with such easy access? Will computers, calculators, and other tools be banned or become mandatory for college? Do they help students have a higher understanding of the process of acquisition of knowledge? Or do they distract students? Those are some questions that I, as a student, grew up asking myself and others. With time, I ended up realizing that learning brings an amazing type of fullfilment and sense of purpose. However, I know that most students disagree and believe that learning is an irrelevant duty. The rise of uncountable kinds of technological tools gave those students a reason to think that technology can replace the need to pursue knowledge. Why would students learn if all information is a few swipes away? Why should they?

In this paper, I aim to show students that technology does not replace knowledge, but rather provides tools to enhance the process of knowing and the experience. Today, knowledge is

what gives advantage to people and enterprises since technology in general isn't something with exclusive access no more. I want them to see that by knowing, one can develop technology that improves learning, leading to an infinite cycle of acquiring knowledge and creating. Technology provides precise answers for exact problems. However, it doesn't deal well with specific scenarios, exclusive situations, and exceptions from the previously established rules. It needs human critical thinking to reach its exceptional potential.

Most students were born digital and, therefore feel comfortable in the digital world. Instead of prohibiting the use of devices like computes, tablets, and cellphones schools should use the students' connecting with those. By making learning fun and familiar, students will be more motivated to continue and see its importance. Technology can make them enjoy learning and wish to learn more. In addition, students will also notice that deciding how to use technology's power is in their hands: they can make it the means or the obstacles to knowledge.

Evidence in the relationship among technology, curiosity, interest, engagement, motivation and learning can be transformed in powerful supportive arguments. Using technology's potential for distraction as a counter argument combined with the concept of established habits provides an opportunity to reflect on how students must learn how to use technology to acquire knowledge as well.

Timeline

- Sep 19: FT 1 - Guided Fascinations Report
- Oct 3: FT 2 - Research Question & Timeline
- Oct 17: FT 3 - Précis and Annotated Bibliography
    - Refine reflection and questions - 5 hours, due Oct 7

        - Who am I communicating with? Which group will identify with my claim? Who might think differently than me? How do their claims differ from mine? Why are my ideas true? How can I articulate my thesis to show the truth of my ideas? What kinds of arguments or evidence are the most convincing? What changes if I am correct? What if I am wrong?
    - Review How to write a paper 2020 article - 1 hour, due Oct 7
    - Research - 12 hours total, due Oct 10
    - Brainstorm arguments - 10 hours, due Oct 12
        - Outline paragraphs (each one should have a topic sentence)
    - Schedule Writing Studio appointment if needed - 2 hours, due Oct 14
- Oct 31: FT 4 - First-Year Thesis, Full Draft for Peer-Review
    - Research further - 8 hours, due Oct 20
    - Develop arguments (use outline) - 10 hours, due Oct 23
    - Schedule a Writing Studio appointment to get a second opinion and help - 3 hours, due Oct 25
    - Review - 2 hours, due Oct 27
    - Fill Writer-Review Form - 3 hours, due Oct 27
- Nov 7: FT 5 - First-Year Thesis, Peer-Review forms
    - Analyze assigned draft 1 - 5 hours, due Nov 2
    - Fill Peer-Review From 1 - 2 hours, due Nov 2
    - Analyze assigned draft 2 - 5 hours, due Nov 5
    - Fill Peer-Review From 2 - 2 hours, due Nov 5
- Nov 14: FT 6 - First-Year Thesis, Final Draft

- Review Peer-Review form - 3 hours, due Nov 8
- Schedule a Writing Studio appointment to get a second opinion and help - 3 hours, due Nov 10
- Review - 4 hours, due Nov 12