

Evaluating Grades K-12 Literacy Development in the Digital Age

Bethany Gooding & Dr. Daniel Woods



The 2023-2024 passing rates for VA reading SOLs for elementary and middle grades have declined since 2018-2019 ("Virginia Department of Education News Release").

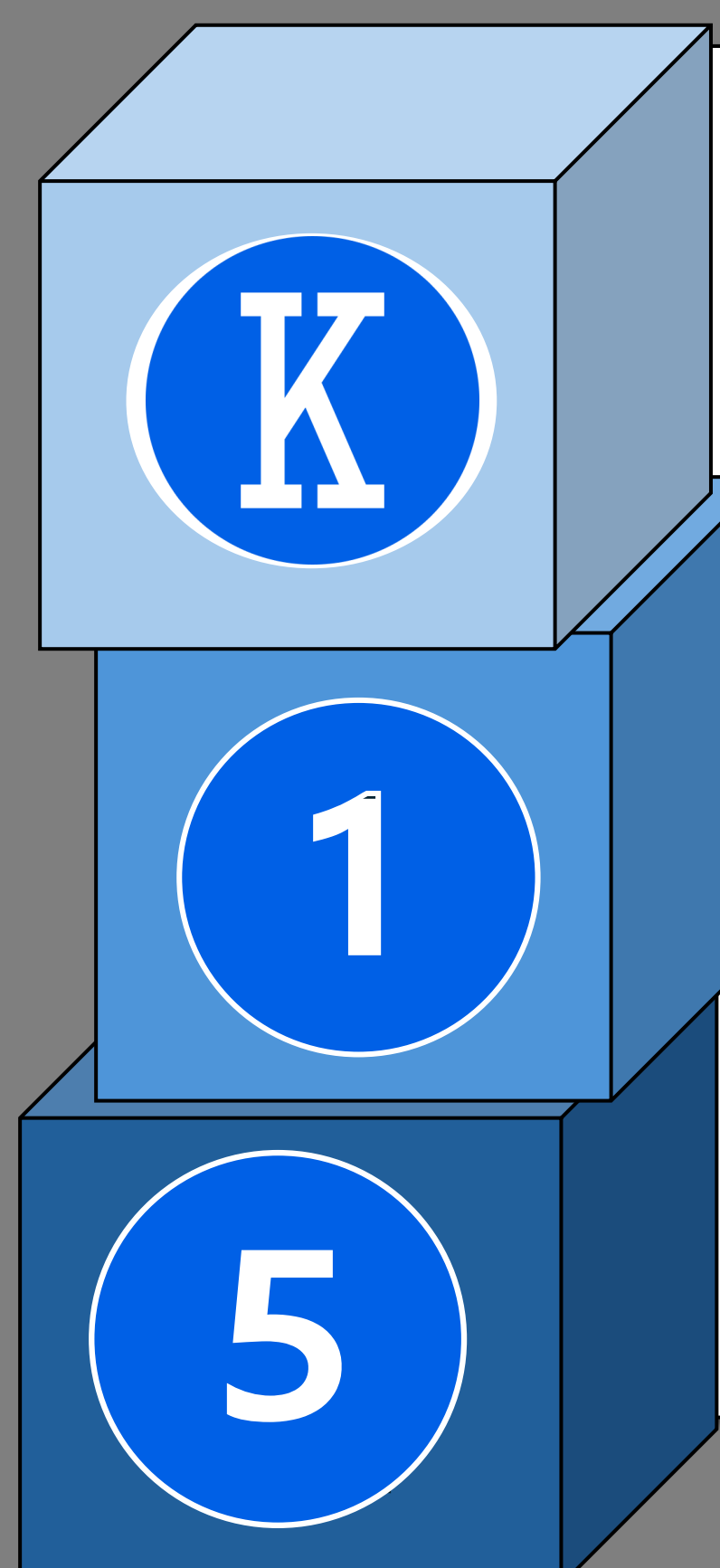
Superintendent of Public Instruction, Lisa Coons believes that the decline is due to learning loss from the pandemic ("Virginia Department of Education News Release").

During the pandemic digital reading was onset for distance learning.

What is digital reading?

It's reading on any electronic device.

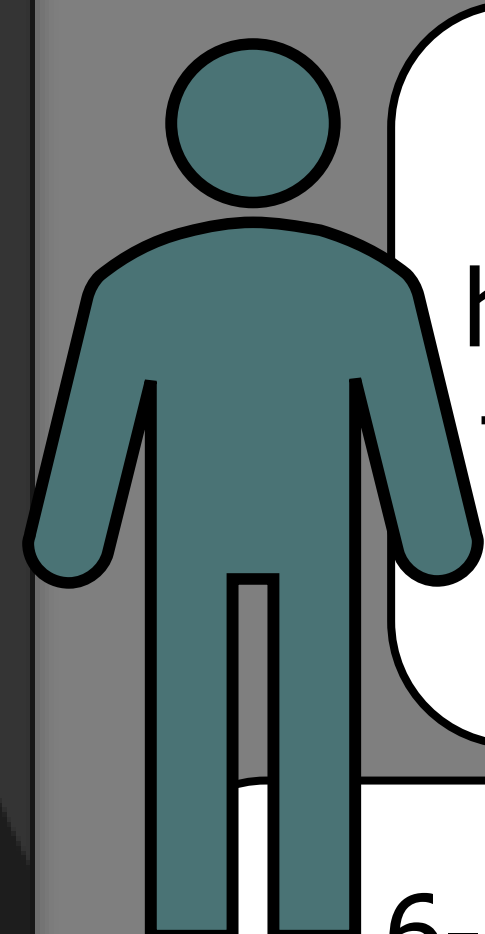
How does it impact student's academic performance?



A longitudinal study on grades 1-9 indicated that digital reading had a negative simultaneous association between reading comprehension and leisure reading in a cross-lagged model when students read digital texts (Torppa 887).

A longitudinal study on 1st graders showed preference on post-test reading medium for the selection of digital reading. Students who had digital skills prior to the study increased their comprehension on screen but not print (Florit et al. 1832-1833).

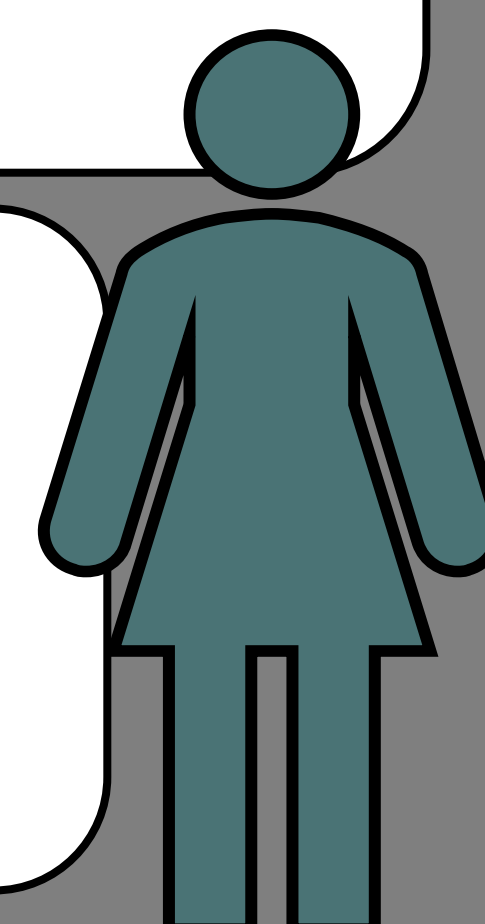
A correlation study on 5th graders indicated a preference for personalized online texts that were related to the student's individual interests. The students found personalized texts "more enjoyable" and had an increased motivation to read (Ertem 224).



6-8th grade male students reported having a more positive attitude than females towards recreational digital reading.

6-8th grade female students reported having a more positive attitude than males towards academic print reading.

(McKenna 297)



Secondary Level



Secondary English educators, Scott Storm, and Emily Rainey emphasize the importance of using digital tools with digital reading to further literary analysis or criticism (Castek et al. 203-204).



How does digital reading impact students with learning disabilities or English Language Learners?

Students with Dyslexia (Cavalli et al. 256)

- Students with dyslexia have either the same results or better reading comprehension than non-impaired students when reading print texts compared to eBooks.
- Digital tools are useful for students with dyslexia when reading for finding parts, like chapters, sections, or individual words in the text, but there's a lack of paratextual cues that hinder the student's reading ability.

English Language Learners (Gilbert 187)

- Students struggle with locating information and navigation when reading digital texts.
- Students found difficulty in finding their initial reading place when scrolling down to continue the reading.
- Students become distracted with multimedia features, such as hyperlinks. Students often lost their reading place after clicking on the link and experienced confusion.

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Reading Performance: Students with Disabilities

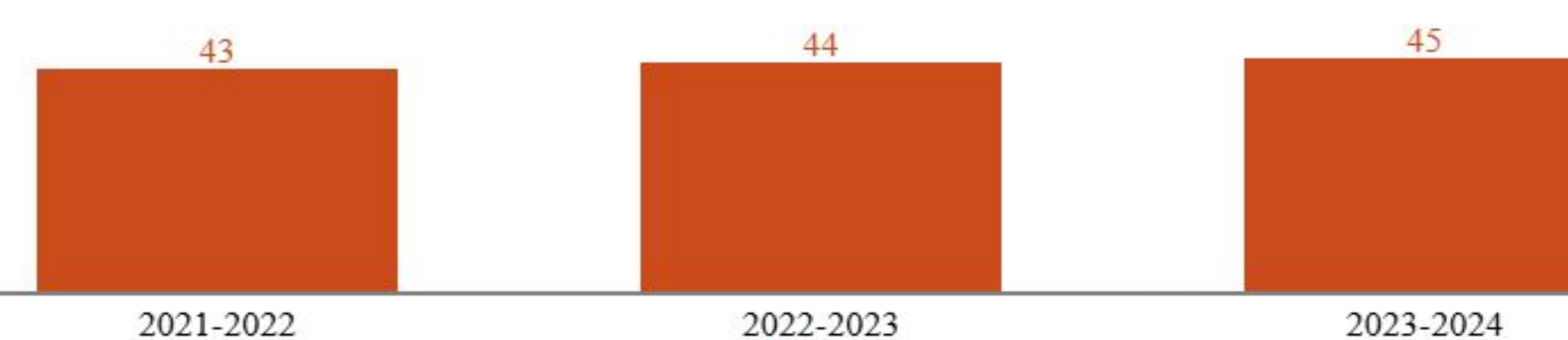
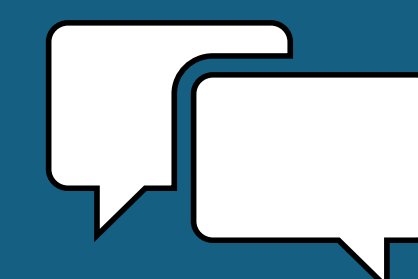


Fig. 1

Scan this QR code to view lesson plans that can support struggling readers in the classroom through digital reading and tools:



Conclusion



- Figure 1 shows students with disabilities performance on Virginia's reading state standardized test, which is completed online through TestNavTM, an "application [that] allows for secure administration of SOL tests to students on a wide variety of devices, including desktop computers, laptop computers, and tablets" ("Virginia SOL Assessment Program").
- Students with prior digital skills have increased comprehension of digital texts and may have higher standardized test scores.
- Access to digital devices for reading depends on school district resources for having devices available. Students may not have e-reader devices at home or internet access to improve their skills digitally.
- Teacher scaffolding is necessary when assigning digital texts to increase comprehension rather than relying on the digital tools provided in e-reader devices to assist students in reading.

Educators' viewpoints on the effects of digital tools in the classroom (Baron 17)

88% believe that students in the digital age have different cognitive abilities

87% believe that students are becoming easily distracted

86% believe that students could use more breaks from technology

61% believe that students aren't as literate as the previous generations

53% believe that students aren't very skilled at multitasking

Works Cited



Scan the QR code to view

Acknowledgements

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