DARLENE MCLENNAN: Welcome everyone. It's a very frazzled and frantic Darlene McLennan here and on behalf of ADCET and ATEND I would like to welcome you all to this Webinar. I'd first like to start by paying my respects and acknowledge the traditional owners, the Aboriginal and Torres Strait Islander, the traditional custodians of the land on which we are meeting today and also pay my respect to the Elders both past and present and any Aboriginal and Torres Strait Islanders joining us today. The reason I'm frazzled is that the University of Tasmania's internet has gone down and so I'm currently talking on my mobile phone and I'm unable to see the presentation, so I'm hoping its all going okay with you. I'm very fortunate to have a wonderful colleague David Swain in Queensland who has been able to pick up the reins for us today and actually is managing the Webinar in the backend. So hopefully, we might get to have the Internet before the presentation ends and I can join in on the presentation, but the good thing is that I can hear the presentation and I also have the old-fashioned printout of the presentation, so I'll be able to play along here at work without seeing the presentation. Today's presentation is Mainstreaming Captions for Online Lectures in Higher Education in Australia. It's an alternative approach to engaging with video content and it will be, the presentation will be presenting the research assessing the usefulness of captioned recorded lecturers as a mainstream learning tool. So we have two presenters today, I'm very fortunate, with us and they've managed our stress levels quite well, so thank you. We have Dr Mike Kent who is the head of the department and a senior lecturer in the Department of Internet Studies at Curtin University and we also have the Associate Professor Katie Ellis, who is the senior research fellow in the Department of Internet Studies at Curtin University and the convenor of the Curtin University Critical Disability Research Network. You can read more about their achievements and research on the ADCET website. As always, this Webinar is captioned by Bradley Reporting and it will be recorded and placed on ADCET. The GoToWebinar platform is not as accessible as we hoped. For screen reader users, they can ask any questions or make any comments by emailing David, sorry David 'cause we're not going to be able to get our emails, I'll get you to give your email address at the end of this if possible, so people can email you with any issues. We have muted everybody, so that we don't receive any little background noise during the Webinar as possible. The presentation should run for around 50 or so minutes and then we'll have some questions at the end. Throughout the presentation, please feel free to enter the questions into the question pane or also if you've got any issues you can put the questions in the pane and our wonderful David will hopefully be able to answer those and ask the questions at the end. I feel really guilty about making David do all this, but I know that he's a very capable man. So David, can you let us know your email address so that people can email if there's any problems.  
DAVID SWAIN: You're too kind, Darlene.  
DARLENE: Thank you.  
DAVID: Any email communication you can send today to davids@stepsgroup.com.au.  
DARLENE: That's wonderful, thank you for that David. Okay, now we'll hand over to Mike and Katie and good luck with your presentation and I'll enjoy listening to it on my phone. Thank you.  
KATIE ELLIS: Okay, thank you Darlene, I guess we'll just jump straight into it. So both Mike and I will be speaking today about a research project we ran at Curtin a couple of years ago, last year, where we mainstreamed the use of captions in online lectures. So what we did was we gave them to the entire student population just to see what they would sort of make of this tool as a mainstream learning tool. So today what I'll be talking about is the background to this research, looking at captions, just sort of defining what they are, history of captioning in Australia and some background research that really informed our research going forward and then I'll look a bit about the use of captions in education, the different groups that benefit from captions and how we've focused a lot on what we call at-risk students and their use of captions and going backwards looking briefly at the idea of accessible education for students with disabilities and how accessible education actually makes education more accessible for the entire student population, which then in turn, makes education more accessible for people with disabilities, students with disabilities. And then we'll lead into the actual research project, where we offered captions to everyone, which Mike will speak to. He will talk about how he designed the study and our interactions with students throughout the study via a survey and also interviews and Mike will also introduce sort of future directions of where education is heading and what this will mean for the provision of captions in higher education. So just to get straight into a definition of captions, they're the text version of speech and other sounds... sorry. So they're the text version of speech and other sounds in audio visual media such as on films, television, DVDs and online videos. Captions, we typically see them across the bottom of the screen and they're most often presented in audio visual media to enhance the audio and are most beneficial for people with hearing ... who are deaf or hard of hearing or people with learning difficulties and a second group who are generally recognised as finding captions most beneficial are people who come from a non-English speaking background or people who are learning to speak English. And when we think about captions, we generally think about captions in the context of entertainment media. So things like film and television and increasingly FaceBook videos for example, but the captions do have relevance to education as well. So going on to the next slide which is a timeline graphic of the history of captions in the Australian context mainly.  
So the timeline starts around the early 1980s when the Australian Government provides funding to establish the Australian Caption Centre and this was intended to get captions on broadcast television. So we've got all the broadcasters sourcing captions from the Australian Caption Centre except the Seven Network who introduced their own captions and what sort of happened then was captions did not really take off because viewers required a teletext system to access the captions and the teletext system was very expensive, so viewers were saying, " We're not going to buy a teletext system until more captions become available." And the broadcasters didn't want to provide more captions until more people accessed them. So there was a bit of an impasse here in the 1980s and then we see going into the 1990s, a lot of legislation popping up around both disability discrimination and broadcasting services and similarly in the US at the same time, there was a lot of activism around the provision of captions and a law was introduced in the US called the Television Decoders Circuitry Act which mandated that screens over 13 inches must be able to decode captions and this is a standard that Australia then picked up in the early 1990s, which then resulted in the late 1990s with changes to legislation to require more captioning on television and at the same time, technology in education started changing and lecture recording started coming in initially just as audio in the late '90s but then, sort of coming into the 2000 we started having actual video recorded lectures, as well. The institution Mike and I work at, Curtin, first introduced recorded lectures in 2002 and I'm sure most people attending this seminar today are familiar with the disability standards for education that were introduced in 2005 to sort of try to clarify what a reasonable adjustment in education is for people with disability and so we see these sorts of changes as having a big impact on the availability of captions on online lectures for students with disabilities and so jumping forward to 2012, Curtin started introducing captions on recorded lectures for students with disabilities and if you required captions on your lectures you requested that through the disability office. So that's just a bit of a brief history showing the changes in technology and legislation, how this has impacted on the availability of captions in entertainment and education. So just to give you a bit of background information on the research that informed our project, is research by Cap That found that one in three students with a disability benefit from captions. So this is not just students with hearing impairments these are other types of students with disabilities which I'll talk more about later and all students we know benefit from individualised approaches to learning. So not all students learn in the same way and they, depending on what their learning style is, they'll benefit from different types of learning practices and further research shows that accessibility for students with a disability improves when it is actually mainstreamed as part of the educational environment and particularly so in the online environment. Online environments are increasingly becoming important to both students without disability and students with disabilities. Other research has showed us that captions actually improve the comprehension and vocabulary for the majority of the student population, not just students with disabilities and this is particularly important when students are learning a new vocabulary as part of a course.

So onto the next slide and some specific research by 3Play Media and the BBC in 2015. They were looking mainly at television, but they found that captions benefit a large number of people. They’re not just used by people with hearing impairments and that the captions are actually used by ... so people with hearing impairments, those whose language ... first language is not English and people with learning disabilities, attention deficits or autism. So those are the sort of at-risk groups. Captions benefiting students comprehend content that is spoken very quickly with accents, mumbling or background noise and I think this is a very important point within education. Lecturers tend to speak quickly, they often have accents, we can mumble and there is background noise happening all the time and captions are also useful to clarify full names and technical terminology and captions also enable students to watch the lecture videos in sound-sensitive environments like the library, offices, maybe on the train.

Onto the next slide and our specific look at at-risk students. So we did a literature review into the kinds of students who would benefit from captions, and this was actually just published on TechTrends. We can send that link forward on to Jane and Darlene if anyone wanted to look into it a bit further. So there as I said captions improved comprehension and there's some research around this with students on the autism spectrum and that the reason they improve comprehension is that captions can cut out the background noise of videos. A group we were really interested in were people with ... students with ADHD and what we found was a lot of anecdotal evidence suggesting that students with ADHD preferred captions because it allowed them to access lectures autonomously through transcripts rather than making use of a note-taker for more example, but this particular point we feel is very important and really requires further research which we weren't able to track down so that's something I think Mark and I are really interested in looking at further. Another group here is students with dyslexia who perform better with text only media as opposed to media combinations with sound and diagrams, diagrams and text etc. Another at-risk group is older students who suffer from age-related hearing loss and they benefit from information being presented in multiple ways, it eases a cognitive overload. So as I said we will just go backwards quickly to the benefits of accessible online education to everyone not just students with disabilities. So Li and Hammel suggested that online education can offer an innovative way to bypass the effects of impairment that can prevent students from participating. So through online education we can access information in many different ways as long as that information is presented in an accessible format. Going on to 2007 Mullen suggests that online education allows people with disabilities to participate in education without having to identify themselves as having a disability which is important to certain groups of students with disabilities and as I've mentioned the adjustments introduced to assist students with disabilities can actually have benefits for the non-disabled population as well and going on to the next slide looking at these benefits for everyone. So online spaces allow more students with disabilities the possibility of participating in an education and mainly due to the flexibility afforded through online education. So delivery of lectures can happen anywhere, anytime and can address problems students with disabilities face later in traditional face-to-face learning format having to be in a particular place at a particular time and students with disabilities are an example of a diverse student population, which includes people with family or people negotiating paid employment along with study as well, who need to access education in different ways and as I said at the beginning of the talk, that different students learn in different ways and so looking at the requirements of students with disabilities as part of this continuum sort of places disability as another way of achieving the same goal using a different learning style or different learning technologies and features rather than disability as a deficit and again, accommodations for students with disabilities can benefit the entire student population which is what we found through this research. An example of this is alternative text.

Onto the next slide. I'll just read the quote here from Kinash and Crichton, "Accessible online environments are important to both students with disability and the mainstream" and they found that alternative text, so alternative text for images, is something that both students with and without disabilities appreciate. So images provide alternative examples or explanations of content, the addition of an alternative text tag to the image enables a screen reader used by a visually disabled person to read the textual description to the learner describing attributes of the image, adding a title representative of a description of an image also allows learners without disabilities a more detailed explanation of the image. So these alternative texts are providing more information about the image which is providing more education about, more information sorry, about what the students need to be learning. Ok, so onto the next slide.

We see captions as another example of the way accommodations for students with disabilities can actually benefit the entire student population, because students do learn in diverse ways and all students actually report difficulties hearing the lectures. Okay, captions actually improve course retention rates and they offer the ability to adapt content to different context.  
Next slide, general mainstream benefits of captions. They enable more consistent access to content even when it's not possible or suitable to listen to a lecture, such as in a library. As different modes of learning become popular, captions will become important for students with a slow or intermittent internet connection, poor-quality speakers or head phones and computers that struggle to stream large files. So by offering captions and transcripts, this can offer the students a record of the lecture that may be difficult to access and it also offers students a creative way to index, search and retrieve information. Captions improve search engine optimisation and, of course, students can more easily search for a particular term or find the relevant part of the lecture content through a key word search when they’re revising for exams or assignments. So we thought it would be a really interesting project to just offer captions to all of the students in three of our units in Internet Studies and I'll hand over to Mike in a second, but our research question was basically we started from the point of view where we recognise that students are a diverse population who all use different personalised approaches to learning and we did believe that accommodations designed to assist students with disabilities do assist the entire student population. So our research question was, do these approaches benefit the, sorry, do captions benefit the entire student cohort and how do all students utilise captioned lectures as a part of a personalised approach to learning? And Mike, I'll hand over to you now.  
MIKE KENT: Thanks very much, Katie. Just looking at the next slide, which is basically, if you could change it for me Katie, for those of you following at home, this is slide No.15 that we're moving onto and it's basically a summary of what I'm going to say, talking about how the actual provision of captions in particular at Curtin, how the study was designed, the training module we set up and then a look at some of the results as well as moving onto some of the future implications. If we could go to the next slide, please.  
The way that captions are provided for students at Curtin is very much an accommodation rather than the universal design approach. So a student who may be deaf or have a hearing impairment or some other disability that is lodged with the disability office can request through their Curtin access plan that captions be provided through the lectures. One of the interesting things I've noticed, I’ve said captions provision and "eatures" there which of course means "features". It’s always good to see I have a typo in every presentation, I apologise. Echo 360 is the recording software that we use at Curtin and it’s probably the most popular technology of that type, but there are other alternatives. What we found, though, was that the use of captions are already built into the system in quite a sophisticated way and not only do they provide captions to accompany the spoken word, they also add other layers of functionality. So they provide students with a full transcript of the lecture which is pretty much a function of having something captioned. They also allow some really interesting searchable features, so students can search for a particular word or phrase and then skip to that bit of the lecture presentation when it is spoken to aid with revision. So if we can move onto the study design, which is the next slide please.  
So the design, it was a combination of planning and fortune. We were able to include, what we wanted to do was provide captions for students in particular in units and we really targeted our two large first year units in the Internet Communications Program, but at the same time we were fortunate enough to have some students going through the system who required captions through their cap plan so we were able to include those, as well. The captions were provided by an external captions provider, so they don't come through Curtin. In the end, we were able to have this provided for our 539 students. We then conducted a survey to see what they thought of the captions and also conducted some interviews both with staff and with students to get sort of more in-depth feedback. Now these students were studying both directly through Curtin University and also as part of Curtin's offering to Open University Australia. So I suppose there were more students studying fully online than you might expect at a sort of standard on-campus university course. (pause)

I lost my place, I apologise.  
Can we move onto the training module Katie, the next slide. The other thing we did was although there was all this functionality in Echo 360 we found that it was a bit hard to find, so we had a custom made training module developed which was a captioned video presentation, which explained how to use the captions and introduced the fact that they would be provided in these units for these students. It didn't work out as well as we hoped and I'll get to that in a second. If we can move onto the results which is the next slide, which is slide 19.  
We had respondents aged from 18 to 65. There were probably more mature-aged students than would be expected although that is consistent with the Open University demographics. There were 64 women and 36 men which probably meant that our results skewed a bit heavily towards female respondents. If we can go onto the next slide, in fact the next two slides we can probably just slide through pretty quickly.  
Of the people only 6 people identified as a person with disability and only 5 identified as coming from a non-English speaking background. So those two groups that sort of Katie highlighted that could potentially benefit from the provision of captions were actually really in the minority in this. I suppose the point I’m trying to make is we were really looking at the broader student population to be involved in this study as well as specifically for accommodating those groups.  
If we go to the next slide, 90% of students access the recorded lectures. Although that 10% seems like a lot not to do it, of course some of the students were on campus and actually going to the physical lectures so they weren't accessing the lectures ... sorry Katie, this is the next slide, my apologies ... as well as 90% accessing recorded lectures, we found at least 70% were accessing that system at least once or twice a week and interestingly, 70% were listening to the same lecture more than once. So we had a group of students who were using this system seemingly to actively review and enhance their learning which is what we hope, obviously.  
If we can go to the next slide now. Here is a quote which has much more context with the graph that is supposed to be on top of it. We only had one in three students accessing the captions and less than one in five were actually aware of the training module. So this is from one of the students interviewed saying people didn't know it was there, so just a quick mention at the start of the lecture to turn the captions on. It's interesting, because we actually were encouraging our teaching staff to mention the captions and certainly in the introductory lectures students were told about the training module and that captions were available, but nonetheless there was this relatively small take-up. Can we go to the next slide please Katie and skip through that again to the following slide, because that's just what I've said about the low take-up of the training module.  
Similarly, not many students used the extra functionality, so as you can see this is using the word search, one student used it most days. Two students used it once or twice a week, so very low reporting of this particular function. If we go to the next slide again, you can see that similarly the full transcripts were taken up slightly more, but it's still a fairly low group. However when we did the follow-up interviews, we found that there was more to it than perhaps our survey results showed. So if we can go to the next slide this is a quote from one of the students talking about how useful transcripts were as opposed to not having them, so I think particularly the point about being able to use Google translate or something to translate into other languages is particularly pertinent there. Similarly if we go to the next slide, we can see that staff spoke about transcripts and in particular, one staff member says they're always asked for transcripts, but didn't receive any when this was happening and also generally, the staff seemed to view these features positively.  
Similarly, the next slide shows a quote again from a student talking about the advantages of the key word search and I think I would like to use the lecture transcripts as well, but I did not use that in this unit. So even when we provided them and people thought they were useful they didn't necessarily access them, but the most impressive results is in the next slide and this is, of those students who use captions, the majority found them useful. So nearly 65% of students who used them found that they helped in the use of the recorded lecture material. Similarly, so if we look then at the next slide which shows some student comments showing why they found captions particularly useful - in both understanding and retaining what was said, being able to follow the lecture and stay focused and then on the next slide. This is from the staff - the potential that it might benefit people who perhaps weren't paying attention as well. Similarly, the next slide is some more ... sorry, I’ve got a couple of quotes, I was trying to fit them in so they were nice and big and accessible rather than squeeze them all onto one slide. Again, staff reporting that students were telling them that they were finding captions useful. However, again our interviews showed some problems. Go to the next slide now, students not aware that there were closed captioning. And then in the next slide, some perhaps input into why that was the case, where we can see there were some glitches in the iLecture system with identifying the correct lecture and some issues with the audio quality and there’s a time delay and that is true because while the lectures go up after a very brief bit of processing, the captions are not done live so it takes time for them to be processed and catch up. And the talk around the iLecture or Echo 360 not necessarily being the most intuitive interfaces. Now I would suggest that that is probably something that students found about recorded lectures in general when they were first introduced so I think there's some literacy with the system that we found students when encountering this for the first time didn't have. However, while there were these problems, it was well received. We go to the next slide, where we've got again just some student comments about how it makes it more useful and again in the next slide just some more quotes. I'm sorry, I thought this was going to be much more smooth in terms of this. We have again, students finding it making things accessible and it's more access to every word rather than note-taking. So just is a brief summary of what we found, which is the next slide, sorry.  
There was a lack of awareness of captions availability and a much greater lack of awareness of the training module which then students found difficulty accessing it perhaps because they hadn't had access to the training module, but those who were aware of them or used them found them helpful and this was across the cohort. So it wasn't - that wasn't just the result of students with a disability or from an ESL background and, in fact, when we separated those a number of those students weren't aware that the captions were there, but those who were from both those groups, did find them useful and one of the suggestions was that the students actually had to go into the system and turn captions on and it might have been better to have them turned on by default and that was something that we'd certainly look to doing if we ever use the system again. Now the staff identified some issues with captions, as well, which you'll see from our interviews on the next slide. This one's related to not being able to rerecord lectures when the technology fails or the recording isn't of sufficient quality. Sorry, Katie, can you put on the next slide?  
And also staff are a bit cautious about there being transcripts, because they're worried about students copying that content and also not hearing the lectures and thinking the transcript is sufficient. The other issue that some staff mentioned, again perhaps reflecting what happened when we first started recording lectures is people are a little bit more cautious in what they say if there's going to be a transcript published, particularly around perhaps swearing or I suppose some staff reported being more guarded in their lectures as a result of the transcripts, despite the fact they were also being recorded.  
If we go to the next slide now. Generally the staff, you can see that this is typical, they did generally find that the transcripts, or the captions rather, were important for accessibility and equity in general and again is why should people have to request captions? We found that it cost - Katie, correct me if I'm wrong – I think it was less than $1,000 per lecture series to transcribe the lectures. So one of our recommendations in the report is that all units above a certain size should be captioned automatically for accessibility regardless of a student having to request it. What we found also, if we go to the next slide, is that the students seem to, although lots of students didn't have captions or didn't respond to the survey, lots of them followed up by saying, "Wow, those captions were great, I don't know what they were there for, but it was really good. Can we have them again?" So there was certainly a positive student response.  
Now just moving to the last slide now and I suppose this is, I suppose I've looked at students and to a lesser extent staff's response to providing captions as a standard rather than as a specialist thing, this is the problem then for the institution. So Curtin is committed to moving towards a more universal design approach for its accessibility with our disability access plan that's coming into force next year, I think. Although how that's actually going to be implemented in relation to captions is a little bit ill-defined at this stage. The other thing is that the increasing reach of global regulations in sort of media and education are eventually going to catch up with Australian higher education, so any university in Australia that's producing a MOOC at the moment will be captioned because the MOOC providers are largely based in the United States and even those who aren't demand that captions be provided and they meet accessibility standards, because they're required for higher education in the United States. As our education becomes more transnational and certainly Australian education has had an international focus for a long time, we're going to find that we’re going to have to meet these standards and I think that you'll see what we've found in this study is that we could get a lot more out of the captions if we're going to provide them, if we then focus on making sure students know how to use them and are aware of their existence and I'm sure that if we were to do this, those benefits would flow in a greater way than was shown in this study. But I suppose the message that I have for university administrations is this is something that's coming and it would be much better to get it right rather than do it in a sort of piecemeal way or the potential benefits based on the actual expenditure could be much higher. So that sort of concludes my summary of our study, but I'd be happy to answer any more questions in detail. I sort of wanted to give an overview quickly rather than go into all the specific nitty-gritty details.  
DARLENE: Great, thanks Mike. So that's been a bit stressy for us, so I'm going to enjoy watching the video back I think, as I’m still a bit stressed. Thank you so much Katie and Mike for your patience with us. The update on the university system is we had an issue with our data, something or other coming under fire threat or something.  
MIKE: Oh, wow.  
DARLENE: So all of our system closed down. So anyway, oh what a stressful day. So, has anybody got any questions? Please feel free to pop the questions into the pod. We have received a question via text, so we're doing it every which way we possibly can today. So, have you got any thoughts on how we could convey the business case outside of the equity world to provide lectures with captions to all students?  
KATIE: I think Mike ended his talk with a pretty important point for the business case and that relates to the transnationalisation of education that yeah, we're getting more international students coming in. That's an important source of income for the university and these students do benefit from captions as well, and there's actually, there's a much higher retention rate for international students in courses that offer captions. So some of the research we did was around international students who said they were going to drop out of a course because it was too difficult to follow, but then through the provision of captions, they decided to stay enrolled in the course and maybe Mike you could talk a bit about the MOOC situation?  
MIKE: Absolutely. So MOOC, the main MOOC providers, that’s Massive Open Online Courses, which I suppose, it reached most interesting about 2011 but still make up significant ... there are still significant numbers available. They are largely housed and aimed at America and Americans, and to meet American disability access regulations and laws they have to be captioned and I think that's what we're going to find. Katie and I have been doing a lot of work in other areas of accessibility such as audio description and you can see that now all Netflix shows have audio description, because that's something that they felt they were going to be required to do in America, so they rolled it out across the world. So those sort of forces, I think, are inevitable, which I'm really happy to say actually, inevitable in Australian higher education. So I think the case can be made, this is something that's coming, we need to be able to deal with it.  
DARLENE: Excellent. One of the other questions is with the length of the lecture series that you quoted the $1,000 in the presentation, how many lectures were in that series?  
MIKE: 13.  
DARLENE: Okay, excellent, and was there any preference for transcription over captioning?  
MIKE: The transcripts were provided as a function of the lecture being captioned. So once the system turns that into a transcript which can be downloaded in its entirety. So they were sort of one and the same rather than an either/or.  
KATIE: Yeah, I think the students that used the captions also use the transcripts and I think something we learnt through this project was we really needed to advertise it was happening more so that more students would be aware that this was a possibility, this was something they could use, because as Mike mentioned in his discussion was that students were saying, " We weren't really aware of these captions" or "Didn't know how to use them", even though we were mentioning all the way along "Here are some captions, turn them on, see what you think, let us know", but still I think we could have gone further with the advertising or maybe talked about different ways they could be used. So direct the students more in that way.  
DARLENE: Thank you. Somebody else has asked, they want more information around Echo 360 and its challenges around captions, was it able to be fixed and captions able to run through Echo 360 or was it still done externally?  
MIKE: I must not have explained that properly. Echo 360 has a fantastic native captioning provision. When I said captions were done externally, what I meant was we sent the lectures away to a captioning service who provided the captions that were then put into Echo 360, which then managed them extremely well. So as a native system to provide captions for lectures, Echo 360 has been fantastic. The point I suppose I was trying to make was we weren't doing the captions internally to the university, we were sending the lectures out for a caption service and that meant there was a slightly longer turnaround, which for some students was an issue.  
DARLENE: Alright, we're running on hot spot here, poor Jane's own phone data, so if we do cut out, David will be able to take over, but hopefully we won't. We've just got a couple more questions, so have you heard of the Florida University USA, who have done a similar study and found that students' GPAs have increased as a result of having access to captions?  
KATIE: Yes, I think I read that report just as we were finishing up our study, as well. So we have referenced it in our report, too, which I see you have a link to in the information. Yeah, so I found that really interesting that this kind of research is taking place in multiple locations, different countries and as a topic it's something I guess is really gathering interest.  
DARLENE: Fantastic, I haven’t heard about that.

MIKE: Yeah it’s sad that we weren’t able to do something a bit more longer.

DARLENE: So is there any further study coming out of this?  
KATIE: Not specifically on captions, but we are wanting to look more into digital technologies and what digital technologies students with disabilities are using. I'd love to do more on captions, Mike, what do you think?  
MIKE: I think ... I would hope that we would be able to continue to take the issue to the university to try and promote the idea of captioning more material and also making the baby steps that I was hoping to push forward from this is where lectures are captioned, make sure that all students are aware of them and able to take advantage of them, because at the moment often the captions are turned on for the one student who’s requested it and no-one else knows that they're present. So trying to take as much advantage of as much accessibility I suppose as we can for students.  
DARLENE: Yep, somebody has just also said has feedback been given to Echo 360 about the problems of finding the transcripts?  
MIKE: We sent them a copy of the report.  
DARLENE: Yep.  
MIKE: So as much as that, yes.  
DARLENE: Okay, I know they actually have a conference next week and I know that they're going to be talking a bit about the transcription service at the Echo 360 conference. I might send our university colleague here that’s going to that, I might send her a copy of the report as well.  
MIKE: That would be great.  
DARLENE: Yeah, we might finish up now, because I don't want Jane to get a huge bill for her data. Thank you so much for your interesting presentation and, as I said, I look forward to actually sitting back and watching it again when my heart is not palpitating or in my throat. Thank you once again to my esteemed colleague David for picking up the reins for us while we were in a bit of a challenging time for us and thank you everybody for joining us. This is the last of our series, our Webinars for 2017. We hope to announce some new ones for 2018 in the next couple of weeks. It's been fantastic working in partnership with ATEND and with the National Equity Centre in bringing these series of Webinars to you throughout 2017. It's been a really good learning curve just for me let alone the thousands of other people that have joined us. As always, it's all about me. [laughter]. And thank you to Bradley Reporting and today's captioner for joining us, but for all their captioning throughout 2017 and once again, thank you to Katie and Mike for your good humour and managing to keep presenting under extraordinary circumstances. I thank you immensely and thank you everybody else for joining in.  
MIKE: Thank you very much.  
KATIE: Thank you, thank you.