DEAF AND HARD OF HEARING ASSISTIVE TECHNOLOGY IN THE CLASSROOM

DEFINING DEAFNESS

- Deaf Auslan users

- Hard of hearing – Hearing aid users, cochlear implants

- Combination of communication – Auslan and speech

- Preference – Some prefer Auslan, some captioning, some sound

- No one is the same, all will have their own preferences

WHY TECHNOLOGY – WHAT WOULD I KNOW?

- Deaf since age 8, experienced university and education at at time when NO SUPPORT was funded – I get what it means to have NO ACCESS

- Worked in a regional area for ten years – The cost is triple, even quadruple what it is in the burbs – Needed to find cost effective ways.

- Internet and mobile technology a boon – BUT unless you know your stuff can be frustrating.

- REMEMBER ACCESS IS COMULSORY NOT AN OPTION

THE CLASSROOM

- Is not fixed – Lecture, breakouts, workshops, discussion oriented etc etc

- Participant inclusion enhanced from having access to instruction and PEER learning

- Demands flexibility and innovation to ensure access.

Auslan VIA VRI

- VRI – Video relay interpreting

- Different Platforms – SKYPE, Gotomeeting etc

- Delivered to a computer or mobile device.

- Needs Internet – fast and reliable

- Obviously a good webcam

- Good and reliable audio feed.

VRI Scope

- Fixed computer/laptop
- Mobile device
- One on one or groups
- More than one deaf person – Data projector to screen
- Straight lecture, or group discussions using mobile devices
- Can be used outside with 4G but quality variable.
- Drop outs CAN happen .. We need NBN!!!!

NDCO
National Disability Coordination Officer Program
An Australian Government Initiative

DEAKIN
UNIVERSITY AUSTRALIA
Worldly

Live Remote Captioning - LRC

- Captioning can have an onsite stenographer or be delivered remotely

- Mostly through Skype and Gotomeeting

- Data Projector to screen

- Needs good and reliable internet

- Needs good and reliable Audio

LRC Captioning Scope

- Fixed computer

- One on one or groups

- More than one deaf person – Data projector to screen

- Straight lecture, or group discussions using mobile devices

- Can be used outside with 4G but quality variable.

- Drop outs CAN happen .. We need NBN!!!!

Preparation is your key

- TEST TEST AND TEST AGAIN
- Check Internet
- Check Audio –
- Have a trial run
- Give captioner and interpreter prep material
- Source a separate screen
- Look at how the session will run – Straight lecture, break outs etc etc … Work out logistics.
- Technology will let you down sometimes – have a plan B (easier said than done – But try!)

The Sound System

- Effectiveness is dependent on good audio and planning

- Modern teaching facilities often have great soundfield systems – These help VRI and LRC immensely – Check what's available

- If not look at what is needed – Microphones etc

- Set group rules – tendency is for everyone to talk at once … Really this helps no one.

- When no sound system is available – THERE IS A POSSIBLE SOLUTION!

THE ROGER PEN

- What it is –
- Setting the scene
- What is needed
- How it can help
- Contact Word of Mouth for advise –

http://wom.com.au/

Image shows example of Roger Pen technology

Assistive Listening Devices (ALD's)

- Some people like to listen while receiving captioning or Auslan interpreting.

- Some just like to listen

FM Systems

• Basic FM System – Speaker has microphone listener the receiver

• Provides an effective amplification and cuts out background noise.

•   Limited in group situations

Bluetooth Systems

- Essentially still an FM system but has Bluetooth?

- Bluetooth means external microphones can give access to group situations

- Includes roger Pens and Inspiro

- Not always user friendly, take time to learn

- Depending on how many external microphones are available takes some coordination

T LOOP Systems

- Requires hearing loop installation
- Requires T-switch on hearing aid – Becoming less common/obsolete
- Generally can only hear presenter unless there are roving microphones
- Bluetooth and soundfield is making such systems almost obsolete
- Maintenance is troublesome and expensive
- Often not turned on or not working

Soundfield Amplification

- Ensures volume and clarity of speaker is the same throughout the room.
- Helps some people with a hearing loss and also hearing people
- Useful when a room has seats with own individual microphone
- Volume is consistent may not be as useful for people with more profound hearing losses
- No special adjustments required
- Helps with VRI and Live remote Captioning

Key Pointers

- Each person is different
- Some may like a combination of solutions
- Good reliable internet and audio are crucial for VRI and LRC success
- Explore instruction method in detail to identify areas that need targeting ..Eg group work, activities, going outside
- You may not solve every communication problem but you can improve inclusion and access
- Cannot emphasise enough the need to trial and test beforehand
- ALD are good – But usefulness varies depending on hearing loss
- 4G can work – But only as a last resort (Eg field work)