



Mathematics Content Workshop

Accessibility OU perspective

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How many students?



- About 10,500 disabled students are currently registered
- This is roughly 5.7% of the OU student population
- 1100 to 1200 at any one time have a visual impairment
- This is 0.6% of the OU student population
- Of these students, perhaps half will be screen reader users (but we can't be sure)

How many students – M courses?



- Small numbers have severe visual impairment
 - But they have much to gain from accessibility
- Even fewer doing mathematics/science
- Only 0.06% of OU mathematics students have a visual impairment (see References)
- This could be because
 - Visually impaired people don't study mathematics
 - Our mathematics courses are not accessible
 - ...?

Small numbers – but



- For any courses with symbolic notation
 - There is a big cost in dealing with complaints about accessibility of materials, PDFs particularly
 - Human expertise is needed to read materials
- Complaints about notation are mostly from visually impaired students
 - But also other assistive technology users (magnification, voice-control)

OU students need to



- Read mathematics online
- Engage with mathematical thinking
- Manipulate mathematics – working out, solving, doing
- Write mathematics – for assessment
- ...?

What can/should the OU do?



- Not sure what to do about **mathematics** courses
 - Is the OU a practical option?
- Focus on courses with small amounts of maths
 - Many subjects across OU now include numeracy
- Options for reading
 - Human reading – limited number of courses
 - moving to DAISY talking books
 - Tag all images of expressions with a text equivalent/description – VLE/PDF
 - Use MathML with MathPlayer plugin – VLE only
 - Provide Braille – expensive and slow to produce

Useful websites and references



- Making Your Teaching Inclusive
<http://www.open.ac.uk/inclusiveteaching/>
- Disabled Student Services – What we can do
<http://www.open.ac.uk/disability/what-we-can-do.php>
- Accessibility Primer
<http://kn.open.ac.uk/public/index.cfm?wpid=2488>
- OU Screen Readers and mathematics study
<http://kn.open.ac.uk/public/document.cfm?documentid=11126>
- JISC TechDis – support for education sector:
<http://www.techdis.ac.uk/>
- List of online videos of people using assistive technologies:
<http://kn.open.ac.uk/workspace.cfm?wpid=7807>
- Math for blind conference 2008:
<http://river-valley.tv/category/conferences/typesetting/math-blind-2008/>

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