

## JEI Equation Formatting Guide

This guide will walk you through best practices for formatting equations for *JEI* manuscripts that ensures that equations and any in-text variables are carried over correctly to your final, published PDF.

At *JEI* the correct formatting for equations/variables is dependent on **where** they appear in the written manuscript. Please see the pictures below to understand the two different scenarios mentioned in this guide.

To compute the “pitchTypeEntropy,” which described the distribution of the type of pitch thrown for each pitcher, the Shannon Information Entropy value,  $E(x)$ , was used on the five one-hot encoded “pitch type” features to estimate a value using *the following*,

$$E(x) = -\sum_{i=1}^n P(x_i) * \log_2(P(x_i)) \quad (\text{Equation 3})$$

where  $P(x_i)$  is the probability of an event  $x_i$  occurring.

A higher  $E(x)$  value implied that the pitcher threw a larger variety of pitches than a small  $E(x)$  value, which implied that the pitcher threw fewer pitches.

**Figure 1. Example of equation placed between paragraphs of text.**

software (33). Flesch suggested a correspondence between reading ease scores and grade levels (13). Using these recommended grade levels as a proxy for complexity, we used the equation from the exponential model,  $Y = 33.2 \times e^{-0.0204W}$  to convert the reading scores ( $W$ ) to complexity scores ( $Y$ ).

**Figure 2. Example of equation located in-line.**

**For equations and variables between paragraphs (Figure 1):**

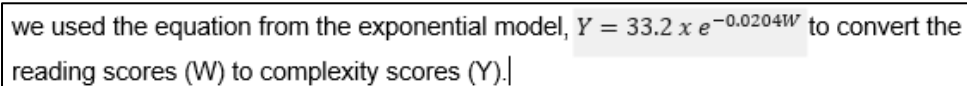
- You **MAY** use Word’s equation formatting tool (**Insert > Equation**)
  - Please ensure that there are no blank boxes in the equations (see below)
$$E(x) = -\sum_{i=1}^n P(x_i) * \log_2(P(x_i))$$
  - Proofing editors will place equations as images instead of text and those boxes will show up in the final PDF!
- If you have more than one equation, please label each equation numerically
  - To avoid confusion with in-text citations please use one of the following styles:
    - [Eqn 1] or (Eqn 1)
    - [Equation 1] or (Equation 1)
  - Please place the equation number to the right of the equation (see **Figure 1**)
    - Proofing editors will finalize spacing of this, so do not worry about it being at the edge of the right margin or the equation centered with the paragraphs.

### For equations and variables that appear in-line (Figure 2):

- You may **NOT** use Word's equation formatting
  - This does not carry over to our proofing software and creates major problems with ensuring everything is present and formatted correctly
- Any special symbols *must* be inserted using **Insert > Symbol**
  - You may italicize and/or use super- and subscripts as needed

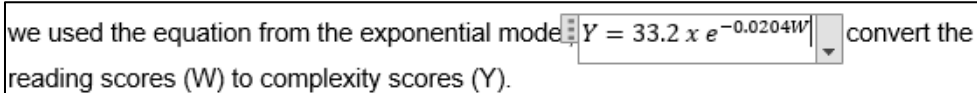
### How to know if you've used Word's equation formatting:

If you place your cursor over the equation or variable it should become highlighted in grey (**Figure 3**) or if you click on the text and a box appears around it (**Figure 4**), you have used Word's equation formatting.



we used the equation from the exponential model,  $Y = 33.2 x e^{-0.0204W}$  to convert the reading scores (W) to complexity scores (Y).

**Figure 3. Example of Word's equation formatting in-line with grey highlight.**



we used the equation from the exponential model,  $Y = 33.2 x e^{-0.0204W}$  convert the reading scores (W) to complexity scores (Y).

**Figure 4. Example of Word's equation formatting in-line with box.**

### What to do if your equations are not showing up in the Editorial Manager built PDF?

This is fairly common as the PDF builder is unable to “read” Word's equation formatting (the same issue we encounter when making your final PDF).

If you are submitting your manuscript for the **first time/peer review**, it is easiest to put all your equations between paragraphs in as pictures to ensure they show up and the reviewers are able to see them.

However, when your manuscript **reaches copy editing**, we do ask that you do not put your equations in as pictures. This allows us to more easily work on overall formatting of the manuscript and will allow our proofing editors to make sure they can get high quality images themselves to use in your published PDF. Unfortunately, if they took an image of your image the quality would decrease and make it harder for them to match text sizing and alignment.

**NOTE:** *JEI* does not accept manuscripts formatted in LaTeX, so you must submit manuscripts on our provided Word template (see [Author Resources](#)).