Digital Literacy and Digital Legacy

echnology is an ever-present factor for students, as they are immersed in a world of digital influences. The foundation of digital literacy has four factors—technological skills and access, authorship rules, representation rules, and online social responsibility. For students and employees to interact responsibly in a digital society, it's imperative that they understand all four parts of the puzzle. It is suggested that by 2020 77 percent of jobs will require digital competency (Lynch 2017).

A report conducted by the New York City Comptroller's Office in 2013 found that in 42 percent of households without broadband students achieved less than high school graduation and only 5 percent earned a bachelor's degree (Liu 2013, 6).

Digital literacy will become a major factor in the success of our future students. Additionally, students must be aware of the importance of their digital legacy and what this digital life means as they age. Librarians have a critical role to play in developing the digital literacy of students so that they can create a digital legacy of which they can be proud. Libraries managed by a professionally trained librarian provide a space where students learn, grow, create, and become responsible citizens, both in person and online. Having regularly scheduled library classes with students starting at age six ensures they learn these crucial skills.

Developing technical skills is crucial for students when considering their future employment capabilities. Therefore, teaching students strong technical skills in today's tech-driven society is key. However, technical skills make up only one small piece of the puzzle. Digital literacy and legacy are vital if today's students are going to become responsible absorbers of information, proficient in their careers and serving as morally driven citizens.

In the library, I teach digital literacy skills with students who range from eleven to nineteen years of age. I started teaching digital literacy and legacy on a continual basis in 2016, specifically after the wave of clown sightings that took place in the US, Canada, and the UK (Rogers 2016).

If you're unfamiliar with this event, there were reports of people dressed up like clowns hanging around schools, malls, and quiet roads. Reportedly, they scared people and, in some extreme cases, attacked them. I didn't pay these reports too much attention until four students came rushing into the library, asking if I'd heard the news. They were convinced that a killer clown had murdered thirty people in Canada. I asked them where they saw this information. They told me "on some page" or "someone showed us a news story." I took it as an opportunity to talk to the students about clickbait, fake news, and how to spot a headline that is trying to simply get you to click on it.

I felt as if something needed to be done to ensure students were aware of the mass amount of misinformation that existed on the internet. I also wanted students to be aware of their online permanence. Every keystroke, every search, every comment can ultimately be traced back to them. It was because of this that I decided to incorporate digital literacy and legacy into the school's library lessons on a more regular basis. To begin with, I ensure that students understand the meaning of the term *digital footprint*. In my opinion it is vital that they comprehend the importance of this term and what it can mean for them as they age. In addition, a digital footprint ties directly

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to their digital legacy. Digital legacy is what is left behind online after someone passes away. It is crucial for students to consider this legacy because it is one of the things that will last after they are gone. Building an accessible digital legacy will allow their family to remember them in ways not thought possible before (Billingham 2016). What I try to stress to the students is that you cannot assume that social media pages will hold on to your digital information after you are gone. It is important to find someone you trust to look after your online life when the time comes.

Digital Footprint

A digital footprint is, at its root, the trail you leave behind when you scour the internet. What's important for students to understand is that every search they complete can be traced, every post they make should be considered permanent, and future employers will most definitely be googling them to see what they've been up to online. In fact, a study in 2017 found that 70 percent of employers are looking at the social media profiles of potential employees (Salm 2017). It is easy to surmise that this percentage will only increase as time passes. I share this startling statistic with my students to try to drive home the fact that pausing before you post is something we all need to consider.

A digital footprint doesn't have to be a negative thing, however. It can be a portfolio of your life, and I explain this to our students. Most of us are using the internet responsibly and being polite and considerate while posting information. Your digital footprint is not just about having the right privacy settings (although I do mention this to students). It's also about leaving behind footprints that are positive. This doesn't mean you can't be thought-provoking or passionate, but I stress to students that sitting behind a keyboard or phone gives some people a lot of courage to say things that they normally wouldn't say. I ask students to act as if they were saying this to the person's face when they respond to things online. In the end, we all are leaving a trail of our online activities, we are all trackable, and considering it is now near impossible to extract yourself from the internet, everyone must be considerate when publishing anything.

An exercise I use in the library is a simple yet effective one. I discuss the fact that most employers will be searching their social media content and that, quite frankly, when they get older, they will be googled by employers. I then show them real-life examples of people losing their jobs and even having their lives threatened over what they at the time perceived as funny, harmless, or private messages. My goal is not to scare them, but it's impossible not to be frightened by some of these stories, which are not hard to find. I remind the students that these are extreme cases, but they must be careful when they post.

I also discuss the importance of deleting accounts they no longer use because failing to delete an account leaves the slim possibility that it will be accessed by malicious users, resulting in a form of identity theft. That said, I tell them that they should keep a list of every account they have so they won't forget about any accounts as time passes. I also go over privacy settings; I don't go into details as it's impossible to know which social media platforms every student is using or is going to use. I use Instagram as an example, ensuring that students at least understand the importance of this feature and how it can be used to their benefit.

I create a wall on Padlet, which is a very useful free site that allows users to create a wall where students can post information in real time. Think of a Padlet wall as an online bulletin board where the students can post virtual sticky notes. I give my wall the name "If Someone Googled You 10 Years from Today, What Would You Want Them to See?" I ask students to discuss in small groups why this is important. I always hope they are thinking back to the news stories on people losing their jobs, but I also want them to think about how everything we do online is permanent and how important it is to leave a positive legacy in general. I ask them to hold on to their answers, and I then provide students with the Padlet access code and inform them that they can post images or add text to the wall to describe what they want to portray.

Padlet https://padlet.com

It's a very interesting and informative exercise that allows students to express their dreams, their fears, and their career goals. We had students posting pictures of themselves as famous soccer players, the emblems of the universities that they hope to attend, descriptions of careers for their family, musical dreams, books they hope to write, cars they hope to own, and much more. What I learned from this lesson was that many of our students, even at an age of eleven, had very concrete career plans in mind for when they become adults, much more than I did at that age. I hope they learn that the internet can be an amazing place to learn virtually anything they want, but the flip side is a dark reality that can lead down a very dangerous path.

To end this session, I have students create a word cloud on Tagxedo, which generates word clouds in specific shapes. Not surprisingly, I ask students to use the footprint template to complete this task. The students use the words and ideas that they generated during the Padlet exercise to make their word clouds. It's a great way to create a display based on a positive digital footprint message.

Tagxedo www.tagxedo.com

Disinformation

Disinformation is an issue that is projected to only become worse in the coming years. New research shows an alarming surge in the creation of videos known as deepfakes, where someone's face is swapped with another so seamlessly it is nearly impossible to detect. The number of these online videos doubled between 2018 and 2019. There is huge concern that deepfake videos will become political in nature (Cellan-Jones 2019).

To combat disinformation, I introduce students to fake news articles and discuss ways to detect and avoid them. I start with an image of the world; the image shows various countries lit up in different colors. Some countries are very bright; some are completely black. I ask the students what they think this image represents. We discuss various answers until the correct one is revealed: the image represents internet usage in one day in 2012 on the planet.

I use this image to illustrate how fortunate we are to have this incredible resource at our fingertips and that unfortunately some countries still struggle to access not just the internet but also basic human necessities. It does come as a surprise to some students that not everyone can access something like YouTube whenever they want.

I ask students to guess how many websites are in existence, again seeing which student can come the closest. They are usually surprised to find that there are close to two billion websites in existence and that in fact over 380 websites are created every minute (Mill for Business 2019).

Using this number, I explain to students that the potential for disinformation and outright lies is very high. Finding reliable information quickly and effectively can be tough. Therefore, I walk them through a variety of Google search tips. These include using quotation marks to search for exact phrases, the site function to ensure your search results come from one specific trusted website only, and the in-title feature, which allows you to have every search result contain a specific word or phrase in the title of the article. Filetype is another effective Google search method. By searching for a phrase and adding filetype:pdf at the end of the search, it will ensure every result is in PDF format. This technique can be used to search for PowerPoint, MS Word documents, whatever file type you'd like.

I also discuss using keywords and have students do a quick exercise. This is one I adapted from Tiffany Whitehead's (2015) "Google It Better" lesson. I started this lesson after I noticed students coming into the library and using the computers to type full-length questions into Google. My goal was to show them that Google doesn't really need questions like these and that their goal should be to reduce the number of results. I broke the class up into five groups. Each group received a piece of flip-chart paper with a question on it. They were also given markers and told to cross out unnecessary words, circle important words, and add words if need be. This was a great opportunity to explain to the students that things like commas, periods, and in some cases question marks are unnecessary with Google. The favorite question was "Is there really a bus that is powered by cow poo?" That group ended up narrowing it down to "bus poo," and we received the results we were looking for. (It's true: there is a bus out there that is powered totally by cow manure.)

I also schedule these lessons to coordinate with an author visit at our school. For example, in March 2018 author Onjali Q. Raúf visited Glenthorne High School to discuss her novel *The Boy at the Back of the Class*. This novel follows a boy named Ahmet who is ten and travels to the UK from Syria. Along the way he is separated from his parents and placed in foster care. He joins a new school and is immediately bullied for the way he dresses and the fact that he cannot speak English. A few kindhearted students then take it upon themselves to try to reunite Ahmet with his parents. The book tackles tough issues in a way that is accessible for students ages ten and up. It also looks to bust myths that surround the refugee crisis not only in the UK but around the world.

To augment this visit, I decided to run a series of digital literacy and legacy lessons that aimed at dispelling the myths about refugees. I asked the class to guess how many refugees are trying to flee wars. I also asked them how many environmental disasters or political persecutions they thought are currently in the world. Using information from the UN Refugee Agency, we were able to determine that over 70 million people are considered "forcibly displaced." I then asked the students, of that 70 million, what percentage do they think the UK takes in? There is a very specific reason for asking this question. In the UK we have political parties running on the platform that "Britain is full" and that we take in too many refugees. Many students guess 10 to 15 percent, and some go as high as 50 percent before I remind them that that number equals half the population of the UK itself. When students are informed of the real number, which is less than 1 percent, I ask them if that surprises anyone in the class. Without fail it does, and I ask them why. Two-thirds of the room have repeatedly said, "Because of what we hear on the news" or

"I thought it was more than that because of stuff I see online." This exercise has proven to be very eyeopening for me and hopefully for the students. It was a powerful way to prepare for Onjali's visit and inform the students on an important social issue while teaching them digital literacy skills.

In library lessons, I also use news stories to promote digital literacy. In one particular lesson, I show students the website How Stuff Works and its page entitled "10 Ways to Spot a Fake News Story" (McManus 2015). I enjoy this site as it fully explains why fake news is created and gives students ways to avoid it. It also points out sites that are generating fake news daily and the reason behind these stories, which is primarily ad revenue. This always generates a discussion with students about the nature of clickbait and why it's so important to avoid such stories. Every click adds money to the coffers of these sites and therefore keeps them in business.

I put students into groups of five or six. I provide each group with a different news story. I stress that each of these stories has been published and promoted as true. However, only one of them has been verified to be true. Their job is to read their news story and discuss with their group whether they think they have the real one or not. When they have had ten to fifteen minutes going over the story, I stop everyone and have each group read their headline, provide a synopsis of their news story, and explain to the rest of the class why they feel that theirs is the real or fake story. I get them to think back to the How Stuff Works article and provide as deep an analysis as possible on their decision.

When everyone has finished, I get the students (and teacher) to vote on which story they think is the real one. The results are often split, with 45 percent of classes getting it right. After the real story has been announced, I will ultimately get asked this question: "How do you even know this is the right story?" I love it when students ask this because it means they are thinking critically and questioning everything they come across, at least in this instance. I talk about how stories can be verified if they are from reliable sources or if they are carried by multiple news outlets (even though I stress that this sometimes still doesn't mean they're reliable). And if the story concerns an urban legend or a story that is based on historical accounts that have been repeated in one form or another, I talk to them about Snopes. I feel Snopes does a great job in debunking popular myths and even current news stories that have captured the imagination of young and old alike.

Snopes https://www.snopes.com game that I call "Real or Fake." This is a game where I display images on the screen. Again, only one of the images has been verified as authentic. All the other fifteen images have been doctored or photoshopped in some way. I once again get students to vote, and they rarely vote for the right image. It always sparks a debate around specific images, particularly ones that students are dead certain are real. These mostly include images of dangerous animals enacting their rage on some poor swimmer or hiker.

To ensure that students are aware of the importance of a positive digital footprint and what their digital legacy entails, hands-on, practical exercises have proven to be effective. The library's role in this area is vital and will continue in future library lessons where students will discuss digital literacy and legacy with experts on the topic via Skype, engage in more research lessons around fake news, and write their own research papers. My ultimate goal is to ensure students are curious yet skeptical, engaged yet wary about what they are interacting with online.

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To finish this lesson and to have some fun, I play a

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