English-Learners Going Digital

FACING A SHORTAGE OF DIGITAL CURRICULA FOR ELLs, EDUCATORS OFTEN TURN TO GENERAL CONTENT

By Michelle R. Davis

n California's Baldwin Park Unified School District, students just learning to speak English can use a combination of digital materials designed just for them, as well as general education software programs that allow teachers to adapt lessons to various learning levels.

A student in the 14,500-student district might, for example, log on to Brainpop esl, an animated computer program that helps teach English-learners grammar and literacy. Or a student might use Voki, which allows students to create animated avatars that can speak using a student's recorded audio or listen to a digital voice that articulates text.

Though one program was created specifically for English-language learners and the other wasn't, educators are finding that both types of resources are helpful, said Arturo Ortega, an assistant superintendent in the district.

With Voki, a student can either record audio or type in something and let the robot or the dog speak their words," he said. "Students feel successful producing something in English, even when they may not be comfortable with the accent."

Because there's not a plethora of digital curricula designed exclusively for English-language learners, teachers often rely on digital curricula used for all students that help individualize lessons, as well as software programs tailored for English language learners, said C. Patrick Proctor, an associate professor of literacy and bilingualism at Boston College. But today's digital offerings make both varieties useful, he says.

"There's no question" that technology has bolstered efforts to help students learn English, Mr. Proctor said. "Just the options the kids have in terms of using language and being expressive the potential is huge."

In 2011, Mr. Proctor, along with several other researchers, published the results of a study that used digital curricula designed specifically for ELL students. In a project dubbed Improving Comprehension Online, or ICON, researchers created multimedia folktales and informational texts that included clickable words with definitions in English or Spanish, along with images for students whose English proficiency was very low. The text contained builtin audio, so that students could hear it in English or in Spanish, as well as embedded activities for reflection in both languages.

"We wanted to get at the content, rather than having the text be a barrier," Mr. Proctor said.

The researchers followed 5th graders working with the curricula and found a measurable increase in vocabulary knowledge and text comprehension, said Bridget Dalton, an associate professor in literacy studies at the University of Colorado at Boulder, who also worked on the project.

Mastering Math Literacy

Other resources have also been shown to help ELL students make gains. The program HELP (Help for English Language Pro-

BEST PRACTICES

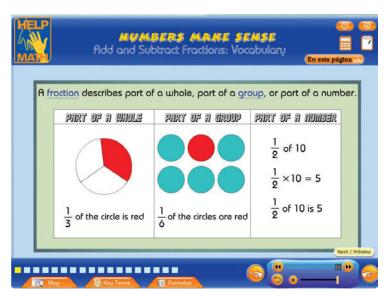
Educators are using both digital curricula designed specifically for English-language learners and digital materials that can be adapted for such students. Features to look for in digital curricula to be used with English-learners include:



Tools to highlight vocabulary words and read definitions with the click of a



Translations of vocabulary words, definitions, directions, or blocks of text.



HELP Math aids ELL students in acquiring vocabulary and math skills, and provides content in both English and Spanish. The federal What **Works Clearinghouse gave HELP Math its highest rating** for effectiveness.



BrainPop ESL is a computer program that helps teach ELL students about grammar and literacy using animation and games.

Voki allows students to create animated avatars that can speak using a student's own recorded voice or lets a student type text and has the animated character's voice speak the words.







The use of images and graphics to convey meaning.



The ability to differentiate content based on learning levels.



Audio capabilities so students can have text read to them, or they can read text to an audio recorder.



Research that shows software or other programs have a measurable, positive impact on language acquisition and achievement.

Schools Pick E-Tools to Help English-Language Learners

ficiency) Math was developed to aid ELL students in grades 3-8 in acquiring academic vocabulary and math language skills. The program, which can be individualized for a student's learning level, focuses on "explicit instructional content," said John Ramo, the founder and CEO of Boulder, Colo.based Digital Directions International Inc., which produces HELP

"Many programs just focus on 'drill and kill,' and don't offer comprehensive instruction," he said.

HELP Math includes manipulatives, assessments, pre-tests, and post-tests and its content is fully bilingual. Every problem, exercise, or key word and its definition can be viewed in English or Spanish, and the program also includes audio support, Mr. Ramo said.

In 2012, the federal What Works Clearinghouse, which works under the Institute of Education Sciences

to vet research, gave HELP Math its highest rating for effectiveness after reviewing research on student improvement related to the

Gina Kell, an instructional facilitator focused on math and science at the 800-student Elmwood Middle School in Rogers, Ark., said she trains and works with teachers using HELP Math. It's the only program that she knows of that addresses the literacy aspect of math for ELL students.

"If you can't read the math and you don't understand the terminology, you can't do the math," she

The 14,000-student Rogers school district—which includes Elmwood Middle School—also uses Imagine Learning, language arts software that can present some of the directions and concepts surrounding literacy in 23 different languages.

The district has about 4,800 English-language learners, and its students speak 40 different languages, said Tricia Holliday, the ESOL/migrant director for the district

Seeking Versatility

Very few digital products are backed by research proving they work, and that's important to educators, Ms. Holliday said.

"We have limited time and money and space, so it does help to find items that have been shown

to work with this population," she said. "There's not a lot out there."

That may be why educators are instead turning to programs aimed at all students, but which can differentiate for various learning levels.

Ms. Holliday said the Rogers district often uses Scholastic's Read 180, a literacy program that can be adapted to a student's needs. However, she added, it's useful only for students who already have some basic level of English proficiency.

That can be a problem with digital curricula not targeted for ELLS, Mr. Proctor said. "Most interventions like that exclude very limitedproficient-English students because they don't speak enough English to use them," he said.

Educators also may be turning to more general educational programs for cost reasons, Mr. Ortega of the Baldwin Park Unified district said.

"Principals are trying to get the biggest bang for their buck, so there's a migration away from those specialized products that are going to cost money to be used with just one group," he said. "They want a product that can be used with English-learners, special education students, everyone."

Professional development to prepare educators to use digital curricula for English-learners is critically important, too.

Mr. Proctor sees digital options bringing even more innovations to the field in the future. He envisions a situation in which a student could

We have limited time and money and space, so it does help to find items that have been shown to work with this population. There's not a lot out there."

TRICIA HOLLIDAY

ESOL/Migrant Director Rogers School District, Arkansas

"converse with the text" in a digital sense. The text might have the ability to pose questions and respond, or even connect the student to another student to talk digitally in real time about the reading.

"That way, they're using language to understand and deal with the text," Mr. Proctor said.

When digital materials work with students, it's rewarding to see success, Ms. Kell said.

"When you hear a kid say, 'Oh, I get it,' it makes up for all the days you are frustrated," she said. "That one little noise makes up for a lot."■

yourschool@calvertservices.org



