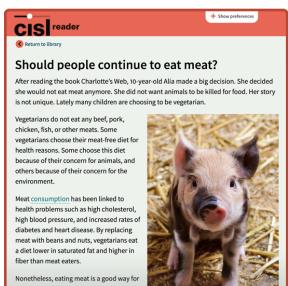
### **Technology Feature Brief**

# Adjustable Letter Spacing

The option to adjust spacing between letters and words is an option that makes documents accessible for all. Do you prefer reading text with the letters spaced more closely together or further apart? Flexible digital environments such as CAST's Clusive learning environment give users the choice to adjust the amount of spacing between letters, allowing readers to explore which setting feels like the best fit for them. Readers with dyslexia in particular may want to use this feature, as some studies have found that they tend to benefit from increased letter spacing.

In the example, the same passage is shown with different letter spacing options selected.







#### Research

Increased letter spacing may improve reading outcomes among children, adolescents, and adults with dyslexia.

A study of 74 children with dyslexia, ages 8 to 14, found that extra-large letter and line spacing improves text reading speed and accuracy.

Zorzi and colleagues, 2012

- A study of 61 sixth-grade children, 29 of whom had dyslexia, found that students with dyslexia needed larger letter spacing to identify letters than do students without dyslexia. Martelli, Filippo, Spinelli, & Zoccolotti, 2009
- A study of 22 individuals with dyslexia, ages 13 to 37, found that the narrower the spacing between characters, the longer participants took to read a passage. Participants' preferences were split between standard character spacing and more separated characters.

Rello, Kanvinde, & Baeza-Yates, 2012

#### **Related Guidelines**

Adjustable letter spacing is a feature that is referenced in existing guidelines, frameworks, and best practices, including the Web Content Accessibility Guidelines (WCAG) and the Universal Design for Learning (UDL) Guidelines. Connections include:

- UDL Guidelines Checkpoint 1.1: Offer ways of customizing the display of information
- WCAG: To meet WCAG level AA, you need to design your content to be still usable if the user configures their system to increase the letter spacing up to certain limits (WCAG 2.1 AA Criterion 1.4.12).

## **Adjustable Letter Spacing Examples**

Want to find out what other projects are doing with adjustable letter spacing? Visit the Raising the Floor website, where they have compiled resources on adjusting text font, including size and spacing.







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