- Hi, everybody, it's Darlene McLennan here. Firstly, I’d like to acknowledge that I'm on Tasmanian Aboriginal land and I’d like to acknowledge, with deep respect, the traditional custodians of the land, the Palawa people, and pay my respects to Elders past and present. I would like to acknowledge the Tasmanian Aboriginal community who continue to maintain their identity, culture and Aboriginal rights here in Tasmania.

So, thank you, everybody, for joining us. For those who don't know, I'm Darlene McLennan and I'm the manager of the Australian Disability Clearing House in Education and Training, ADCET for short.

We're very fortunate today to have Jacqui Donnelly from the Royal Institute for Deaf and Blind Children present to us today. Julie’s presentation will look at the Round Table… oh, sorry, Jacqui… sorry, did I say… sorry, Jacqui. Sorry. There’s a mistake in my script. Jacqui’s presentation will look at the Round Table on Information Access for People with Print Disabilities guidelines for accessible assessments. These updated guidelines were launched in March this year and contain recommendations designed to make assessment materials accessible to students of all ages and levels of education, which is fantastic. We heard about the launch in May and have been really keen to have Jacqui, or someone, present to us on these guidelines, so it’s great to have you here, Jacqui.

Before we begin the presentation, there's just a couple of housekeeping items. The webinar is live captioned by Bradley Reporting, and it is being recorded and the recording will be up on ADCET in a couple of days. For those who haven't used our captioning before, and need to, you can click on the captioning — closed captioning icon either at the top or bottom of your tool bar in the Zoom. And you can see the captions there.

We also have a website you can go to and receive the captions there if you need to and that's in our chat box.

If you have any difficulty with technology throughout the webinar, you can email us on [admin@adcet.edu.au](mailto:admin@adcet.Edu.au). The presentation will go for around 50 minutes and then we will open up questions, but I encourage you all to ask your questions during the presentation in the chat box. Also, if you would like to share your question with the whole audience, please tick or choose all panellists and attendees and that way other people can see the questions. It makes the webinar a little more interactive and sometimes people have some answers to the questions that you may have as well. So, I really encourage that conversation throughout the webinar. So, I think that’s it. Now, I’ll throw over to you, Jacqui, thank you very much - or Julie, or whichever wild name you take. Sorry about that.

- That's absolutely fine. Hi, everyone, I’d like to add my welcome to that of Darlene and Jane. If you missed the beginning of the introduction, my name is Jacqui Donnelly and I work for the Royal Institute for Deaf and Blind Children in Sydney, NSW. I served on the Round Table subcommittee that updated the accessible assessment guidelines. That’s what we’re going to talk about this afternoon. I’m hoping that will be really useful time and before we get into it, I just want to share with you a little bit about the Round Table.

The full name is Round Table on Information Access for People with Print Disabilities and they have a website at [printdisability.org](http://printdisability.org/) and there's some really useful resources there. If you have a student in your learning community who has a visual impairment, there are free downloadable guidelines on the production of e‑text, braille, audio files, on clear print, large print, and also on image description. And they're incredibly helpful resources and I'd encourage you to download those and to share them with your colleagues, and of course, the guidelines we’ll be talking about today are there as well in a variety of formats available to download.

So, I have a question for you before we start. I believe that at least some of you can see me on your screens. I can't see you. I don't know anything about you, so I would like to ask where you work and that will give me just a little bit of an idea about the background of people who have registered today. So, the options we've got are university, VET, private RTO, the NCDO program, RIDBC, a primary school, a secondary school, or other. So, if you could fill in your answers, that would be really helpful to me.

So, at the moment, it looks like…

- We didn't let people know there was going to be a poll. Some people have added that in to the chat box and some people have done it in the poll. If you could put it into the poll, that would be great. And also, it's the NDCO program, we've done a typo there. It must be the day for mistakes today. So, we just might end the poll now. And so, the results… so, yeah, we've got 63% of people from the university sector, 24% from the VET sector, the NDCO program 4%, primary schools 2% and other 8%. So, that's fantastic.

- That's really helpful, thank you. So, on the topic of education for students with vision impairment, on issues around providing them with accessible…

- Sorry, we've lost your presentation.

- How's that?

- Yep, great.

- So, on the issue of providing people with vision impairment with information that is accessible and useable and equitable, also with providing them with educational experiences and assessment that allow them to learn and to express their achievement.

I was reminded recently, this is not just about being nice to blind people, it's about human rights and I wanted to start with that because I think this is a really important truth and it's a truth that we need to handle carefully and the reason for that is that, yes, there is a very clear legal mandate for the work that we do in this, and this informs our practice, but as educators, I don't think we really want our interaction with students to be reduced to a legalistic ticking off of compliance criteria.

We want to engage with our students meaningfully in an enriching way, so that access really ideally becomes a non‑issue and if we build accessibility in from the ground floor, we have a much better chance of achieving that, and in-course content will be and remain the focus for us, as we prepare and teach units of work, and also for the students as they engage with our material.

So, we need to be informed by the legal framework and I will talk about that in a moment, but I think not limited to it and I think knowing not only our legal, but also our moral obligations, we want to be creative, maybe a little bit adventurous in how we prepare and present materials.

So, I'm hoping today we'll be able to cover the basic access issues for students with vision impairment and that once you've got a firm grasp of these, you will be able to take them away and strive for absolute best practice so that you enjoy your teaching and students enjoy learning from you.

So, we will look at the Disability Discrimination Act. Darlene, I've still got the poll on my screen…

- You should be able to just click it in the X mark.

- Brilliant. Thank you. Okay, so the DDA of 1992, I'm assuming that you all have been familiar with this and have heard of this. So, just very briefly, this states that discrimination occurs when a person is treated less favourably or not given the same opportunities as others because of their disability and it can occur when a policy is the same for everyone, but it has an unfair effect on people with disability.

So, an example of this would be if all the assignments have to be submitted to the online portal by a certain time and date, but the portal is not accessible to screen readers. So, then anyone who is using a screen reader is unable to submit their assignment on time. If they were then penalised because of that, that potentially would be discrimination.

Hopefully, my slides will progress in a moment. They don't seem to be for now.

- The gremlins are certainly with us today, aren’t they?

- I blame the smoke.

- If you can just go back to the other one and then restart it again. So, go back to non-presenting, and then try presenting again.

- There we go. Thank you.

So, disability standards for education - we’re looking in 2005 initially, and they've been reviewed several times since then and they were really written to set out how the DDA applies in the field of education and they were written to ensure that students with disability can access and participate in education on the same basis as other students and that's where reasonable adjustments come in. They're designed to remove barriers that people with a disability may face. A failure to make reasonable adjustments may be discrimination and so my earlier example of the online portal that doesn't work with screen readers, a simple and reasonable adjustment there, other than sourcing an online portal that is accessible, of course, would be for the student to be allowed to email their work into a particular person's email by a certain date and time, the same as applied to everybody else unless they had been granted an extension for other reasons.

So, a reasonable adjustment is any action really taken to enable a person in this case with vision impairment, to participate in education on the same basis as the other students and almost every element of an assessment and assessment practices and policies can be adjusted. So, almost anything.

Okay, so, back to you. Poll question No.2, do you currently work with a student with vision impairment and if so, which of the following do they use? The options are: hard copy large print, soft copy large print, hard copy braille, accessible electronic documents, and they may be for people who have very low or no vision or people who are otherwise able to use large print, a screen reader for audio only, I'm not talking about refreshable braille there, or a combination of the above.

- Okay, we've started the poll. Just while we're waiting for people to complete that, for those that don't know, Jacqui's in Sydney today, so she's struggling a bit with the smoke, so we appreciate her struggling through.

Alright, so we might end it now. So, for hard copy large print, 21%, soft copy large print, 14%, hard copy braille, 5%, accessible electronic documents, 21%, screen reader audio only, 19%, and a combination of all of the above sits at 76%. So, that's fantastic. So, you're right to click that off, Jacqui.

- Okay, I've lost my presentation again - just bear with me, sorry. I think we have the fix now. Okay, we're back up.

So, we've covered in very quick general terms the legal framework that informs our practice. The guidelines do state equal access to information is a human right. It's a requirement by law. It's a procurement standard and it's also a professional standard for educators.

The guidelines also refer, therefore, to the rights of persons with disabilities, the DDA, disability standards, the Human Rights Act, Australian standards and also professional standards for educators. We've also mentioned in there UDL and W3C, so the web consortium, the web content accessibility guidelines and UDL, and I wanted to talk briefly about UDL as an excellent framework in education. It's an approach to education that designs learning experiences to meet the needs of all learners and it assumes importantly that barriers to education exists in the design of the environment and not in the student. And that's a big shift in thinking and I think in many parts of education, we still really need a culture shift away from the view that if the student can't do it, that's their problem and their loss and it's a shift to a way of thinking that encourages us as educators to be proactive in solving any access issues that our students may have.

Students with vision impairment have been in mainstream educational environments and the regular workforce now for decades, so we need to expect that students with vision impairment will be enrolling in our schools, in our treasury institutions and coming to work alongside us and so we really should be preparing courses and infrastructure with that in mind, with accessibility built in. Instead of what often seems to happen, regrettably, which is, here's an assessment that I've done for some time with all my sighted students, give it to the student with a vision impairment and then try and work out how they might do it, if they can do it.

I think, instead, what we're striving for is that the assessment tasks, particularly, are written in a way that a student with a vision impairment can do it, there's no mystery about it, there's no extra problem solving to do. We've removed the visual bias and we know that they can do it. So, again, the key point here is that if something isn't going to work, we're able to fix it. We have that expectation and we know how to do it.

Responsibility really lies with us as educators and it's fair to say handing an access problem back to the student is not only unfair, but by my reading of the DDA, that's illegal.

It is possible to retrofit a course and assessments to make them accessible, but whenever you have the opportunity, I'd really encourage you to start afresh with a new course, new material, to build in accessibility. It makes for a much more cohesive course and a more enjoyable experience, can I say, as a teacher and also for students.

Vision Australia recently did some research into the accessibility of online learning platforms for students with vision impairment, particularly in the tertiary environment, and they found some significant issues with online learning platforms. I won't go into a lot of detail, but it's available online and if that's an area that you're familiar with and that you work with, I'd encourage you to read that.

So, the guidelines…

- We're still on the poll, the actual… your presentation. Excellent. So, for people, also, we'll put in just a question around UDL, so we will put in some information around what universal design for learning is about and we'll put up in the chat a link to the recent Vision Australia report for people to follow up with as well.

- Great, thank you. To the guidelines. If you haven't had an opportunity to read them, I'd encourage you to. We tried to write them so people who have a particular area of interest can dip in and read what's important for them but, of course, I'd like to think they're worth reading from beginning to end as well.

Okay, so the first thing that we discussed is really just, what is assessment? And, of course, assessment is defined quite broadly and we've just touched on a few areas of assessment. So, diagnostic, summative, formative, norm referenced, criterion referenced, interim or benchmarked and, of course, there are formal and informal assessments and they can be anything from worksheets, multiple choice, short and extended responses, experiments, presentations, research projects, individual work, group work, the list goes on. And some of these are now being developed to be available digitally or online. And, I guess, my main point here is I would like you to know some forms of assessment are inherently problematic for students with vision impairment, but potentially any assessment is, depending on the content.

Norm reference tests, for example, can discriminate against vision‑impaired students, and the reason for that is vision impairment is a very low incidence disability and so, the experience of people with visual impairment may not be captured in the norms and an example of that is IQ tests. There are often spatial reasoning components that are very, very visual and for someone with low vision or no vision, it can be not only very difficult to produce those tests in a way that is accessible, but certainly in a way that is meaningful. And it doesn't really, I think, do justice to a person's intelligence to assess them in an area in which we know that they have functioning difficulty.

And so, in that instance, and in any instance where a test is not accessible, and not meaningful, what you're really assessing by default is the student's vision and we already know that they have a vision impairment. So, that then becomes just an onerous task for them and one that doesn't really add to our understanding of where the student sits in terms of their knowledge and skills based on studying a particular course of work.

Other tests, and particularly those that are moving online, have other accessibility issues and we'll come to those. But I also wanted to say that open book exams can be problematic and the reason for that is that often, in an open book exam, students are allowed to bring textbooks and notes that they have taken, which amounts to a lot of print material, and they are — particularly, sighted people, are able to flip through those notes quite quickly in order to get the information they need to answer the questions. And for people with low vision, if you remember all of that work in very large print or all of those pages having to go under a magnifier or those pages in braille, it's just not possible for them to whiz through as efficiently as it is for a typically sighted person.

So, if it's possible, and you're really committed to the open book test, it would be better to provide searchable digital information for a student with low vision or ideally, just pick another form of assessment. And if the student is bringing equipment, of course, we need to plan for failure. We've had a few bugs in the system today and I think one thing that we all know about technology is that it's great when it works, but invariably at some point, it doesn’t, and it will usually fail at the most inconvenient time. Redundancies and back‑ups are essential.

Okay, now, reasonable adjustments, my second point on the slide - when you're thinking about the appropriate reasonable adjustments for any particular student, consider the impact of their particular vision impairment and that may be the age of diagnosis, the nature of the vision impairment, whether it's stable or whether it changes. Is it deteriorating over time? Is it vision that changes during the course of the day, for example, or during the week? What has worked for them before? What print or braille needs do they have and what has worked before? What are the transparent documented reasonable adjustments that have been used for this person, particularly if they've had a vision impairment for a period of some years, they will most likely have had assessments before and they, in most cases have, for example, had a particular font size on a particular colour piece of paper, particular font style, spacing, adjustments for graphics, descriptions, for example, maybe no colour, maybe black and white only. There will be reasonable adjustments that have worked before and they can often form a good starting point. So, if your student is in a tertiary environment and they've graduated high school, there should be records of those and certainly the student themselves should know them.

Think, too, though, about the impact on others. If a student is going to use a reader scribe, then obviously they need to be moved away from the rest of the cohort during an exam just because the noise will disturb other students.

Costs and benefits. Always maintaining academic integrity and I would say here, too, that all students with vision impairment are entitled to receive adjustments. There are all sorts of funding issues around education and students with different levels of disability and different types of disability, but if a student has a diagnosed vision impairment regardless of their eligibility for funding, they are entitled to reasonable adjustment, so please be aware of that.

While the interests of all affected are considered, I would suggest you pay special attention to the impact on the student themselves, remembering that they have the most at stake. We can, I would argue, as educators, be prepared to put ourselves out a little bit to change procedures, to change the way we have historically done things that we might be committed to, that we might feel comfortable with, that have worked for us before, but for the student with a visual impairment, this is their shot to get an education and we know students with a visual impairment, if they have good education, if they have good literacy skills and technology skills, they are far more likely to succeed in further education and also in employment. Given that people with disability are generally unemployed or underemployed and people with visual impairment tend to be unemployed at a rate around about 10 times the rate of sighted people in the community, this is our chance to support these students effectively so that they can learn and so that they can then achieve results that demonstrate the learning that they have engaged in.

So, I would say, too, that students should have a voice, unless you're dealing with very, very young students, and possibly even then, if they're able to, but students should have a voice and be part of this process. Obviously, they don't get to choose carte blanche whatever adjustments, sorry, that they would like, but they should be involved and consulted and just have a voice in this because it does affect them and they also are usually in a position to know how to express their vision needs effectively. That's something they need to be able to do and they need to be able to have that acknowledged and respected as much as possible.

So, the principles of reasonable adjustment, I find in my work, which is mostly with primary and high school students, but still very much education, I often say to the mainstream teachers, it's helpful for them to think about what are you trying to teach and what do you really want the students to learn? What's the take home? And when that's clear, they find it much more easy, I think, to determine what can be modified. Sometimes, there are just significant visual biases in an assessment or in course material and if we can remove those, but still get to the heart of what is to be assessed, then everything becomes much clearer and much smoother for all involved.

So, an example might be if you're going to be asking students to give an oral presentation using a PowerPoint, for example, and you have expected in the past that students would use interesting graphics and transitions and a variety of font sizes, styles and colours, and borders and all kinds of stimulating visual images to engage their audience and to make their message more powerful, for someone with vision impairment, that is most likely either not going to be particularly meaningful, and maybe not even possible.

Whilst they could ask someone to help them source images and put transitions in the slides, it's not going to be their own work and it's not — for a blind person particularly, it's not going to have any meaning. They would be far better to — it would be far better for them to present to their peers using, for example, sound as a source of engagement. So, music clips, other sound files, sound effects. There's all kinds of opportunities there. And if that is a suitable replacement, then you will know because the student will be able to demonstrate their understanding alongside their peers, but without that reliance on visual information that they either cannot access effectively or at all.

But the most common adjustments, and in many ways the most obvious, are either braille or tactile graphics, or both. Large print, sometimes on coloured paper, depending on sensitivity or photophobia, which is part of some vision conditions. Accessible electronic format, which I think is coming into its own and as more people learn about what an accessible document is online, then I'm hopeful that will improve access for many people with low vision, and not just those for low vision, I would hasten to add.

I will talk more about each of those later on, but they are some of the most obvious ones that hopefully, you're a little bit familiar with.

So, just general considerations, and I think a lot of this will be quite self‑evident, so I will go through quite quickly.

Security and confidentiality, any exam material should be kept secure and confidential. It is done as a matter of course with quite a bit of effort. I know to secure exam materials prior to and for a period, a secure period after exams, I think that's fairly standard practice and so, of course, the same standards need to apply for large print papers and for braille papers. Papers in any other format, if it contains exam material, it should be kept confidential. And this is really key, and it comes back, really, to safeguarding the integrity of the course - if confidentiality or security is compromised, then the course is compromised and that serves no‑one.

As if often the case, if there's a relative… sorry, if a member of staff has a relative who is doing the same exam that needs to be disclosed and decisions made about the suitability of that staff member continuing to be involved with that student with vision impairment. But also, just things like conversations around the content of the exam, where the exam is left, who has access to it. Obviously, keep it secure, talk only to other authorised staff, use filing cabinets, password protect files on the computer. Do whatever you can to make sure the exam is kept secure.

If there are breaches of security, then obviously advise the assessment authority concerned straight away so that they can kick into gear and do whatever needs to be done to make sure that the exam that does go out is secure and has integrity.

And timeliness is a big one. I would say that for people with vision impairment, time is a constant issue, partly because they are trying to acquire information, the same amount of information ideally, as typically sighted people, whereas I, as a typically sighted person, can glance at something, and in a moment, have access to a whole lot of information. I've got, instantly, a sound understanding of what I have looked at, the layout, for example, of furniture in a room, the number of people in a room, where the text is on a page, if there are graphics, how complicated those graphics appear.

For someone with low vision or blindness to get that same amount of information is going to take them a lot of time, partly because they are either trying to piece together either poor quality images or, if they have a field loss as well, then little pieces, fragmented pieces of information and piece them together and that is cognitively quite a draining and time‑consuming task. For those who are touch readers, who use braille, all the information is coming through the tips of usually a couple of fingers and, again, that needs to be pieced together and that takes time. Producing braille and large print is also a very labour‑intensive task. It does require some specialist understanding and it does take time. Any of you who are involved with that will know what I mean. At RIDBC, we have a department that produces large print and braille and we usually ask for several weeks minimum lead time in order to produce the material to a high standard. It needs to be proofread at least once and sent out to the student so they have it at the same time as everyone else.

There's not much point in a student receiving materials that they need, course content for exams, after everybody else. That really creates an equity issue. So, planning is key, I think. Better planning makes for better teaching and if you can — if you are in a position where you're sending materials off to be transcribed, it's never too soon. The sooner the better, and you know what? If it comes back early, it can sit on your desk or be locked up securely somewhere until you're ready for it. It is really, really important. I've had situations in schools where people will give me an exam to braille, and the exam's actually started. The sighted kids are in the exam, and that then creates all kinds of security and flow‑on issues for the student, for their cohort, and for the organisation itself.

So, time is a big one.

Materials that have technical content like maths and geography and the sciences can be more time‑consuming. They tend to have more graphics and graphics take longer to produce. They often have to be modified and that involves a lot of consultation with specialist staff and the examining body.

When you're sending material off to be transcribed, if you're in that position, it's helpful if you provide a clean copy of the original print and a soft copy if you have it. Often, that's a little bit quicker to edit and to transcribe than scanning it in an image of text and then converting it back to text and so on.

If there are a list of approved adjustments for the student, it's helpful also to include those because often, and particularly in braille, the time allowances are written in the student's paper as they are for them. They don't get the standard copy, so to speak. So, that's really important, and also vital is descriptions of any images. It's really important that transcribers aren't left to describe images, but that's done by the person who has set the exam and in consultation with a vision specialist.

The reason for that is if I show five people a picture and ask them to describe it, I will probably get five quite different descriptions. So, it needs to be described in a way that is relevant so that the student can answer the exam question that is based on that image. Some people tend to describe things in incredible detail and produce very long descriptions, that can be quite unhelpful because of the time taken to read it and it usually contains a lot of superfluous information that's not important in that context. Sometimes, people will move systematically through an image starting, say, in the top-left corner as you would to read, and working through. Some people will start with the largest part of the image. There's all different ways of doing it. But for that reason alone, it's very important that the examiner, or the person writing the paper, has significant input into that and the vision specialists can advise and consult on that. But it shouldn't be left to other people, simply because the description may be unhelpful and the student is disadvantaged when it comes to answering questions about the images.

Access to practice tests. Just as sighted students are able to see the format and the content in past papers and they obviously get to practice writing within a certain time frame, students with vision impairment should have access to a practice test in their format. The… that’s often used is preferred format, and I sometimes think that’s a little bit unhelpful because it can sound to people like this is just what they’d like. But in actual fact, it refers to the format that has been deemed to be the most effective for them to use. So, the one that gives them access, in other words.

So, for a student using large print, that will be the size and the font and the colour that they can read most accurately and most comfortably without visual fatigue for as long as possible and that's going to vary significantly from person to person, even with the same diagnosis and, of course, for a braille user, that's going to be braille.

So, past papers in those formats are really, really important. And particularly, again, as electronic materials are becoming more and more common, access to past papers in that format will allow students with low vision to practice navigating. There have been, in some of the early versions of online tests and digital tests, significant issues where the paper has been technically accessible, but not particularly useable, and where students have had to press multiple keystrokes in order just to get from the question, for example, to the answer box, and that doesn't meet the requirements of accessibility and every test seems to be different. Hopefully, we're moving towards uniformity in that field, but for students who are using the keyboard to navigate, or even just an enlarged mouse pointer, practice in finding where things are, where their options are, for example, to enlarge the screen, where they might have to click the next button and so on, is an important part of that practice process.

So, again, they need access in a timely manner alongside their peers to past papers.

Just a quick word about spot tests. These are often popular, but they can also be problematic for students with a vision impairment and the reason for that is they don't necessarily have time or the opportunity to ask for their provisions, and if you're committed to spot text, just think about the format in which you conduct that text and if it's not relying on print or any visual information, you're far more likely to get a fairer test and a better sense of where that student with vision impairment sits in the cohort.

I think it's time for another question. In your experience, what is the most significant difficulty students with vision impairment face at assessment time? Is that the paper not being in an accessible format or is it negotiating reasonable adjustments and disability provisions? Is it issues with technology, or something else?

- Wonderful. Thank you, Jacqui. It's interesting how words can mean so much. When we use that word “preferred”, I kind of liked how your take on that - it was very insightful.

We might end the poll now. Interesting, so, paper not in an accessible format, 41%, negotiating reasonable adjustments disability provision, 23%, issues with technology, 31%, others, 5%.

- That is interesting, and concerning. I feel very passionately that students with vision impairment work really hard to get access to information all the time and there's always something that seems to be missing. I see this in school a lot - a lot of incidental information, things on notice boards, information that’s put up on an inaccessible portal, even just knowing the time - sitting in a classroom and not able to access the time. There’s information that seems to be slipping through their fingers almost constantly. To see students who work really hard just to access information and then to learn what often contains a lot of visual content, to not be able to have a paper in an accessible format must be incredibly frustrating for them. There’s obviously a lot of work we need to do around that particularly, and also issues with technology, I think it might be tempting to say we all have issues with technology, but the difference between the typically sighted person and a person with vision impairment is if a typically sighted person's technology fails, it's annoying and it might slow them down, but often for people with low vision, that's their access and if that's gone, that's it. A lot of schools, more and more, have digital devices - bring your own device or where the students have all been issued a computer, often as the students arrive in class, they log in, they go to the online portal, they download the material for that lesson and start work and when, as inevitably happens, the network goes down, batteries fail, computers crash, the sighted students go to their bag and get a notebook and a pen or pencil and carry on, and the student with vision impairment has no back‑up.

So, I think although it's tempting, I think, to say we all have issues with technology, I think the stakes are much higher for those with low vision or blindness and negotiating reasonable adjustments in disability provisions I know is problematic because it so often requires more of the organisation. If you're going to provide separate supervision, for example, for a student with equipment that is bulky or noisy or requires a power supply, that creates issues and no‑one has enough space, and so my concern there is that the students are missing out on what they really need because they're in the minority and because, practically, it's quite difficult to organise.

- Just to let people know, the closed captions are not working at the moment, so we'll put the URL up if you need to go on to the URL. We've got, probably, another five or eight minutes, Jacqui, so just a reminder if people have any questions that they would like to ask Jacqui at the end of this that I will ask her, please add them to the chat pod.

- I think we're back up. Responsibilities of specialist staff. I've talked little bit about this already. It's really important to have vision specialists involved. Often, everyone has an opinion about vision. Sometimes, people have had an experience working with or teaching or being in community with someone with a vision impairment before and often, they want to bring that experience to this other student - and although I know it’s well-intentioned, it’s often really unhelpful. I had an experience once where I’d been working with a student for several months and things seemed to be going quite well, and then a teacher in the school confronted me about the fact that someone else they know was working in another school with another student with a different type of vision impairment, and that student had green paper and why had I failed to mention the importance of green paper. The reason was the student we were working with didn't need green paper. It wasn't part of his vision condition that that would be helpful. It's such a low‑incidence disability and people do want to learn about it and bring that experience to bear on new situations, but in my experience, no two people with vision impairment have ever had the same needs or the same life experience, and so it is really important to have people there who understand vision and to not delegate to people who might be really, really keen to be involved, but who actually just don't have that understanding and that's not to disrespect them or the importance of their role or the importance of their knowledge and experience in other things, but on vision, it is a specialised field and you really need to draw on the resources, the expert resources that you have and use people like me, if you have them, and to produce the best outcome for students.

So, I've already talked quite a bit about consulting liaising, regarding the most appropriate adjustments, and remembering that the aim is — and it's easy to lose sight of this, but the aim is for accessible and equitable assessment. I think often in the bureaucracies of large educational institutions, it's easy to try for a streamlined experience for things to be as much like… so, for things like… sorry, I'll say that again. For experience, the exam experience of a vision impaired student to conform as much as possible with the sighted students. I guess my response to that is to say let's make it similar in terms of access and success, bar the… sitting in the hall with a set time frame with a standard sized paper. If you were trying to assess someone with low vision with a standard sized paper, it becomes a vision assessment and again, that really wastes everyone's time - you, as an educator, and also the student.

So, the next question, and this is the last one, poll question No.4 is what is the most significant difficulty for you as an educator when creating assessments for students with visual impairment? And the options are similar to before. Is it transcription of papers in accessible format? Is it negotiating reasonable adjustments or disability provisions? Issues with technology, or something else?

- Thank you, everyone, for filling that in. Also, if anyone wants to add others that might be quite interesting to the chat, just what some other experiences are for people that we could identify.

There we go. So, transcription of paper in accessible format sits at 29%, negotiating reasonable adjustments and disability provision at 47%, issues with technology, 15%, and other at 9%.

- Interesting. So, I think we've had a switch, reasonable adjustments are a more common problem for educators.

- Yes, indeed.

- I lost this. Sorry, everyone, bear with me. I will just get the technology to work.

- You're doing… you're not stressed by doing it, so it's wonderful. Some of us would be in a meltdown, so thank you for your patience.

- Not at all. So, accessible format papers. The main options are braille, which we know, large print, digital both online and offline and multiple format. Some people, particularly with a recent diagnosis or with vision that is deteriorating, will use a range of formats, depending on the nature of the paper and the technical content, the amount of text, the number of graphics. Generally speaking, students will have one preferred format and that will be one of the ones that I've listed.

Now, there are… when I talked before about the Round Table website, as I said, there are additional guidelines that go into much more detail about the correct formatting of each of these types of papers for students with vision impairment, so what I will talk about now is kind of a summary and the issues — there is significant overlap between the issues.

The key thing, though, is ease of access. I talked earlier about the principle that there's not really much point in teaching a course that's laden with visual content and visual bias that presumes visual awareness and understanding and visually based concepts being soundly grasped and understood, that expects students to use visual material to reproduce visual material and then giving them a beautifully formatted braille or large print or digital or whatever exam and feeling that our work is done because, look at that, we provided a braille paper or a large print paper - even though enormous effort will have gone into the production of that exam, we have failed to give the student access and equity. They need to be able to engage meaningfully with the material from the beginning of the course all the way through, and so a lot of, obviously, all of the course materials need to be in that preferred format and real thought needs to be invested into how the material is presented and taught and in the type of assessment that's going to be used.

Although it's easy to get caught up in the details of braille formatting and the correct place to put the marks allocated and the time that's available, what size paper to use, what colour paper to use for people with low vision and, of course, the use of keyboard commands and accessibility features for digital assessments, I really want to stress that the assessment process begins at the very first lesson, even before at enrolment. We need to be making sure that the test is valid. Yes, it needs to be accessible, but it needs to assess real knowledge that was acquired meaningfully.

A lot of schools are keen on film studies and for blind students that is a really hard sell and I, as a vision consultant going into schools will say, you know what? It's not compulsory and it's really going to be very difficult for you, and for me, and for the other people involved to help this student understand all of the visual information contained in the film. Is it really that important? Can we not look at something else instead? And I would encourage you, as educators, to take a similar view.

There are numerous ways to convey information and when you take vision out, at first that's really confronting and a little bit scary, perhaps, it's a bit difficult, it requires a lot of us, as sighted people in a sighted world, but it's incredibly rewarding and it works really well.

I've had a blind braille‑using student just enjoy more than any other subject, I think that year, a unit on light because it was taught in a way that helped them to understand the concept of light and how light behaves and that was done very simply, it didn't cost a lot of money, really, the big investment there was just thinking a little bit differently about how to use a light box.

I've had a legally blind student come top in visual arts and that was because the concepts were taught very clearly, the symbolism was conveyed very effectively and so in the exam they were able to show their understanding, and they had sound understanding.

Interestingly, people were concerned at the time. They came to see me and said, "What does it mean that a legally blind person came top in art?" It means it was taught really well. That student had access to information the same as their sighted peers and they demonstrated their understanding in an accessible exam. Everybody wins.

- We're getting close to time. We've got seven minutes until 2:00.

- Do we have enough questions that I should stop for questions?

- No, keep going. We have a couple of questions, but if you wrap up in the next two minutes, we have five minutes for questions.

- Alright, sounds good.

Alright, braille, now there's a long list in the guidelines about how to set out braille. I imagine for some of you, you will be sending the work off to be transcribed, so you should be able to trust the transcription process will be done to best practice standards, but it's useful for you to have a copy of what that is so that you can check if you are sending it away, I expect that you are paying for that service. So, it needs to be, of course, good quality braille, partly for you as a consumer, but more importantly for the student who will be accessing the paper that way.

One thing, again, that applies to all formats is a logical sequencing and just a clear setting out, and the use of styles, for example, headings in Word, is a really good way to think about that. So, headings need to be headings. Space needs to be used carefully. It's often far more meaningful for sighted people than it is for blind people, so lots of spaces between lines in braille is not always a good thing.

So, just very quickly, things like page headers on every page containing the name of the subject and the section of the paper, having braille and print — sorry, braille and print page numbers on every page. Using both as a reference when directing a student to stimulus or other materials in a booklet or in a different booklet. Leave out the instructions that are for print users. Using a black pen to circle the correct answer is meaningless and it just wastes time reading those kinds of instructions.

I said before, time allowances are usually adjusted if you're able to provide the disability provisions to the transcriber. Question numbers always go on the left margin, clear of any overruns and the marks don't go on the right‑hand side as they often do in print. This is the same for large print - they go right up after the question so that it's clear, as the person reads the question number and the question, they know how many marks are allocated and can allocate time then accordingly.

If you have to avoid splitting questions across the page, and this is different to what we normally do for sighted people that split the question mid-sentence so it's clear that there's more coming. You don't want a student to, for example, be looking at a multiple choice question and read A, B and C, not realising that D is on the next page. That can cause time delays, but also unnecessary stress.

If there's a long passage to read, often putting the question before and after the passage is helpful, and lines for braille users are totally irrelevant. If they're using a screen reader, I know... will say underline, underline, underline, until it's worked its way through all the pages of blank lines. They should be removed and we usually use seven words approximately per line, so we would replace the lines with… that’s approximately 210 words.

Look carefully at diagrams and decide which ones will be produced tactically and which ones will be described or if you're going to do both, and that really depends on the nature of the task and that's why the examiner needs to be involved as well as the vision specialist.

Graphics will often need to be modified. Vision is a very powerful sense and sensitive sense, more so than touch. It's possible for a typically sighted person to discern when two lines are very, very close together, say, a millimetre between them, but they are still two distinct lines, and it's not generally possible to make that distinction through touch. Often, diagrams have to be made larger so that lines that are nearby are not confused as being one thick line, for example, so that will take up much more space and sometimes too much information is on a diagram for it to be meaningfully conveyed tactically. For example, a graph that might contain information on say, four or five different areas, rainfall and temperature. Too many lines, too many criss‑crossing lines, and it's hard to know which direction the line you're following goes in. So, often, some information will need to be pulled out and put in a separate graphic. Or, if it's irrelevant, removed completely.

Diagrams should be adjacent, often we use a facing page. They need to be nearby so there's not more time lost trying to find the graphic that is referred to in the question. Sometimes, if there's a lot of graphics, I’ll put them in a separate booklet and that way they're easier to keep track of.

With the advent of 3D printers, more and more people are starting to use models and if they are produced to a high standard, they can be incredibly useful as well. It is always difficult to convey 3D information in a 2D format. I remember trying to understand diagrams of 3D shapes in maths years ago was horrendous. That, in braille, is harder still. Graphics can be a challenging skill for experienced touch readers, partly because we bring a lot of print and sighted‑person conventions to the way that we produce graphs. Remember, it doesn't need to look like the thing we're representing, it needs to feel like the thing that we're representing and that's quite a different way of thinking about it, which is why, again, you need your vision specialist, why you need the examiner involved and professional transcribers.

Proofreading is absolutely essential, not only for exams, but for any material. If a student in a class finds a typo or an error in their book or what they think is a mistake, they can readily check with other people to see if their book is the same and if they also think it's wrong. If there's an error in the braille code, chances are the student is the only person around who reads braille, so they don't get that opportunity to ease the stress and, oh, yeah, it's a mistake, it should be this. So, proofreading, absolutely essential. Just for quality control, if nothing else.

- Okay, Jacqui. We've got about a minute to go.

- Okay.

- Is there any final words? There's a couple of questions, but I think what we can do is put them to you and they can be on the website with the video. Is there anything you want to finish up in the last minute?

- Just this slide on blindness and education. It's a quote I found in a study coming out of the University of Colorado. The author said, "The world today is powered by technology, fuelled by information and driven by knowledge. Knowledge is the currency of modern life and quality education for all is a necessity and not an option." And I think just for us as educators, to think about that and the part that we play in providing that and the difference then, not just in the person's knowledge, but in their concept of themselves as a person in the world who has something to contribute to society, we know that people with vision impairment who have a good education are far more likely, as I said, to be able to be employed and people who are employed have better physical health and mental health and social connections and generally, really, a higher quality of life than those who struggle to find meaningful work. And I think that's what we would want for everybody and I think it's a real opportunity that we have as educators to contribute to that outcome for people with vision impairment. And whilst I know as a teacher that the work can be exhausting, and at times thankless, and expectations are very high, it is a great opportunity to be able to impart, I guess, useful information about the world to a student, but also to convey, look, you're a worthwhile person, you have so much to contribute, you don't need me to tell you that, I'm just going to teach you this course and then get out there and make your mark on the world.

So I guess, yeah, I'd just encourage people to think about access in those terms and hopefully that makes the extra effort involved a little bit more worthwhile.

- That's brilliant to end on that. Thank you so much, Jacqui, for a fantastic presentation and sorry we didn't get the time for the questions. We'll send out a link to the recording and the answers to the questions, we'll get Jacqui to answer those and we'll put it online.

Thank you, once again, Jacqui. Thank you, everybody, for participating, this is our last webinar for the year. It's been fantastic to bring you this one and many previous ones. We will be doing some planning in the next couple of weeks for 2020, can't believe I'm saying 2020. So, if anybody's got any ideas or any — if they've seen any papers or research or great work that has been done similar to what the Round Table have done, please let us know because we're certainly wanting to book in a number of webinars all throughout 2020.

So, thank you, once again, Jacqui, and thank you, everybody, for participating. It was great information and heaps to think about and to get right. So, yeah. Fantastic, have a great day, everybody.