Math and Chemistry Considerations for Converting to Online Teaching

1. **Use the Equation Editors!** (Scroll down for screenshots) There is one in D2L in the “file/html” editor (you may have to click on the “show all components” button). The Equation Editors in Office products are found in the “Insert” menu with the “Symbols” tool. This keeps your work future proof and interoperable, as the Equation Editor allows for correct interpretation of the equation in other programs that support MathML. Equations written in the Equation Editor can also be read out loud, which is helpful to your students and is proper accessibility practice.

2. **Create single column materials.** Some of your students will be using their phones to view your materials, and a single column format works best. Students might miss content if they have to scroll to the side to find it, and fishing around for content “somewhere” on their screen can distract from your students’ learning.

3. **Avoid tables!** If you already have a great deal of content in tables (it’s not uncommon for instructors to use tables for tests, homework problems, and other things), and you cannot convert everything quickly enough, LET YOUR STUDENTS KNOW THAT YOU USE TABLES AND THEY NEED TO SCROLL TO THE FAR, RIGHT EDGE OF THE SCREEN TO SEE ALL YOUR CONTENT. Tables read from left to right, top to bottom. Please don’t use tables. I know they keep things from moving around, but they are terrible on-line and a problem for accessibility in any setting.

4. **D2L supports LaTeX by converting it to MathML in the equation editor.**

   There are two possible modes for LaTeX entry: text mode and math mode. MathJax supports math mode only. If you add LaTeX using the Equation Editor, allow for the following differences in math mode:
   - Most spaces and line breaks are not recognized and have to be specified with special commands such as \quad.
   - Empty lines are ignored, only one paragraph per formula.
   - Each letter is considered to be the name of a variable and will be typeset as such. If you want normal text within a formula (normal upright font and normal spacing) then you have to enter the text using dedicated commands.

5. **Only MS Word in the MS Office suite of tools supports LaTeX.**

Scroll down for screenshots of where to find the Equation Editors in D2L and MS Word.

**Helpful links:**

- Video: Write an Equation or Formula in MS Word (51s)
- Article: The Equation Editor and Latex in MS Word
- Video: Improve your MS Documents with the Accessibility Checker (1min 4s)
- Video: D2L Equation Editor (4min 9s)
- Video: D2L Accessibility Checker (4min 19s)
- PDF: Accessible Math in D2L
The Equation Editor in MS Word

You will find it in the “Insert Ribbon”. You can use a preset or create a new equation.

The Equation Editor in D2L

The Equation Editor is built-in to the HTML Editor (this is the window you use when you create or edit web page content). You may need to click the “Show all Components” button, the one on the far right with 3 dots, to reveal the equation editor.
The Equation Editor opens in its own pop up dialogue box. Create your equation.

You can also enter MathML or LaTeX code directly into the Equation Editor. Click the arrow next to the Equation Editor Symbol, and you can select an entry mode for your math code.

In the Equation Editor, click the HTML Source Editor button to toggle to the Source Code.
LaTeX code is accepted, but D2L just translates it into MathML. If you add LaTeX using the Equation Editor, allow for the following differences in math mode:

- Most spaces and line breaks are not recognized, and have to be specified with special commands such as \quad.
- Empty lines are ignored, only one paragraph per formula.
- Each letter is considered to be the name of a variable and will be typeset as such. If you want normal text within a formula (normal upright font and normal spacing) then you have to enter the text using dedicated commands.

SIUC Accessibility website

CTE, SIUC December 2020