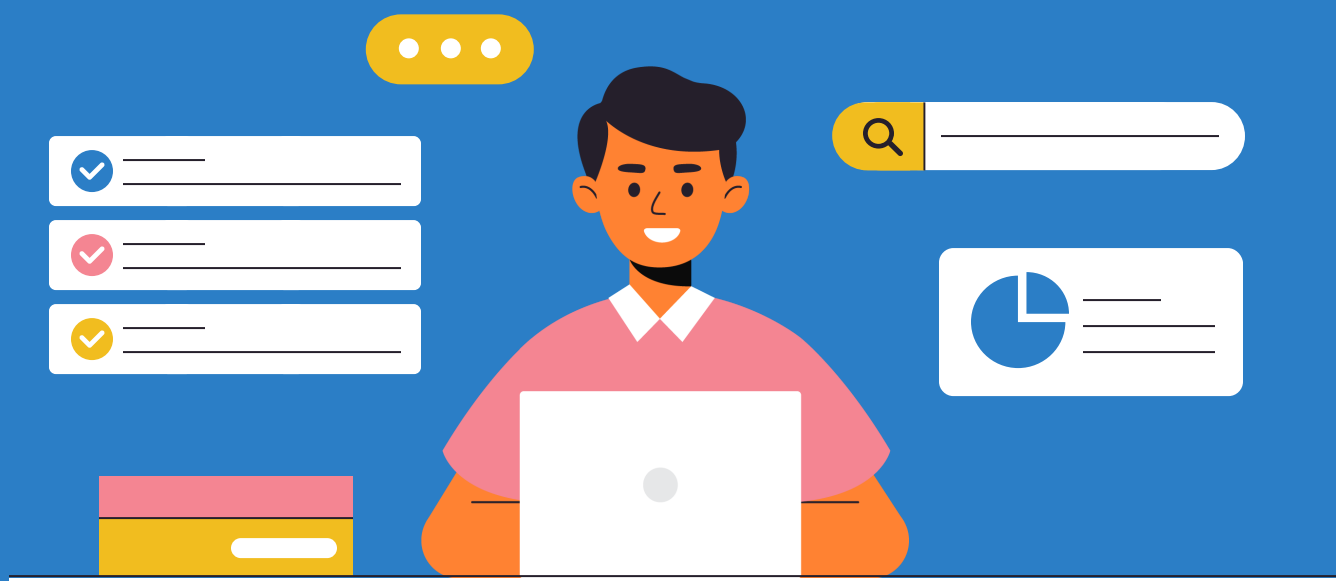


Keypresses and Mouse Clicks

Analysis of the First National Computer-Based Writing Assessment



This study uses information provided by **computer-based assessment** to better understand **students' digital writing skills**



Study Questions

- What is the relationship between word count and (NAEP) writing achievement?
- What is the relationship between the number of keypresses and NAEP writing achievement?



Patterns of Keyboard and Mouse Activity

Students using digital writing tools possess different patterns of keyboard and mouse activity

Word processing software allows different approaches to writing

1. Editing; cut, copy, paste
2. Formatting indenting, bold
3. Spelling, grammar, and reference; spell check, thesaurus, dictionary
4. Viewing and reviewing

Speedy text production: using all listed functions of the keyboard such as number backspace, delete button, and spell check

Methods

*Eighth grade students' keyboard and mouse activity during the NAEP assessment focused on word count and mouse clicks to access digital affordances tools via dropdown menu (italics, cut, copy, paste, etc.)

Findings

- Keypresses may indicate the usage of lengthier, more complex vocabulary, or a student is revising his or her work by using backspace keys or making modifications to the written text
- Middle school students do not use many of the affordances of digital tools

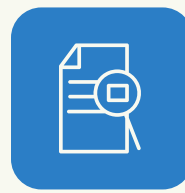


Implications



Teachers' fast and easy accessibility to digital writing opportunities is needed

Diverse assessment practices in classrooms would better prepare students in digital writing productive activities



The value of additional words and keypresses was not the same for all students; English learners and students in special education benefited less from more keypresses