

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.

A screenshot of the CIS reader interface. The header is red with the text "CIS reader" and a "Show preferences" button. Below the header is a "Return to library" button. The main content area has the title "Should people continue to eat meat?" and a paragraph of text. To the right of the text is a photograph of a piglet. The text is spaced normally.

Should people continue to eat meat?

After reading the book *Charlotte's Web*, 10-year-old Alia made a big decision. She decided she would not eat meat anymore. She did not want animals to be killed for food. Her story is not unique. Lately many children are choosing to be vegetarian.

Vegetarians do not eat any beef, pork, chicken, fish, or other meats. Some vegetarians choose their meat-free diet for health reasons. Some choose this diet because of their concern for animals, and others because of their concern for the environment.

Meat consumption has been linked to health problems such as high cholesterol, high blood pressure, and increased rates of diabetes and heart disease. By replacing meat with beans and nuts, vegetarians eat a diet lower in saturated fat and higher in fiber than meat eaters.

Nonetheless, eating meat is a good way for

A screenshot of the CIS reader interface, identical to the one on the left but with increased letter spacing. The text is more spread out, making it easier to read.

Should people continue to eat meat?

After reading the book *Charlotte's Web*, 10-year-old Alia made a big decision. She decided she would not eat meat anymore. She did not want animals to be killed for food. Her story is not unique. Lately many children are choosing to be vegetarian.

Vegetarians do not eat any beef, pork, chicken, fish, or other meats. Some vegetarians choose their meat-free diet for health reasons. Some choose this diet because of their concern for animals, and others because of their concern for the environment.

Meat consumption has been linked to health problems such as high cholesterol, high blood pressure, and

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](#).



This content was developed under a grant from the US Department of Education, #H327A170002. However, the contents do not necessarily represent the policy of the US Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Celia Rosenquist.



Except where otherwise noted, CISL content is licensed under a Creative Commons Attribution 4.0 International License.