Video use in education - are deaf students being left out?

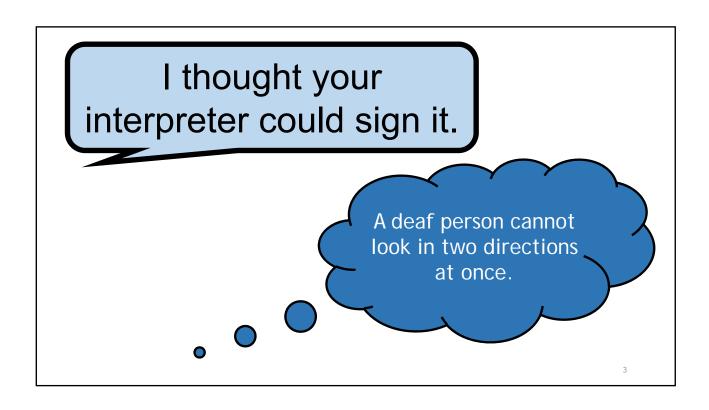
Natalya Dell CHESS Planning Group

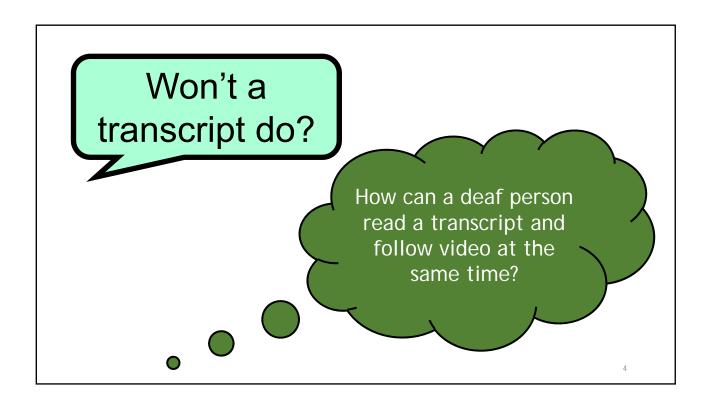


http://www.uclan.ac.uk/about_us/the_consortium_of_higher_
education_support_services_with_deaf_students.php

In a lecture - "Let's watch a video!"







Captions are too expensive.

A hidden expense is the admin time to coordinate addon captioning.

- Professional captions cost at least 85 pence per minute.
 - 1 hour a week of video over 30 teaching weeks could = £1500.
 - Disabled Students' Allowances (DSAs) won't fund this.
- Affordability based on institution's entire financial situation.

It is unlikely most education providers could claim captioning videos is unaffordable.

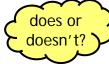
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Aren't captions automatic these days?

- Automatic Speech Recognition (ASR) captions are not very accurate.
 - Typically 60-70% which means 1 in 3 words are wrong.
 - ASR struggles with the words deaf people do not hear well so even 90% is not good enough.







Aren't captions automatic these days?

Other problems include:

- 1. No speaker identification for multiple or off-screen speakers.
- 2. Limited or no captioning of non-speech sounds.
- 3. Timing poor synchronisation and display issues.
- 4. Readability limited capitalisation and punctuation.
- Deaf people are more likely to have language or literacy difficulties.



I forgot...

- Institutions often agree to provide deaf students with captioned video as a reasonable adjustment.
- In practice institution staff often:
 - · Forget to provide captions at all.
 - Rely on unacceptable ASR captions.
- Lecture capture
 - Can create large volume of uncaptioned/ASR captioned video content.
 - What about deaf students?

Failure to caption videos (especially if agreed as an adjustment) puts institutions at risk of being sued.

Legal Question to Consider $\Delta \Delta$

- Education providers have an 'anticipatory duty' to reduce barriers as well as making case by case 'reasonable adjustments' for students who disclose a disability.
- Anticipatory = captioning all video.
- Reasonable Adjustment = case by case.







Is captioning video an 'anticipatory duty' or a 'reasonable adjustment'?

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Solutions?

Managing expectations

 Currently no good ways of creating quality captions which are not time, labour and/or resource intensive.



Value of video?



- Consider if video is useful for learning objectives.
 - If not worth captioning, is it worth using at all?



- Budget and explicitly seek funding for captioning.
 - Discourage captioning budgets being re-allocated when costs need to be cut.



- Encourage institution to only use captioned videos.
 - Use your buying power.
 - Accessible procurement is good Equality Act practice!



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Do all deaf students need captions?



- Can some students manage without captions?
- Is selective captioning of videos an option?
- Especially for videos watched at home?



Some deaf students may not want to "make a fuss" Ensure students know their legal rights.

In-house Captioning



 Many institutions have units to handle accessible formats. Could these do captioning?



- Flexible employment of students?
- Encourage academic staff to caption their own short videos.



- Online and free/cheap solutions are available.
- Creative solutions like crowdsourcing captioning?

ASR captions can provide a good starting point.



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Summary?

- Many deaf students will need captions for video materials.
 - Institutions are at legal risk if they fail to provide them.
- Hopefully ASR captions will keep improving:
 - Tools for tidying them up should get better.
- There's a variety of captioning options available:
 - Professional captions.
 - In-House captioning.
 - Tidying up ASR captions.
 - · Some cost money others cost time and labour.

Anticipatory duty or reasonable adjustment?

- Education content increasingly "digital"
- Web Content Accessibility Guidelines (WCAG).
 - Captioning of videos is included at the most basic beginner (A) level.
 - WCAG drives North American post-16 education standards.



- I would expect UK education providers to be aiming for intermediate (AA) or Advanced (AAA) levels.
- I believe captioning should be an anticipatory duty.
 - But a legal case would be needed to test this further in UK law.

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And to finish... A captioned Dean.



Further ideas from after presentation

- Students on University "audio visual translation" (subtitling) courses may be hirable at affordable rates and been to get practice.
 - (Thank you Zoe Moors for this idea)
- Seek out people with audio transcription training and use something like YouTube to tweak the timings.
 - (Thank you to @Zaranosaur for this idea)