

## **A Future Date | What I Wish I Learned About AT Before Starting College\_Veronica Lewis.mp4**

VERONICA LEWIS: Hello, and welcome to my session for A Future Date conference, What I Wish I Learned About Assistive Technology Before I Started College. My name is Veronica Lewis and I am a student at George Mason University in Virginia studying data science and assistive technology with a special interest in visual impairment.

I also run the website Veronica With Four Eyes, which has over 530 free posts on topics related to low vision, assistive technology, college transition, and so much more, written for readers of all ages and skill levels.

A lot of people assume I started Veronica With Four Eyes because I've always been an assistive technology power user. But the truth is, that wasn't always the case. In fact, when I first started college, I had a fairly limited assistive technology education. Most of what I had learned about assistive technology at that point came from articles I read online or learning how to solve accessibility problems for myself in the classroom.

My school had limited resources for assistive technology and didn't have the time to teach me how to use different tools. So I never had the chance to explore different devices or fully learn my assistive technology preferences until I started attending college.

Because of this, I had the challenge of trying to learn how to use assistive technology and trying to learn the new material in my college classes at the same time. While I was successful in doing so, there are many students who aren't able to. In fact, more than 50% of students with visual impairments stop attending college after their first year, with accessibility barriers being a common factor in their decision.

One of the ways I am working to help students with low vision and blindness to be successful in college is by sharing my own experiences in a positive and practical way. And today, I will be sharing what I wish I learned about assistive technology before starting college with the help of a few props.

While I give a lot of examples involving assistive technology for low vision, these skills are important for all assistive technology users who are planning to attend college or pursue other post-secondary education.

One of the first things I learned when I got to college is that not all assistive technology is like that. And by that, I mean nausea inducing. You see, the first time I ever tried out a screen magnification program in high school, I didn't realize that it would have a flashing window and that the items in focus would quickly shift positions every time I slightly moved my mouse.

I ended up getting vertigo from the rapid motion, almost threw up, and refused to go anywhere near a screen magnification program for a while. I would just use the zoom function in a web browser or find some other way to magnify information.

When I told this story to one of the assistive technology specialists at my college, they listed off several different magnification programs and settings that I could try out that wouldn't actually trigger my vertigo or the need for

additional items, like a barf bag. I learned that I prefer a lens view for magnification over a full screen view. And I learned more about how to disable flashing light effects as well.

Even though I thought I would never go anywhere near screen magnification ever again, I'm glad that I gave that tool a second chance, as I use these type of programs and settings a lot now. As it turns out, I don't dislike screen magnification programs. I just dislike the ones that make me sick.

Another thing is that just because I use a device or tool regularly, that doesn't mean that I will have the same device until the end of time. For example, my junior year of high school, I had the opportunity to use a desktop video magnifier that I nicknamed the dinosaur.

It reminded me of a retro computer. It made a lot of weird noises. And it was so heavy that it couldn't be brought to any of my classes. I would have to leave the classroom and go to the library to use it. Even though it was very frustrating to use, I eventually became proficient with using it and figured that once I mastered the dinosaur, I was set for life.

Well, once I got to college, I was surprised to find that the dinosaur I was used to using-- it was basically extinct. All of the video magnifiers in the assistive technology lab were totally different. And a lot of people were confused as to why I had used a device like the dinosaur in high school. This experience taught me that I should take the time to learn how to use multiple types of different assistive technology so that I can easily adapt to using different devices when needed.

Another valuable lesson I learned that also involves magnification is that no assistive technology will ever be able to solve everything. I mean, imagine having a magnification solution that can zoom in on paper, enlarge items on a computer screen, identify details in a small object, read everything on the board in class, magnify a small menu at a restaurant, and do all of this without running out of battery or causing eye fatigue.

Since no assistive technology solution will ever be able to do everything that a user may need, it's important to ensure that students know what tool work best and when. In my case, I use a handheld magnifying glass, like this one, or a scanning app to read paper materials and use a program like Zoom or Magnifier when working on my iPad or computer.

I use a video magnifier to examine details in objects and have a desktop video magnifier that can help me to see the board in class. As for reading a menu at a restaurant, I like to use my phone as a magnifier or pull up the menu online in large print if I'm in a particularly dark area.

Of course, while I have my favorite magnification tools, it's important for me to know how to ask for assistive

technology by function, also known as the generic brand. I was having a conversation with my faculty mentor about different assistive technology that I use in the classroom. And they asked me why I kept using specific device and app names whenever I described how I preferred to access materials.

They told me that it was important to focus on the core features of assistive technology that I use, such as screen reading capabilities or magnification to a certain percentage, and not to worry about what program will be able to do these things for me. Besides, the technology I use could suddenly become extinct tomorrow if an app is shut down or if my vision drastically changes.

After all, I don't need a specific brand of coconut milk in order to make a delicious recipe. I can use this generic brand just fine. However, what if I didn't know what coconut milk was, and I had to figure out what it's used for and how it can help me to make something awesome? I might have a bit more trouble making different recipes or deal with frustrating substitutions because I have no idea that coconut milk exists.

The same goes for knowing different assistive technology terms and how different assistive technology tools and devices can be helpful both inside and outside the classroom. While it's not overly likely that I'll be able to learn more about assistive technology terminology by flipping through this dictionary, taking a little bit of time to learn how things like high contrast displays, audio description, and Alt text can help me as someone with low vision, this can go a long way with helping students to learn more about how assistive technology can help them to be successful.

I tell prospective students at George Mason that their disability services file that list their accommodations is like a blueprint. It can help them to be successful. However, assistive technology is more like a tool box where they can find their own tools and help to turn those ideas in the blueprint into reality and a successful classroom experience.

Another important thing to know other than knowing how to ask for assistive technology is knowing what a device can do and how to use it correctly. At one point, I was talking to my friend about my frustrations with using a screen reader and specifically asked him if there was a way I could duct tape the software's mouth shut, as I had no idea how to get it to talk faster or to stop talking.

At that point, I had never really used a screen reader before. And my friend laughed and showed me how I could change things like the voice speed, pitch, and most importantly, how to get it to stop talking. I hadn't realized how many things I could customize and change to fit my needs. And after that lesson, I started developing my own preferences for how I used screen readers and other technologies.

After my friend showed me all the different ways that they can customize assistive technology for their needs, I

created several documents that show my preferred settings for the devices and software that I use frequently.

I also created documents for things that I use less frequently. So that way, I don't have to try and remember what font size I need for a program or if the inverted screen option is frustrating with certain color schemes. I have an entire post on my website about how I create these documents. You can find it by searching for [How I Document Assistive Technology and Accessibility Preferences](#).

This next thing that I wish I learned before starting college may vary depending on where you live and is all about learning how to ask for technology and resources from your state or, in my case, commonwealth.

A few weeks before I started college, I was referred to the vocational rehabilitation program that is connected with the Virginia Department for the Blind and Vision Impaired, also referred to as the DBVI.

It wasn't until the end of my freshman year of college when I met with their assistive technology specialist that I learned that I could request different devices from the Commonwealth that could help me to be successful in the classroom up to a certain dollar amount. The assistive technology specialist is also able to recommend different devices for me like, say, a tablet or a portable scanner.

DBVI can purchase those devices at a discount or at no additional cost to me as long as the technology can be used to help me achieve my goal of graduating college and working for a major technology company in a role related to accessibility or assistive technology. While I haven't used this benefit very often, it is definitely something to keep in mind when considering whether to create a file with the state department for vision impairment.

One of the main things that I really wish I learned before starting college is how to use a blindness cane. And yes, blindness canes are assistive technology, too. You see, there were a lot of unknowns about my visual impairment and how it would impact me as an adult. Because of this, I never received any orientation and mobility lessons at school, even though I frequently ran into people, walls, trashcans, almost any obstacle you can think of, really.

By the time we realized I would benefit from using a blindness cane, which was shortly after I fell down the stairs at my freshman orientation twice and almost getting hit by a Toyota Prius in front of my DBVI case manager, by that point, there wasn't enough time for me to start getting formal orientation and mobility lessons before I would have to start at college several hours away.

My first day at George Mason was also the first day I started using a blindness cane in public. And I spent the first year or so wondering what I was doing and if I was even using this cane correctly. Luckily, this was corrected by some orientation and mobility lessons at my college. But if we knew more about how my visual impairment would progress over time, I probably would have started looking into orientation and mobility training much sooner, as it would have kept me from getting injured.

Of course, a lot of people have that one tool or device they feel like they are not disabled enough to benefit from, or they think that they will learn it whenever they really need it or when they think they need it. I had assumed for a long time that blindness canes were only for people with no usable vision and didn't think about how it could help me avoid obstacles and incidents like how I fell off the school bus and into a pothole during my senior year of high school.

While I can't say that everyone should learn to use a blindness cane like mine, it's important for students to take the time to learn as many assistive technology skills as they can even if they feel like they aren't necessary. There may come a time when these skills absolutely will be necessary.

I'd like to end this talk by saying that I do not blame anybody for not teaching me these things about assistive technology before I started college, as I know that my school district believed they had prepared me to be able to tackle any technology challenge that may come my way. In a way, they were absolutely correct, because I eventually learned all of these skills and I've been a successful college student, though I definitely wish I had these skills sooner.

I hope that this list of assistive technology skills that I wish I learned before starting college is helpful for people looking to fill in knowledge gaps or learn more practical skills prior to starting college. If you have any more questions about topics related to low vision or assistive technology, or you just want to say hi, feel free to follow me on Twitter or send me an email. My Twitter is @veron4ica spelled V-E-R-O-N, the number 4, I-C-A. And my email is veron4ica@gmail.com.

Thank you for joining me for A Future Date, and I hope to hear from you at a future time.