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Technology and Deaf Education
Exploring Instructional and Access Technologies

RIDBC TELESCHOOL: INNOVATION IN REMOTE SERVICE DELIVERY
Presenter: Melissa McCarthy
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>> Hello. We need to get everybody's attention. Hello there. Are we ready
to get started? How was lunch? I'd like to introduce our speaker today
Melissa McCarthy. She's your dessert. She's from Boston. She was raised in
Boston and moved to Australia to work at the Royal Institute for deaf and
blind children and the title of her presentation is Teleschool. I'll let her
take the floor because we only have a brief time about a half an hour. When
we're done we'll hand out evaluation. Great, thank you.
>> MELISSA McCARTHY: Thank you very much. The handouts at the front of the
room and there may be a few at the back of the room if anybody needs one.
I've been living in Australia now the last four years and I'm working as the
manager at RIDBC Teleschool. And RIDBC may sound like a mouthful but it's a
lot quicker than the Royal Institute for deaf and blind children.
We have a number of programs on our campus. The Teleschool program is just
one. And so today I'm going to talk about how we're using video conferencing
and multimedia technologies to provide specialist support to children with
hearing or vision impairment living in rural and regional areas of Australia.
I'll start by giving you a quick look at one of our video conferencing
sessions.
Some of you may be working with older children, but in this clip you're going
to see a little boy who's just 12 weeks old, and I met him when he was 7
weeks old. His mom and dad and he came to visit us.
And this videoconference is their first videoconference. It's taking place
at a studio about a half an hour from their home. The child has a profound
bilateral hearing loss and is wearing hearing aids on both ears. I've got no
audio. Sorry about that.
Basically what's happening here is you see me in the small picture. That's
essentially what the family is seeing on the whole screen at their end. I'm
seeing a picture of the family, as well as myself, because it helps me to
keep track of what's happening in both settings.
>> Does he have a favorite song, Catherine?
>> No. We might sing a song, [inaudible]
We don't have a song yet.
>> Okay, how about twinkle, twinkle. Should we try that one? [singing]
Twinkle, twinkle, little star. How I wonder what you are. Up above the
world so high.
Like a diamond in the sky.

Twinkle, twinkle, little star.
How I wonder what you are.
[end of song]
Yea!
Did you like that song? Yes, I think you did.
>> MELISSA McCARTHY: The reason it jumped there was because we actually sang that song three times so he'd been crying for about 10 minutes and then he sat there and watched me while I sang that song three "Times" and I didn't think you wanted to hear me sing three times.
I think the thing that we really learned about videoconferencing is it actually puts parents back in the driver's seat where they're having to do a lot more of the work than the teachers.
So I don't know how many of you are working with families in early intervention but often we find that when we're in a face-to-face setting, teachers I think intuitively want to just take over and show parents how to do it. In videoconferencing you don't have the luxury of reaching out, grabbing the kid and showing the mom how to do it. You have to actually explain to the parent how to do it for themselves.
So I think we're actually empowering parents a lot more through videoconferencing than in a face-to-face setting and parents actually tell us that so one mom said to me, it probably means we, as parents, have to do a little bit more work than if we were in the room with the teacher, because then the teacher would do most of it and we'd sit back a bit. But videoconferencing is good because it's pushing us forward and actually making us do it.
So I think even though we often think we're pushing parents in the beginning, in a face-to-face session, that's not always true. I just thought I'd give you a little background about the Royal Institute for deaf and blind children. And about Australia as a whole.
So the Royal Institute for deaf and blind children, or RIDBC, is a really large organization that has a lot of different programs settled on our campus. This is a picture of just one of our buildings on campus.
And RIDBC has had an ongoing commitment to providing a wide range of services to children with hearing or vision impairment for the last 150 years. So it's a really well-established organization.
And the programs include a range of specialized early intervention, preschool, and school-age support programs, as well as preschool and school support programs in mainstream settings.
Instruction takes place in the communication mode chosen by the family, so we have sign language programs on our campus, we have auditory-oral programs on our campus, we have auditory verbal programs on our campus, and we even have signed English programs on our campus so it's really about what the families are choosing to use with their child.
And currently RIDBC provides educational support to over 800 students. I don't know how many of you have been to Australia but this is generally what it looks like.
Australia in essence covers the same geographical area as the United States, slightly smaller, but it's essentially the same size. But in terms of population, America has 300 million people, while Australia only has 21 million. So there's a vast difference in population.
So if you were to spread the population of the U.S. evenly across the country, you'd end up with about 30 people per square kilometer. If you did the same thing in Australia you'd end up with 2.5 people per square kilometer.
So the distances that people have to travel to access anything is really, they can be really immense. Luckily, the population of Australia isn't evenly distributed and this map shows generally where the people are located,

which is mostly around the Coast, near Capital Cities. But even a family who lives, say, near brings bane, the closest capital city, they could be still 6 hours away from an early intervention setting or a school for the Deaf. Furthermore, each of these dots represents 1,000 people. And we know that up to 3 in every 1,000 babies can be born with a hearing loss. So if you look at these isolated spots in the middle of the country, professionals with appropriate qualifications and experience are in very short supply in those areas, so videoconferencing is an ideal way to reach families who live in those areas without them having to move to a major city.

So RIDBC Teleschool is just one of the programs at the Royal Institute for deaf and blind children. And it was designed to overcome what's called the tier any of distance, which is essentially what I've just described that people live really far apart and they're very widespread across the country. The Teleschool program began with just 4 families, up in I think I have a laser pointer here, up here, sorry, just in this crowded bit, which is northern New South Wales, just north of Sydney.

So 4 families who needed early intervention services were our first clients. And initially, that consisted mainly of sending out packages of resources to the families, and then following up with them on the phone to review the lesson.

Because we wanted to do more than that and we wanted to be providing a better service, we trialed the use of web cams but we found they really just were not good enough for young children. The quality wasn't sufficient for working with them.

So then we moved to the studio-based videoconferencing which you saw earlier. And basically, what we needed to do in that instance was find studios that already existed rather than having to create studios. In 2004, we were really lucky to have received a substantial government grant that allowed us to expand to a Nationwide program.

And then in 2007, the program expanded again to offer services to school age children so we've continued to grow throughout the 8 years that we've been in existence.

And currently each of these red dots represents at least one family that we're providing a service to. And we're providing services to 128 children across Australia. They range in age from 3 months to 16 years. And the Teleschool program is available at no cost to them.

This is a picture of one of our videoconferencing studios in Sydney. As I said, videoconferencing is our primary means of communicating with families now. So in this picture, you see me interacting with a family. I'm in Sydney and they're up in northern New South Wales about probably an 8 to 10 hour drive away. And then we've also got similar resources so that we can interact in real time around the same activities.

And what we've found about videoconferencing is that it's really unique in a number of ways. It allows those families in remote areas to have regular face-to-face contact with experienced professionals which they wouldn't have otherwise. It allows the families to have additional educational choices, so for example if a family lives in an area where there are no sign language options available to them, they can access our service and have sign language support provided to them.

They're also able to provide families with an intensity and continuity of services they wouldn't get otherwise so many families in remote areas may have access to an itinerant teacher who comes out once a temperature to visit the local school. We on the other hand are able to see them once a week. And ultimately, students can remain in the program from the time they're born all the way up until they leave school at 18 and regardless of where they live so we had one family, for example, who started out as one of our original families in northern New South Wales and then moved across country

and traveled for 6 months along the way and we'd find videoconferencing studios as they went. They finally settled on the West Coast in Perth for about 12 months. We did videoconferencing there and they checked back again, another 3 months of travel across the country and settled again in northern New South Wales and the entire time they were able to maintain contact with us and are the same teacher. So for families to have that kind of continuity I think is really unique around the world.
And as I mentioned, the initial success depended largely on the availability of studio based videoconferencing studios and what we did there was we developed relationships with other organizations such as hospitals and universities, who already had the infrastructure, and accessed their technology using ISDN lines, typically. I'd like to show you another clip of a family at a videoconferencing studio. This is a little girl who's 2.5 years old. She's profoundly deaf and the family has chosen to learn AUSLAN which is Australian Sign Language and you'll see here the child is really just playing while the mom has a lesson.
>> So it's backwards and forwards a little bit. Side to side, excellent. So where, car.
Where grandfather?
>> Where grandfather?
>> Great! Where's the rabbit?
>> Where's the rabbit?
>> Great!
>> MELISSA McCARTHY: So Cindy is the teacher and she's a certified interpreter. She wanted to work on some basic questions that mom could use with the child so she asked mom to bring 5 objects or people that she wanted to learn the signs for and they were practicing pairing where, was the teacher wanted to teach with the words the mom wanted to learn. You saw the mom didn't quite sign the sign correctly so Cindy showed her again and corrected her so that she could do it and gave her a chance to practice it again.
So videoconferencing is a really good tool for those kinds of situations. I should also tell you that the quality that you're seeing is not -- sorry, the quality that you're seeing is not actually as good as the quality of the videoconferencing when it's actually happening because it's all been compressed and rerecorded and shoved on to my memory stick. In terms of the technology we have five videoconferencing studios at our campus in Sydney and we use either Sony or polycom videoconferencing equipment which is high grade professional videoconferencing equipment and we do that for a couple of reasons which I'll get into a little later. But basically we use at least one television, sometimes two because that can make it easier to monitor what's happening in both settings. We use a videoconferencing camera, a modem and a microphone and we also use auxiliary equipment like a visualizer, a DVD player, and something that allows us to connect a laptop to the videoconferencing camera so that we could show a PowerPoint to a family for example or we could direct them to a website and actually navigate it with them.
We connect at the highest possible speed which is usually considered 512 kilobits per second for the technology people in the audience but we've actually found if we slow the speed down to 384, we get a more stable connection with less dropping out and less freezing so the quality is still good enough for sign language transmission and lipreading but the connection is much more reliable. And we use a number of different connections depending on where the families live so as I mentioned before, we use ISDN lines if they're at a studio, that's your typical telephone connection. We use SDSL, a professional broadband, business grade broadband and we also use cellular connections which is basically like using your cell phone and

attaching it to a special modem and then using the cell towers to transmit
the signal. In Australia that works really well, because there's cell towers
in about 98% of the country, so we can pretty much access every family and
the 2% of the population that we can't access that way, we can access through
satellite and we've just recently installed our first successful satellite
link and the only reason we don't have more of those is because they're
really expensive. Just in terms of why we use the professional grade
videoconferencing rather than webcams, webcams certainly have a place and
they're beneficial for a lot of things especially working with older children
or working with adults, establishing an initial face-to-face contact for
helping families just to get set up and get a consistent service going while
they're waiting to find a studio or waiting to have the in-home
videoconferencing installed but with the professional videoconferencing we
actually connect it to the family television so the television screen is a
much more engaging medium for the child than a computer screen is typically.
The television screen is usually in the family living room rather than in mom
or dad's office where there's a lot of things the child could get into that
they shouldn't be getting into.
So it's a much more comfortable setting for the child to be working with the
parent. It's a lot easier usually to rearrange the furniture in the living
room than in an office type of setting and also the videoconferencing cameras
are much more flexible and better quality. Better quality lens, better
quality picture. They can usually have better angle and better range than a
webcam and also, we at the Sydney side can actually use our remote control to
control a family's videoconferencing camera in their home so it takes a
little pressure off the family in terms of understanding how to use the
technology.
So when we first started we were using studio videoconferencing. And now in
order to give more families better access, we've actually switched to in-home
videoconferencing. I won't dwell on that too much but I'll show you a video
clip because I have a lot of other interesting things I'd like to show you
today, as well. This little girl is 12 months old. She's the youngest of 3.
She has a severe to profound hearing loss.
This video clip takes place two weeks after she had her cochlear implant
switched on. And the first language of the home is Chinese, so we're working
in Chinese. You'll see me speaking in English, and then there's another
interpreter on my end who's interpreting in Chinese, and the family's
speaking in Chinese, and the interpreter is interpreting back for me.
>> Scoop the sugar. Scoop the sugar.
[speaking Chinese]
>> I don't have a teapot. I don't have a teapot. I don't have a teapot in
my tea set. You need to pour some tea for me.
Good pouring! Thank you!
May I have some more?
Pour the tea.
Good girl! Thank you!
>> MELISSA McCARTHY: I couldn't believe she actually did it the first time.
I thought it must have been a fluke. I had to ask her to do it again and I
couldn't believe she actually did it.
So the initial objective of Teleschool was to be providing special support to
families through videoconferencing. And we've done really well at doing
that, and we wanted to keep moving ahead and keep going further. So we're
focused -- shifted our focus now to the integration of multimedia resources.
And we have a multimedia designer on our staff. His name's Ronnie Lam. He
was meant to be here with me today but he was awarded a prestigious
fellowship and currently traveling in Scandinavia finding out new
applications of multimedia resources. So this next bit of the talk is

actually his. I'm happy to try to answer questions but please bear with me
if it doesn't quite work. So we're using these different types of multimedia
formats: Print, CD-ROM, video, and portable web. Most would be in familiar
to you but today I'll concentrate on two of our latest projects, portable
media and web based tools.

Sorry, I went the wrong way. So the RIDBC AUSLAN tutor is our first portable
media project. And what we mean by portable media is a transient technology
that allows for on-demand access to resources, so that parents and
professionals don't miss out on teaching and learning opportunities. So what
it is actually a comprehensive portable video-based instructional tool for
learning AUSLAN. Many of the families that we work with live in isolated
areas and don't have access to sign language classes or deaf role models to
learn sign language.

So this project was developed to provide them with an alternative way to
learn AUSLAN. And also, families had inquired about a portable tool that
they could have with them, so that when they were out at the playground with
their child and didn't know a sign, they'd have a way to actually learn the
sign on demand in that situation so they could communicate effectively with
their child.

So we have a number of families and professionals who are learning AUSLAN to
communicate, and have -- are using this portable media tool. And this is it.
Some of you may have seen something that looks like this before. It's an I
pod touch. And I'll give you a demonstration of it in just a minute. But
first let me explain why we've chosen the iPod Touch. First, it's really
cool and everybody on my staff really wanted one so we thought it was a good
reason to ask the accounts department to buy a bunch but it has a really
large screen. So it's really good for showing video. But it's still light
enough and portable enough to take with you wherever you go. It's got a
really user-friendly touch screen interface which I'll show you in a minute
and iPod has a 70% market share so the majority of people who have, it sounds
silly but majority of people who have an MP3 player would likely have an iPod
or if they didn't would be happen happy for us to give them one. You can
access the content through iTunes on your computer so you can have the
portable device but if you're at home you can also use the computer to review
or look at signs again. I'll just flip over to the visualizer.

Gotcha. I've got to get it into focus for you.

It has a touch screen interface so if we hit "videos," this one's still a bit
jet lagged so it takes a minute to come up. And basically what we've done is
we've provided over 2,500 signs on this device.

So we can just scroll through, it's all in alphabetical order. And I can
pick a sign. And each sign is structured in 5 episodes. So it shows you the
hand shape of the sign. It shows you a word. It shows you the word in a
phrase. It shows you the phrase in a sentence. And then it shows you a text
note on AUSLAN grammar.

So I'll just go through this one. So the hand shape is cup. You might call
it C. In Australia they call it a "cup."

The sign is farm made at your waist. The phrase is "at the farm." The
sentence is, goats live where? At the farm. Then the note is about
questions, question words frequently appear in AUSLAN sentences emphasize
information. In this context the sign "where" serves as a rhetorical
question. So goats live where? At the farm.

So each word entry, there's 500 word entries. Each word entry has those 5
episodes with a grammar note on it.

So the reason we've put the grammar notes in is to really take things one
step further because a lot of families reported to us they easily learned
vocabulary and could even put signs together but they weren't actually using

AUSLAN grammar so it was a way to give them some more information to help them improve their AUSLAN skills.

And again it's portable enough that they could be at the park and say oh, I wish I knew the sign for, I don't know, swing. This is one of the drawbacks we found about the iPod. When you put 500 words in, takes a really long time to scroll through them all. We've put in a request to Steve Jobs to please put alphabetizing into the TV shows comes up in music but not videos. So if you're out and want to have a picnic, let's have a picnic. Have picnic.

Now, that works really, really with well if you speak English really well and read English really well but we have a lot of families who don't speak English really well. The majority of our second-language families are Chinese, Arabic or speak an Aboriginal language so what we've actually done is created a modified version of this iPod tool. I'll just flip back to the PC for a minute while I'm getting this loaded. We use the terminology called in Australia I don't know if you use that here, culturally and linguistically diverse populations. So the simplified version has a little bit different structure so instead of having the 5 episode structure, it has just a 3-episode structure. It actually has a picture that shows you what the word is, an illustration. A hand shape and the word. But then we made some modifications so we found that the illustration provided picture support for non-English speakers and we also provided a dual-language presentation in print and audio so I'll just show you an example of that. This one's Chinese.

So toilet, is that clear enough for everybody? So the picture shows "toilet." Not getting any audio again. Sorry. So you get to see the picture. It's got the English and the Chinese characters at the bottom of the screen in print, so it's print dual language and it also has an audio in both languages and again it shows the hand shape.

So that's just an example of how we've adapted it for non-English speakers. The next thing I want to show you is a website that we've been working on. So we've created an actual website for the families that are on our service so it's a really private network. So I've got a copy here of basically a display model, so I'll show you that. And basically what it provides is an informational, educational and social networking website for families and the service providers who are working with those families.

It facilitates family to family networking as well, which is a big issue we've found for families in remote communities is that they don't have access to other families in a similar situation. So by setting them up on our network they can actually contact other families, and have interactions with them. This personalized communication between the family and their teacher and I'll show you that. We post videos up that we can run a dialogue about and there's online instructional resources that they can access. For example if we added updates to the iPod we could put those on the website and the families could download them to their computer.

So at the moment this website is restricted to families who are on our program and service providers who work with those families so I'll just show you a mock version of it.

So this is the website. And you can see across the top here there's lots of different options for families. This is coming up as if I logged on as a family. So it shows here that there's a comment on the forum I've been watching, and that there's some new conferences that my teacher's posted, some new videoconferencing footage and that there's a new comment about one of the activities I'm interested in.

This is just a general information about the program. These are some informational articles that teachers would have posted for families. This is the family that we're pretending to be at the moment.

This is the traveling family I was telling you about. And then there are stories down here about other families on our service who have written about their experience, that I could access, and then I could comment on, if I wanted to.

So I could, for example, hopefully read this story. So this is about a family of 8 on our service. They have 3 children with hearing impairment, varying ages, varying degrees of hearing impairment, various types of hearing assistance equipment. And this is just a little song that they sing with their kids every morning.

And these are some comments that other people on the site have made about that story. So if we go to new videoconference, when we do a videoconference with a family, we record the conferences so that we can go back and edit out bits that are really useful. We also keep them as a running record so we can go back and record a child's progress. And we also send a copy to the family, so if they have other professionals they're working with that they want to share the information with, they can. Or if there's a parent who's not available to come to the videoconferencing sessions, they can review those sessions, and get the information more first-hand than having to hear it through the other person.

So this is what it looks like when we edit a clip. I'll just hit "play" here. It's not captioned but it's really not important what's happening. It's basically that this is a videoconferencing clip that I've edited. I've put on the computer. I've said to the parent that this illustrates language. That's - more complex than the words and phrases their child is currently using. By copying the words she says and adding additional words you can continue to explain the language and then I've given them an idea. Try extending her by adding words. If she says drink, you add yes, a small drink. Then we start a dialogue so the mom says, and yes, her name is really Lady. Mom says she learned heaps of new words and I can say that's great. Next time try to do baby play so she can also use those words in play.

Mom says we tried that, it worked really well. She also learned about a PRAM, a stroller and a crib. And then I can give other feedback. You can try increasing the length of the sentence by adding a new grammatical structure and mom says that's a great idea, that's working really well with her. We can have running dialogue and those videoconferencing clips can be archived.

The next thing in here that's, or the other really great thing in here is the resources. So we've created hearing impairment and vision impairment resources for children in various levels of development. So the hearing impairment resources, and I apologize for the terminology. That's the current terminology in Australia. Hearing impairment is divided into three language categories: Emerging language, putting words together and putting sentences together.

So if we click on hearing impairment resources, and we look at emerging language, this is really for young children who are maybe just starting to use their first words, or whose families are really just in the process of giving them lots of input. There's activities, songs, and toys. So if we look at activities, there's all these different activities that happen in the home.

Bath time, doing the washing, getting dressed, et cetera. And the parents could click on any one of those. They could add it to their favorites on their home page. They could download it as a PDF, and basically what it does is gives them ideas about how to incorporate language into these everyday routines.

We add in some songs, some helpful hints, like don't drop hearing aids in the bath. And never leave your child alone in the tub. And things like that. Then again, families can make comments, and start up a dialogue.

So for example, if I saw this comment by T. Loom and thought it was great, I could actually then do a people search to find her, and send her a comment directly, or I could post a comment on that page.

So families are also able to do a people search for people who are on our program. And they can search by family, and choose, for example, somebody who has a child in a similar situation to them, so a child with a hearing impairment using cochlear implant, who's female, and anywhere in Australia. And you get 6 families in that category, and this is the family that we've been looking at. And it's got a little synopsis about their story. Okay.

So I'll just go back to resources. I'll show you the other areas of resources there. We saw the activities. I'll show you the songs.

Again, just a number of different early-language songs that you might sing with a child. You can click on the song. Again, you can download it as a PDF, if you want. You get the lyrics here. You get some rationale about how do we sing songs because we all do it but parents don't know why it's important so we've told them why we do it. Then we give them some tips on how they can sing the song to increase their child's listening and language skills.

And then we've actually put in a video clip of a parent on our service with her child singing songs. We've actually got parents to do the singing for us. So families can see how they can actually do that song with their child.

[singing]

All the King's horses and all the King's men, couldn't put humpty together again.

>> MELISSA McCARTHY: There are other ideas here about other things you can do after you've sung that song. You could play a game with a doll, acting out the song. You could use a stacking toy that's in our library, et cetera, et cetera.

Then if we go back, I'll just quickly show you "toys." Again it's similar. It comes up, these toys, though, are all toys that are available in our library. So if a family comes here and sees a toy that they think looks interesting, they can actually request that toy.

So reserve this toy, sends a note to the librarian saying this particular family wants to borrow this particular toy, and could she make sure that the teacher sends it out in the next teaching pack. And again it just talks about why we use the toy, how to use it, and some other ideas for using it, as well as that it's not just about this toy. So it gives you other ideas like, if this is a noise-maker toy, make a noisemaker at home with rice in a cardboard tube so families don't get hung up on the resources.

I think that pretty well covers the website for you in 5 minutes flat. Just go back to the PowerPoint. Whoops.

So just to sum up, we use videoconferencing as our primary method of contact, but we use a combination of service delivery modes to support families in regional areas so we provide them with educational packages so we can be interacting with the same materials in a videoconference. We use the phone and internet based communication to keep contact with them. We use a variety of multimedia resources. And we also encourage families to visit us at our Sydney campus.

Because although we know we can develop a rapport by videoconference, it happens a lot more quickly if we actually meet the family face-to-face first. And following that visit, the packages get sent out regularly. We do weekly videoconferencing, and then families are welcome to come visit us any time they want if they're in the area.

So we've found that the effective use of a range of technologies, both existing technologies and emerging technologies, eliminates the inequity of access that exists for families in very rural areas, and it allows them to obtain the same level and quality of support that families in metropolitan

areas can receive. If you'd like to find out more about our program visit
our website or contact me and I'll be happy to answer any questions now, if
you have some. Yes?
>> Could you tell us --
[inaudible comment]
The second question would be for the videoconferencing in the home, who is
responsible for setting it up? And is there training involved?
>> MELISSA McCARTHY: So the first question is the finances. A studio site
can cost us anywhere from free all the way up to about $500 an hour. So we
try to make friends with the free people. And that tends to be hospitals,
community health centers, elementary schools in New South Wales, a lot of the
government education facilities have videoconferencing studios, and it's part
of their funding requirements that they allow other educational organizations
to use their equipment.
So it ranges. In terms of the in-home equipment, the equipment costs about
$5,000 to set up. And then there's an ongoing monthly fee for the
connection, which is anywhere between $50 and $150, depending on the type of
connection we're using.
We pay that, so there's no cost to the family. We initially used to send out
our own I.T. people to set up the equipment. Once we figured out how we
wanted to do it, what all the settings were, then we contracted with third-
party installers, told them what to do. It was a lot quicker for them to go
down the road than it was for us to fly out to the middle of the country, and
those people serve as the technical support people if there's a problem
locally. But we're very fortunate because our teachers have training in how
to use the equipment so they're able to teach the parents. And they're able
to do basic troubleshooting.
Then we have a technical assistant on our team who is one step up from the
teachers but not quite an IT person. If she can't fix it, then we go to IT.
We've got two levels of IT support in our IT department and then we actually
have a third-party contractor that we can go out to if they can't solve it,
so the people that actually provide the equipment will do troubleshooting for
us if we can't figure it out ourselves.
But usually, we can solve it. Yes?
[comment off microphone]
We've been work at this for about 8 years now and it was a really long
process but we've found that in the last probably 18 months, it's just sky
rocketed and most of that had to do with changes of infrastructure with
technology in the country so we had a really hard time getting the equipment
set up for families, and then once the infrastructure was available across
the country, we were able to roll it out much more quickly, so with cellular
video conferencing for example, we've put about 35 families on cellular
videoconferencing in the last five months.
[comment off microphone]
Not at the moment. So the way that the equipment's been set up is as a
private network, and that makes the equipment run a lot more efficiently.
And it allows us to maintain control over the expense of it. So we know that
we're only using X number of gigabytes of download a month. But our hope is
that in the future, we'll be able to work out a way for families to be able
to connect to each other.
Right now, the closest that they come is if they visit us in Sydney, we'll
set up a video link to a family in-home so that they can have a video
connection while they're on site.
[comment off microphone]
>> For the sign language models you had, the iPhone, did you actually
videotape all those models yourself or purchase it from somewhere else?

>> MELISSA McCARTHY: No, we did it all. And I hope nobody asks for a Volume 2.
>> Maybe you mentioned it -- is this on? Maybe you mentioned this before, how are you funded?
>> MELISSA McCARTHY: We are a not-for-profit organization, so 75% of our funding is self-fundraising, bequests. We have a whole department that just does fundraising. We are really fortunate, because we're such a long-standing organization, we get a lot of bequests and donations from families across the years. And 25 -% of our funding comes from the government. My particular -- this particular department was very fortunate that we got a government grant, which was quite substantial. So that allowed us to be a lot more flexible in the initial stages, but really if you look at the budget over time, the grant that they gave us is such a drop in the bucket compared to what we actually put into it.
Yep, in the back there?
>> I'm curious about some of the more practical sides of it. The website is amazing. It's very extensive. And I'm wondering, who's responsible for the content? I mean all the communication from the families, all the video from the videoconferencing, that's a lot of work. Are the teachers doing that? And are they given the time? Is that part of their job? They're not in a classroom inaudible outreach.
>> MELISSA McCARTHY: If you don't cry, I'll tell you our case loads are one teacher to 11 students. So they get a lot of time allocated for children. When we do our videoconferencing, we actually record directly onto the server, so we don't have to worry about transferring from DVD or VHS on to the computer. So that cuts down one step. Then the teachers are responsible for doing the editing themselves, but many the end, it really helps them in terms of writing their progress reports and planning for the next lesson to review that footage.
The rest of the website is managed by Ronnie, who's our multimedia designer and we actually outsourced the development of the website to somebody else so they're responsible for sort of the back-end, front end, something or other. So they do sort of the bones of it. Ronnie does the what we can do on a day-to-day basis, and the teachers are responsible for the content. So the stories you saw came from families, they wrote those. The news articles came from teachers. The videoconferencing comes from teachers so there's a question down front here.
>> I understand that a lot of the students are remote and in rural areas. Even some hearing students. So do you communicate with them through video? How do you teach courses for families for social studies at a high school level with deaf students.
>> MELISSA McCARTHY: I don't. Our program is purely about language, speech, and listening development, or sign language development. So we might support, for example, the older children on our service, 15, 16-year-olds, we might be supporting them to develop literacy skills, or looking towards skills that will help them in their career, but we wouldn't be teaching curriculum content.
So --
>> Are the parents expected to teach that?
>> MELISSA McCARTHY: Not necessarily. Some of the children might be in a school. There is something called school of the air which does distance education services for children, hearing children even, that live in remote areas.
So they may do that for their schooling, or they may be boarding, so I know some of the children who live in remote communities they actually move into the city for high school, and board for the four years that they're at high school.

One more question, maybe?

>> You've indicated that you have a project that is focused primarily on distance. In your country, is there a lot of distance learning?

>> MELISSA McCARTHY: Yes, there is a lot of distance learning. So for hearing children. So our program is the only one I know of that is dealing with specialist support services, but there are educational distance services in the country.

>> Is it videoconferencing, primarily?

>> MELISSA McCARTHY: No, it's not as much like this. It's often broadcast, so it's videoconferencing, but only in one direction. So the children can see the teacher, but the teacher can't see the children. Or it might be two-way audio. There's a lot of different models, again, depending on the technology that's available in the particular community.

Okay? Be happy to answer any other questions over presentations and snacks outside.

[Applause]

Thank you.

[End of Presentation]

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