

Subtitling Live Events Through Respeaking: Increasing Accessibility For All

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What is respeaking?

The production of live subtitles by means of **speech recognition**.



It's used to subtitle programmes as they are broadcast.

Usually, there is no script or only a partial script.

What happens during respeaking?



The aural content of the programme is respoken. The content may be edited slightly and punctuation must be voiced. Sound labels and other content may also be spoken.

Next, the speech recognition software processes the input.



The recognised utterances pass through the subtitling software. The respeaker is able to make further, slight, adjustments to the subtitles.

Respeaking Clip

Video available at: <https://www.youtube.com/watch?v=u2K9-JPIPjg>

When did live subtitling begin?

1970s

**Pre-recorded
SDH subtitles**

1980s

**QWERTY
keyboards
used for
headlines**

1990s

**Stenotypers
subtitled
news**

2000s

**Speech
recognition
testing
began**

2010s

**Respeaking
widely
used**

Key issues with live subtitling:

- Delay between the spoken word and subtitles appearing on screen
- Accuracy
- Speed of the subtitles

My Research

1) **Respeaking**: how can it be used effectively to subtitle live events?

Q&A, conferences, discussions, music events, walking tours...

2) **Increasing accessibility** - which other audience members can benefit from this access?

- Equality Act 2010 (29.7)

“A duty to make **reasonable adjustments.**”



Accessibility

Creating access which enables the audience to “understand and appreciate” the event

Oxford Dictionaries Online

Universal Design Approach

- Integrating planned access as early as possible
- Considering all end-users early on in the process

Udo & Fels, 2009



<https://britishrockmelody.wordpress.com/2011/09/22/top-5-livebackstage-videos/>

Methods

Focus group approach:

- Giving a strong voice to those who provide and benefit from the access provided
- Interviews and surveys

End-users:

- Deaf and hard of hearing audience
- Speakers of English as an additional language (EAL)

Access providers:

- Venues
- Respeakers

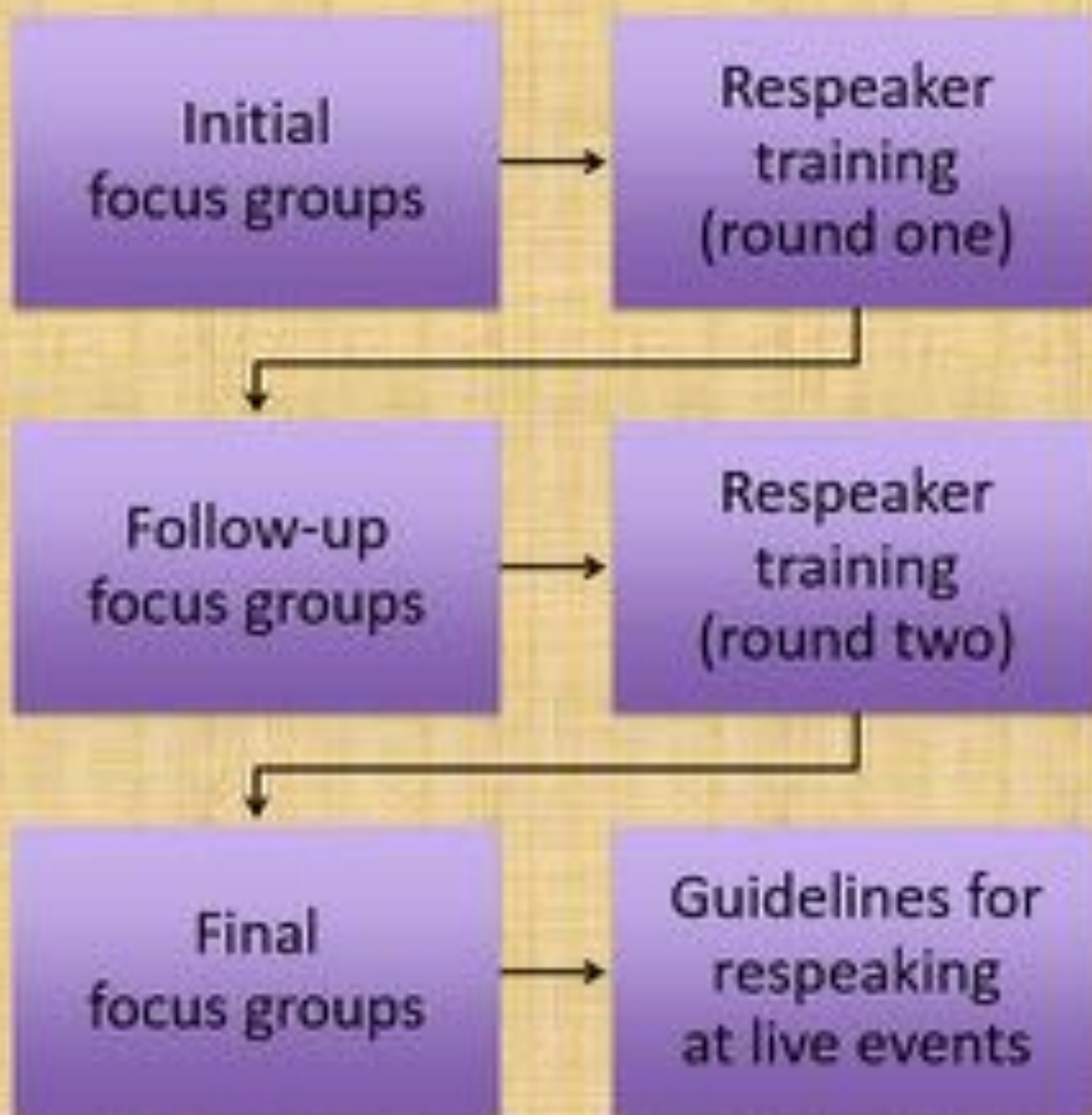
User Needs





Action research:

- Cycles of action and reflection > tried and tested model
- Replicable guidelines for training respeakers and providing access at events



Findings: Key Priorities for Each Group

Deaf and Hard of Hearing

- Little or no delay
- Easy-to-read font
- Accurate terminology / Error-free
- Little/no editing of the content
- No obstruction of the picture / stage
- Indications about audio

EAL Speakers

- No obstruction of the visual image
- Key words and information included
- Well-timed subtitles – little or no delay

Venues

- Easy-to-implement access
- Viable cost
- Knowing everything will run smoothly
- Good visitor experience
- In line with user preferences
- Support with promoting the event

Respeakers



- Eager to try respeaking in a new setting
- Eager to find out more about the audience they subtitle for

Conclusion

Greater awareness and understanding of

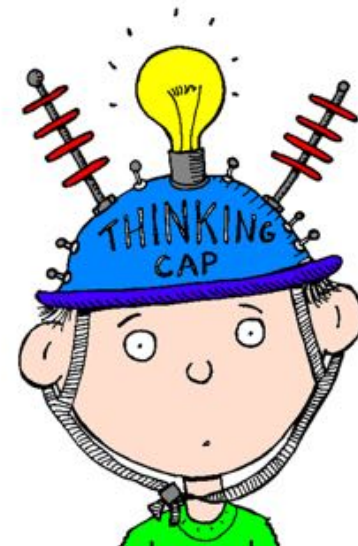
- live subtitling
- need for access

Leading to

- Guidelines for respeaking at live events
- More accessible live events

Aiming Higher - Respeaking in Education

- Classroom and lecture theatre
- Special events
- Trips and excursions





**Questions, comments,
interested in getting involved?**

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Filmography

How subtitles are made, See Hear, BBC Two, uploaded 9th February 2011, available at:

<https://www.youtube.com/watch?v=u2K9-JPIPjg> (Accessed 13.6.17)

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