

## **Introduction**

Thank you so much for having me here today. It's a pleasure to get to visit all of you here in beautiful Oregon and speak with you about the future of libraries in the digital age. In my position as Innovations Manager for the San Jose Public Library I am constantly studying how libraries are changing and actively pursuing projects that continue to keep us relevant, while maintaining our core values.

Today, I'll invite you to join me on a journey. We will explore our paths into librarianship and what we think the purpose libraries hold. We'll go back in time to look at the history of library services and the ways in which we used to meet information needs. Then, we will examine what it means to be a library today, investigating the 21st century information needs our patrons have. Last we'll talk about change, failure, and what you can do right now to ensure you're a librarian of the digital age.

## **Why are you a librarian or library worker?**

Think back to when your library journey began. Were you a child who always wanted to be a librarian when you grew up? Did you set up your stuffed animals and stamp the inside of the books on your shelves? Did you shhh your friends on the playground when things got a little too rowdy? In high school, did you spend hours flipping through card catalogs, researching a question? Did you spend long nights at the university library carrying away stacks of books to your table and trying to pat dry the drool puddles from the pages as you struggled to stay awake for an all night study session?

Even if you were a library fanboy, you may not have seen a path to librarianship until later in life. It may have come sometime during undergraduate years or after graduating with a liberal arts degree and struggling to find a practical value. What was your, "Aha! Librarianship!" moment? How much did you know about what a librarian actually did day-to-day or what a library's core values and ethics were? Many of the librarians I know were always avid readers and collectors of knowledge, pursuing degrees in English, sociology, humanities, or political science. We are literacy nerds. We love being on the quest for knowledge and sharing that passion with others. We are driven to help others know things.

My own path into libraries was as sorted as I'm sure many of yours have been. As I mentioned, just like most of you I loved learning and reading. Hermione Granger is my book character doppelganger. Always the teacher's pet, my arm raised high in the sky begging to be called on. When I thought a teacher was incorrect, I rushed to the library after school to fact check them and then call them out the next day, showing off how much I'd learned. Everytime I read a new book I would discover a possible new career path that I was sure I would follow when I grew up. Contact made me want to join SETI and be a radio astronomer, after reading *Outbreak* I was sure I was going to join the CDC to do disease research. Secretly, I was really hoping I'd find the "So You Want to be a Wizard" book that Diane Duane writes about and that I could just be a

wizard. I would talk about being a tennis star or joining the cast of Saturday Night Live. And while I spent countless hours at the library, it never crossed my mind to become a librarian.

Instead, I pursued theatre in my undergraduate career. Starting as an actor, then moving through various backstage jobs until landing on dramaturgy. A dramaturg does all the research and development for a play. They gather knowledge and then disseminate it to the cast and crew. They also act as the advocate for the playwright, ensuring their voice and vision isn't lost in production. As a drew closer to graduation I began to realize that the theatre just wasn't where my passion laid anymore. Just before getting my degree an advisor posed the question to me, "Why not become a librarian?" I could use my research skills and passion for sharing knowledge with people, just not on a stage.

The thought of more school and more debt created a good deal of unease and instead of jumping at the opportunity I went to do an internship at a theatre company in California. What did I know about libraries? Shortly after starting my internship I again was faced with the realization that I didn't want to do this with my life. So, sitting up late at night I submitted my graduate school application and started to learn about libraries.

Even when I began my masters program I was unsure about what I wanted to do within this great field. Still didn't feel like I knew what the purpose of libraries was other than to deliver books to people. Oh boy, was I about to discover a whole new world of possibilities! When I began my program I went to volunteer for the local public library. On my first day, I knew that's where I belonged; it felt like home. As my studies progressed and my time spent at the library increased I finally began to understand why I needed to be involved and how I could work to not just shape the lives of our patrons, but also help to grow the profession and ensure that we continued to be a critical piece of any community.

Being a librarian means we have the power to unlock doors for people. We provide access to worlds of knowledge. For at the end of the day, information is power. Those with the tools to access it can change the world. Each and everyone of you sitting here today makes our world a more connected place. We work to ensure libraries can fulfil their purpose.

### **Purpose of libraries**

So, what is that purpose? We all might have some different answers here about what we think the purpose of a library is. Libraries mean a lot of different things to people. Also, we all come from different types of libraries. Some of you are from special libraries or public or academic. At the end of the day, it doesn't matter what library you come from, we're all here for the same reason. Libraries are about literacy and providing access to information.

Libraries are the cornerstone of democracy. We are here so that society can have an informed populous. Libraries level the playing field, ensuring that every member of our society has free and open access to knowledge. You as reference librarians are central to serving this core

value. In most of your institutions you are the link that connects people to that knowledge. As librarians it is our responsibility to make sure that people are able to access all that information. That means going beyond just fetching the information for someone. Instead, we have to teach the tools of literacy. While literacy was refined to just reading in the libraries of the past, today we are faced with a new set of literacies to teach and new ways of accessing information.

## **Libraries of the past**

Before we move into discussing those new literacies, I think it's important for us to take a step back and understand where we come from. The first libraries were created as a place to store records. People wanted to reflect back on their past. It was convenient to have a central point of storage where you could access documents such as transaction records, treaties, or maps. Soon humans began doing more than just writing to keep track of items bought and sold. Scholars began writing their theories on the creation of the universe, mathematics, and stories of their explorations. The Library of Alexandria is commonly accepted as the first library that would have resembled a library that we know and love today. It was a place of research where academics could access the world's knowledge. Or at least what they knew of the world. The core value of libraries was established, to disseminate and provide access to information.

However, the libraries of the past were not lending libraries. Literacy rates were low and so was free time for most. These institutions were only accessible by a small part of the population and even then they found themselves beholden to the will of the librarian. With chained books and stacks that could only be browsed directly by the librarian, we were the true gatekeepers of knowledge. Librarians literally held the keys that unlocked a vast universe. Without their guidance it was nearly impossible to obtain information.

Until fairly recently, librarians still acted as the primary gatekeeper to accessing information. The role of the reference librarian was clearly understood and defined. People would call or visit their local libraries to find answers to their questions, beyond where are the bathrooms and how do I use this eReader thing? Those of you who have worked public library reference for many years may be able to reflect back and see the shift in questions that people ask. [At NYPL](#) in the 1960s people asked if black widow spiders were more harmful dead or alive and what the lifespan of an eyelash was (the answer is 150 days based on the book *Your hair and its care*). Librarians were the original Google, we were who people turned to in order to meet their information needs.

## **How did we meet information needs?**

Librarians most often solved a person's information request by answering the query for them. They scoured the stacks for the perfect books or articles, leaving this great mystery about how exactly they were able to find the answers to any question. We soon gained a reputation that exists to this day, librarians are the know-it-alls. I usually respond to that stereotype at parties, explaining that we just know how to find anything. If only I could access the entirety of human

knowledge without having to touch my smartphone! While people thought highly of their librarian's abilities to answer their questions, we weren't seen as the most fun loving bunch of people. The librarian stereotype continued to grow as one who was greedy with the keys to knowledge. We became an institution, comforted by the fact that we would always be needed. How else were people going to get access to information?

Then one day, the screech of modems came into the library. Yahoo!, Altavista, and Ask Jeeves popped onto computer screens through this mysterious new tool. The keys to the kingdom of knowledge were copied and pasted into everyone's hands. For the first time, the average person could search for information without any special training.

Yet, in its infancy the Internet was small and libraries still reigned supreme. Slow at the start, but getting faster every day, the internet began growing. All of humanity's knowledge was making its way into the homes, and pockets, of people around the world. No matter where you are in the world today you can access any piece of information you desire. We even had service when we were riding on camels through the Sahara in Morocco. Some believed the days of libraries were numbered, but librarians understood that these changes created a new role for them, as guides and teachers helping patrons wade through vast stores of knowledge.

### **A Shift in access**

Do you remember pre-Google internet? I was a fairly early internet adopter and was stoked beyond belief when I finally got a computer at home, no more need to wait for one to open up at the main library in Phoenix. Now I could spend hours searching for the random and weird websites that fed my X-Files fandom. Yahoo Directory was my first introduction to web searching, but I rarely used the internet to answer questions. Soon Ask Jeeves sauntered into my web toolbox, a place where you could kind of sort of ask questions and get answers. Yet, primarily the library is still where I went to seek answers and to do research for school. Google had not yet begun to build the algorithms that would change the way people searched and accessed information forever.

Libraries continued to act as a portal to information and were some of the earliest adopters of computers and access to the world wide web. In those early days, finding information online was still challenging, librarians mostly were still holding the keys. Overtime, the landscape has changed. Google grew their search algorithms, becoming synonymous with online searching. As the barrier to going online became smaller we reached a point where the ubiquity of smartphones made a librarians role more nebulous. If anyone can ask, "Hey Google what is the lifespan of an eyelash?" and get an immediate response, what purpose do we serve in providing access to information? Where does this leave libraries in the digital age?

We are no longer the gatekeepers to information. Nearly the entirety of human knowledge is at our fingertips, just waiting to be accessed. Many people began to dismiss the role of librarians and libraries entirely. While I've groomed my friends quite well to understand what libraries do

and why they are important, I can't tell you how many times I've been asked, "But why do libraries need to exist? Everyone has Google now." I was even at a bar in Los Angeles once and upon telling a woman that I was a librarian she asked me, "What do you plan on doing when you get a real career?" I'm sure you all have had similar interactions throughout your profession. The expectation that people will come to us in order to have a question answered is no longer the norm, especially not in a public library.

The ease of search, even in an academic setting or special library, has made the average person think that they can do it themselves. Who needs to learn how to search? Google does it for me! Heck, they even fill in the blanks as I type. But, what have we seen with the increase in information combined with search algorithms and filter bubbles? People haven't been trained how to be critical of the information they see online. They still don't know how to effectively search in order to find the correct information. The floodgates have been opened, but people are drowning in an ad driven content sea.

A deluge of information is the same as having no access at all. I find it exhausting and overwhelming to go online anymore. Feels like I'm wading through a minefield of advertisements dressed up as blog posts, fake news, and clickbait headlines. If we, as knowledge brokers and information literacy champions are finding ourselves worn out by the constant struggle to determine what is real or not, can you imagine how our patrons feel? The content on the internet has been shaped by people's reactions to it. Until we learn not to listen to the false information being thrown at us, we will continue to be bombarded with sensationalized headlines.

Here is where we as librarians can play a critical role in the future of the internet and how people access information. While our core values haven't changed, we still are responsible for providing access to information, the format has changed and so must we. Instead of being gatekeepers, we can be instructors and guides. We need to teach people how to be critical thinkers and how to wade through the information swamp; assisting patrons to find knowledge and answer their own questions.

It is also time to acknowledge that there are a new set of literacies to teach in the digital age. Where once libraries focused on traditional book literacy we are now expanding our role to cover 21st century literacies and become libraries of the digital age.

## **21st century library**

I think there are nuggets of truth when people question the value of libraries today. The time has passed when the librarian's job was to sit behind a desk waiting to be of service and solve that critical information need. However, I don't believe that libraries need to try and be more like Amazon or Google or Facebook. We are often sold a narrative from library service vendors about the need for personalized services and social integration on our discovery layers. That these products will bring the library into the 21st century and keep us relevant; keep us alive. I

think that narrative is bs. Libraries are different from the tech conglomerates who derive their earnings from advertising and collecting user data. We should not strive to be like these companies, but rather shape our institutions to highlight our services and values. Let us create places where people can come to learn, grow, discover, and explore safely and privately. Let's shape our own work to be the guides who show patrons the paths to become active and engaged members of their community.

I've been in many libraries all across the country and world. I have a travel bug and try to visit at least one new country every year, it is where my money goes instead of children. Some libraries have made me heartbroken, like a school library in east San Jose that hadn't had any new books for 30 years or the one in the Republic of Georgia that mostly contained books in Russian from the soviet era; they only had a few books in their native Georgian. Other libraries have left me feeling envious like the one in Aarhus, Denmark that encourages play with huge climbable structures surrounding the building and builds community with a giant gong that chimes every time a child is born in the city. Sometimes I feel hope for our future, like when I walk to my office in the San Jose State University library, which we share a building with, and it is wall to wall students studying.

So, then what does a 21st century library look like? Well, I can tell you that there is no one shared physical characteristic. I'm not going to tell you that everyone needs to go back to their locations and install a makerspace or rip out your reference desk. Instead, I think that a 21st century library acts in a different way than libraries of the past. It is how we approach service that matters, not necessarily how or what services we provide.

First, we have to be forward thinking. For most of the history of libraries we were thought of as a place of stagnation. In fact, many people were drawn to the profession as a place without much change. Libraries were information depositories, giving people access to books and helping them find information. While that core value is still there we are and can be so much more.

We live in a time of unprecedented change. Never before in human history have people lived where innovations were drastically changing how they run their day to day lives. Think about the past 20 years. What new technologies have come to be? Do you remember when the internet stopped being a novelty and started becoming a necessity? Or how about smartphones? It's hard for me to even remember how I functioned without having instant access in my pocket. When I was younger I used to ride public transit everywhere. I'd always have my trusty bus book in my backpack, mapping out routes and trying to figure out when I needed to leave my house so that I could catch the next bus and not stand out in the Arizona heat in my vinyl pants and steel toed doc martens too long. Now, it's hard to even conceptualize doing something similar. Why wouldn't I just pull up Google maps and have it decide how I should get somewhere? Yet, realistically ubiquitous smartphone adoption is only about five years old. What do you think is going to be the next major shift in how people live their lives and by extension utilize libraries?

We have to look towards the future, putting long term plans in place that drive the direction of services we want to provide to our communities. Did you know city planners do this? I went on a trip to Detroit a couple of years ago to learn about how they have responded to their monetary woes in order to rebuild their city. Several people from our city's planning department were on the trip with me. They were from a long term department, planning for what the city would look like in 20, 30, or 40 years from now. Why don't we do the same thing?

Have you thought about what library services at your locations will be like in the future? Is it naive of us to imagine that physical books will always line our shelves? Perhaps one day eReader technology will become so seamless and integrated into our other devices that the era of physical media will fall to the wayside. It might seem impossible to us now, but so did having a super powerful computer in my pocket 10 years ago.

By looking forward we can situate ourselves to be less reactionary, let's respond not react. I've actually really been trying to put that mantra into my personal life the last few months. Generally speaking, most of my life I've kind of been a hot head, letting my amygdala get inflamed whenever I felt attacked. I am quick to react, which does not often serve me well. I let emotion and my lizard brain drive my decision making. It rarely leads to good choices. So, I've been trying to teach myself how to slow down and allow myself time to respond to any given situation. Even stopping for a second to take a deep breath, allow a moment to assess before responding can make a huge difference, acting with logic instead of being driven by emotion.

We have to put this into practice in a work environment as well. If we are forward thinking then we will not be as caught off guard by change. We will have looked at the potential opportunities and threats, planning for many different possible outcomes. Future planning then gives us the space to stop being reactionary. We are shaping the library's future and can be confident in our ability to succeed. Many of us are still scared about looming budget cuts and as such continue to operate under the assumption that libraries will blink out of existence at any given time. This mindset continues to make us react and not respond, making choices driven by fear and anxiety instead of confidence. Libraries are only doomed if we continue to live only in the here and now, we have to look towards the future, laying out the path of what we want library services to look like moving forward.

In order to be forward thinking we have to be willing to take risks and grow comfortable with failure. This is a hard one for most of us. How many of you enjoy failing? It sucks. It feels awful when we fail. It is embarrassing and most of us hate to let down our co-workers and patrons. Yet, if we're not failing then we're not trying hard enough. We are not pushing the boundaries of what's possible for library services. Give yourself and your employees a safe space to fail. We fail successfully by learning from what went wrong. We evaluate and iterate, trying again if it is determined there is value in a new approach.

Not everything in life is going to go right. I fail quite a bit. In fact the first two large programs I planned for the library were total flops. When I started as a librarian I jumped on the after hours

adult programming bandwagon. Gathered a couple of other young librarians and we planned what was sure to be an awesome event. Spent many months working on marketing, program elements, and set up. The night came and we were stoked. You know who came? People who worked at the library. I think we had about 5 people from the community, most of whom knew someone who worked at the library. It was a total failure. We tried doing several different iterations of the event later, never having much success drawing in young professionals. After a few months we finally hung up our hats and moved onto other projects.

Libraries need to encourage failure as part of the lifecycle of service. A 21st century library will plan for the future, choosing different services and programs to test with the community. These services will be decided on by evaluating needs, not reacting out of fear. Sometimes the new thing you try will work and you'll be able to push forward in a new direction. But sometimes you'll fail and that's okay too. Either way you will learn something new about how to provide services and be able to grow and adapt as the world continues to rapidly change.

Being able to adapt quickly to our ever changing environment extends beyond just library staff. It is also our responsibility as a library of the digital age to ensure that our patrons can navigate through this technologically driven world. We want to make sure that our patrons are problem solvers and have robust critical thinking skills. We have to teach our patrons how to do things on their own instead of doing it for them. San Jose really lives by this model of teaching a patron, guiding them through the process of finding their own information.

I've heard many negative reactions to this service model, based out of fear of becoming obsolete. Librarians continuing to see themselves as the gatekeepers to knowledge, clutching onto the keys as tightly as possible. If we teach people how to do all of this on their own, what will our value be? However, if libraries continue to stay ahead of the curve, if we are forward thinking in our services then people will keep coming to us to learn. We will be the first place people look towards when they consider how to come across new knowledge or understand how to operate a new piece of technology.

The last key element of building a 21st century library is embracing being a library. While there are lots of different types of libraries out there, I firmly believe that libraries should identify their core values and stick to them. We don't have to be like Amazon or Google. We should be true to what libraries are. Libraries are centers for knowledge, we help people become literate and provide access to information for all. Let us tout our virtues loudly and proudly, explaining to people what sets us apart from any other institution in existence. Together we can change lives and help our patrons live successfully in the digital era.

### **21st century literacies**

As we make moves to become forward thinking, to respond and not react, to fail successfully, to teach our patrons, and to embrace our role as libraries we have to design our services around 21st century literacies. Libraries have always been about literacy. In order to unlock the

knowledge on a page, we have to become literate in language and reading. While that literacy is still a key component of libraries, there are new literacies that are essential to living in today's, and tomorrow's, world.

Who do you want your patrons to be? What purpose do we serve in their lives? I view libraries as an institution that assists people in becoming informed citizens. We help to ensure that everyone has access to information and is able to use that information in order to participate fully in their community. You, as reference librarians, are critical to achieving that goal. You are integral to shaping how information is delivered and accessed by your patrons.

What does an informed citizen look like? The first thing that pops into my head is someone who is an active member of their community. This could be any community that they are a part of, their school, neighborhood, or work. They know how to navigate through their community's infrastructure in order to accomplish tasks that help them in living their lives. Active members of a community are connected with one another; they know who and how to ask for help. They can lead engaged, successful lives because they are literate.

Beyond learning how to read, we all have to be technology and information literate. Libraries, and especially academic libraries, have been teaching people information literacy for a long time. However, there are new challenges people face since they are accessing information through different mediums. Libraries can help people navigate through the vast swaths of information to find what they need to solve their problems. Information literacy works in tandem with technology literacy since it is nearly impossible to access information without interfacing with technology in some way.

### **Technology - device & internet**

How often do you use technology? Unless you are out camping, purposely unplugged from our connected society, it's likely that technology drives nearly every part of your waking life. Every morning, I'm awakened by the alarm on my cell phone. I sit in bed for a few minutes, checking work email and Facebook. I get up and make tea using my smart kettle that allows me to set the water temperature and brew length. After breakfast, I brush my teeth using my electric toothbrush which keeps me accountable with a 2 minute timer. I hop on my motorcycle to go to work, connecting my bluetooth headset to my helmet, asking siri to play me music on my ride. When I get to work, I login to both my work desktop and my personal laptop. One uses iTunes to play me music while I use the other to answer emails, organize projects, and create presentations. When I get home, I order food through doordash on my cell phone and relax, eating dinner while watching streaming video through the projector in my living room. After dinner, my partner and I discuss how to build a project for burning man and we hop on YouTube to watch tutorials. Then we go and build it in our garage with our laser cutter and 3D printer. Finally, before bed I ask my homepod to turn off my bedroom lights, as all three lamps click off for the night. There is barely a moment that goes by in which I am not interacting with technology in some way.

Now, I admittedly come from a place of great privilege. I grew up with technology in my house. My father worked for Motorola and we always had a computer at home. I was fascinated by the early internet, getting connected at my local library as often as I could after school. I'd spend endless hours in AOL chat rooms and posting in usenet groups. When a new piece of technology comes out I am rarely intimidated by it. Because I am technology literate I am able to figure out how new things operate or where to find the resources to teach me how. I'm willing to push buttons until I get something working, rarely afraid of breaking something. I will fail over and over again until I seek out the assistance of an expert or get it right.

However, many people are not technology literate. They are not confident in their abilities. As the rate of change in technology increases the more it will be embedded into our everyday tasks. We are already at a place where it's very challenging to live a successful life without having access to technology, which includes knowing how to use it and benefit from it. Libraries are perfectly situated to assist people in becoming technology literate.

I see there being two divisions in technology literacy, device literacy and internet literacy. While they are interconnected, we can deliver tailored services to ensure that our patrons are literate in both.

### **Device literacy**

Most of us interact with several different technological devices throughout the course of our day. I don't know what I would do without my laptop, smartphone, and Kindle. You should see me scramble at night if I misplaced my Kindle. It's my nightly ritual to lay in bed with the lights out, reading for 30 minutes before drifting off to sleep. I'm so thankful for that particular advance in technology. Gone are the nights of my youth, huddled under my blankets with a flashlight and paperback, trying to hold one in each hand and still flip the pages. This seemingly small upgrade in the way I access information has greatly improved my life. I'm excited about what the next advancement might be.

Technology is not slowing down. There is always going to be something new on the horizon. So, it's not enough that we learn how to use a particular device. We also have to learn how to be critical thinkers and to seek out assistance when something new crosses our paths. If we institute programming and services now that teach device literacy then people will continue to turn to us as they need to learn new things. We will be looked at as one of the primary resources for becoming technology literate.

One of the things that helps me in continuing to learn a new device is my excitement when something is released. Many people have a great deal of fear around technology. They are scared of breaking it or feeling foolish when they don't get it. The library can provide a safe learning environment and can also foster a sense of excitement around emerging technologies.

Libraries are not strangers to teaching device literacy. In recent years, libraries have began teaching classes in how to use everything from eReaders to 3D printers. At San Jose Public Library we decided to expand on how we delivered technology programming by building the Maker[Space]Ship. We operate in the heart of Silicon Valley with all the largest technology companies right in our backyard. Yet we saw many that many of our patrons were technology illiterate. Even those with access at home struggled to learn the basics. Our librarians were spending a great deal of time trying to teach people how to use their devices.

We tried to build excitement and ease fears by hosting technology petting zoos, giving people an opportunity to play with various devices. Librarians hosted workshops and volunteers acted as tech mentors to provide one-on-one assistance to patrons. These more traditional approaches to teaching people how to use technology have been great ways to ensure our patrons are technology literate. However, we realized that we weren't reaching all the members of our community. What about those that don't come to the library? We also weren't really building up a large amount of excitement which serves as a method of reducing fear and anxiety.

Thus, the Maker[Space]Ship was born. Using the traditional bookmobile model, we built a mobile makerspace. Its mission is to overcome access barriers in San José to foster creative ideas, connect people with technology, and encourage problem-solving, collaboration, and discovery. The bus visits various locations across the city including parks, schools, senior centers, preschools, and community events. Librarians teach visitors creative problem solving through various technology devices including laser cutters, 3D printers, robotics, sewing machines, and more. Each of the workshops taught on board has clearly identified learning objectives that are centered on 21st century learning skills.

In order to really embrace technology and feel confident, to become literate, one must learn in a safe and welcoming environment. The Maker[Space]Ship meets people in their neighborhoods, places where they already feel comfortable. When people are relaxed they find it easier to learn something that can be intimidating like technology. We also built the bus to have a "wow" factor. When the bus drives up people are excited to come on board. It is bright and vibrant, unlike many school classrooms or traditional makerspaces.

When you consider teaching people how to use devices consider ways that you might make them feel safe. How can you develop new service models that reach populations that don't come into the library? How can you put people at ease when they are becoming literate so that they don't get frustrated and just give up?

Another key piece to becoming tech literate is learning how to use the internet. Part of knowing how to use the internet falls under information literacy, while another is more about understanding how the internet and the services you interact with online function. Understanding the nuts and bolts, even on a basic level is what keeps us safe online. So while

internet searching is critical, and I'll speak more on that in a moment, what can we do to demystify the internet?

The internet in its infancy was a place of anonymity. We didn't share very much personal data and you didn't have to be online. We still filed taxes using paper and did our banking in person. The risk level of not knowing what you were doing online was fairly low. We moved from an era of being warned not to meet anyone you met online in person to literally calling up a stranger to pick us up in their car to take us to our final destination. Today, we have to use the internet in order to conduct our lives. Nearly every job application is online, you have to use the internet to get health insurance or government assistance. You need to go online to pay rent or do your homework. However, every time we go online we risk our personal information falling into nefarious hands.

We used to speak of the digital divide. Those with access and those without. That gap is closing. Two-thirds of adults have broadband at home and nearly 90% use the internet in some way. The access gap is closing, but the privacy divide only grows larger. Those who are tech literate know the methods of creating strong passwords, how to set privacy settings on social media sites, what and when to share information, and how to identify schemes. We can't expect people to not access the internet, it's a requirement today. Libraries have a great opportunity here to teach people how to become privacy literate and close that growing gap.

Libraries have been strong advocates for patron privacy since the charge was added to our code of ethics 80 years ago. It seems like a natural step for us in the digital age to move from just protecting patron privacy to teaching patrons how to protect their own privacy. There are lots of opportunities for us to help our patrons become more privacy literate. Think about all the interactions that you have with people day to day and search out moments where you can teach small, but valuable lessons.

A great moment to teach the value of creating good passwords is in one of the first interactions we have with a patron, setting their library card PIN. Many times we instruct our patrons to think of something easy that they won't forget. We set their PIN to the last 4 of their phone number or their street address. Sometimes we have them set it to all 2s. Take this opportunity to talk about making a strong PIN and why it's important. Library cards can be used to check-out hundreds of dollars worth of materials. Someone who gains access will also know personal information, including address, phone and email. The conversation about setting a strong PIN can quickly lead to how to create strong passwords for any online accounts.

At San Jose Public Library we took a unique approach to teaching privacy literacy. Much like with our Maker[Space]Ship we saw our patrons struggle to use the internet safely. They didn't have confidence online, leading them to just avoid it all together. We applied for a grant from the Knight Foundation to build a privacy literacy tool. Knight gave us \$35,000 as part of their prototype grant and we had six months to build a working prototype.

Since we know that technology is intimidating, we again focused on creating an engaging tool that people would want to use. Our initial product was a side-scrolling video game that led you on a privacy adventure. As you worked through the video game you would be asked questions about your online needs and at the end of each level would be granted a personalized toolkit with links, tips, and resources for building a safe online identity.

Upon doing user evaluations and scoping out the cost of building an entire video game we decide to scrap the original vision and build something more user friendly. Thus, the Virtual Privacy Lab was developed. The Lab has all the same content as the video game, giving access to information about digital footprints, how the internet works, tracking, security, and more. After each lesson, users can build those personalized toolkits to help them in becoming literate and then taking charge of their online identities.

The VPL was met with widespread acclaim and we now have libraries across the world who link to it from their websites. We've had a great deal of different people reach out to us wanting to share it with their user populations. Through one of these connections we discovered an entire demographic of people that were in need of a service like the VPL, domestic abuse survivors.

Several years ago we were approached by the National Network to End Domestic Violence. They had heard about the VPL and wanted us to present at their annual tech summit to their providers. Survivors of domestic abuse still need to live their lives. We can't just tell people to not go online anymore. There is a huge need in this community to learn how to protect their online identities to ensure their physical safety.

Not only did we go to the tech summit and present about the lab, but last year we added domestic violence resources to the VPL. Anyone who builds a toolkit can have immediate access to resources that can help them in living a safe and confident online life. It's been amazing that the library can act as such a powerful change agent in ensuring that this vulnerable population becomes privacy literate.

Technology is not the only literacy a library in the digital era should focus on. We also need to expand one of our traditional roles, teaching information literacy. As reference librarians, information literacy is your bread and butter. With more information available than ever before it is critical that we continue to teach people how to search for information and evaluate it.

### **Information Literacy**

As a librarian, I sometimes find myself forgetting that most people don't know how to find quality information online. Perhaps you're like me, finding pleasure in being able to seek out some obscure piece of information that answers a patron question. And ever since our election cycle began I've found myself posting retorts to people's Facebook posts sharing news headlines, pointing them towards more factual information.

While it can often seem like searching is super simple today, with Google auto filling in our queries, what many people don't realize is that those top results are not always accurate or based in fact. Quite often they are advertisements masquerading as personal blog posts, sensationalized clickbait headlines, and shoddy medical advice. Far too few people understand how search engine optimization works or know how to critically evaluate the information they find.

Many of you are already working to teach information literacy to your patrons, especially those of you in an academic setting. However, if our current political situation shows us anything it is that whatever we're doing isn't enough. We've somehow found ourselves living in a post truth world. A world where it is easier, and more fun, to believe the absurd rather than use critical thinking skills to search for reality.

Our media has fabricated a world where we expect the austentatious from what should be mundane. We have television shows that have turned cake decorating and buying storage units into fast-paced, thrilling professions. It delights us to imagine a federal government that is fueled by conspiracies instead of endless bureaucracy. Our internet is full of clickbait headlines, telling us that everyone is super upset, when really it's 10 people on Twitter. All of this misleading information has led us into a hyper divisive world, unable to listen or have empathy for each other. How is it that with the entirety of human knowledge at our fingertips we are stuck sharing fake news and creating artificial tensions between people?

Even with all the animosity and confusion, I see this as an opportunity for libraries. Instructing people on how to access information is one of our core values. That piece of your job hasn't changed. We do have to reevaluate how we reach people and what we teach them. Our standard formats don't satisfy the needs of the digital user.

I wish that I could come to you today with all the answers on how to assist people in becoming expert internet sleuths, evaluating information with a critical eye. I've seen many libraries trying new programming, such as news literacy and media workshops for teens, but we still have a lot of exploration to do! Let's seek out partnerships with organizations that are also working towards this same goal, forming alliances with journalists, teachers, and even politicians. Let's continue to share with one another what is working for our communities, fostering collaboration with libraries across the country. Most importantly, let's set aside our fears of failure and attempt new things that may be outside of our comfort zones.

We are in the wild west days of the internet. The methods of accessing information and the type of information available is vastly different than in the past. It's okay to not have a solution that will get everyone in the world to stop believing fake news or spreading misinformation to their friends on Facebook. However, libraries can set the tone if we believe in ourselves and our reach. We can be the leaders in teaching people how to evaluate information on the internet in its current form, instructing people on how to search for that factual information. Moving on from what we were in the past, beginning to teach 21st century literacies, will situate libraries to

remain relevant and provide our patrons with the skills they need to thrive in the digital era. Libraries today must throw out the notion of being a stagnant palace of knowledge; forever unchanging and move confidently into the future.

## **Change**

One of the things that got me excited about working in public libraries was the opportunities I saw for growth and change. People were responding to budget cuts, library shutdowns, and the internet with a refreshing vigour. Sometimes it takes a major shakeup to realize that your institution isn't as permanent or secure in its standing as you thought it was. We realized that libraries could actually be removed from communities and schools; people just don't need us in the same ways that they used to. Libraries are not now, and probably will never be again, the primary place people to turn to when they need to find something.

This reframing of how we provide service is requiring a major cultural shift, internally and in the minds of the public. Librarians are working hard to dispel the myths of the uptight, bunned librarian, shushing everyone who walks through the door. Projects like Kyle Cassidy's, *This is What a Librarian Looks Like*, bring the image of the modern day librarian to popular culture. The book has gorgeous photos of librarians of all colors, complete with tattoos, pink hair, and bowties. Famous authors such as Neil Gaiman and George R. R. Martin provide essays on their experiences with librarians and those who read the book are introduced to the wide range of jobs librarians hold. Kyle is helping us to shift the way the public's view of librarians, what is your library doing to embrace our culture change?

## **What can you do; starting today?**

While it may seem scary and uncomfortable to change, I think overcoming our fear of it is one of the most important things to work on. The world is changing at a rapid pace. For the majority of human history things would be mostly the same when you died as when you were born. That time is gone. Think back over the course of your life; what technologies totally altered how you live day-to-day? It's hard to imagine life before smartphones, the internet, or even Netflix. I mean to think, I used to have to get in my car and actually drive to a Blockbuster to watch a movie, the audacity!

The fear of change used to be a strong motivator in my life. When I look back I regret the moments when I didn't act. I wish that I'd taken a semester abroad or gone to college in a different state instead of the university down the street. But, I was held back by the fear of change. Then, about 10 years ago I'd had enough. I was sick of being afraid of change, of not participating in all the amazing opportunities that life presented to me. I made a personal intention to embrace change and so can you.

This change practice began with a mantra to myself; fear or feeling uncomfortable is an indicator that, as long as the chance of death or injury is low, I need to try it. My mantra plays

out in all sorts of scenarios from trying new foods to skydiving. This practice of forcing myself to experience change on a regular basis hasn't completely alleviated the stress that comes from the unknown, but it has almost totally removed my fear. At the end of the day, almost all the new things I try have, at the very least, led to me learning something about myself. Sometimes it's good and sometimes it's bad. You have to give yourself permission to fail, but set yourself up to fail successfully.

### **Successful Failure**

When I graduated from library school I had no job prospects and my lease was about to expire on my condo. I'd always wanted to travel, but my fear of change had been holding me back. My mother encouraged me to go teach English abroad. Staying true to my mantra, I sold everything I owned, strapped on a backpack, and left for my first overseas adventure in the country of Georgia.

On my way there I had a ridiculously long layover at LAX. While anxiously waiting to board my flight to Istanbul, and then onto Tibisi, I met a woman who chatted me up in the food court. She had been a peace corps volunteer and spent much of her early 20s traveling the world. She explained to me that while I was traveling there were bound to be horrible experiences. I would be late for trains, misunderstand directions, and be totally and utterly confused by a language I barely spoke. There would be moments of misery when I got sick from drinking the water or had to sleep on the floor of airports. That in these moments it would be hard to not feel like I'd failed, to want to give up and go home. But, she told me, try to remember that these are the moments that make the best stories. It is in these moments of strife and hardship that we learn and grow. No one wants to hear about how you sat on the beach and drank cocktails with little umbrellas for a week. People want to hear how you failed a little bit and then overcame the challenge to be back with them telling the story.

When was the last time you failed? We all do it on a regular basis. We might fail at work or in our personal lives. Tell yourself right now that it's okay to fail; give yourself the permission. Talk about failure with your co-workers, explaining what you'd do differently next time. Don't hide failure, shoving it into a corner of shame. When we practice and embrace change our odds of failing increase, but so do our opportunities for success. Try new things, evaluate them, learn from the failures and successes, and then try it again. This constant exploration will lead to growth within yourself and an ability to shift the culture within your library to be more accepting of change.

Libraries that embrace change on an institutional level will find themselves ahead of the curve, prepared for upcoming challenges. You will be able to respond to new technologies as they pop-up instead of reacting; scrambling to figure out how to provide service.

### **The same but different**

While I talk to you about embracing change, our core values as librarians still hold true. We are here to foster lifelong learning and provide equitable access to information. The literacies we teach are different, focusing on technology and navigating the internet. We have to reach out, providing innovative services that teach people the skills they need to lead successful lives in the digital era. As reference librarians you can be the key drivers in shaping these services. Hold tightly to your core values, but embrace change, being flexible in your approach to providing access and enhancing literacy. Connecting with your patrons and planning for the future will ensure your library's success in this fast-paced, ever-changing, technology driven society.

Thank you for having me today! We have about 15 minutes for any questions.