Taking steps toward more usable and accessible math online

By **Mary.M.343**

Last Updated: Apr 11, 2023

This topic contains information previously published by Andy Freed of Portland Community College in 2012. It has been updated and combined with other sources.

D2L has come a long way since math equations relied on with a Java-based equation editor – those applets presented difficulties for overall usability, and they were inaccessible to screen readers. MathML (Mathematical Markup Language) and MathJax are now the standard. MathML is a vast improvement over Java applets as they can be edited, stored inline (within the HTML), and interpreted by some screen readers. MathJax is a JavaScript library provided as part of Brightspace that you can embed in your HTML page. Within the Brightspace Editor tool, the Graphical Equation editor is a Javascript-based application that enables users to add graphical, chemical, MathML and LaTeX equations to their content. The editor provides the necessary elements to easily construct equations in all tools that support the Brightspace HTML editor, including Discussions, Quizzes, and Content.

Reading Equations outside of Forms Mode with assistive technology

If you complete a quiz, survey, or self-assessment, and answer choices contain equations made with an equation editor, you might get the best experience with an assistive technology device if you do not read the equation using forms mode. Out of forms mode MathPlayer can render the equation more comprehensibly. If you read equations within forms mode, your assistive technology might read out MathML code instead of the equation.