

1. Please tell me about yourself.

Ava Smith:

I am Ava Smith, and I am the Director of the Talking Book Program. I have been director for about 15 years. I am a librarian and came from Waco, where I worked in a public library for 24 years. As director, I am also the regional librarian for Texas in the National Library Service for the Blind and Physically Handicapped network. We call it NLS, and NLS is a division of the Library of Congress. Basically, I administer the federal program for the state agency, the Texas State Library and Archives Commission.

We are the regional library and we are the only NLS library in the state. Now, in some states, you may find multiple libraries. You have the regional library and smaller libraries that they call sub-regionals, scattered around the state, but we just have the one here in Texas.

As I said, we are a network. Practically all states and territories in the U.S. have some form of Talking Book Library through this program. The only state that does not is Wyoming, because there are just not enough people, period, in the state of Wyoming to necessitate them having their own library. They get their service out of Utah. But territories like Puerto Rico, and the U.S. Virgin Islands, they have their own libraries. Guam gets its service through Hawaii, and I believe American Samoa also through Hawaii.

We got this network and it is a cooperative network. We transfer patrons back and forth and things like that. I oversee all of that for Texas.

Dina Abramson:

My name is Dina Abramson, and my official title is Disability Information and Referral Coordinator. It is a professional library position. Basically, what I do is handle information outside of the program. Anybody in the state can contact me. They don't have to be Talking Book Program patrons, for information, disability, and health-related. I can refer people to other agencies, provide information about adaptive equipment, assistive technology—information like that. Any disability-related information, not just blindness or low-vision.

2. What can you tell me about the Talking Book Program?

Ava Smith:

The NLS network was founded in 1931, and Texas was the third state to join in the network. So we've been in the network since the beginning. The two states that got in front of us were Georgia and New York.

Through the years, the services changed quite a bit, not just in terms of technology. When it was originally founded, it was just for blind and visually impaired adults. We also served people with physical

disabilities that prevent them from holding a book or turning pages. The visual disabilities, you cannot read standard print, and we usually use newspaper print as an example of standard print. If you are having difficulty reading a newspaper, you are more likely eligible for the service.

Originally, it was for adults. In 1952, Congress added to the law to allow children to be served. Up until that time, there was not a really national service for children. Then, in the 70s, they added learning disabilities. So over time, the person served has expanded. But not everyone of visual disability is eligible for service, and it's laid down in the federal guidelines—who is eligible and who is not.

In the beginning, it sort of started out as a music service—you know, printed music for people. They distributed braille and then they began to do what they call leisure reading. Fiction and popular non-fiction. They did printed braille, then they began recording the books on phonodiscs, kind of like a record player. Back when phonodiscs became popular with the public, they had basically two speeds. They had 16, which was extremely slow, and then 78, which was extremely fast, and then somewhere in the middle, they developed the 33 1/3 rpm. Well, those speeds were originally designed for these discs. The 16 was the disc for the blind, because they were very slow. And most record players didn't handle those speeds. So we had to record a disc.

In the 60s, they developed the cassette tape technology. Again, they did a 4-track recording, and this was because of copyright. Most commercial players just do 2-track. In other words, a track on each side of the tape—of the cassette. We were doing 4 tracks, so we had two tracks on each side. If you tried to play them on a regular commercial player, you would hear cross-talking, cause one track would be running backwards and the other one would be running forwards. We had specialized players that would separate the tracks for people to use. We are still using some of them. We have patrons who prefer that medium.

In about 2009, we introduced the new Digital Talking Book Machine. That's a machine that uses flash memory technology. So we went from cassettes to digital cartridges. These were designed similar to the cassette cartridges, because—we have to remember—things have to be tactile for our blind patrons to be able to handle and tell what they are using. The recording was on a flash drive that was embedded in the cartridge.

So that's what we are using now, although we are already transitioning to download. We have a download side—the Braille and Audio Reading Download side, or BARD for short—and many of our patrons are using that. Now they can download to a flash drive, which will fit into the side of the Digital Talking Book Machine. We also have phone apps. We have apps for i-devices and for Android. Many of our patrons are downloading to those as well, so they can use their books on their phones.

[Asked about how the book service is different from that by Amazon]

For one thing, we are free. We do have magazines, which I don't believe they are doing on Amazon right now. We have magazines and newspapers. We have a lot of older recordings that have never been put to audio. Of course, that will change over time, because the commercials for pacers are always looking for

new things to offer. Right now, we have a lot of books that are not available in audio format anywhere else.

As far as how we operate, we're basically very much like a regular library, except that our patrons don't come in and browse for books. Most of the transactions are handled over the telephone. We have a call center. E-mail and postal mail. We do have printed book catalogs that go out to our patrons, and they have order blanks in them, so they can mark up the order blanks for the books they want and mail them in. Or they can call us and read off the numbers that they want. All of that is being digitized. In other words, they are now putting the printed catalogs, where patrons can access them via computer. They can make selections and e-mail them.

So in the last 10 years, there has been a lot of change. That is beginning to happen for braille as well. We're moving into electronic braille. Our patrons who read braille don't have to use the big, heavy physical volumes. They can download their books from BARD and transfer them to braille readers, and they can access their books that way. They can download to Notebooks, which they then can read off of that. Now, as far as having a commercial braille reader, we're moving toward that, because that's one of the things the National Library Service wants to be able to do. Not all of our patrons can afford that technology. They provided the audio reading machine. Now they are going to try and provide the braille reading machine, and they are looking to do that in the next 2 to 3 years.

Dina Abramson:

Now, braille devices are very expensive, unfortunately. It's difficult for people to afford the braille devices. One thing that I developed in the Reference Center is an assistive technology funding guide, and it has information on some organizations that either provide loans for technology or maybe recycled, refurbished equipment. So when people call and if they are looking for either a commercially available digital player or a braille device, I tell them about how much they are and they are like, oh my god, I can't afford it! I say, well, I can send you this guide and there may be some organizations that you can contact, that you might qualify for their loan program.

Ava Smith:

We have a blind staff that works in the call center, so we have outfitted his computer workstation, his keyboard with a braille platen. It's called refreshable braille. It's an extension that you attach to the keyboard and it has braille pins in it. What the operator does is, you have software that can read the screen to you. There might be times when you don't want the screen to be audible to others. Instead, you want to read in braille. You can turn on the sound off, and as the software works its way down the screen, these pins pop up and you can read. As you pass over the pins, the first set drops as you work

your way down the platen, and then it moves onto the next line, the next set of pins pop up, and that's why they call it refreshable.

That platen alone starts at \$5,000 and may go up to \$8,000. For people to be able to use something like that at home, it's very, very difficult to come up with the funds. Of course, as any piece of equipment, they eventually wear out or they age out. There's no longer any maintenance available, so periodically, you would have to replace those. If it becomes difficult to even acquire once, it becomes even more difficult to maintain, keep, and replace. So that's a real problem for our patrons.

Now, if you go through the school for the blind, for example, there is help available, for students who go through. Then, if they are working, there are programs through the state who will help their agencies acquire their equipment. For a lot of people who become maybe blind, say as young adults, there is not a lot of help out there for them. So if they learn to read braille, they are almost totally dependent on printed braille, because they cannot afford these pieces of equipment.

Dina Abramson:

It can often be hard for older people to learn braille. It can be done, but one of the difficult things is, braille is very tactile and, as you get older, you can lose sensitivity in your fingers. So there are people older in life who learn braille but it's less likely as you age to be able to learn braille effectively.

Ava Smith:

Let me give you an example. The National Library Service puts out a newsletter periodically. These are printed copies. One of the things that we do is, we purchase books called print braille, where they take a printed book—usually a children's book—and then they insert the braille pages in it, so that both the sighted and unsighted readers can participate.

As you become older, all your senses dull—your sense of touch dulls as well. It's much harder for older people to learn to read braille, because they cannot distinguish as clearly with their fingers, as well as a younger person can.

That's one of the things that our patrons have always struggled with. If you want to read a braille book, you want all the pieces at the same time. You don't want to read volume 1, and then you can't get volume 2, but you have volume 3. So we try to not send something unless we can send all the pieces. But a very big book may run to 6 or 8 volumes.

Then, you've got the problem of, the postal system is going to deliver this for free. They don't like carrying all those volumes. They have to basically leave it on people's front doorsteps, because none of these things will fit in a mailbox. So if a patron lives where the postman generally doesn't carry mail to the front door, you've got all these issues. Then, the patrons themselves have to pick up the heavy braille

volumes and carry them into houses. Particularly, with older patrons, that might be physically difficult for them to do. So electronic braille is going to make a big, big difference.

Dina Abramson:

And they are working on models that are lower in cost. I believe it's National Braille Press that has just released a braille display machine that is a bit less expensive. I think it's still \$3,000 or something like that.

Ava Smith:

[Asked about a machine in development that aims for \$300]

Yeah, that's the one that NLS is looking at. What the NLS will do is, they will forward an appropriation request to Congress in order to buy X number of these readers. Then, they will distribute them to us, to our patrons, just like we do with the digital talking book machines. So that will enable a lot of people to actually have a reader that cannot afford one now. But NLS hasn't been able to afford to purchase readers on a large scale until the price can come down.

Dina Abramson:

The other beneficial thing with the electronic braille versus the printed braille is that, the printed braille can wear out over time, and if you have people continually reading these books, going through the mail, and stuff like that, they can get worn down to where the dots are more difficult to read.

Ava Smith:

We also have problems with things going through the postal service and getting smooshed. Well, if your dots get smooshed, you can't read! So there's quite a bit of controversy about mailing containers. If your braille material gets wet, it's gone. There's a lot of things that can happen to physical braille that makes it more difficult.

Dina Abramson:

It's fragile.

3. Please walk me through the application process for TBP.

4. How many books do you offer in these mediums: (1) digital audio; (2) braille; and (3) large print?

Ava Smith:

I don't have those figures right at hand, but our largest collection is, of course, the digital audio. We probably have—we talk about titles and we talk about numbers of books. Titles, I think, we're getting up in the neighborhood of about 25,000 titles. For digital audio.

Of course, there are books on BARD that are not available in the digital cartridge. NLS has not made them available, but we have the capability. We have blank cartridges, so we can download those books and make our own digital audiobooks for patrons. That's something of an issue, because some libraries don't have the budget to buy their own cartridges. Cartridges are expensive. They are about \$7-8 apiece, whereas a cassette is less than a dollar. There is a big shift here in investment. Some libraries don't have the staff to do this. They don't have the equipment. We've always been very lucky in Texas that we have been able to do that.

The latest that NLS is doing is, they are providing some cartridges to each of the libraries, with the idea that you download these books that are not available through the Copy Allotment System and make those available to your patrons.

Now, as far as braille, we have thousands of braille titles. Our philosophy has always been, if a braille book is viable, we keep it. When I say viable, I mean that there is no damage, that we could tell that all the pages are there, because as you can see, there is no pagination. So when we get a braille volume back in the mail, if we got loose pages, we can't tell if that page where it is stuck in the book, if that's where it goes. We can't tell if there are missing pages. Those books are generally withdrawn from the collection. We do withdraw books that are really outdated—non-fiction books. But otherwise, if the book is workable, we will keep it for as long as possible.

We do not have the problem that a lot of our sister libraries have, in that we have plenty of space to shelve our braille collection. Some of our libraries have had to get rid of their braille—completely—because they had no shelving space. So they get their braille service from the sister library that serves multiple libraries.

As far as our circulation, in April [2016], we circulated 232 titles, and that amounted to 608 volumes. That [Title] means individual titles. If you talk about a title, that's a copy. If you talk about a volume, that's the pieces. So we circulated 232 titles that had 608 pieces altogether. That pretty much works out to at least 2 volumes per title, and sometimes 3. We have a little over 1100 patrons who are registered for braille format, and that would be both hard-copy braille and electronic braille. And in April, our patrons who were using BARD braille downloaded over 6,000 books. As you can see, electronic braille is already outstripping hard-copy braille as far as what our patrons prefer to use.

And this would also include magazines. We don't really circulate braille magazines. Those are circulated by NLS. But on BARD, they can download magazines. Popular magazines. It's almost equal, the books and the magazines, that they download. The number of patrons we have registered for braille, that represents about 8% of our overall patron base.

Let's talk a little about braille literacy, since it has come up. About 30, 40 years ago, when audio reading became more popular, there was a very disastrous decision taken that, okay, we don't really need to teach children braille anymore, because they can use audiobooks. Well, what they have found is that, if you listen to nothing but audiobooks, you don't really develop literacy skills.

When you are reading a book—I usually tell people—you learn to read in different ways. When we are dealing with older patrons, they were very reluctant to admit that they can't read print anymore and that they need to switch to something else. And so, I tell people, you learn to read in different ways. When you were a very small child, you couldn't read print. You listened. People read stories to you. That's how you read. Then, as you grew older, you mastered print, you mastered your alphabets, so then you learned to read printed page. But for people who were born blind, they can't read the printed page, so they have to learn to read by touch.

However you are learning to read, either by looking at print or by reading braille with your finger, you have to learn to interpret what you are reading. That's where your literacy skills come in. If you are listening to someone reading to you, you're very dependent on how they interpret—through inflection, and emotion, and all that stuff that they put into reading. But that's their interpretation, not yours. That's what we found, is that, as blind children grew up, they didn't have very good literacy skills, because they never learned to read and interpret on their own. So they began teaching braille again to young people.

Now, that doesn't mean that young people want to read braille. Blind teenagers are just like other teenagers. They decide how they want to read. Sighted teenagers don't necessarily want to read the printed page either. So literacy skills, both in the sighted and unsighted populations, are going to be an increasing issue, because you have to master reading on your own in order to develop those skills.

What we're finding though is, kids are always interested in braille. I guess it's because it's kind of secretive to them. When we go out to children's programs, we give them braille cards, and we often do programs where we say, okay, we are going to write secret messages that only you and your other friends can read. Your parents won't be able to read it, because they don't have your braille cards.

I personally think it might not be a bad idea for young people—any young person—to learn braille and sign language.

Dina Abramson:

Absolutely. Victor, our reader consultant who is blind, and I have been to a couple of outreach events, where he has read a print braille book to students and we've handed out the alphabet cards. They love it. They think it's so interesting.

I wasn't able to go to this, but last fall, I think, Barnes & Noble did a nationwide reading of *To Kill a Mockingbird* before the new book came out, *Go Set a Watchman*. So I called them and said, can you use another volunteer reader? They said, yeah sure! And I said, we have somebody who would like to read the braille book. They were like, fantastic! So Victor went and read a chapter using his braille book—a braille book from here, actually—you were there.

Ava Smith:

Yeah, it was very interesting, because he was standing at a podium with a microphone, and someone who is really, really good at reading braille can actually appear to be speaking extemporaneously. People can't see the fingers. He's reading and people are literally walking around him, trying to figure out what is he reading—you know, how is he reading? Because he was obviously blind!

The adults were much more fascinated, I think, than the children, although there was one little kid that came up to me. He stood there and watched Victor for a while, and he came up to me and he said, is that man blind? I said, yes. I said, he is reading braille. And the kid goes, cool, and he whips out his iPad, turns the camera and takes a picture of Victor, so he could go and show-and-tell at school.

But that's it! Many people have had no contact whatsoever with a blind person, and they don't know how to act around a blind person. They are very afraid that they will offend in some way. As one of our former staff members who was blind said, I'm blind, get over it. But you know, for example, in talking, if they used the word, did you see? And it's like, oh my god, I shouldn't have said that. But blind people use those vocabulary words as well. It's not a problem.

The only thing you have to remember with a blind person is—we have a list that we give to new staff. We say, you don't have to yell at a blind person. Most of them are not deaf. In fact, their hearing is very sensitive. Never go up and grab a person, thinking you're going to help them in some way. All you do is scare the dickens out of them.

I had a colleague who works at our Massachusetts sister library. He has some sight; he is visually impaired. And he said, he had gone outside the building one day to smoke a cigarette and he just happened to be standing near the traffic light. He's standing there smoking a cigarette on his break, and he said, the light changed and this woman came up to him and said, okay, we're going to cross the street! And she literally drags him across the street. They get to the other side, okay, now you're across the street, and he had to inform her, but I need to go back because I was just on my break!

People mean well, but you know, blind people are just like everybody else. Just ask. Do you need any assistance, and they will tell you, yes or no.

Dina Abramson:

Also, there is a lot of etiquette regarding guide dogs, or service dogs. You don't talk to a service dog, you don't pet them. A lot of times, they wear a harness that will say, I'm a working dog or something. But there is a natural inclination if you like animals that you want to pet the dogs and you want to talk to them. But when they are in harness and when they are out in the community, they are working. And if you pet them or if you talk to them, you can distract them and that can make it dangerous for the person that they are helping out. That's something important for people to know, about that kind of etiquette.

5. What are the strengths and weaknesses of each medium mentioned in Q4?

Ava Smith:

Well, large print is a fairly good transition, particularly as people age. And I can speak to this. Even with glasses, sometimes it's difficult to read very small print. The light has to be right, and all of that. So we have a lot of people who are still capable of enjoying a physical book, and I want to read a physical book, but they just can't read those smaller prints. We get the large print for that. And this is a medium that NLS does not provide. This is something that we purchase through funding from the legislature.

Our collection is, I would say, relatively small collection for what we want to do with. This is probably our smallest percentage of patrons. Only about 2% of our patrons are registered for large print, but that's improving. What we are doing is, we're recruiting people into the program with the large print. They are not strictly eligible for the other services yet, but it's kind of a bridge. So they can get their large print and they can be in the program and get the newsletters and all the other stuff that we do. Then, as their vision begins to fail, it's easier for them to move on to the other services.

Dina Abramson:

I think that's definitely true, about large print being a transition. A lot of people are weary of the program, because they're so—it's such a thing to get used to, losing your vision. There are so many emotions and so many things that you have to deal with. In the beginning, a lot of people are like, I'm not going to be able to listen to audio. It's such a different way of reading. And a lot of times when we tell them, we have large print, maybe you would like to start with that, it is kind of a way to ease in.

It can be difficult when you've read print all your life, to suddenly try a different way of reading. It can be difficult to get used to, but so many of our patrons say, this program has just saved our lives because we were such avid readers and we thought we'd never be able to read again. It's a wonderful way to get back into reading.

Ava Smith:

And, of course, we have people who used audiobooks for when they travel. They listened in their car. Now, we have people listening to books all the time, because of the small handheld devices that they can download books to. So I think that aspect of it—getting people to consider the program—is going to become easier. It doesn't mean they will sign up for it, but we won't need to push the large print as much.

Now, the other thing we like to do with large print also is, as you get older, your mobility decreases. So maybe you can't drive anymore and you can't go to library, you can't go to the bookstore. This is one way we can get these books to your home free of charge. The Congress pays the postal service to do that. It's called Free Matter for Blind and Visually Handicapped.

That's how we send out all of our materials, physical materials. Patrons set up an account, and we have their mailing address, and they select their books. Each day, out at the circulation facility, where all the physical books are stored, they get mailing cards printed out and they go to the shelves and they pull the books. The audiobooks are already in a mailing case, and they just slip the card in and check them out and put them in the mail. Now, the braille and the large print, are shelved more traditionally—books on shelves. They have to be pulled and put in a mailing container.

The large print, they all go in zippered bags, sort of like oversized bank bags. And they have a slot on outside of the case and you put the mailing card in that. This is so that people can handle the books very easily. Because, again, as you get older, your fingers don't work as well. Zippered bag, as opposed to something with a strap and a latch, which is how they used to mail the books. We've had people actually—they couldn't get the latches undone, so they just take scissors and cut the straps so they could get the box open, which of course makes the box totally unusable. They can't mail it back, cause they don't have anything to strap it with.

So all of those things have to be thought about, when you do a service like this. So we buy the zippered bags. They're nylon-constructed, they are very heavy. They get dirty going through the mail, but I don't think we've ever had a bag come back that was torn up. And when materials go through the mail, it's a rough-and-tumble thing. The mailing cases get busted and pieces fall out and all of that. But the large print has worked pretty well.

We send some of the smaller braille materials in those bags as well, but we also have special braille mailers that the National Library Service supplies. They are like oversized lunch bags with a Velcro, with a flap. Those work pretty well, but those are the ones that we also had the problems with the braille getting crushed, because they are a soft bag. And they tend to get stacked, so the braille book on the bottom gets all the way. So whatever we do to make it easy for the patrons to open the mailing container to get their book out, there may be other problems that come with that container.

Now, the ideal braille containers are the hard shell boxes with the mailing straps, and we still got some of those. And we once in a while get a request from some of our sister libraries, do you have any extra ones we can have? But those are slowly wearing out and falling apart, so those will be going away eventually.

One of the problems that we have with large print is not having enough titles that we can buy. It took publishers a long time to figure out that there was a market for large print. When I worked in the public library, we had companies that did nothing but publish large print. They were publishing mysteries, westerns, those kinds of things. It was very difficult sometimes to find a popular title, like on the New York Times Best Sellers list, that was also available in large print.

About 2000, that began to change, because the baby boomers are beginning to age and they are demanding large print. So then, you began to get publishers—when they issued a popular title, they would also issue it in large print. That still isn't happening on a very wide scale, but it has gotten better.

Now, the other thing is publishing laws. Publishing houses have to do inventory at the end of each year for tax purposes. Yes, the taxman comes after publishers. So if they haven't sold their stock, they remainder it. In other words, they sell it off to jobbers so that it's not in the warehouse when the taxman comes around to survey. Large print books go out of print very quickly, unlike the regular print books, cause they are still in greater demand for those. So if you don't get your large print copies when they first come out, you may not be able to get them later. And of course, replacing something that wears out or tears up becomes a problem.

So when we buy large prints, we usually buy anywhere from 4 to 8 copies at a time, depending on what we think the demand is going to be. And we only got limited funds, so when you start buying that many copies of the title, you go through your budget pretty quickly. So we don't always have the budget to buy more copies later on or to replace copies after wear-out.

And of course, one of the things—when we are doing audio and braille—we can produce copies, we can duplicate copies that are automatically protected. But large print can't be protected, because anybody can read large print. So large print is not covered under the copyright exemption that we operate under. We can't just take a large print book and make another copy.

There is a treaty out there—it's called the Marrakesh Treaty—it's the world intellectual property organization and it's a treaty that is supposed to improve access to materials for people who cannot read standard print. And one of the things that we hope is, it will allow us to do large print under that treaty. Now, the treaty has been sent to the U.S. Senate, and they will have to ratify. And at that point, all the signatories that are under that treaty will be able to exchange materials with each other, and we'll be able to do these specialized formats.

One of the main reasons we've been interested in it is because of our Spanish-reading patrons. We cannot just record, for example, a book that was published in Mexico, cause we don't have copyright protections that way. But Mexico has already ratified this treaty, and if our Senate ratifies it, then we will be able to freely exchange materials between us and Mexico. The secondary reason we are interested in it

is the large print, because then that would enable us to take any book that a patron is interested in and create a large print version for them, which we cannot do right now.

So we try to buy as much large print as we can. And we know there is a lot of people out in the state who might be homebound who could read large print. They have no way of getting it. So we're trying to figure out ways where we can enlarge our collection and then do some kind of program, service where we can reach out to people in their homes and get the large print to them.

Dina Abramson:

One of the nice things about our program, there are public libraries now that are offering downloadable books. There is a service called Overdrive. With most of the public libraries, the books disappear after a certain amount of time, like you only have them checked out for 2 or 3 weeks sometimes.

Our downloadable books don't go away. Once they are downloaded to either blank digital cartridge or to a flash drive, they stay on there until you take them off. And blank digital cartridges are reusable. They are also big. They are like 4 GB. Depending on the size of the book, you can have several books on one cartridge. Now, the commercially available cartridges are about \$12 to \$15 each, but you can buy one and they could last you for months and months.

Ava Smith:

And you can get multiple books. We ran a little experiment. I think the one we have is 4 GB. We had the entire Bible, Gone with the Wind, and 2 or 3 other books. We still had space on the drive to add maybe some smaller books. But the point we wanted to make was, if you are one of our patrons and you want to create your own digital library, you can do that. You can get your membership in BARD, we'll provide you with the digital player, or you can have another digital player. Then, you can download—now you cannot download directly to a computer, again that's those copyright issues—but you can download to a flash drive and then use it on an approved device.

The first handheld device that was approved was a product from Humanware, and it was called a Victor Reader Stream. In it is the little digital flash cards. I don't know how many books you could get on one of those. People were buying those little cards and loading all their favorite books on them. Then, they listened and they just had a little box of cards, because I don't think you could store anything directly to the machine, could you?

Dina Abramson:

I don't think so.

Ava Smith:

You had to use these cards. So that's what people want to do. They want to read the same book over and over again. We have people who have been in the program for over 50 years. They came into the program as children, and our automation system keeps a list of all the books that they have had checked out. Some of these lists go back quite away. Every once in a while, we get a call from a patron. They are either trying to remember a book that they read, you know, 30 years ago, or they just want to see what they read, and maybe, oh, I want to read that book again. So they ask us if we can send them the list. Well, we can actually do that via email now. We can pull the file and put it into an email format and send it to them.

Some of our patrons get very distressed if they don't have a stack of books waiting to read. So BARD has been just wonderful for them, because they can download all the books they want. I know when BARD first came out, NLS would load the books on Fridays—the new books. Every once in a while, something would happen and they didn't load any books. And patrons would just go berserk, you know? What has happened? Why haven't they loaded any more books?

There is a BARD talk—it's a listserv—a discussion list that BARD patrons can subscribe to and chat with each other. And BARD talk would just light up with all these distressed messages. And then, finally, someone said, get a grip, you've already downloaded 4,000 books! How could you possibly have read all of them?

Dina Abramson:

BARD is wonderful because it's open 24/7. They don't have to wait for the 8 to 5 call center. Also, the phone apps—the iOS and the Android—the fact that people can read on their iPads also, and their iPod Touches, especially with a lot of the young people. In some of the outreach that I've done, I've gone to conferences and exhibits, and met with younger people like college-age. And they were like, I used to be in the program but I didn't like that big machine. I didn't want to carry that around. And I'm like, well, we have a phone app now. You can read on your phone, just like your friends. And they were, oh my god, really? I'm coming back! We've actually had people come back to the program because of the new technology and the new mediums that are available.

Ava Smith:

Yes, everybody wants the handheld. I'll show you—here is a cassette machine. We had a patron refer to it as Old Yeller. You can see how big it is, and it's very heavy. We had older patrons—they can't lift my machine. Of course, the record players were humongous, and they are extremely heavy. They weigh about 50 pounds.

The new Digital Talking Book Machine is about half this size and only weighs about 2 pounds. But that was still too big for a lot of our patrons. There's this—it didn't go with their fashion sense, I guess, would be the best way to describe it. They didn't want to be seen being uncool, or not up to date. So particularly younger patrons, they liked the phone apps and things like that, cause they looked like everybody else.

And this machine was also rather complicated to use, because you put the cassette in, and like I had said, it had four tracks. So you would have to flip—there would be an announcement that said, turn the tape over. Here's the slow speed—15, 16—and then, you could also play commercial cassettes—you change the button. You could change the speed and the tone and all of that. So there was a lot to master here. But you see, you still had the very tactile keys and the colors for those patrons who had some vision.

They carried some of that over to the Digital Talking Book Machine. It has big, colorful buttons, and it has a sleep button—they love that. You could set it to turn off after 15, 30, 45, or an hour. A lot of people take their players to bed, and they listen to their book and they go off to sleep. With this thing, the cassette would play till the end, and then you'd have to rewind and hunt to find your place. Well, with the sleep button, it will either turn off before they go to sleep—and what it does is, it kind of just fades out, the voice fades out—or they know, okay, I set it for 15 minutes, I have to back it up 15 minutes and it will tell you as you rewind, how much it's backing up.

Now, the phone app didn't have that until just recently, so they have been really excited about having that feature. So with each generation of player or whatever, they are making a lot of improvements and they are listening to what the patrons want. And I suspect, when we get the braille readers, we will have that same process. The first braille readers, everyone will be excited about them. Then, after the new wears out, people will get, well, I wish it did this, I wish it did that. So those ideas will be incorporated into future machines.

Apparently, the equipment has, what they call, cells in it. These are power cells. They probably operate different sets of pins and communicate. Well, some of those cells will burn out. Then, some of your pins won't pop up. So you can still probably follow the text, but it's kind of jarring if you are missing a pin. That distracts you.

Those machines have to be sent off and worked on, and sometimes, they are gone for 3 weeks, 6 weeks. What does your staff member do in the meantime? We had a blind person who worked for us for many, many years. She always scheduled her vacation when her machine needed to be sent off for maintenance, because it would be gone for 2 or 3 weeks.

Also, hooking that kind of machine—equipment—up to a network can get real hairy too. We have a person who is kind of our assistive technology guru, and the technology is getting more and more complicated in terms of being able to hook up to networks and getting it to play well with other equipment. And she said, the current IT people don't even know how to do some of this stuff, so it's a lot of trial-and-error.

We have braille printers and we print out particular types of labeling to put on, say, for the cartridges. Every time NLS changes the software, people all over the country are having problems, because maybe their equipment is just like one generation out from what the software are supposed to work on. And buying a new printer is an expensive proposition too. There is a lot of technology issues and everything is just developing very quickly, so it's hard to keep up. And if you don't have the money, you know. Again, we've been luckier than most of our sister libraries, in that we do have adequate funding most of the time.

6. On average (monthly or annually), how many checkouts occur in the mediums mentioned in Q4? Over the past years, how has the checkout rate of books in braille changed?

7. How has technology facilitated (or failed to facilitate) reading braille?

8. How long does it take for a printed text to be translated to braille? Does the duration differ according to factors such as: (1) book vs. magazine; (2) black-and-white vs. color; and (3) popular vs. technical)?

9. How much does it cost for a printed text to be translated to braille? Does the cost differ according to factors such as: (1) book vs. magazine; (2) black-and-white vs. color; and (3) popular vs. technical)?

Ava Smith:

Braille production has always been much more expensive. It's generally slower, because you have to punch all those little dots. It's extremely noisy. Our braille equipment is in a room and we close the door, and even with the doors shut, there is this constant tapping noise. And people working near it—you know, after a while, you don't hear it—but it can be quite annoying and distracting if you are trying to concentrate on something.

You have to have special paper and it's a heavier grade paper, because if you tried to use, for example, a basic copy machine paper, it would poke through and that wouldn't work at all. So it has to be a heavier paper. It is, of course, more expensive.

This is the standard size of the braille sheet. You can get it in different sizes, but this is mostly what we work on. So if a patron asks us to print something, like a letter for them, it's going to be on these big sheets. You run it through the printer and you have to get everything aligned. It's like any other printers. If you don't, then half your braille is off the page. Then, we have to proof everything to make sure that it did actually come out.

We don't do printing of braille books or braille magazines here, because we don't really have the setup for it. Some of the printers can be quite large. They are stand-up printers, and it might be as wide as from the edge of the door over to the cabinet here. What they do is, they print this way. So you can buy braille paper to do that.

NLS gives us cost-of-value of the program sheet. For example, a regular book to produce an audiobook, might run about \$12. The same book production in braille might run over \$30. And a lot of that is the supplies and all the time that it takes to make sure that that book has been proofed and is ready to go out.

So, time-consuming, yes. It takes—to read one chapter, for an audiobook—might take 2 to 3 hours? It might take 2 to 3 days to print that same chapter on the braille and get it proofed to be produced. And that's just to do one. If you record a book, then you have the capability of making multiple copies through duplication. Our duplicating equipment—we can do up to 15 or 20 copies at a time. With a braille book, it's one at a time. That's why we get our audiobooks from NLS fairly quickly, and maybe months before we get the braille copies—just because of the production.

Now, there are companies that do nothing but braille publishing. So they got all the setup, they will have several machines running, and all of that. But it still takes a long time, and unfortunately, we're losing those companies because there is not a whole lot of money in doing physical braille anymore. That's a real problem for people who want to actually read a physical book. Braille is more time-consuming and expensive to do.

They use computers [to translate to braille]. A lot of times, they take a regular book that has been published. Okay, there is software where you can scan the text and convert it into braille, and then you print it off. For example, when we do newsletters, we do a certain number of about 200 braille newsletters. What we do is, we've done the newsletter on computer—Word document or whatever—and we do that to send to UT [University of Texas at Austin] to print off the printed copies of the newsletter. We take that same file, and it's reformatted and then you can run it through the braille printer. Braille printer is hooked up to a regular computer workstation. So you can take a Word document and run it through the braille printer.

But to do a book, you're going to have to create a very large digital file to do that, so they usually scan it. Now, in the old age, yes, they did it all by hand. They transcribed the print into the braille. That was before they had computers. So it was even more laborious and there were fewer braille books in those times. Then, of course, if something happens to your braille book, it's almost impossible to replace, unless you have that computer file.

One of the things we kicked around, we want to do some braille publishing on a limited basis. We record, in our recording studio, Texas materials—books that are being published that the National Service is not picking up to record. They have a limited number of books that they can record during the year. We have local recording studios around the network, and they are responsible for recording books

published on their areas. We record these books and we make them available in an audio format, but we've never made them available in braille.

So we want to dip our toes into doing that, and at least getting 1 or 2 books published a year. What we'd have to do is, we'd have to do all that scanning, create those digital files, and take the time to print out individual books, cause there is no way you can mass-duplicate them. In order to do that—right now, we don't have the work space, we don't really have the staff, and we don't really have the computer programs to do it.

So that's a project we want to kind of do down the line. But it will be a major undertaking to do it, and we won't have a whole lot of braille books to show for it, except that we will have some of these titles available in hardcopy braille that we don't have now.

Dina Abramson:

We do have a braillist here who brailles the newsletter, also the information from the Disability Information Referral Center, the part of the program that I manage. If I'm talking to a patron and they are like—I have a fact sheet that I developed that you might be interested in—if they ask for it in braille and if it's not too big—if it's only a couple of pages—then we'll get that brailled for them. So we have the ability to do some limited in-house braille for our patrons.

But there are also companies who do braille production. I have a list. The national part of the list is not as updated as the Texas organizations. Some of the education service centers will do braille production, some of the Lighthouses for the Blind will do braille production.

In most cases, I have information about what kinds of things they will braille—they will do menus for restaurants, or they will do pamphlets for companies that might need a couple of braille copies—and there are some prices on there but I haven't updated the prices in a couple of years. Also, they say what format they prefer—if they prefer to have the information in a digital format that would be easier for them to braille, or if they don't mind doing something from a printed page or a hardcopy. I do have those resources for people that need braille production.

There is only one in Austin that I know of—Junior Women's Federation. I can give you that list, but the last time I talked to the woman in charge of that, she said that they were really backed up on their braille requests, so it was hard for them to take new requests. But the last time I talked to her was quite a while ago, like maybe a year ago. There are a couple of places in Houston and San Antonio as well.

Ava Smith:

They also have groups that will volunteer to do braille projects—menus in restaurants is a very popular one. I believe San Antonio is way out in the front of everybody else on having lots of restaurants

with braille menus. They had a service group that chose that as their topic, so that was their project. They have been systematically trying to get all restaurants to have at least 1 copy of their menu in braille, because it makes a big difference. If you go to dinner with a blind person, then someone sighted has to read the menu to them. And unless it's a restaurant that they've been to before, where they have a few favorite items that they know that they're going to want to order, it takes a long time to get everyone at the table's order in, because you're having to read.

I know, a few years ago, we were in Oklahoma City for a conference, and the new director of NLS is blind. We went to a tavern and she was going to order a bottle of beer—a stein of beer. And they had this humongous menu of beers. I had to read all the beers off to her, so that she could select one. Until you've helped someone like that, you really don't realize how limiting not being able to have a menu is. Of course, I don't know if they—I imagine that the beer menu would have been about this size when they got through with it. So those things, but yes, if you can get a service group to do something like that, then the cost isn't so great, except to purchase the paper and then find a way to create the braille, which is much easier than it used to be. But it is time-consuming and it's expensive.

We also have programs, primarily through the prison systems, where people can be certified as braille transcribers. That's both putting things into braille and proofreading things that have been brailled. They generally charge by the line, and it can be anywhere from 10 cents up to \$1.25 per line.

[Asked more about braille production in prisons]

We really don't work with any of them. We generally have our own staff who can do that sort of thing. If we get into the braille printing, we may actually have to look at that in order to get something out in a timely fashion.

The proofing is the biggest thing for us, because sometimes, the computer programs get a little wonky. And even if you're printing the same thing over and over again, you have to do spot checking, because sometimes, it will suddenly decide to print garbage. The sighted staff aren't going to know that, so you have to have somebody to read that. Our staff member who does that, she will proof a copy of the newsletter and then she will do spot checking on the rest of them, because it's not possible to read each newsletter. But if we did—if we actually printed a book—that would have to be proofed from cover to cover.

Dina Abramson:

National Library Service works with the National Federation of the Blind to have a braille certification program. And I believe Gatesville is a prison in Texas that does braille production, because every once in a while, they will send out an email with the people—a list of people—that have passed the braille certification program and have become certified transcribers. And they will list the names by state. For the Texas one, you will see the name and you will see Gatesville. So those individuals are incarcerated.

[Asked about the steps that a person would take to obtain the certification]

There are classes that they take and it's a by-mail program. It's like a correspondence class, and I think at the end of the correspondence class, they take an exam. Our brailist, Inez, she was going to the program. I don't know if she has completed yet. There's also different types of braille. There is literary braille, there is math braille, which is called Nemeth braille, science braille. So they can get certifications in different types of braille as well.

Ava Smith:

And just recently, there has been a new braille adopted, Unified English Braille. The UEB. So we asked Inez, cause Inez hasn't gotten her certification, and we said, okay now. And basically, what they told us at NLS meeting last month was, if you're already certified as a transcriber, you will be grandfathered, but the people getting the new certifications will have to be certified in UEB. So we asked Inez about that, and she said, well, she inquired and she has to take 1 additional course. Then, she will be certified that way. It's about 2 years, I think, altogether. You know, if you work at it steadily.

Now, Inez can read braille, but it was very interesting. When she came to apply for this job, she was one of those people who mostly did audiobooks. Even though she had been taught to read in braille, she was very rusty. So, of course, she has had to come up to speed, because most of the work she does is proofing braille and printing braille.

I noticed you had on here, black-and-white versus color. Okay, we don't really do color, in braille. Oh, like for emphasis? I don't know how they handle that. I don't think they really have a way to do that. If a text is being transcribed, they may add additional text to say, text printed in red—just that. But if you're just scanning something, it's not going to pick up on that.

Now, the other thing that's not done very often are tactiles. That's something that NLS said they are going to try to get more of that into the materials that they offer, like if you have maps—and in fact, I think we have a map on the door down the hall here, a brailled map. There is a lot of things like pie charts and stuff in books that there might be references to, but there is no tactile chart for a person to use. So they are going to try improve that.

One of the running jokes of the last few years was that they were offering a Playboy in braille. And they had to say, text only, you know? But somebody—there was somebody—that had done something like a Playboy magazine in tactiles and it was quite interesting. It didn't survive. [Affirms there is no way to show images as of now.] But again, as the technology improves, they will be able to do that. But there will always be limitations. There's only so much you can do, because everything has to be outlined. So there's not really, right now, not any way to do any depth in an illustration. But I think, with the way technology is developing, they will be able to do that eventually. It will be hard for us to imagine, though.

10. Please tell me about your plan for helping with the adoption of Unified English Braille.

Ava Smith:

The newest books that are coming from NLS are going to be in Unified English Braille. We purchase books from other companies, and eventually, everybody will be required to offer UEB.

Now, from the patrons' standpoint, many of our patrons haven't been trained in UEB. So there's efforts on the way to help patrons transition. They are more like guidebooks. You can get kind of a manual that explains where the changes are. So if you are already familiar with this form of braille, here's what's going to be like in UEB.

Dina Abramson:

National Library Service has a 4-page—2-page front and back—fact sheet in hardcopy braille that has the changes. We got some copies from NLS and Inez brailled some more, and we have sent out some of those. It was maybe mentioned in the newsletter. Somehow, people found out about that. So we can send out that fact sheet.

I also have a list of some online sources. There's the Braille Authority of North America—BANA—they have a lot of information about UEB on their website. The Hadley Institute for the Blind, they offer free classes by mail or through the computer on all kinds of information for people who are blind or visually impaired, and they have a UEB class that you can take. So if people call and they are looking for information on UEB, we can send them the fact sheet and I can also either email them a copy of those online resources or Inez can put that list into braille for people.

It has been a little rocky. You know, we think about printed material—what if, all of a sudden, there was a whole list of new changes to print materials? It's hard. A lot of our patrons are concerned about UEB and being able to learn the changes. I've heard that there aren't that many changes, but I'm not a braille reader, so I can't sit here and say, oh, that's a piece of cake. A lot of our patrons have struggled with the changes.

Ava Smith:

Yeah, the analogy would be if we suddenly told everybody, okay, all the vowels are changing. They are now going to look like this. In the context of words, you can probably figure most of it out, but it's not going to be smooth. There's going to be a period of adjustment. So that's what our patrons are going through. And like in any change, some people go, okay, it's changing, and they just go on with the flow. And some of our patrons are like, you can't change!

Dina Abramson:

Yeah, and there was actually one lady who contacted me that said, I want to cancel my braille magazines because they are all going to be in UEB now and I can't—I don't want to learn UEB. So cancel my subscription. Luckily, she has been the only one I've talked to, but that would be within the program? Actually, I transferred her back to the call center, because I don't make changes to the magazines that we send our patrons. Now there are other magazines and other formats available from other organizations, so if it was a magazine from somewhere else—American Printing House or whatever—I'd give her the phone number and she could call and cancel that subscription.

Ava Smith:

And we see that, with any change we make—you saw the big yellow machine—we have people who don't want to give that up. But it's going away cause they haven't made these machines since 2007, so if their machine breaks, it's harder to replace it. And the new digital machine is very easy to use—it's just like night and day—but we've had people that say, oh, I can't learn how to use this. And it's that thing that humans have about change. Some people are okay with change and others dig in their heels going, I'm not going to change. So we have to work through it and convince them that, yes, they can.

A lot of it is, our patrons do not have anyone to assist them at the local level. They can call the call center and our consultants can try to talk them through things. Sometimes that's successful and sometimes it isn't. But it makes a big difference if somebody can come to your home and help you through something, but we just don't have the resources to do that. And Texas is a big state, so there's no way we can help someone way up in the north panhandle, unless we do an outreach there and that person comes to our event.

I know that happened to me. I went up into the panhandle to a public library there, and it just so happened, this lady came in—she didn't know I was there—but she came in and she was having a problem with her machine. And the librarian said, well, today's your lucky day. Here's the lady who runs the program. Well, what it was, her battery had run down. And she didn't realize that she could plug the machine, because the cord is in this recess. She had never figured out that there was a cord there that she could pull out and plug in.

Dina Abramson:

Yeah, where you live can have a big impact. If you live in little town in Texas—which unfortunately—a lot of people retire and they like to move to rural areas or little towns, then they may become disabled, they start to lose their hearing and their vision. Now, if you live in a big city like Houston or Dallas or San Antonio, then there are more options.

iPhones are very accessible to people who are blind or visually impaired. A lot of visually impaired people have iPhones, and once they learn how to use them, they work really well for them. But learning how to use them can be a difficult thing. So one thing that I try to do on my job is to connect people to resources, and if I find out that they live in Houston, I'm like, thank god you live in Houston, because I can refer you to this place and this place. And a lot of times, they charge or they bill insurance or something like that. But they will teach people how to use technology, including iPhones.

What I'm really trying to find is people—trainers—who will go into people's homes and work with them, because sometimes, transportation is difficult. They can't get somewhere to get the training. There is a place in Houston called the iBUG group, and they do phone consultations once a month, where you call in and they give a general overview and they will take individuals' questions like how do you do this on iPhone and how do you do that. So it's getting the resources to the people in the format and the place—home is the best place. And Best Buy has their geeks but they are not going to know about assistive technology, so that's not really going to work for our patrons.

Ava Smith:

See, that's another issue with braille. If you go to the public library, you can find large prints, you can find audiobooks, you can find all kinds of stuff. But you probably are not going to find any braille. The problem there is, braille is bulky, takes up a lot of room. Libraries generally don't have shelf space for it. The readership is very limited, and it's expensive, so libraries don't want to invest in braille. You buy a copy of the latest Danielle Steel book. Okay, once your one or two patrons read that book, who else is going to read it?

That's why we have the braille collection. We are the public library for our patrons, and we can get it delivered to them. When I worked in the public library, we would get donations of braille books. Okay, send them down to me, I am the cataloger, I don't read braille. How am I going to create a card catalog record for this book so that it can be put out on the shelf? The reference staff don't read braille. If you have more than one braille book, how do you tell the difference?

And then, of course, libraries quite often say, well, we don't have any patrons like that. You don't have any patrons cause you don't have any materials for them. It's kind of a Catch-22 situation. We have the braille, we have the only large braille library in the state. It's free and we deliver to the home. If people need physical braille, they need to come to us and we can provide it for them.

[Asked if a large print book shouldn't be heavier than a braille book]

No, not necessarily. Even Harry Potter, which are big books, Gone with the Wind—they are not that difficult. Now, the complaint we hear—we do have a patron who reads large print, she is homebound. She is sort of frail in that she can't lift anything heavy. She said that she was getting large print books that

she couldn't lift. So we tried to find smaller large print books, and you usually do that through pagination. You look to see for books that have maybe less than 100 pages.

But there's various ways large print publishers can get around that. Dina mentioned the Bible. There's one version of the Bible in large print, where how they solved the problem was, instead of making the books thicker, they made them taller, so you could get more printing on a page. That book is also easier to handle, cause it's not as thick—just because it's taller. It might make it weigh more. But no, by far, braille books are much bigger and much heavier.

[Asked about steps for joining the book program]

Oh, it's very easy. We can't advertise. That's one of our problems and that's something that we hope to address very soon with the legislature. A lot of people don't know that we exist, or they've forgotten we exist. Now, if someone goes through, say, the School for the Blind, or they start looking through services—through DARS or DADS, which are the state agencies that handle disability services—they will very likely hear about us that way. But otherwise, people generally don't know we exist. Once they find out about it, usually through a family member—hears about us.

To join is relatively easy. There is an application, it's on our website www.texastalkingbooks.org. They can fill out the application, and we don't need a whole lot of information. We don't need driver's license or social security. We ask a few demographic things for statistical purposes. Primarily, what we need is address and phone number. Address, so we can mail you stuff. Phone number, so we can contact you. E-mail, if you have it. We also ask for a contact person, because, given the situations of our patrons, sometimes we lose contact with them and we don't always know what has happened. So if we have an alternate contact, we can call, find out what's going on there. Some of the services like BARD—BARD is dependent on your email. If your email bounces back, you suddenly have no access to BARD, so we try to keep tabs on all of our patrons.

The application has to be signed and sent in. Now, it has to be certified. If you are blind or obviously visually impaired or obviously have those physical problems, then there is a wider circle of certifiers—like a librarian can certify you, a minister can certify you. But if you have certain visual disabilities—learning disabilities—the certifiers is much more restricted because of the federal statute. Learning disabilities have to have an organic cause, so only a doctor can really certify that. For example, you would think that everybody that has dyslexia would be eligible for our program, but that's not the case. So certain conditions have to have a medical certification.

We don't serve all visual disabilities, and we don't serve things like autism, because the cause of autism cannot be certainly identified, and we do not serve some mental disabilities, because they may not have an organic cause. The best way it was explained to me is, you have to have the ability to be literate. So for example, if you've never learned how to read, that's not cause for you to be in this program. But if you have some sort of a disability that prevented you from learning how to read, then we may be able to serve

you, depending on how the doctor certifies you. If you have mental issues that you could not learn how to read, because your brain just won't function that way, you may not be certifiable for us.

You have to have the ability to be literate. In other words, you have to have the ability to learn how to read and understand what you are reading. For example, there are people with mental disabilities who cannot really—you can read to them and they can understand what you are reading—but they could not read even a simple children's book, they couldn't understand on their own. Those people are not really eligible for our program. But a child who has a severe visual disability can be in our program, because they have the ability—all that's wrong is their eyes don't work.

[Asked if sighted people can join the book program]

Okay, part of it has to do with copyright law. There is an exemption in the copyright law, which allows us to have these materials in different formats. The reason that we have them in the formats is so people without disabilities who are able to read cannot use these materials, because if, for example, anybody could be in the program and read large print, then the publishers are losing their money. That's what it boils down to.

But it's also, the only people who can read braille are the people who learned to read braille. If a sighted person learns to read braille, they just learned to read braille. They are still able to read other materials that are under copyright. So that's kind of what it is. The program is designed for those people who cannot read otherwise, and that's the slogan of the National Library Service: That all may read.

By the way, the United States was fairly late in coming to the game of having a national library for people with visual disabilities. Libraries in Europe are much, much older than the one we have here in the United States.

Dina Abramson:

Because we are not allowed to do paid advertising, that's why our going to a lot of events throughout the state are so important. We usually have a public awareness coordinator. We are in the process of hiring one now. That person travels throughout the state to attend conferences, exhibits, meetings—you know, really try to spread the word about our program.

In going to some of these places, even to public libraries—the people who attend the meetings maybe don't qualify but they may have family members that qualify. Some of the work that we do in schools is to educate students about what it's like to be blind, what it's like to read braille. Also, they may think, oh, my grandfather had a stroke or my aunt has a disease where she's losing her vision, so we have family members that would qualify and bring them into the program.

I do some public awareness in the job that I have, but we have a public awareness coordinator who does, and that's probably one of the most important jobs in the agency—to help spread the word about the

program. There's so many people that qualify that are not a part of the program, cause they don't know we exist.

Ava Smith:

The formula that NLS gives us to calculate how many people may be eligible is 1.4% of any given population. So if you look at the population of the state of Texas, which is up around 26, 28 million, 1.4% is something like 390,000 people, roughly? We're serving less than 20,000 people, so there's this big gap. And how many of those people would be able to read braille? We think—probably—the majority of people who need braille are probably aware of our program, because this is the free source of braille that they couldn't get.

Now, as time goes by and electronic braille becomes more prevalent, it just depends—there will be technology developed to where somebody can download a regular book and it can be translated into braille. Those people would definitely be self-served, if they can afford their technology. But most people who read braille are probably aware of our program. It's the other people who would need large print or digital audio that are not as aware. It's very hard to reach people when you can't advertise in any way.

11. In your opinion, what is the role of braille in today's society?

12. What are a few things that non-blind people can do to further braille?

Ava Smith:

If you do know somebody who happens to need braille and they don't know about us, yes, tell them and help them fill out the application.

And what is the role of braille in today's society? Well, I think people who can read braille—it's that literacy issue. Being able to participate—for example, having voter guides in braille, for people who want to participate in the political process. Being able to go to a restaurant and not feel like—we know a couple, they are both blind and they both use guide dogs, they use public transport, they go out. So they go to a restaurant and unless they have a sighted person with them, they have to ask the restaurant staff, can you read the menu to me? Having braille menus would simplify everybody's life in that situation.

We talk about public buildings. I don't know if you've noticed it, but our elevators speak. They didn't before we had the building renovated. But you always have to have signage. If you look at the sign here on the outside of my office, it has braille on it. This enables staff to be able to work and move around and everything, because they can get into an elevator, for example, and they can feel the braille signage on the buttons so they can push the buttons. They don't have to have somebody else do it for them.

So there is a lot of braille around us. We are just not—sighted people—we are not always aware of it. But for a blind person that reads braille, if there is no braille, it suddenly constricts their world a great deal.

Dina Abramson:

Yeah, and I think that the work that we're doing in schools and also it's just—teachers contact us independently and say, I want to do a braille awareness unit, do you have things available? We can send them the braille alphabet cards. I have the worksheets—what Ava was talking about earlier, where they can learn to fill in the bubbles and write their name in braille, or they can write a secret message in braille. I can send that type of stuff. We can send something like this to show them. One thing that we provide to our patrons every year—we get a stack of braille calendars from the American Action Fund for Blind Children and Adults. And usually, I have a couple of those left over every year, so if a teacher is doing a braille awareness unit, I can send them a calendar and it's all in braille.

So getting the word out to the schools, I think, is good, and a lot of teachers are already doing that without any prompting from us.

Ava Smith:

Some of our sister libraries do textbooks. They have contracted textbooks in schools. They print sporting schedules. Patrons will say, I want to know what the football schedule is for this year, so they will get that printed for them. Of course, just general correspondence. Blind people get mail just like the rest of us, and they have no idea what it is.

Currency is a big issue. In fact, I believe the U.S. mint is going to eventually publish paper money that has some kind of braille on it. Usually, what blind people do when they are going to go out, say, to a restaurant or go shopping is, they will have a sighted person tell them what bills they have. And they arrange those in a certain way in their wallet, so that, if they need to pull a \$20, hopefully they have an idea of where that \$20 is. But they really don't know, and if they hand a \$20 in and they get change back, they have no idea if they got the correct change because they cannot see the bills.

Of course, coins, they do a little better because our coins are of different sizes and there are somewhat tactile, in that you can tell whose face is on one side and what's on the other. But they still have to memorize all of that. It would be just much better for a quarter to have a 2 and a 5 in braille somewhere on that coin, so that they know that's a quarter. The same thing for the bills, so they know when they have a \$1, a \$5, a \$10, a \$20, and so forth.

Now, we have currency readers that Bureau of Engraving and Printing has distributed through NLS. We don't handle them, but they will read a bill once you master how to put the bill in. Those have been very popular and I'm sure very helpful.

There is just a lot of small things that I think sighted people take very much for granted, that they don't understand how blind people who do want to be independent—and many of them are—they still need things, labels. Braille signage is one of the big things. If you're speaking to a group, remind them that, if they have a business or something, they need some braille signage so that they can have blind customers, who can feel confident coming into their places and business and being able to move around without having to be dependent on a sighted person.

Dina Abramson:

Yeah, handling money is especially difficult. There are some people who have wallets that they can put—and again, a sighted person usually has to help them—but they put the \$20s in one part of the wallet and the \$10s. Unfortunately, I hear a lot from people that are like, well, I was in a store and I thought that I gave somebody a \$20 and they said they gave me a \$10 back, and they only gave me a \$1.

So the money readers have been great. They've been available for purchase for years in low-vision catalogs, but they are like \$100. So NLS, a couple of years ago, partnered with the U.S. Bureau of Engraving and Printing to provide these money readers for free. For a while, we were able to sign up our patrons through our computer system, and now, we send them the application and they fill it out and send it in. They get a free money reader.

It's like a little pager slice thing. You slide the bill into one end and you press the button, and it will say \$1 or \$5 or \$10. It also has the ability—you can have it announce it in voice, or if you are in a store and you don't want everybody to know what bill you have, you can switch it to tone or to vibration. The vibration part is also helpful if you are deafblind. You can feel, like it's 1 buzz for \$1, 2 buzzes for a \$5, or something like that.

Ava Smith:

Yeah, there is a lot of practical technology like braille watches—some people can tell what time it is—talking appliances. And one of the really wonderful things—and, of course, this technology started out like over \$1,000, I think it has come down—GPS technology? People can buy these devices and it enables them to get around out on the sidewalk. They can stop and literally get their bearings, and the device will tell them what intersection they are at.

They also have some devices like that, where they can go into a restaurant and they can scan the menu and it will read the menu to them. We have talking traffic lights. I know one of the big controversies a few years ago was when the Prius automobile came out? The hybrids? They were very, very quiet, so people don't know they are there. So they were saying, can you make them have a little engine noise, so we don't walk out in front of them?

All kinds of things like that, that they're developing, because our blind people don't want to be sitting at home, being helpless. They want to live a life. So there's all these things that have been developed to help them, and they will continue to be that way. But we need the sighted population to be aware of that and cooperate.

Dina Abramson:

There are phone apps that are already being developed or that are already in operation, like GPS phone apps, especially through the iPhones. Not all blind people use iPhones rather than Android, but the majority of them do. I think there is something called Foursquare that is like a GPS app? I have a list of apps—it hasn't been updated in a little while—they are developing stuff like that all the time, to make life easier for people who are blind or visually impaired, which is great.

Ava Smith:

Yeah, and people just need to be aware that blind people are very capable. This is a story to tell—I was talking about some of our patrons and their computers, and I had someone say, why do you keep talking about computers? Blind people don't know anything about computers. And after I picked my jaw off the floor, I said, blind people can use a computer better than you or I can. It has just revolutionized their lives. They can communicate, they can work, they can do all kinds of things.

Movies. A lot of our patrons love to go to the movies, but they can't tell what's going on on the screen. Every once in a while, you will see an advertisement for a described movie in a theater, so they can go and have their popcorn and drink and watch a movie. These are things that people need to be aware of, and now with the Google self-driving cars, blind people are very excited about that. If that technology actually plays out, they will be able to actually get in a car and tell the car where to take them and go there.

Dina Abramson:

Yeah, I think they are doing some test drives here. There is a woman who used to be the main person at the Texas Governor's Committee on People with Disabilities. Her name is Pat Pound. She is retired now, but she's still extremely involved in disability activities, she has done a lot of stuff for airlines—to make airlines more accessible. I think she said something about, she was possibly going to get involved with the test drives of the Google car.

Very exciting for people with all types of disabilities that are unable to drive, because transportation is just huge. If you don't have a car and you can't drive, it really makes your life very difficult. I mean, there are transportation services here—there's Paratransit, Metro Access, and there's the regular bus

system—but it can take you a long time to get where you want to go. So the idea of having a car is very exciting to a lot of people that don't have one.

Ava Smith:

Then, they can enjoy sitting in traffic.

Dina Abramson:

I know, right?

Ava Smith:

So I think braille is morphing in ways that people don't generally think about. I think just to tell people to stop and kind of look around, look for these things like the braille buttons in the elevator, braille signage.

In fact, one of the things that was brought to my attention—and, of course, I knew it from working here—when you go out and you're walking on the sidewalk and you come to an intersection, and there is an apron with the bumps on it? Okay, that's there for blind people who use canes, to know that there is a surface change, and that surface change may be a drop-off or whatever. It's there so blind people know they've come to an intersection. And it's sort of like street braille, you know, because it says stop? They pick up on that when their cane comes across it. So their cane is almost like an extension of their hands. Here's the braille on the pavement and they are picking that up.

So there's a lot of things that people are not aware, that braille is all around them. And that's what we would remind people of.

13. Is there anything else you would like to add?