1. Tell me about yourself

So I am the manager of the E Text department and the E Text department.  
We make electronic text basically, so we make digital accessible versions of course materials for students in higher Ed.Now we have lots of customers outside of the higher Ed market, but since we were started by the Board of Regents to make accessible textbooks for students at Georgia schools are primary goal and mission, and our most of our customers are from umm colleges.So my unit is about 10 full time staff or 7 full time staff currently and four student workers. And we all work on converting materials from.Inaccessible print into accessible digital file formats and we have many different file formats that we specialize in and we spend a lot of our time writing alt text and describing images, charts, graphs, diagrams so that people have access to them and can pass their exams and have equal access to the material

1. Would you tell me some barriers or constraints that you have to take into account when designing for the system?

One the biggest barrier in accessible content right now would be accessible math, especially higher level math. UM, it is very difficult and time consuming to make math accessible and make it accessible for students, especially students who are majoring in high level.  
That's like linear algebra or calculus or anything there and above.  
Umm, when we get a book that is maybe 80 to 90 or more percent math equations to render that into accessible math type or math speak.  
It just takes months just to do one book.  
It could take a year to do one book well and make sure that it's absolutely perfect and every equation is correct, and there's not really an automated way to do it yet.  
And so I think that that's a huge barrier.  
We have experimented with all different ways of making that content accessible, but we have not been able to do it quickly without sacrificing accuracy.  
So I think the entire accessibility field is waiting for some tech genius to invent a math tool, and there are a lot of them out there that don't really work well.  
Maybe don't quote me on that.  
There are a lot out there, but all of the ones that we've tested there are significant problems and we would not be comfortable relying on them for the the quality work that we try to do for students.  
But there there are a lot of tools out there.

Umm, not all of them produce the output that students need.  
So you know, some students are more familiar with different types of programs or software.  
They have their preferred screen reader or their preferred file format and very hard to find a tool that works for you know that makes all of these different file formats.  
I would say another barrier would just be time.  
Because we have, umm, we have really educated dedicated people on our team and we are always umm, you know, pushing to make things accessible as quickly as possible, but sometimes it just takes time to describe images.  
So if we have umm, you know if a student orders a graphic novel, we have the ability in house at CIDI to make that novel accessible and describe every panel and every image and give them the sense that they are reading the novel.

If they can't access the pictures, if they're blind or have low vision, we can make that completely accessible to them, but it might take us a couple months to do that.

1. could you elaborate on how your system would help visually impaired students, or how would it help designers when they're preparing content for visually impaired students?

Everything that we do is to make accessible materials for anyone who's using screen reader software or assistive technology to access content so that the content will be read aloud to them.  
So we are making a textbook accessible for someone who is listening to it and only using a keyboard to navigate.  
So someone who doesn't have access to a mouse, someone who needs all of the features of a digital file.  
In order to navigate it, so we're we're not just serving lines or low vision, we have a huge.  
Customer base of students who have other print related disabilities that use our textbooks or that use our digital E text files.  
So it would be students who are blind and low vision, and I think that would be about 10 to 20.  
Sorry, 10 to 15% of our orders are for students who are blind.  
The rest of the students who order Etext, our students who have learning disabilities such as dyslexia or dysgraphia, or dyscalculia.  
Or students who have ADHD and have trouble focusing, and they need that audio input of the screen reader reading aloud the content while they follow it along on the screen.  
And it's highlighted for them.  
Also, students who have cognitive disabilities or motor disabilities, they might have broken their wrist or broken their arm or finger.

1. how do you confirm that your designs were helping you students?

So we do not work directly with the students.  
We work through the disability service providers at different universities and colleges.  
Then we also work with different nonprofits or companies as well.  
But the way that we are confirming it is that we have people in House who are testing the files and.  
People who work at CIDI who do user testing help us look at our files and make sure that they are working correctly with the screen readers and the software.

1. So the collaboration and the feedback from the students and from the CIDI, does this improve the quality of the creating these accessible documents?

So you know, we're again, we're not directly interacting with the students.  
The students are the way our membership agreement works.  
We receive all of the orders from students through that disability service provider, but we are constantly updating our standards and our practices and the way that we create files in an accessible way based on our interactions with our user testers in House.  
And also we have to always be improving our systems because there are lots of software updates that we have to change.

How we're doing things there are different tools that come out that allow us to make new products.  
So we're always trying to invent and innovate and make new file formats accessible to students.  
Umm, so yes, I think that we while we don't have a channel to get direct feedback from students, we are getting feedback from the disability service providers and our own staff that are helping us improve our products.

1. How do the different tools students use impact your design and what do you do to accommodate this?

We have our different file format and then the disability service provider is hopefully working with the student to figure out what their needs are, what their different abilities are with print to access different materials, what file formats they prefer.  
So by the time a student gets to college, if they have a print related disability, that's this is unfortunately not always the case.

But the goal is that they already have some familiarity with different the sister of technology software, and they already have identified their preferred file format.

So we offer accessible PDF files accessible Microsoft Word docs.  
We make EPUB files, we make accessible PowerPoint files.  
We also have some more advanced PDFs that have umm enhanced structure tags for best reading order.we do alt text for images

What you need to make keep in mind and how you might need to adjust the headings or add certain metadata or create different formatting for each file format to work umm smoothly with each different.

1. How did your thinking evolve?

When we first started making accessible textbooks and course materials are goal was just to get everything out to everyone as quickly as possible, and so the files didn't look beautiful.  
They weren't elegant.  
They weren't as pretty as you would want them to be, but they functioned very well, so we were really trying to do a quick.

Job on getting these out to students and at the beginning when we started, I'm gonna say 15 years ago, but I think it was longer than that.

Only offered accessible PDF files at the beginning and in the years to follow.  
We expanded that exponentially, right.  
So we then offered Microsoft Word DOC files and HTML and Daisy and EPUB and PowerPoint, and like just trying to get as many different file formats as we could to serve every students needs.  
And then we, at a certain point, we even offered math, ML and.

You know, now I think we're trying to instead of when you're asking about evolving at the beginning, we were evolving by diversifying and really kind of trying to add new umm products

And I think now instead of adding more things and more things and more things, I think we we got we got it and now we're trying to refine those things and make them make them more beautiful and more elegant and work.

Instead of expanding, we're trying to focus on the quality of what we do offer.