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WSU researcher awarded \$100K from NEH for accessibility app

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Dr. Darren DeFrain, associate professor of English, has been awarded \$100,000 from the National Endowment for the Arts to further research and development of Vizling, which is an app to help visually impaired people read comic books and graphic novels.

The National Endowment for Humanities (NEH) has awarded a Wichita State University researcher \$100,000 for his work on developing an app that allows visually impaired people to read comic books and graphic novels.

Dr. Darren DeFrain, associate professor of English and director of the Wichita State writing program, has been working with former Wichita State student Aaron Rodriguez (who is currently a graduate student at Florida State University) to create Vizling.

Vizling is an app will allow people who are visually impaired to read and understand comics, graphic novels, or anything that's got a visual component along with a text component so they understand the page layout, flow, and movement in addition to just getting told what's happening.

With comic books or graphic novels, stories aren't always told in a linear format. There are visual clues as to where the readers' eyes should go next. With Vizling, the users can use their fingers to drag across and see which way things are set up. They can also touch different areas of the screen to find out what's on the screen.

For instance, DeFrain said, there's one two-page spread he teaches where one of the characters is freaking out, "and you see all this stuff happening all over the page."

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He can verbally tell a visually impaired student what's happening, he said, "but that doesn't convey all the different things that are going on in the character's head. If you're fully sighted, when you open up that page, your eye goes where it wants to go. You interpret it at your own speed and in your own way."

The Vizling app is twofold: There's audio to read the words of the book, and sensory clues offer directional insight to the reader.

"Darren DeFrain is a risk-taker with entrepreneurial spirit who draws from his expertise to do something completely different in the world of apps," said Dr. Andrew Hippisley, dean of the Fairmount College of Liberal Arts and Sciences. "And he is a member of the English department, demonstrating that the humanities brings its own special contribution to software design, a distinctly human contribution."

Earlier this year, Vizling was [granted \\$11,000 with the John A. See Innovation Award](#) from Wichita State. With the NEH award, DeFrain says he plans to focus on prototyping the app and move toward "more robust testing."

"We'll be getting feedback from blind and visually impaired users and then adjusting the way the app functions," he said.

DeFrain said the next step in app development is to connect with Wichita State's [Training and Technology Team](#) (T3).

“We want to work with T3 as soon as possible to develop more of the upper end of the software,” he said.