Inclusion and Assistive Technology for Dyslexic Students - a UK Perspective

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Inclusion – buzzword or reality

Graduated Approach - Three Wave Model - England

Wave 3
Additional highly personalised interventions

Wave 2
Additional interventions enabling students to work at age/skill related expectations or above

Wave 1
Inclusive quality first teaching for all

Talking for Writing - Primary and Secondary Schools

Oral storytelling before writing

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Imitation – Creating a text map and using talk to internalise text

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Modelling and Analysing – sharing and exploring any writing

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Innovation – changing, adapting and editing text

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Independent Application – Copying ideas and text, possibly using a different topic/title

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Review and present

Using technology…

1. Students are given or create a story framework using images (e.g. in PowerPoint) which is imported into Audio Notetaker.

2. They then record their ideas about the pictures and the story alongside the images. They could be prompted by an adult.

3. They re-listen to the audio and use the colour marker to identify different parts of the audio (e.g. marking out descriptions, action points, speech etc). They can edit, reorder and add to the audio until they feel they have the basis of the story.

4. Then they can either attempt to start writing the story from the audio or send it directly to Dragon NaturallySpeaking for transcribing (in this case they may have added in the recording of punctuation in the editing stage).

• With thanks to Abi James and Sonocent Audio Notetaker Case Study - https://www.microlinkpc.com/wp-content/uploads/ulceby-web-sp.pdf

Waringstown Primary School, Northern Ireland

Examples of Inclusion with Read and Write from TextHelp

CALL Scotland ask ...

- **Can you be a...**
  - **Successful learner**
    if you can't read learning materials and examination papers?
  - **Confident individual**
    if you depend on others to read or write for you in exams?
  - **Responsible citizen**
    if you don't have access to information?
  - **An effective contributor**
    if you can't speak, write or communicate independently?

- **Digital papers can help pupils become...**
  - **more successful learners**
    if you can read learning materials when they want, where they want;
  - **more confident individuals**
    if you don't have to rely on a reader or scribe;
  - **more responsible citizens**
    if you are learning to be independent and self-reliant;
  - **more effective contributors**
    if you have learned the ways and means to contribute yourself.

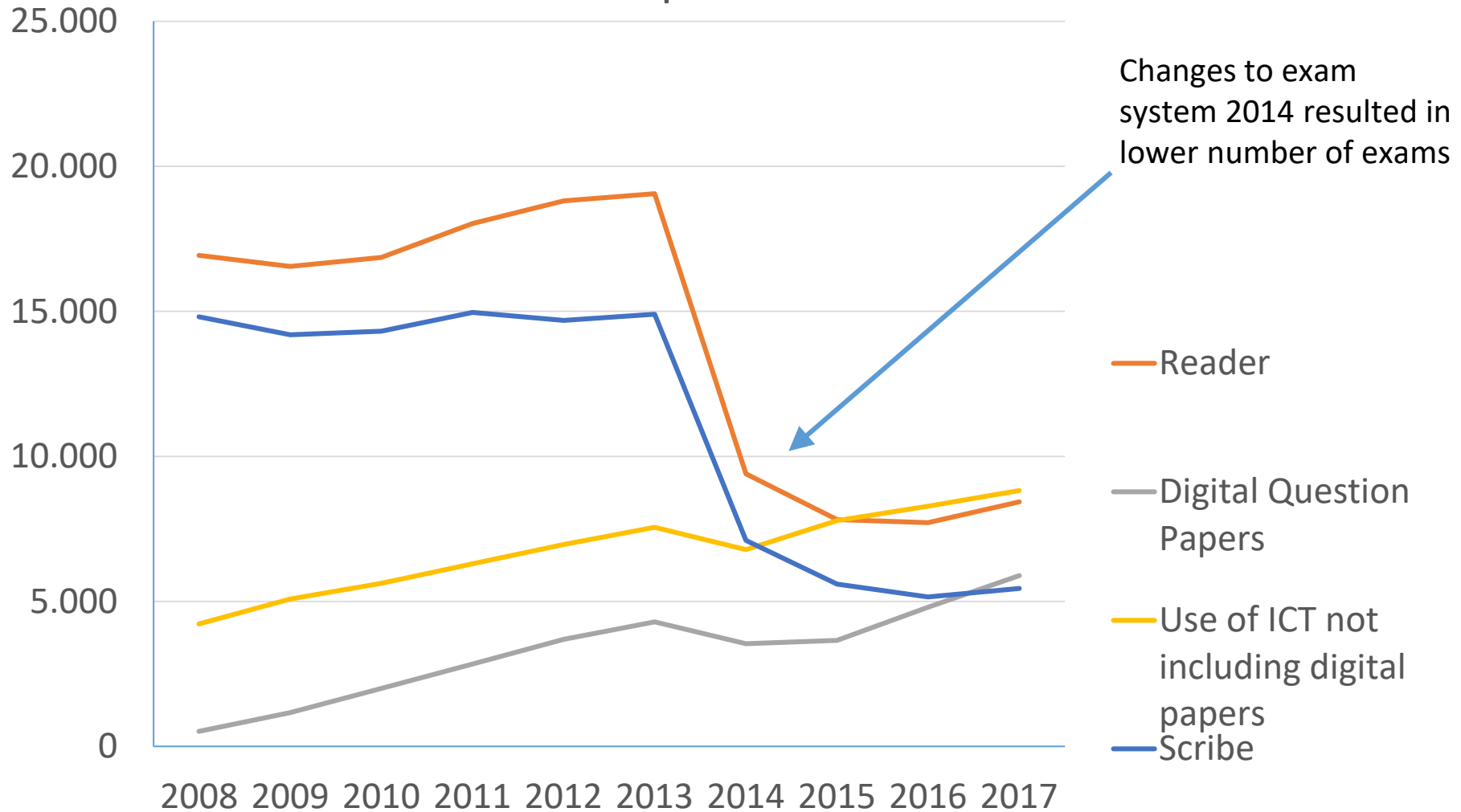http://www.adapteddigitalexams.org.uk/common-assets/cm-files/files/digital-examinations-at-kinross.mp4
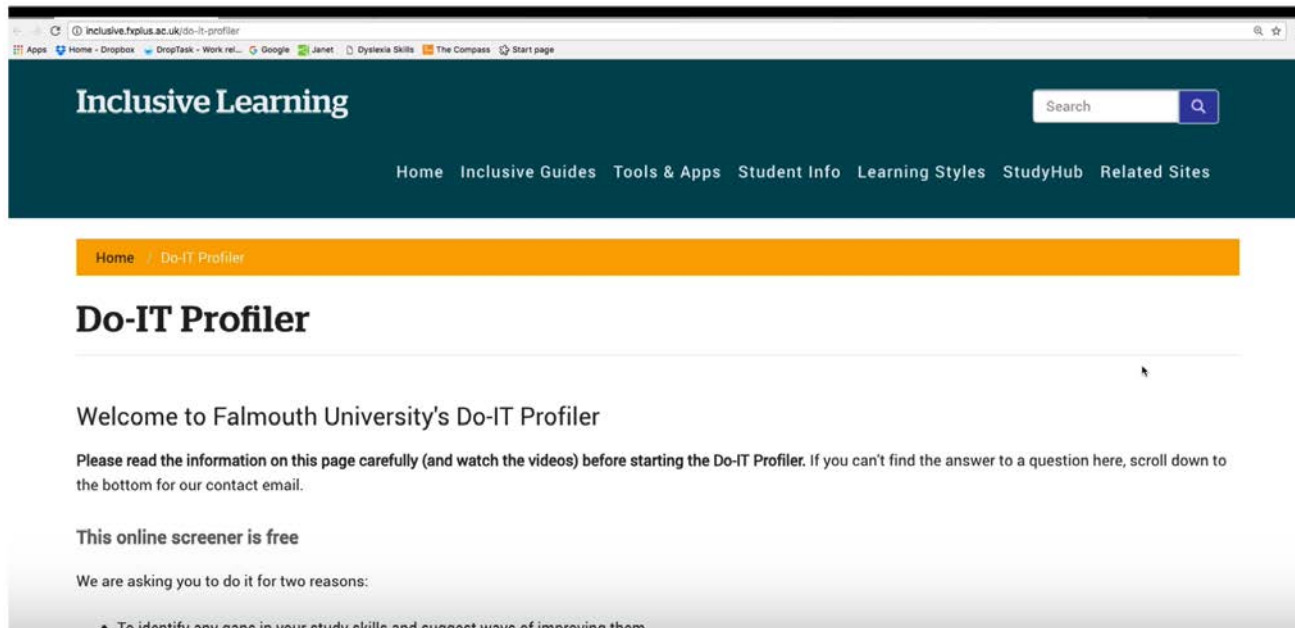
Digital Examinations - Kinross

Scottish Experience: Technology is replacing readers and scribes

SQA AA Requests 2008 - 2017

Changes to exam system 2014 resulted in lower number of exams

— Reader

— Digital Question Papers

— Use of ICT not including digital papers

— Scribe

25.000

20.000

15.000

10.000

5.000

0

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

[Do-IT Profiler](#) - Wales

- Personal Profilers, Education, Into Employment, Employment and Prison. [Getting started with the Do-IT Profiler](#)

Digital Accessibility & Assistive Technology

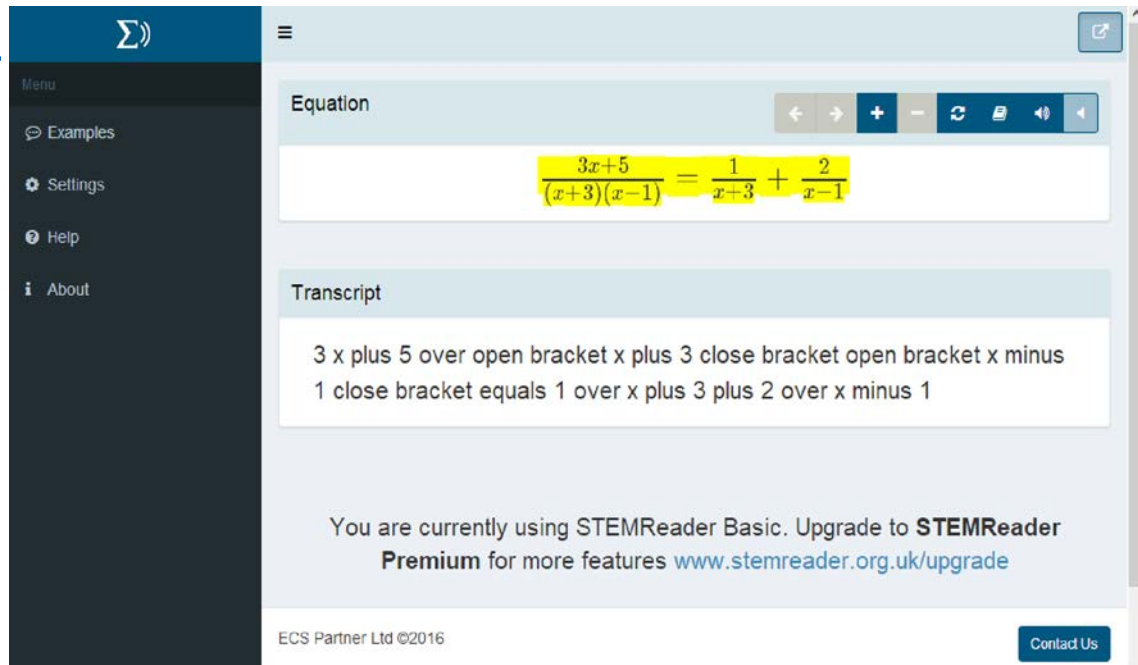| Digital Accessibility | ⟷ | Assistive Technology |

Is Assistive Technology more inclusive now?

Every major operating system has:

- Text to speech built in
- Free or low cost speech apps available
- Ability to alter fonts and colours

[Microsoft Office Learning tools Immersive Reader](#)
[Read & Write plug-in for Google Docs](#)
[StemReader for Windows](#)
[Select to speak on mobile phones](#)

But is Assistive Technology being used?

20% of candidates at GCSE/A-level qualifying for a reader are using text to speech

83% of students receiving text to speech through DSA found it useful (Draffan et al, 2013).

Not just a reading/dyslexia problem...

Studies have shown between 30% and 70% of users fail to make use or "adopt" their assistive technology

Barriers and Facilitators to Uptake of Assistive Technologies

PROVIDE TIMELY ACCESS

IMPROVE AWARENESS

IMPROVE FUNCTIONALITY & DESIGN

INVOLVE USERS IN DEVELEOPMENT & USE

REDUCE STIGMA

PROVIDE TECHNICAL SUPPORT

IMPROVE COMPETENCY & CONFIDENCE

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ENHANCED OUTCOMES?

SMOOTHER TRANSITION BETWEEN PHASES OF LIFE?

BETTER USE OF RESOURCES?

BETTER EXPERIENCE FOR USERS & PROVIDERS?

Draffan et al (2015) Barriers and Facilitators to Uptake of Assistive Technologies: Summary of a Literature Exploration.

Can we influence technology adoption?

Increase ease of use	**Perceived benefits**
Organisation • Can I get the software installed if it is not built in? Technical • Is the interface easy to use? • Will I need technical support all the time? Personal • Can I learn to use this tool?	Organisation • Is this going to be worth the money I spend on it if it is not built in? Technical • Is this going to bring the benefits I need? • Will it support the tasks I need to undertake? Personal • Will I feel comfortable using this?

Raising Awareness of Digital Accessibility and Assistive Technologies

- Embed digital accessibility as part of the continual professional development for all academic / teaching roles

- Make content available under Creative Commons licences for repurposing and provide as Open Educational Resources
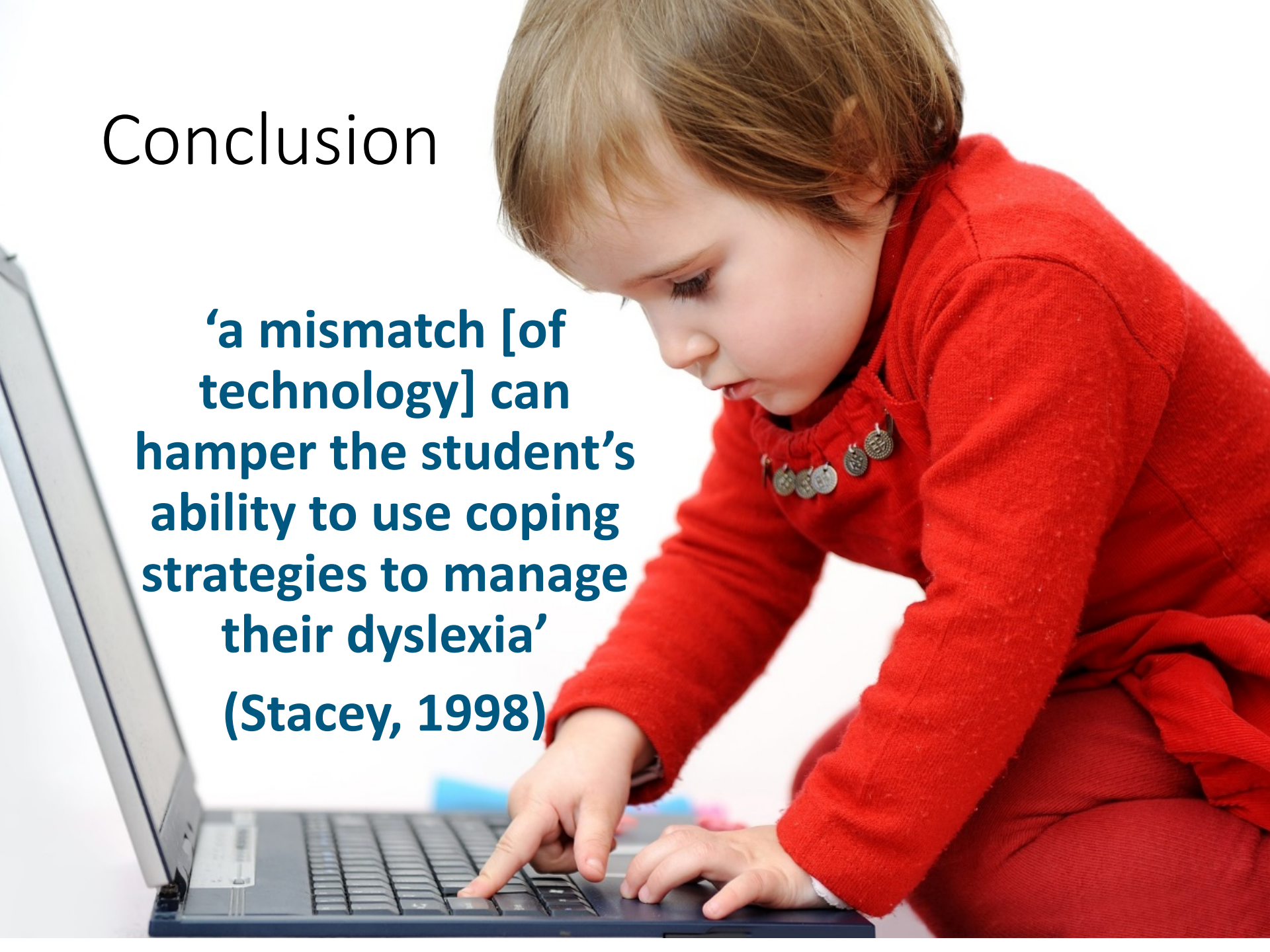
- MOOCs – free online courses

Examples

https://www.futurelearn.com/courses/digital-accessibility

https://slidewiki.org/

Conclusion

'a mismatch [of technology] can hamper the student's ability to use coping strategies to manage their dyslexia'

(Stacey, 1998)

Thank You - Mange tak

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