**You CAN Create Accessible Math for Students With Print Disabilities**

Susan Kelmer

Alternate Format Production Program Manager

Disability Services, University of Colorado Boulder

[Susan.Kelmer@colorado.edu](mailto:Susan.Kelmer@colorado.edu), 303/735-4836

## Presentation Outline:

1. Slide show
2. Acquisition/Initial File Conversion
   1. acquire PDF from publisher
   2. Convert to text using Omnipage (right-click file, Omnipage, convert to .txt)
   3. open PDF
   4. Open .txt file with Microsoft Word
3. Text editing
   1. apply text formatting as needed (apply normal template, set headings, fix lists and tables)
4. Math editing
   1. go to equation that needs to be fixed, added, or edited. Delete equation.
   2. Go to MathType tab in Word
   3. choose inline
   4. type/enter in equation in the MathType window
   5. have students practice this several times
5. Math output
   1. if student is using NVDA, simply save the word file.
   2. if student is not visually impaired and using CAR, simply save the word file
   3. If the student is using Jaws and browser, output to MathML
      1. Save the word file
      2. on the MathType tab, select “Publish to Mathpage.”
      3. in title box, enter name of file
      4. in file-name section, click browse.
      5. Create new folder, named the same as the file name
      6. Open the new folder
      7. Click on save (the file window will close)
      8. Choose “MathML using: radio button
      9. In drop-down box choose html+mathjax
      10. Target Browser checkbox should be “all browsers”
      11. Click ok.
   4. To send MathML files to student:
      1. In the folder where you saved the files, should be the new folder you created for the file. Double-click to open it.
      2. Select both the .htm file and the folder with all of the equations in it. Right click and “Send to: Compressed file.” This only takes a few seconds. Hit enter to accept the name when done.
      3. Send the zipped file to the student via email or other mean
   5. You can output to MathML using CAR (Central Access Reader)
      1. Open CAR
      2. Drag file into CAR
      3. Click three lines (upper right), then File, then to HTML
      4. This works and creates only one file, but currently, CAR is not being updated or supported and may go away at some point.
6. Math Output to Braille
   1. Open Duxbury
   2. Open Word file with MathType
   3. Choose Bana with Nemeth Template
   4. Translate (Ctrl + H)
   5. Emboss to hard copy, or save as Braille-Ready File (BRF)